## ONTARIO ENERGY BOARD Commission de l'énergie de l'Ontario

**IN THE MATTER OF** the *Ontario Energy Board Act, 1998,* S.O 1998, c. 15, Schedule B;

AND IN THE MATTER OF an application by Dufferin Wind Power Inc. for an Order granting leave to construct a new transmission line and associated facilities.

### CONSERVE OUR RURAL ENVIRONMENT

### SUBMISSION ON THE NEED FOR AN ORAL HEARING

### **DELIVERED FEBRUARY 21, 2013**

### BACKGROUND

- Dufferin Wind Power Inc. ("DWPI") filed an application (the "Application") with the Ontario Energy Board (the "Board"), dated September 21, 2012, under sections 92, 96(2), 97 and 101 of the Ontario Energy Board Act, 1998, S.O. 1998, c. 15, Schedule B (the "Act").
- 2. DWPI seeks to construct approximately 47 km of single circuit 230 kilovolt ("kV") electricity transmission line (the "Transmission Line") and associated facilities (the "Other Facilities") to connect DWPI's proposed generation facility, the proposed Dufferin Wind Farm (the "Proposed Wind Farm"), to the IESO-controlled grid. DWPI has also applied for an order approving the construction of certain transmission facilities upon, under or over a highway, utility line, or ditch.
- 3. DWPI has advised that it is in the process of acquiring the permanent and temporary land rights needed for the construction of the transmission line and facilities and for access to the lands during construction.
- 4. Conserve Our Rural Environment ("CORE") is an incorporated residents' group in the Township of Mulmur who have an interest in the wind farm proposed by DWPI, and whose members can be impacted by it. By way of Procedural Order dated December 14, 2012, the Board granted intervenor status to CORE.
- 5. CORE is one of several parties who have requested an oral hearing in this matter.
- 6. DWPI objected to the requests for an oral hearing, by way of correspondence dated November 9, 2012. In its Procedural Order dated December 14, 2012, the Board nevertheless stated that it would determine if an oral hearing was required after the completion of the interrogatory phase.
- 7. Board staff and the intervenors filed interrogatories on January 4, 2013. DWPI responded on January 16, 2013.
- 8. The pre-filed Application materials, and the responses provided during the interrogatory process have revealed that there remains a great deal of uncertainty as to whether the Transmission Facilities will actually be constructed, and as to where they will be constructed. The uncertainty

- arises as a result of DWPI's failure to obtain all necessary regulatory approvals and required property rights.
- 9. What is absolutely clear from DWPI's materials is that the present application is premature.
- 10. By way of Procedural Order dated February 5, 2013, the Board requested submissions with respect to whether the Board should proceed by way of an oral or written hearing.

### DWPI'S HAS FAILED TO SECURE ANY OF THE REGULATORY APPROVALS IT REQUIRES

- 11. For the transmission project alone, DWPI states that it requires the following permits:
  - (a) Authorization under subsection 35(2) of the Fisheries Act for watercourse crossings;
  - (b) Navigational clearances under the Navigable Waters Protection Act;
  - (c) Renewable Energy Approval;
  - (d) Water crossings work permit for watercourse crossings under O. Reg. 453/96 of Lakes and Rivers Improvement Act;
  - (e) Work permit for watercourse crossings under the *Public Lands Act*;
  - (f) Species at risk permit under the Endangered Species Act;
  - (g) Generic Regulations permit for water crossings and works within floodplain;
  - (h) Compliance with the *Highway Traffic Act* and *Road Safety Regulations* Highway Entrance permit, transportation permits;
  - (i) Notice of Proposal under section 81 of the Ontario Energy Board Act,
  - (j) Notice of Project prior to commencing construction;
  - (k) Transmission Connection Agreement;
  - (I) Facility Registration;
  - (m) Metering Registration;
  - (n) Connection Assessment Approval;
  - (o) Connection Authorization;
  - (p) Road Use Agreements and Building Permits; and
  - (q) Utility Crossing Agreements to cross existing distribution lines.<sup>1</sup>
- 12. For the proposed wind farm, DWPI states that it requires the following permits:
  - (a) Authorization under subsection 35(2) of the Fisheries Act for watercourse crossings;
  - (b) Permit under Migratory Bird Conservation Act to collect bird carcasses;

<sup>&</sup>lt;sup>1</sup> Exhibit E, Tab 2, Schedule 1, pp. 5-8 of 8, Application

- (c) Aviation Safety Land Use Proposal under the Aeronautical Act;
- (d) Navigational clearances under the Navigable Waters Protection Act;
- (e) Clearance from applicable organizations operating radio communications and radar systems;
- (f) CBC Radio Communications Interference Approval;
- (g) Clearance re Emergency Radio System;
- (h) Renewable Energy Approval;
- (i) Water Crossings Work Permit under O. Reg 453/96 of Lakes and Rivers Improvement Act;
- (j) Work permit for watercourse crossings under the *Public Lands Act*;
- (k) Species at Risk Permit under the Endangered Species Act,
- (I) Permit under the Fish and Wildlife Conservation Act to collect bat and bird carcasses;
- (m) Generic Regulations permit for water crossings and works within floodplain;
- (n) Archaeological and Cultural Heritage clearances under the Heritage Act;
- (o) Compliance with the *Highway Traffic Act* and *Road Safety Regulations* Highway Entrance Permit, Transportation Permits;
- (p) Notice of Proposal under section 81 of the Ontario Energy Board Act;
- (q) Electricity Generation License under section 57 of the Ontario Energy Board Act;
- (r) Notice of Project prior to commencing construction;
- (s) Authorization as a Market Participant;
- (t) Facility Registration;
- (u) Road Use Agreements and/or Building Permits; and
- (v) Utility Crossing Agreements to cross existing distribution lines.<sup>2</sup>
- 13. It is trite that without approval for the wind farm, there is no need for the Transmission Line or Other Facilities.
- 14. DWPI has obtained none of these regulatory approvals.3
- 15. Board approval of the Application will lend regulatory legitimacy to a project that has no regulatory legitimacy.

<sup>&</sup>lt;sup>2</sup> Exhibit E, Tab 2, Schedule 1, pp. 5-8 of 8, Application

<sup>&</sup>lt;sup>3</sup> Exhibit B, Tab 1, Schedule 3, Responses to Board Staff Interrogatories, Appendix A

### DWPI'S HAS FAILED TO SECURE MOST OF THE PROPERTY RIGHTS IT REQUIRES

- 16. DWPI proposes a transmission line approximately 47km in length. It has secured property rights over less than a third of the length of the proposed route.<sup>4</sup>
- 17. DWPI states that "it is not necessary for all easements or other land rights to be finalized prior to the granting of leave to construct. The absence of a final easement will not result in a "gap" in the route that will prevent the delivery of electricity from the Wind Farm to the IESO-controlled grid... This is because, in accordance with the typical Conditions of Approval issued by the Board in granting leave to construct pursuant to section 92 of the Ontario Energy Board Act, DWPI will be required to obtain all necessary easement rights required to construct, operate and maintain the proposed transmission facilities." DWPI further states that "an applicant may continue its efforts to secure such land rights subsequent to the granting of leave to construct, either through continued negotiations with land owners or through expropriation proceedings under section 99 of the Ontario Energy Board Act."
- 18. DWPI states that it will continue to work with the owners of all properties in respect of which required land rights remain outstanding, including (a) owners of the two sections of the transmission line that run along private property where transmission easements or leases have not yet been finalized; (b) the County of Dufferin in respect of the parcels it owns along the rail corridor, and (c) the owners of any lands for which DWPI determines temporary construction or working rights will be required.<sup>7</sup>
- 19. DWPI is seeking approval of the form of agreements to be entered into with various landowners. So, in fact, were approval to be granted, the Board would be providing DWPI with a hammer to hold over an unwilling community. Landowners will be given the option to enter into an agreement, the form of which has already been approved, which approval strips landowners of their negotiating power; or face expropriation.

### CONDITIONAL APPROVAL IS NOT APPROPRIATE IN THE CIRCUMSTANCES

- 20. CORE fundamentally disagrees with the position that it is appropriate to grant conditional leave to construct the Transmission Line and Other Facilities. The circumstances in this case are inappropriate for conditional approval:
  - (a) Notwithstanding that it has been working on obtaining it since April 2007, there is no substantial community support for this project;<sup>8</sup>
  - (b) In the last six years, DWPI has failed to secure property rights over most of the land it requires;
  - (c) DWPI cannot demonstrate any support from any public or regulatory agency for the Transmission Line or Other Facilities;
  - (d) DWPI has a FIT contract with OPA, which is time-sensitive. It is required to achieve commercial operation by January 30, 2014 or face financial penalties.<sup>9</sup> Commercial operation requires that DWPI certify to OPA that the Proposed Wind Farm is completed

<sup>8</sup> Exhibit G, Tab 1, Schedule 1, p. 2 of 6, Application

<sup>&</sup>lt;sup>4</sup> Exhibit F, Tab 1, Schedule 1, Application; and Exhibit B, Tab 1, Schedule 3, Responses to Board Staff Interrogatories, Appendix G.

<sup>&</sup>lt;sup>5</sup> Exhibit B, Tab 1, Schedule 3, Responses to Lori Byenton Interrogatories, p. 2 of 29

Exhibit B, Tab 1, Schedule 3, Responses to CORE Interrogatories, p. 1 of 20.

<sup>&</sup>lt;sup>7</sup> Exhibit F, Tab 1, Schedule 1, Application

<sup>&</sup>lt;sup>9</sup> Exhibit B, Tab 1, Schedule 3, p. 6 of 38, Responses to Board Staff Interrogatories

in all material respects, that it has been constructed, connected, commissioned and synchronized to the IESO-controlled grid, such that at least 90% of the capacity is available to deliver electricity. Commercial operation by January 2014 is a virtual impossibility, in light of all of the work that remains to be completed;

- (e) Furthermore, any resultant financial penalties for failure to achieve commercial operation in accordance with the FIT Contract may impact DWPI's commercial viability. The financial penalties provided for in the FIT contract are not insubstantial. DWPI's commercial viability has direct bearing on the interests of consumers with respect to prices and the reliability and quality of electricity service. Should it not be able to fund the ongoing operation and maintenance of the Proposed Wind Farm, Transmission Line and Other Facilities after achieving commercial operation, as a result of the costs associated with securing approvals and property rights, its ability to continue to generate and transmit electricity to consumers will be negatively impacted;
- (f) DWPI may not proceed with the Proposed Wind Farm at all if it fails to achieve Commercial Operation in accordance with the FIT contract, in which case this Application becomes moot, and the Board's resources will have been wasted;
- (g) The uncertainty about the route of the Transmission Line, as a result of DWPI's failure to secure all necessary property rights to date, means that the length of the Transmission Line is currently unknown. If the length of the Transmission Line exceeds 50km, DWPI may lose its FIT eligibility. The FIT eligibility of the Proposed Wind Farm has direct bearing on the interests of consumers with respect to prices and the reliability and quality of the resultant electricity service;
- (h) If DWPI continues working with landowners to secure property rights, it may be that DWPI is able to do so, subject to conditions, for example. One such condition may be that the Transmission Line be placed underground on a given property. Building the Transmission Line underground may also increase DWPI's operational costs, and the reliability and quality of the resulting electricity service;<sup>12</sup>
- (i) Moreover, new forms of agreement may be required. The form of an agreement with one landowner may impact the form of agreement entered into with another. For example, if the County of Dufferin were to permit DWPI to use the Rail Corridor for an underground Transmission Lines only, the routing of the Transmission Line may need to be altered and/or the rights required by DWPI of other landowners may be subject to change. The combinations and permutations of necessary agreements need to be explored further through an iterative negotiation process;
- (j) If the Board authorizes DWPI to expropriate certain lands, it is possible that disputes may arise as to the appropriate compensation to be paid to the landowner. Such disputes are to be settled in accordance with the *Expropriations Act* or by appeal to the Ontario Municipal Board. It is impossible to predict with certainty the outcome of an Ontario Municipal Board compensation hearing; or to estimate with certainty the cost of engaging in such disputes; or to predict how many such hearings might occur. These are significant financial matters, about which there is additional uncertainty, which further contribute to the uncertainty of DWPI's financial position and ability to deliver electricity in a reliable manner; and

<sup>&</sup>lt;sup>10</sup> FIT Contract, section 26, Responses to Requests in P.O. No. 3.

Exhibit B, Tab 1, Schedule 3, p. 6 of 38, Responses to Board Staff Interrogatories
 Exhibit B, Tab 1, Schedule 3, p. 7 of 20, Responses to CORE Interrogatories.

- (k) In the face of significant public opposition, it is to be expected that the grant of a right to expropriate to DWPI by the Board may also be subject to challenge, which will cause further uncertainty.
- 21. In other words, there is simply too much uncertainty about the Proposed Wind Farm, the Transmission Line and the Other Facilities, and DWPI's financial ability to manage the uncertainty at this time. These uncertainties, in turn, call into question whether construction of the Transmission Line and Other Facilities is in the public interest, having regard to the interests of consumers with respect to prices and the reliability and quality of the resulting electricity service.
- 22. The Board cannot satisfy itself that it is in the public interest to grant leave to construct in these circumstances. Contrary to DWPI's reliance on the Board's ability to grant conditional approval, it is CORE's position that the Board cannot address these uncertain matters satisfactorily through conditions.
- 23. Moreover, DWPI's use of the Board's process to obtain property rights that it would not otherwise be able to obtain from an unwilling community, and to potentially improve its position vis-à-vis other regulatory approvals, is inconsistent with the policies of the Government of Ontario in the promotion of the use of renewable energy sources, and with the public interest, broadly speaking.

### THERE IS A NEED FOR AN ORAL HEARING IN THIS CASE

- 24. The Board is bound by the *Statutory Powers Procedure Act*, which provides at s. 5.1(2) that "the tribunal shall not hold a written hearing if a party satisfies the tribunal that there is a good reason for not doing so."
- 25. There is a good reason to not hold a written hearing in this case. There are several issues relevant to the proceeding which cannot be adequately considered by way of written hearing, namely:
  - (a) the level of community support for the project, and therefore the likelihood of securing the necessary property rights to construct the Transmission Line and Other Facilities without the need to expropriate:
  - (b) the appropriate form of the agreements with landowners for the grant of property rights;
  - (c) the timing and likelihood of the need for expropriation proceedings, and all associated expropriation costs;
  - (d) the timing and likelihood of all other regulatory approvals being issued;
  - (e) the possibility of having to construct a Transmission Line longer than 50km;
  - (f) DWPI's ability to achieve commercial operation;
  - (g) DWPI's intended course of action should it not achieve commercial operation in accordance with the timelines set out in its FIT contract; and
  - (h) DWPI's financial position.
- 26. DWPI's Application materials and Responses to Interrogatories attempt to reassure readers that there is community support for the Proposed Wind Farm and transmission facilities, that regulatory approvals will be forthcoming on the basis of technical work submitted, and that increased costs resultant from uncertainties will all be borne by DWPI and have no impact on the

interests of consumers with respect to prices and the reliability and quality of electricity service. For example, DWPI states:

- (a) The Applicant has carried out a comprehensive stakeholder consultation program, guided by the REA process, through which it has been able to provide information to interested stakeholders and receive feedback and other information from stakeholders. The feedback received has played a significant role in shaping the proposed Transmission Project.<sup>13</sup>
- (b) In respect of the transmission easement required from the County of Dufferin along the Rail Corridor, the Applicant has been engaged in discussions with the County since the Fall of 2011 and intends to continue to work towards concluding a definitive transmission easement with the County for the use of these lands.<sup>14</sup>
- (c) The Applicant is continuing to work with the County of Dufferin with a view to finalizing the necessary transmission easement for use of the former Rail Corridor. 15
- (d) Based on consultations with members of the local community, as well as technical and environmental reviews undertaken, the Applicant has determined that the proposed Transmission Project is in the circumstances the optimal means for connecting the Wind Farm to the IESO-controlled grid. Key benefits and characteristics of the proposed Transmission Project that led to this determination include the following: (a) Community Support...<sup>16</sup>
- (e) The Applicant filed its final REA submission package with the Ministry of the Environment on August 13, 2012, and therefore expects to receive its REA in approximately January 2013.<sup>17</sup>
- (f) The actual costs associated with the proposed transmission facilities...are not relevant to the Application. DWPI is not a rate-regulated applicant but, rather, is proposing to construct the transmission facilities to connect its generation facility to the IESO-controlled grid....As rate payer money is not involved, these applicants generally do not need to justify their expenditures on their own transmission facilities to the Board. 18
- 27. These are matters of significant factual dispute. CORE disputes that there is community support for the project, or that the technical materials produced thus far are capable of supporting the issuance of any regulatory approval, and that the costs to DWPI of constructing the Transmission Line and Other Facilities are not relevant to the Application. By way of support for its version of the facts, CORE attaches respectively hereto as Appendices 1 to 4 the following documents: a recent resolution of Dufferin County, a copy of the Township of Mulmur's Staff Report on the Proposed Wind Farm; correspondence between the Mayor of the Township of Melancthon and the Ministry of Energy; a copy of CORE's comments to the MOE on DWPI's Renewable Energy Approval application.
- 28. CORE requires the Board to have a full picture of these facts to support its argument on the substance of the Application, which is briefly outlined above, that it is not in the public interest to grant the relief DWPI requests in its Application. A clear picture of these circumstances can only be provided to the Board during an oral hearing. These are matters of factual dispute, which can

<sup>&</sup>lt;sup>13</sup> Exhibit B, Tab 1, Schedule 1, p. 5 of 7, Application

<sup>&</sup>lt;sup>14</sup> Exhibit B, Tab 2, Schedule 1, pp. 3-4 of 5, Application

<sup>&</sup>lt;sup>15</sup> Exhibit D, Tab 1, Schedule 1, p. 3 of 7, Application

<sup>&</sup>lt;sup>16</sup> Exhibit B, Tab 4, Schedule 1, p. 2 of 9, Application

<sup>&</sup>lt;sup>17</sup> Exhibit B, Tab 1, Schedule 1, p. 5 of 7, Application; Exhibit E, Tab 2, Schedule 1, p. 3 of 8 Application.

<sup>&</sup>lt;sup>18</sup> Exhibit B, Tab 1, Schedule 3, pp. 17-18 of 38, Responses to Board Staff Interrogatories

- only adequately be explored through cross-examination, and which, given the factual disagreements, may require determinations of credibility by the Board.
- 29. These are matters which the Board should consider, as they are within the Board's jurisdiction. The Board's jurisdiction on an application pursuant to section 92 of the Act is set out in section 96 of the Act:
  - (1) If, after considering an application under section...92 the Board is of the opinion that the construction, expansion or reinforcement of the proposed work is in the public interest, it shall make an order granting leave to carry out the work.
  - (2) In an application under section 92, the Board shall only consider the following when, under subsection (1), it considers whether the construction, expansion or reinforcement of the electricity transmission line or electricity distribution line, or the making of the interconnection, is in the public interest:
  - 1. The interests of consumers with respect to prices and the reliability and quality of electricity service.
  - 2. Where applicable and in a manner consistent with the policies of the Government of Ontario, the promotion of the use of renewable energy sources.
- 30. With respect to crossings with leave, the Board's jurisdiction is even broader than its jurisdiction under section 92. Its jurisdiction includes consideration of the public interest broadly, as set out in ss. 101(3) of the Act. To the extent that DWPI's application relates to crossings with leave, therefore, the limitations on the Board's jurisdiction related to the interests of consumers with respect to prices and the reliability and quality of electricity services, and the promotion of the use of renewable energy sources do not apply, and the Board should not limits its consideration of the public interest to these matters.
- 31. The issues that CORE raises relate both to the issues of (1) the interests of consumers with respect to prices and the reliability and quality of electricity services; and the promotion of the use of renewable energy sources; and (2) to the public interest, broadly speaking.

### ISSUES INTENDED TO BE ADDRESSED THROUGH CROSS-EXAMINATION

- 32. Without limiting its right to cross-examine on any relevant issues, should an oral hearing be granted, CORE intends to address the following issues through cross-examination:
  - (a) Community support for the Transmission Line and Other Facilities;
  - (b) The status of negotiations with landowners and the costs thereof, as they may affect interests of consumers with respect to prices and the reliability and quality of the resulting electricity service;
  - (c) The forms of agreement for which approval is sought, and the costs thereof, with respect to prices (in light of repair, insurance and decommissioning requirements, for example), and the reliability and quality of the resulting electricity service;
  - (d) The effect of the various options both sought and potentially required (burying the Transmission Line, for example) on the price and reliability and quality of the resulting electricity service;
  - (e) DWPI's financial position and ability to reliably delivery resulting electricity service in light of the substantial uncertainties associated with this project;

- (f) DWPI's ability to achieve commercial operation;
- (g) DWPI's intended course of action should it not achieve commercial operation by January 2014; and
- (h) The status of DWPI's efforts to obtain other regulatory approvals in the context of the need for the Transmission Line and Other Facilities.

### CONCLUSION

- 33. For the foregoing reasons, CORE respectfully submits that there is a good reason not to hold an written hearing in this case.
- 34. CORE requests that the Board order an oral hearing, and that it establish a hearing date, and procedural timelines for the preparatory steps leading up to the oral hearing.

All of which is respectfully submitted this 21st day of February, 2013.

per: David Croker

Counsel to Conserve Our Rural Environment

Davis LL



## CORPORATE SERVICES

February 13, 2013

TO: Interested Parties regarding the Request

For Easement on the Rail Line

RE: Dufferin Wind Power Request for Easement

Update No. 3

Further to our letter dated January 7, 2013, I can provide the following update.

A public meeting was held on Tuesday, February 5<sup>th</sup> in Shelburne to hear a presentation from the MMM Group, Consultants engaged by the Council of Dufferin provide comments on the Dufferin Wind's application to the Ministry of the Environment for approval of a renewable energy project. Approximately 100 people were in attendance to hear the presentation.

Following the public meeting, Council received a report from the Chief Administrative Officer and also a report from MMM Group on February 7, 2013.

The reports are available at: <a href="http://www.dufferincounty.ca/government/council-and-committee-meetings/date">http://www.dufferincounty.ca/government/council-and-committee-meetings/date</a>

Council passed the following motion in response to comments received by residents and also comments made by MMM Group.

THAT the report of the Chief Administrative Officer dated February 7, 2013 with respect to the request by Dufferin Wind Power for an easement along the former rail line be received;

AND THAT, staff be directed to submit comments, to the Ministry of the Environment through the Renewable Energy Approval process, pertaining to the following:

- Additional Studies and Reviews identified by the MMM Group;
- Items for Clarification and additional information identified by the MMM Group;
- · Clarification of items raised by staff;
- A summary of general types of comments received from residents;

• Copies of all correspondence received from residents on this matter (both negative and positive).

AND THAT the Provincial approval authorities be advised as follows:

- 1. The County of Dufferin requests a moratorium on all wind development until the health studies currently being conducted (Two Year Health Canada Study on Wind Turbine Noise and Health) is completed and shared.
- 2. The County of Dufferin objects to any overhead lines that will connect with any wind development projects in Dufferin County.
- 3. The County of Dufferin requests that any transmissions lines, if approved, be located underground and not located in the Town of Shelburne.
- Concerns and questions from Dufferin County residents and interested parties be responded to by the Ministry of the Environment prior a decision being made on the Dufferin Wind Project.

Please do not hesitate to contact us with any questions/concerns.

Yours very truly,

Pam Hillock, County Clerk



### REPORT TO COUNCIL

TO:

Mayor Mills and Members of Council

FROM:

Ron Mills, Planner

DATE:

July 12, 2012

SUBJECT:

Mulmur Township comments on Dufferin Wind Power Inc. Proposal

## **RECOMMENDATION:**

That Council receive the report of Planner Ron Mills concerning the Township's comments on the proposed Dufferin Wind Power Inc. wind farm in the Township of Melancthon, and a possible 69 kV transmission line along a portion of the Mulmur-Melancthon Townline and that staff be authorized to forward the report, as amended as directed by Council, to the proponent, the approval authorities, area MP and MPP, adjacent, directly affected municipalities, the County of Dufferin and ratepayers that attended the May 25<sup>th</sup> meeting as our formal comments and position on the proposal.

### **BACKGROUND:**

A copy of the application and all related submissions prepared in support of an application for approval of the proposed 49 turbine Dufferin Wind Power Inc. wind farm in Melancthon Township, and related transmission and transformer infrastructure in Dufferin County was delivered to the Township in the early spring. Under the Province's Renewable Energy Approval (REA) process, adjacent directly affected municipalities are required to be consulted and a 60 day commenting timeframe is normally provided for submitting comments. Because the information could not be released to the public until the latter part of May, the commenting deadline for this project was extended until July 24, 2012. The proposal requires approval under Ontario Regulation 359/09 under the Ontario Environmental Protection Act.

A meeting was held on May 25<sup>th</sup> for Township ratepayers with an interest in and/or concerns about the proposal. The meeting was an early opportunity for our ratepayers to share information and concerns about the project and served to help the Township better understanding the concerns of its ratepayers and focus its efforts on identifying key issues. The list of very preliminary issues/concerns attached as ATTACHMENT NO. 1 was prepared for that meeting, for discussion

purposes. It was made clear at that time that the information was preliminary and that no decisions had been made, or positions had yet been taken by Council.

At the meeting, ratepayers and ratepayers groups were urged to keep us informed about their concerns once they had had a better opportunity to review the extensive background material and to provide us with a copy of their comments and submissions. To date, we have received very little such information, but as the deadline approaches we will not doubt be the recipient of such information. Items received before the July 18 Council meeting will be placed on-desk and I will attempt to provide a brief summary of the submissions, recognizing that Council may wish to take a position with respect to those submissions. Comments received after the July 18 Council meeting can be provided as information items at the next Council meeting, if/as directed by Council.

Since those initial comments were prepared, we have been made aware of concerns for impacts on people along the alternative transmission line alignment through Melancthon/Shelburne/Amaranth, relating primarily to the proposal to install a much higher voltage (230 kV) transmission line along the former railway right-of-way and through a portion of Shelburne (Power line option 2). Since we have not investigated that proposed alternative in any depth, and in the interests of good relations with our neighbouring municipalities, it is probably appropriate that the Township should limit its comments to the concerns and requirements we have with the Townline alternative (Power line option 1) only, which is the only one that has the potential to directly impact on ratepayers of Mulmur Township.

Council supported a recommendation that came out of the May 25th meeting and has urged the Township of Melancthon to peer review the Noise Impact Assessment Report. Melancthon has confirmed that it is conducting a peer review and has offered to make the results available to us. At the time of writing this report, the results were not yet available and will not be available for the July 18 Council meeting. The Township should therefore ensure that it reserves the right to provide additional comments in support of our concerns for noise impacts, should the advice we get from the peer review consultant warrant further action on our part.

Representatives from Dufferin Wind Power Inc. attended the June 20<sup>th</sup> Council meeting, including two noise experts. Because we had already identified noise as a primary issue and because the proponent had two experts on noise present at the meeting, much of the discussion focused on noise impacts and electromagnetic affects.

Although some information dealing with the electromagnetic impacts and health effects has been provided, no similar information relating to the potential impacts of the turbines has been provided. It is noteworthy that the Canadian government

has very recently announced that it will be doing health related studies on the affects of wind turbines and related infrastructure. In 2010, the Township adopted a resolution imposing a moratorium on wind farm developments in Mulmur Township and calling for such health studies to be completed before any new projects are approved. A copy of that resolution is attached. Although this project is not physically located within the Township, some of the turbines are nearly as close to receptors in Mulmur Township as they would be if the project was located in the Township, so the resolution should apply. This Township has already had experience with a proponent of a wind farm insisting that a 400 m. set-back from receptors was adequate, only to have the Province shortly thereafter impose greater set-back requirement of a minimum of 550 m., with even greater set-backs where the cumulative impacts of several turbines are involved. In some other jurisdictions, set-backs of up to 2 km. are required. In light of this resolution and the concerns of our ratepayers, it should be our position that it would not be appropriate for the approval authorities to approve any new projects until the results of the studies to be undertaken by the Federal government are available and the noise impacts and health effects of such projects are more clearly understood, and avoided and/or mitigated so that they can somehow be deemed to be minimal and acceptable.

The appropriateness of proposed set-backs between the proposed 69 kV line and existing dwellings along the Townline also remains of concern.

At the June 18 Council meeting, we also discussed potential visual impacts of the project to/from vantage points in the Township, including from the Niagara Escarpment and the Bruce Trail in particular, Information that has apparently been submitted to the Niagara Escarpment Commission in that regard has not yet been received by the Township, despite several requests. However, some preliminary depictions were provided to Council at the June 20<sup>th</sup> Council meeting. The proponents indicated that they did not wish that information released by the Township to our ratepayers, but Dillon Consulting has since offered, and we have arranged to have their visual impact expert, Eha Naylor, attend the July 18th Council meeting to present her findings concerning the visual impacts of the proposed wind farm, from a Mulmur perspective. Although the turbines themselves are within (and beyond) an area that has been classified in the preliminary visual impact assessment information that has been provided to Council as a "low attraction natural area", there are a significant number of turbines that will be located quite close to areas classified as "attractive natural areas" and as "outstanding natural areas". Such large structures will be clearly visible from these areas.

Visual impacts of the proposed 69 kV transmission line along the Mulmur-Melancthon Townline are also of concern. The assertion that the proposed 69 kV line is no more visually intrusive than the existing transmission line requires explanation, especially since a portion of that alignment does not have a transmission line at the present time.

During the discussions at the June 20th Council meeting, it was discovered that the development potential and options for developing vacant parcels for purposes otherwise permitted as of right in municipal Official Plans and Zoning By-laws was, in many cases, being greatly diminished as a consequence of the reciprocal application of required minimum set-backs between turbines (and entire wind farms) and new receptors. Owners of vacant parcels that now have the right to build anywhere on their lands in accordance with property line setbacks (where the lands are zoned for development) could be, and are being severely constrained. Small development envelopes, most often very near to municipal roads and in the opposite corner from proposed wind turbines will be the only option available, once the turbines are built. This could, and very likely will diminish the value of those properties. If the required set-backs are ever increased, which is a distinct possibility, many of those lots could be rendered undevelopable. Development rights must either be respected and any diminution or removal of such rights must be compensated. This should be a primary concern of landowners within, and the Township of Melancthon generally.

Decommissioning of the project remains of concern. The Township of Melancthon and the approval authorities must ensure that decommissioning takes place in an appropriate and timely manner, and at no cost to taxpayers.

We have received comments from the Town of Mono on those aspects of the proposal that are of concern to them. They have pointed out that it appears that the responsibility for constructing/re-constructing the existing transmission facilities involved with power line option 1 have been apportioned between the project proponent and Hydro One in such a way as to seemingly avoid the need for an environmental assessment, and that Hydro One and the taxpayers of Ontario appear to be responsible for a considerable share of the costs. As the up-grading and extending of the transmission lines is substantially, if not entirely for the benefit of this private sector initiative, the costs should be borne by the proponent. The position advanced by the Town of Mono in this regard should be supported.

## Recommendations

The following is recommended as the Township of Mulmur's comments and requirements relating to, and current position with respect to the proposal:

1) The project should not be approved until studies to be carried out by the Government of Canada are completed and it has been definitively determined that set-backs between individual turbines (and wind farms generally) and noise receptors are adequate, and that electromagnetic effects of wind farms and transmission facilities are determined to be minimal and acceptable, from a human health and safety perspective.

- 2) The impact of noise on Mulmur Township residents and, in particular, of the cumulative impacts of noise from the wind farm, have not (yet) been addressed to the satisfaction of the Township. The Township reserves the right to provide further documentation in support of this concern following receipt of the results of a peer review currently being carried out by the Township of Melancthon.
- 3) Visual impacts of the proposed wind farm on scenic resources and the rural character of Mulmur Township, and on the landscape in the vicinity of power line option 1 have not (yet) been adequately addressed. Council should further clarify its concerns and position on this issue following the presentation by Eha Naylor and, if deemed necessary, reserve the right to provide further documentation in support of any outstanding concern(s).
- 4) Assurances have not been provided to demonstrate that set-backs from the proposed 69 kV transmission line and adjacent residences are adequate, relative to potential electromagnetic effects on human health and safety.
- 5) The flight path to/from and existing private airstrip located on the Townline within Mulmur Township must be preserved. The transmission lines must be buried at this location. The burial of such lines is technically feasible. The sole concern appears to be the higher cost. The Township is therefore of the position that the required 69 kV transmission lines should be buried along that portion of power line option 1 within and adjacent to the Township.
- 6) No cost of the transmission lines necessitated by and serving this private sector development should be borne by Hydro One or the taxpayers of Ontario.
- 7) The decommissioning plan is not adequate, and adequate funding must be provided at the outset, or some funding mechanism must be put in place to cover the full cost of decommissioning. Agreements must be required to ensure that decommissioning takes place in an appropriate and timely manner, at no cost to the host municipality or the taxpayers.
- 8) Any diminution of rights to develop and use property as a result of the proposal must be adequately compensated. Buy-out provisions at fair market value should be incorporated into agreements between the host municipality and the proponent in all situations where any increase in the required set-backs between the turbines or wind farm and where owners can build on their lots that would render vacant parcels undevelopable.

If the project is approved.

9) A road use agreement with Mulmur for any use of Township roads is required. All costs shall be the responsibility of, and shall be fully recovered from the proponent.

## **FINANCIAL IMPACT:**

Full municipal cost recovery for review and consultation, as well as for project related damages and costs (if project approved) is required, pursuant to our recently approved cost recovery by-law. Although assurances have been provided that a deposit to cover the costs incurred by the Township relating to review of the proposal and municipal consultation is forthcoming, no deposit has yet been received.

Respectfully submitted,	
Ron Mills, Planner	•
	ATTACHMENTS (3)

### ATTACHMENT NO. 1

## <u>Dufferin Wind Power Inc. Mulmur Preliminary Comments</u> <u>prepared for the May 25, 2012 Mulmur ratepayers meeting</u>

## **Wind Farm**

- The cost of Mulmur involvement for review and consultation are to be recovered from the proponent. A substantial deposit for this purpose has been requested and is expected to be received shortly.
- A visual impact assessment has not been provided. Views to/from the NE and an
  analysis of visual impacts from other key locations in Mulmur should be prepared
  and made available. Information should be prepared in accordance with the
  Township's requirements, as developed by Eha Naylor, for the Eolectric
  proposal. Ms. Naylor now works for Dillon, lead consultant for this project, and
  has apparently been dealing with this issue with the NEC. The Township has
  insisted, and will continue to insist that this information be released to the
  Township and the public for review and comment.
- According to the lead consultants for the project, the decommissioning plan is
  proposed to "evolve over time". The Township (and Melancthon Township) must
  be assured that proper decommissioning will occur, and that sufficient
  guarantees and funds are in place from the outset to accomplish this.
- A road use agreement with Mulmur for any use of Township roads is required. Costs are also to be recovered from the proponent.
- Township has pointed out that information distributed by proponent on health
  effects (Health and Welfare Canada) deals only with power transmission lines,
  and not the turbines. Similar information should be provided that deals with the
  health effects (or lack of same) caused by the wind turbines, sufficient to address
  the concerns (fears) of Mulmur ratepayers.
- The Township does understand that a number of its ratepayers may stand to benefit from this undertaking, and recognizes the importance of this initiative to them, from a financial perspective.

### <u>Transmission Lines</u>

 The Township does not support Transmission Line Option One – involving the up-grading of existing and new 69 kV power lines which, in part, will criss-cross the Mulmur-Melancthon Townline between Highway 89 and County Road 17, due to the impacts it will have on existing properties and ratepayers along that alignment. The Township strongly supports the Dufferin Rail transmission route, despite the existence of some wetlands along that route. People are more important than wetlands, and the Township fails to see how the addition of a transmission line there will negatively impact the landowners along that alignment and the wetlands to anywhere near the extent of the Option One routing.

• If the Option One routing is chosen, the Township will require a road use agreement and the recovery of all of its costs.

### ATTACHMENT NO. 2

# Issues list from the May 25<sup>th</sup> meeting prepared to facilitate discussion at the June 20<sup>th</sup> Council meeting.

- Noise Impacts concerns with the reliability of the studies and the appropriateness of stated impacts, cumulative impacts not addressed?; very high noise levels for some participating landowners, levels at or very near threshold levels for many non-participating landowners, etc;
- Use of very large turbines in area adjacent to the Township of Mulmur, where visual and noise impacts are greatest for Mulmur residents;
- Visual impacts to/from the Niagara Escarpment and Bruce Trail, and from adjacent properties;
- Most of the wetlands within/adjacent to the wind farm are mapped as "unevaluated wetlands" – adequacy of understanding of impacts??
- Impacts of wind turbines on bird migration, native species at risk and bats;
- The rationale for, and impact on lands and landowners rights in areas where the transmission lines within the wind farm are proposed to be buried;
- affects on human and animal (livestock and wildlife) health and welfare related to electromagnetic and noise impacts;
- Visual impacts of the proposed 69 kV transmission line along the Townline:
- Electromagnetic effects and the adequacy of set-backs between existing dwellings and the proposed line (what are the minimum acceptable standards?);
- The need for a new line to 'close the existing gap' in the existing pole line along the Townline;
- Impacts on the existing private airstrip and the need to bury the lines in its vicinity;
- Impacts on wetlands and existing forests and treed areas along the Townline transmission route:

- The appropriateness of a 230 kV line (as opposed to a 69 kV line) within the alternative (Dufferin Railway) transmission route and impacts on properties and people along that route;
- Impact on wetlands and forested lands, and wildlife along that route;
- Burial of transmission lines as an option to reduce impacts;
- Impact of the wind farm and transmission facilities on property values;
- The possibility that the project will be expanded to the east into the northwest area of the Township of Mulmur;
- The need for a decommissioning plan and adequate up-front securities;

### ATTACHMENT NO. 3

## Council resolution calling for a moratorium and health studies

## MULMUR TOWNSHIP COUNCIL

Mulmur Township Council met on Wednesday, February 17th, 2010, at 6:00 p.m. with the following present:

Gordon Montgomery – Mayor Susan Snider – Deputy Mayor Jeff Sedgwick – Councillor Earl Hawkins - Councillor Rhonda Campbell Moon – Councillor

Staff: Terry Horner, CAO/Clerk was present for the entire meeting. John Willmetts, Director of Public Works and Ron Mills, Planner were present for their respective sections.

Motion # 77-10 Hawkins-Snider: THAT WHEREAS Council, at its January 5, 2010 meeting, received a resolution from the County of Grey expressing concern for the public health effects of wind turbines;

AND WHEREAS a further, similar resolution has now also been forwarded from the Municipality of West Grey, calling for a moratorium until the effects of wind turbines are studied and clearly understood and the health, safety and well-being of the public can been assured:

NOW THEREFORE BE IT RESOLVED THAT the Township of Mulmur supports the resolution of the County of Grey calling for the Province to conduct scientific research on the public health and safety aspects of low frequency noise and electrical and electromagnetic disturbances caused by wind turbines, and also calling for the provision of scientifically based standards for wind turbines that will protect the health and ensure the safety of the public,

AND THAT the Township of Mulmur also supports the resolution from the Municipality of West Grey calling for a moratorium on the establishment of any new wind turbines in Ontario until the health, safety and well-being of the public has been thoroughly and scientifically evaluated and assured;

AND THAT the County of Grey and the Municipality of West Grey be advised accordingly, and that a copy of the two resolutions, along with this resolution be forwarded to Premier Dalton McGinty and the Ministers responsible for Energy, the Environment and Health, as well as MPP Sylvia Jones.

Carried.



The Corporation of

### THE TOWNSHIP OF MELANCTHON

157101 Hwy. 10, R.R. # 6, Shelburne, Ontario, LON 1S9

Telephone - (519) 925-5525 Fax No. - (519) 925-1110

Website: <u>www.melancthontownship.ca</u> Email:<u>info@melancthontownship.ca</u>

Denise B. Holmes, AMCT CAO/Clerk-Treasurer

January 29, 2013

Ministry of Energy 880 Bay Street 2<sup>nd</sup> Floor Toronto, Ontario M7A 2C1

Attention: Mirrun Zaveri, Deputy Director, Renewable Energy Facilitation Office

Dear Sir:

Thank you for your letter dated January 7, 2013.

Respectfully this is simply a political answer. We are aware of the Regulations and the FIT Program Rules.

The fact remains that your Government continues to ignore the wishes of the people in dealing with the concerns that have been expressed about Industrial Wind Farm Projects and the potential health issues relating to them.

The former Minister of Energy, Brad Duguid, made a statement over a year ago about the fact that there were Municipalities lined up to become involved in renewable energy projects. Former Premier McGuinty, in April of 2012, at a news conference in Belleville went further to say he didn't need the headaches from Municipalities that did not want wind turbines.

Although we had requested that list from Minister Duguid, and the current Minister of Energy, Chris Bentley and the former Premier McGuinty, they have all been ignored and instead we received your letter.

Therefore, I will ask you to please provide us with that list that so many senior people in the Liberal Government claim to have access to.

Respectfully,

Bill Hill, Mayor 9

FEB - 7 2013

### Ministry of Energy

880 Bay Street 2nd Floor Toronto ON M7A 2C1 Tel: (416) 212-6582 Fax: (416) 314-2175

January 7, 2012

Ministère de l'Énergie

880, rue Bay 2<sup>e</sup> étage

Toronto ON M7A 2C1 Tél: (416) 212-6582 Téléc.: (416) 314-2175



Ontario

His Worship Bill Hill, Mayor The Township of Melancthon 157101 Highway 10, RR #6 Shelburne, Ontario L0N 1S9

Dear Mayor Hill,

Your letters to the Premier regarding your concerns about wind energy projects in the Township of Melancthon have been forwarded to the Ministry of Energy's Renewable Energy Facilitation Office. I am pleased to respond.

Ontario has stringent noise regulations and setback requirements that wind facilities must meet in order to proceed to construction. When developing the Renewable Energy Approvals (REA) regulation, the Ministry of the Environment (MOE) used existing scientific research from around the world. Reviewing a large body of reports and studies enabled MOE to develop a regulation that was based on the best available science to protect human health and the environment.

Under the REA process, project applicants must engage the public, municipal governments and Aboriginal communities in discussions about their proposed energy projects. If mandatory public, municipal and Aboriginal consultation requirements are not met, a REA will not be issued, and the project will not proceed.

The government's clean energy initiatives, including its successful Feed-in Tariff (FIT) program, are creating economic benefits for Ontario. Many municipalities in Ontario have embraced the FIT program by both participating in and supporting local projects. There is room for municipalities to play a greater role in the development of projects.

Ontario has recently undertaken a review of the Feed-in Tariff (FIT) program, which resulted in the release of the FIT 2-Year Review Report on March 22, 2012. The Report contained recommendations for creating a more sustainable program by reducing prices, encouraging community participation in renewable energy development and improving local consultation.

Under the updated FIT program, new project applicants that work closely with municipalities and have support will receive points during the application process, helping those projects move forward.

4

The FIT 2-Year Review also included further recommendations for enhancing municipal engagement in renewable energy, which are currently being implemented:

- The Ministry of the Environment is revising the Municipal Consultation Form in the REA process to better reflect areas of municipal concern, in consultation with AMO.
- The Ministry of Energy's Renewable Energy Facilitation Office (REFO), developers and renewable energy industry associations are working to develop best-practice guidance materials, to help build projects in a sustainable, meaningful and responsible way.
- REFO has updated the Municipal Guide to Renewable Energy Projects, in collaboration with AMO amongst others, and will launch additional outreach initiatives, as appropriate. Please see the updated Guide online at the website link below:

http://www.energy.gov.on.ca/docs/en/RenewableEnergyDevelopment.pdf

We appreciate you taking the time to provide your feedback. If you have any further comments or questions please contact me and I will have a member of my staff assist you.

Sincerely,

Mirrun Zaveri, Deputy Director

Renewable Energy Facilitation Office



FROM THE OFFICE OF DIRECT LINE DIRECT FAX E-MAIL

Laura K. Bisset 416.941.5400 416,777,7432 lbisset@davis.ca

FILE NUMBER:

81310-00002

February 7, 2013

### **DELIVERED BY COURIER & FAX**

Sarah Raetsen Senior Program Support Coordinator Ministry of the Environment **Operations Division Environmental Approvals Branch** 2 St. Clair Avenue West Floor 12A Toronto ON M4V 1L5

Dear Ms. Raetsen:

Re: EBR Registry Number 011-7852

Dufferin Wind Power Inc. - Instrument Proposal - Approval for a renewable energy project

pursuant to s. 47.3(1) of the Environmental Protection Act

We are counsel for Conserve Our Rural Environment ("CORE"), an incorporated residents' group in the Township of Mulmur who have an interest in the wind farm proposed (the "Proposed Wind Farm") by Dufferin Wind Power Inc. ("DWPI"), and whose members can be impacted by it. On behalf of CORE, we write to provide comments on the above-noted Instrument Proposal and reports submitted in support of its approval.

CORE's position is that the reports submitted in support of the Proposed Wind Farm fail to demonstrate that it is in the public interest to grant the requested approval. Although CORE does not accept the adequacy of any of the reports, it comments herein focus on the following key areas of concern:

- 1. Natural Heritage
- 2. Noise
- 3. Cultural Heritage
- 4. Geotechnical
- 5. Air Quality
- 6. Visual Impact
- 7. Rail Line Easement



### 8. Human Health

It is CORE's position that the REA cannot be approved as long as these key concerns remain outstanding. A substantial amount of work would be required to demonstrate that the Proposed Wind Farm meets the requirements of the *Environmental Protection Act* and O. Reg 359/09. The reports simply do not support the approval of the REA.

### Natural Heritage

The proponent's natural heritage assessment work does not meet the requirements of O. Reg. 359/09 (the "Regulation"), nor does it demonstrate that the Proposed Wind Farm will have acceptable impacts on the natural environment.

These comments on natural heritage assessment will focus on bats, as an example of the inadequacy of DWPI's analysis of natural heritage features. Eighteen species of conservation concern were identified during site investigation with the potential to occur within 120 metres of the project location (see Evaluation of Significance Report). Even though these comments relate to bats, CORE's position is that the adequacy and completeness of the analysis performed with respect to the other species of conservation concern are also unsatisfactory, as is the analysis completed with respect to wetlands, woodlands, areas of natural and scientific interest and wildlife habitat.

The Records Review Report identifies three species of bat, classified as endangered by COSEWIC, as potentially occurring in the general area of the project location: the Little Brown Bat, the Northern Longeared Bat, and the Eastern Pipistrelle (see Appendix C). The Natural Heritage Assessment Site Investigation Report identifies five bat maternal roost colonies habitat, all of which were suitable roosting habitat for the Little Brown Bat, and the Northern Long-eared Bat. Two of these habitats (BMA 1 and BMA 4) are considered significant habitat, and BMA 2 is being treated as significant. Within 5 metres of BMA 1, DWPI proposes the following project components: underground collector circuit, alternative underground collector circuit, horizontal directional drilling, Turbine 3, access road, and crane path. Within 20 metres of BMA 2, DWPI proposes the following project components: Turbine 15, access road, underground collector circuit, and crane path. Within 5 metres of BMA 4, DWPI proposes the following project components: underground collector circuit, horizontal directional drilling, Turbine 34, access road, and crane path (see Environmental Impact Study Report).

The Environmental Impact Study Report says that studies to confirm the significance of wildlife habitats treated as significant will be completed prior to construction, which would include BMA 2. Mitigation measures will only be applicable if wildlife habitats are confirmed to be significant. In that same report, DWPI advises that pre-construction surveys will not be conducted within BMA 2. In other words, DWP proposes to construct Turbine 15 and determine later whether it poses a mortality threat to two species of endangered bat, and because it will not be confirming that BMA 2 is actually significant habitat, no mitigation measures will be applicable. This approach is plainly unacceptable.

In the same vein, and equally unacceptable is the description of the proposed contingency measure in the Environmental Effects Monitoring Plan for significant natural features in and within 120 metres of the Proposed Wind Farm where an operational impact has the potential to occur. DWPI proposes the following contingency measure with respect to bats: "upon submission of annual post-construction monitoring reports to Ministry of Natural Resources ("the "MNR") it will be determined in consultation with MNR whether contingency measures are required and the contingency measures to be undertaken." In other words, DWPI suggests that the Proposed Wind Farm be permitted to operate, potentially causing endangered bat mortality, before contingency measures to avoid that outcome are developed.



DWPI states that discussions regarding species at risk are outlined in a separate report (see Environmental Impact Study Report), but this report has not been made available. Bat mortality is a significant concern arising from the operation of wind farms. The MNR reports in Bats and Bat Habitats: Guidelines for Wind Power Projects that bat mortality has been documented at wind power projects in a variety of habitats across North America, and in Ontario, annual mortality estimates at wind power projects range from 4 to 14 bat mortalities/turbine/year. It is not acceptable that analysis of a virtually guaranteed impact to three endangered species of bats is not available for public review and comment prior to the potential approval of the requested REA. This approach fails to address the regulatory requirement to describe all potential negative environmental effects related to natural heritage resources and indicate where additional approvals will address specific potential effects.

These comments were provided to DWPI in July. None of the Draft Records Review Report, Draft Evaluation of Significance Report, or Draft Environmental Impact Study Report were modified in any way to address the comments before the reports were finalized.

DWPI has also failed to meet the procedural requirements of the Regulation, in relation to natural heritage. Subsection 28(3) of the Regulation requires the proponent to submit three things: (a) a natural heritage assessment; (b) a copy of any confirmation or comment it is required to obtain from MNR; and (c) any additional written comments provided by MNR in respect of the natural heritage assessment. At the time that DWPI's draft reports were made available for public comment in May, 2012, DWPI did not make available any correspondence from MNR suggesting that it had obtained the required confirmations to proceed with the Proposed Wind Farm. The final reports, however, make reference to correspondence from MNR dated May 9, 2012, without including a copy of it. DWPI did not comply with the regulation in not making that correspondence available with the draft reports, and it continues to fail to meet its obligations pursuant to paragraph 28(3)(c) of the Regulation by failing to produce a copy of the May 9, 2012 MNR correspondence. DWPI's REA application should not have been deemed complete in the absence of this correspondence; and MOE should not consider approving the REA until the correspondence has been produced, and it has received public comment on it.

Finally, MNR's October 21, 2012 correspondence indicates that MNR does not "support or confirm that any part of the Northern Route has satisfied the requirements of Ontario Regulation 359/09." It is unclear to CORE what is meant by the "Northern Route" or whether DWP is seeking the MOE's approval of it notwithstanding MNR's failure to provide the confirmation required by the Regulation.

DWPI's natural heritage work is inadequate and fails to meet the regulatory requirements that would allow for the approval of the REA.

Noise

DWPI's Noise Study Report concludes:

The modelling was completed for a worst-case noise impact scenario with a conservative assumption of applying the maximum turbine noise level for all wind speeds and comparing the results against the most stringent limit (i.e., 40 dBA) which applies to wind speed of 6m/s at 10m height. The noise modelling results, as assessed in this study indicated that receptor noise levels for non-participating receptors (including vacant lots) comply with the most stringent guideline limit of 40 dBA.

The concept of applying the maximum turbine noise level against the most stringent criteria is a reasonable approach that avoids having to consider the wind speed profile. However, the implementation of this approach in the report is questionable.



Specifically, referring to Table 5(c) on page 19 of the report as an example, the analysis undertaken has used the Manufacturer's Emission Level at the highest wind speed (10m/s) as the Adjusted Emission Level for all integer wind speed between 6 and 10m/s. However, the total sound power is not the highest at a wind speed of 10m/s; it is 0.1 dB higher at a wind speed of 8m/s and 0.2 dB at 9m/s. Similar discrepancies occur in the emission levels assumed for four of the seven different wind turbine generation capacities.

Increments of 0.1 or 0.2 dB in the sound power levels would seem to be trivial were it not for the fact that in Table 8(a) the predicted impact at seven non-participating receptors (NP15, NP43, NP56, NP83, NP133, NP250, and NP255) is identically at the criteria of 40.0 dBA. Assessed properly, and depending on site specific wind shear values and the frequency spectrum of the sound emissions, the sound levels at these receptors may be out of compliance with MOE guidelines.

In addition, several other potential concerns should be clarified or addressed:

The MOE guidelines require that: "the acoustic emissions of the wind turbine must be specified by the manufacturer for the full range of rated operation and wind speeds. As a minimum, the information must include the sound power levels, frequency spectra in octave bands (633 to 8000 HZ), and tonality at integer wind speeds from 6 to 10 m/s. The acoustic emission information must be determined and reported in accordance with the international standard CAN/CSA-C61400-11-07."

The report refers to some of the above sound power and tonality levels in text and tables, and directs the reader to the detailed data in Appendix A. Appendix A presents no information related to wind turbines making it difficult to validate the values used in the analysis.

- The cumulative impact of adjacent wind farms does not appear to have been properly assessed in the report. For example, Table 8(a) claims it summarizes the combined noise impact, and for non-participating receptor 258 (NP258) shows an impact of 37.5 dBA. However, the concordance table (Table 8(b)) shows an impact of 37.5 dBA from the Dufferin Wind Farm and 38.0 dBA from the neighbouring Plateau Wind Farm. Summing these two impacts results in a combined impact of 40.8 dBA which is not in compliance with MOE guidelines. Also, on Table 8(b), the report is not necessarily correct in stating that the conservative location for vacant lots is a point closer to the Dufferin Wind Farm; this depends on the relative impact from the two wind farms.
- The report considers wind turbines of seven different generation capacities. In Table 2 the model names are not listed *per se*, only the name plate capacity. Based on the parameters listed it is suspected that there are only two models, GE Energy 1.6-100 and GE Energy 2.75-103, with the remaining five "models" likely to be de-rated versions of these two. De-rated turbines cause a concern from a compliance perspective because it is difficult to ensure that the adjustments are working as intended.
- In the MOE guideline, "Participating Receptor" is defined as a property that is associated with the Wind Farm by means of a legal agreement with the property owner for the installation and operation of wind turbines or related equipment located on that property. The report identifies 44 participating residences, with 20 of those predicted to have sound levels exceeding the MOE criteria, which is allowed under the guideline. From Figure 3 in the report, the relationship between participating receptors and the wind turbine equipment is clear, except in the vicinity of wind turbines T22, T48 and T49 where there are four participating receptors associated with the three turbines.



The acoustic impact of the substation transformer options has been assessed in a reasonable fashion, and while the report shows both options comply with the MOE guidelines, the option of having the transformer at the point of interconnect in the Town of Mono impacts a significant number of receptors with at least 10 dB higher sound levels than the option of locating the transformer within the project site. Levels on the order of 37 dBA are expected at non-participating receptors in Mono, and it should be considered that persistent complaints arose at a similar transformer in Amaranth that produced noise impacts on the order of 30 dBA. It appears from a note on DWPI's website that this option has not been selected, however, this should be clarified.

DWPI's noise impact analysis is inadequate and fails to meet the regulatory requirements that would allow for the approval of the REA.

#### Geotechnical

DWPI proposes to construct the wind turbines on large spread footings. It is essential that the turbines' foundations be adequate for their purpose, and solidly grounded, because the consequence of failure is that the turbines will fall over. DWPI has not demonstrated that the turbine foundations are capable of being constructed in a way that will allow them to be adequate for their purpose.

First, the Geotechnical Report is based on preliminary information only. For instance, the author of the report is not certain about the bearing pressure of the turbines. The report says that based on preliminary information provided, two types of turbines will be used on this project: (1) 1.6MW turbine which is typically founded on a 14m diameter spread footing foundation with a bearing pressure of 160 kPa to 215 kPa; and (2) 275 MW turbine which is typically founded on a 16m diameter spread footing foundation with a bearing pressure of 215 kPA to 290 kPa. The report then says that it is not clear at the time of the draft report if the above values represent ultimate or serviceability (working load) conditions and if they are factored or not. The bearing pressure is the maximum pressure which can be supported without failure. Without properly understanding these conditions, it is impossible to conclude that geotechnical conditions are such that the turbines can be constructed.

Second, the reported groundwater elevation is not based on sufficient information, and has likely underestimated the depth of the water table. The report relies on groundwater measurements obtained in December 2011 and February 2012. The report finds that groundwater levels were found to be relatively deep except at 14 locations where the groundwater table was found to be less than 4 metres below the ground surface. The report then adds the important qualification that groundwater levels can vary and are subject to seasonal fluctuations as well as fluctuations in response to major weather events. Higher groundwater levels should be expected during wetter period of the year, for example spring run-off and during periods of extended rainfall.

Given that the groundwater level measurements were taken (a) during the winter; and (b) during one of the driest winters on record in southern Ontario, it is quite likely that the assessment of the elevation of the water table is low, probably lower than it would be were four-season measurements to have been taken and averaged. Moreover, if there are seasonal fluctuations in the groundwater level, as suggested, the levels presented in the report will be higher at different parts of the year.

The report assumes that excavations will be large diameter relatively shallow excavations to facilitate construction of the turbine bases. It also assumes that the depth of excavation will be at least 1.5 metres or more to provide adequate frost protection. The thickness of the turbine bases, as well as the depth of the excavation required for the foundations was not known at the time of preparing the report.



Based on the low estimate of the groundwater elevation, there are a significant number of turbine sites where excavating to a minimum of 1.5 metres below the surface to construct the turbine foundations will pose a problem. In particular, the groundwater depth at T01 is 1.5 metres; at T26 it is 0.8 metres; at T32, it is 1.6 metres; at T34, it is 1.4 metres; at T36 it is 1.7 metres; at T39 it is 1.3 metres, and at T48 it is 1.4 metres. As previously stated, the elevation of the water table could even increase given seasonal fluctuations. The Geotechnical Report suggests that where the excavations extend a significant depth below the water table then additional dewatering such as temporary cut-off walls, well points, etc. may be required due to the sandy nature of the till soils. The report provides no analysis as to whether these mitigation measures are feasible in the conditions. The conclusion in Geotechnical Report, and adopted in the Construction Plan Report that generally these conditions are considered favourable from a geotechnical perspective for supporting wind turbines on the typical large spread footings is questionable in light of the data and DWPI's failure to analyse the feasibility of mitigation measures.

DWPI's geotechnical analysis is inadequate and fails to meet the regulatory requirements that would allow for the approval of the REA.

### Cultural Heritage

The proponent's Construction Plan Report does not implement the findings of the Archaeological Assessment which is appended thereto.

First, turbine sites T31 and T32 have not been adequately assessed. The Archaeological Assessment, states that assessment of the T31 and T32 turbine sites, as well as their associated access road yielded evidence of a historic scatter in the south-eastern corner of the T31 turbine pad. The Archaeological Assessment concludes that if the site is to be impacted by development, Stage 3 Testing and Controlled Surface Pick-up are warranted. It is further concluded that Stage 4 archaeological investigation may be required for areas of the site as well, depending on the results of the Stage 3 archaeological assessment. DWPI's response to this analysis, documented in the Construction Plan Report, was that because a Stage 3 was recommended, the location of the buildable area for T30 (formerly T31) would be moved. DWPI has provided no analysis of the archaeological resources that may be located at the new T30 turbine site.

Second, turbine sites T43 and T44 have not been adequately assessed. The Archaeological Assessment states that assessment of the T43 and T44 turbine sites, as well as their associated access road yielded evidence of a historic scatter on turbine site T43, located in the north-eastern corner of the turbine pad. The report concludes that if the site is to be impacted by development, Stage 3 Testing and Controlled Surface Pick-up are warranted. It is further concluded that Stage 4 archaeological investigation may be required for areas of the site as well, depending on the results of the Stage 3 archaeological assessment. DWPI's response to this recommendation is completely inadequate. T42 (formerly T43) is not being relocated, nor are Stage 3 Testing or Controlled Surface Pick-up proposed to be undertaken.

Nevertheless, with respect to both of these areas, DWPI states that it has determined that there will be sufficient area outside of the area of archaeological concern to lay down turbine components in the construction stage of the project, such that this archaeological resource will not be affected. DWPI proposes to erect temporary fencing along the outer limits of the monitoring zone to prevent any accidental impacts. Temporary fencing might be an adequate mitigation measure once assessment has been completed. Not having completed the assessment, though, DWPI cannot know that its construction activities will not impact sensitive archaeological resources. DWPI must undertake the Stage 3 assessment and Controlled Surface Pick-up that its consultants have recommended to it.

DWPI has not completed the archaeological assessment required by the Ministry of Culture, Tourism and Sport ("MCTS") for the private easement lands. All ploughed fields remain to be reploughed, allowed to



weather, and resurveyed for a second field assessment. The REA should not be considered until this assessment is completed and the results made available to the public for comment.

DWPI's analysis of archaeological and cultural heritage resources on and around the project site is incomplete. DWPI should not be permitted to proceed until the analysis is complete.

DWPI's cultural heritage work is inadequate and fails to meet the regulatory requirements that would allow for the approval of the REA.

### Air Quality

The Construction Plan Report states that there will be project-related air quality effects during the construction phase. Although DWPI states that the effects are "expected to be minimal and temporary," DWPI has not provided <u>any</u> air quality analysis for public or MOE review, such that DWPI's expectations can be assessed. Air quality analysis is required before the REA can be approved.

### Visual Impact

CORE is concerned about the impacts of the project on the scenic resources of the Township and on its rural character. CORE does not accept that the visual impact of any of the turbines on the rural landscape of the Township is acceptable. In addition, the Niagara Escarpment Commission (the "NEC") considers the impacts of some of the turbines close to the Niagara Escarpment Plan boundary to be unacceptable. The NEC has requested that some of the turbines be relocated, which request has gone unanswered by DWPI. Visual impacts must be properly assessed before the REA can be approved.

### Rail Line Easement

DWPI has decided to seek approval for the 230 kV power line option, which is proposed to run along the former railroad right-of-way. DWPI has not secured the property rights it requires from the County of Dufferin (the "County") to construct the power line along the former right-of-way. County Council has directed staff to commence a review of DWPI's proposal to enter into an easement agreement and to engage in public consultation. CORE has engaged in the public consultation process by providing comments to the County in opposition to the grant of the easement. In CORE's view, the County has not satisfied itself that, if it grants the easement, and the transmission line is constructed, no unacceptable land use conflicts will arise. It does not appear to the members of CORE that the transmission lines can co-exist with current and planned uses of abutting land. Three areas of particular concern are in the populated residential areas in Shelburne and Corbetton, and the locations along the corridor that are used and planned for recreational purposes. The Construction Plan Report indicates that some guyed poles will be required where the power line shifts to either side of the easement or transitions through curves or difficult terrain. Guy wires are a particular safety concern for snowmobilers who use the rail lands.

The County will take these and other comments into consideration in determining whether to grant the easement. This public process has not yet run its course.

DWPI has also applied to the Ontario Energy Board (the "OEB") for leave to construct the 230 kV power line. CORE has been involved in the OEB process, and it, along with other parties, oppose the grant of leave to construct by the OEB. The OEB process has not concluded yet.

It is premature for MOE to consider the REA before it is known whether the 230 kV power line can be constructed in the location DWPI proposes. It is a waste of the MOE's resources to review a proposal





that may never be implemented; or that may need to be so substantially altered so as to require that a new application be filed.

### Human Health

DWPI has done no analysis of the potential impacts on human health of the Proposed Wind Farm. CORE is concerned about the impacts of the Proposed Wind Farm operations on its members' health, in particular the effects of shadow flicker, ice throw hazards and noise.

There are studies that show that the shadow flicker effect caused by the operation of wind turbines can, in the long term, cause significant nuisance. In particular, shadow flicker causes stress to human beings and can cause headaches.

Health Canada has announced that it will be working with Statistics Canada and other external experts possessing expertise in areas including noise, health assessment, clinical medicine and epidemiology, to design a research study that will explore the relationship between wind turbine noise and the extent of health effects on those living near wind power developments. In Health Canada's view, currently there is insufficient evidence to conclude whether or not there is a relationship between exposure to the noise from wind turbines and adverse human health effects, although community annoyance and other concerns have been reported in the scientific literature.

It is CORE's position that the approval process related to the Proposed Wind Farm should await the outcome of Health Canada's study, given the import of protecting human health, and given how close to its members' homes some of the turbines are proposed to be located. MOE should not countenance DWPI's ostensible lack of concern for the health impacts that can be caused by the Proposed Wind Farm.

### Conclusion

In CORE's view, approval of the Proposed Wind Farm has not been justified by the Reports. Substantial further work is required to bring the Reports into compliance with the requirements of the Regulation. As it has been presented, the REA has the potential to cause significant adverse impacts to natural heritage resources, cultural heritage resources, air quality, scenic resources and the rural character of the Township, and human health and safety. It would be a mistake to grant an REA for the Proposed Wind Farm.

Yours truly, DAVIS LLP

Per:

Laura K. Bisset

LKB/

CC:

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FROM THE OFFICE OF DIRECT LINE DIRECT FAX E-MAIL

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FILE NUMBER:

81310-00002

February 12, 2013

### **DELIVERED BY COURIER & FAX**

Sarah Raetsen Senior Program Support Coordinator Ministry of the Environment Operations Division **Environmental Approvals Branch** 2 St. Clair Avenue West Floor 12A Toronto ON M4V 1L5

Dear Ms. Raetsen:

Re:

EBR Registry Number 011-7852

Dufferin Wind Power Inc. - Instrument Proposal - Approval for a renewable energy project pursuant to s. 47.3(1) of the Environmental Protection Act

As previously advised, we are counsel for Conserve Our Rural Environment ("CORE"). We write to provide comments supplementary to the comments submitted on February 7, 2013, with respect to the above-noted Proposed Wind Farm. We write in particular to supplement our comments about:

- matters arising in the context of the application to the Ontario Energy Board (the "OEB") by 1. Dufferin Wind Power Inc. ("DWPI") for Leave to Construct transmission facilities;
- 2. confirmation of DWPI's failure to secure municipal support for the Proposed Wind Farm; and
- 3. noise impacts.

Leave To Construct Application

On February 5th, the OEB issued Procedural Order No. 3 in the Leave to Construct matter. In that procedural order, the OEB has required disclosure of certain information by DWPI, by February 15th, 2013, including:

- corporate organizational abilities, including, but not limited to background information on key personnel, relevant financial information, and information about experience with respect to the management of similar projects;
- a copy of its FIT contract, including a copy of all amendments to date; and



 additional detailed corporate information related to key individuals, financial information, and technical resources.

As set out in our previous correspondence, CORE believes that the impacts of the Proposed Wind Farm will be numerous and significant. Managing a wind farm with adequate regard to the public interest requires an operator to monitor and address impacts to the natural environment and to human health and safety caused by the wind farm. DWPI's corporate and financial ability to monitor, assess and address impacts are therefore directly relevant to whether an REA should be granted in respect of the Proposed Wind Farm.

It is also essential that the public be given the opportunity to review DWPI's FIT contract and any amendments thereto. Amendments to the FIT Rules were finalized in December, 2012, which include consideration of municipal council engagement and support for proposed renewable energy projects. The contents of DWPI's FIT contract will inform the feasibility of the Proposed Wind Farm; and it is possible that amendments to it require consideration of the December 2012 FIT standards related to municipal council support. As will be discussed in greater detail below, there is no municipal support for the Proposed Wind Farm.

As such, MOE should defer consideration of granting any REA to DWPI until the above-noted information has been made public, and the public has had at least thirty (30) days from the date of disclosure to review it and to provide additional comment to the MOE.

Moreover, in further support for CORE's comment that it is premature to consider granting an REA until the Leave to Construct Application has been disposed of by the OEB, the location and feasibility of the transmission lines, which are matters that the OEB will be considering, continue to be moving targets. If the route of the transmission line is altered, it is possible that the generation facilities will also require revision, and that a revised REA application will need to be made. In particular, it is not known whether the present request to the County of Dufferin to use its rail line will be granted, or it so, on what conditions. Some issue, such as financial capacity to provide requested mitigation for the transmission line are relevant to the REA. Some items, such as decommissioning requirements, should be coordinated with any REA conditions.

### Lack of Municipal Support

On February 7, 2013, the County of Dufferin resolved to bring municipal concerns related to the grant of an REA to DWPI to the MOE's attention. Its concerns relate to a number of matters, including the route for the proposed transmission line, along a former railway corridor which now belongs to the County, and over which DWPI would be required to secure an easement to proceed with construction as proposed; ecological and social effects of the Proposed Wind Farm; and the County's role and the role of local municipalities in monitoring the impacts of the Proposed Wind Farm.

On February 6, 2013, the Township of Mulmur also resolved to bring its concerns to the attention of the MOE through the REA comment process. The comments that the Township of Mulmur resolved to make included that none of the concerns it has raised with DWPI have been resolved to the Township's satisfaction.

The Mayor of the Township of Melancthon has written to the Province on numerous occasions expressing concern with the approval of industrial wind generation facilities in the Township.

It is inappropriate to grant an REA where there is no municipal support for a proposed project. The MOE should not consider granting approval to the Proposed Wind Farm unless the affected municipalities are



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satisfied that DWPI has addressed their concerns and that the impacts to their communities will be acceptable.

### Noise Impacts

New information about the noise impacts of wind turbines has recently come to CORE's attention. Large wind turbines generate low frequency sound, or infrasound, in turbulent wind conditions. The health impacts of infrasound on the human ear are currently poorly understood and are being studied, but are thought to include tinnitus and vertigo, and other inner ear conditions. The standards by which noise studies in support of REA approvals are assessed for sufficiency by MOE do not include consideration of infrasound. Given potential risk to human health that may be caused by infrasound, DWPI's noise study should not be considered to be complete until DWPI has modelled and assessed infrasound, and the impacts of infrasound on human health are understood.

This information further underscores the need to await further progress on Health Canada's study on the relationship between wind turbine noise and the extent of health effects on those living near wind power developments.

Yours truly,

Per:

Laura K. Bisset

LKB/

cc.: Jane Pepino

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