

1 **ONTARIO ENERGY BOARD**

2
3 **EB-2013-0233**

4
5 IN THE MATTER OF the *Ontario Energy Board Act*,
6 1998, S.O., c. 15 (Sched. B);

7
8 AND IN THE MATTER OF an application by East
9 Durham Wind, Inc. for an Order or Orders pursuant to
10 Section 41(9) of the *Electricity Act, 1998* (as amended)
11 establishing the location of the applicant's distribution
12 facilities within certain road allowances owned by the
13 Municipality of West Grey.

14
15 **ARGUMENT IN CHIEF**

16
17 In accordance with the Ontario Energy Board's (the "**Board's**") Procedural Order No. 2
18 dated August 1, 2013, East Durham Wind, Inc. ("**East Durham**") makes this written
19 submission in support of its application for an order or orders pursuant to Section 41(9)
20 of the *Electricity Act, 1998* (as amended) (the "**Electricity Act**") establishing the location
21 of East Durham's distribution facilities within certain public rights-of-way, streets and
22 highways owned by the Municipality of West Grey (collectively, the "**Road**
23 **Allowances**").

24 **1.0 THE PROJECT**

25 By way of background, East Durham owns and will operate the generation and
26 distribution assets of the East Durham Wind Energy Centre (the "**Project**"), which is
27 located in the Municipality of West Grey ("**West Grey**") in Grey County, Ontario. The
28 Project will include up to 14 wind turbines (with 2 approved alternate wind turbine sites)

1 and will have a total nameplate capacity of up to 23 megawatts. The Project is further
2 described in Exhibit B, Tab 2, Schedule 1 of East Durham’s June 14, 2013 application
3 (the “**Application**”).

4 The Project will involve 34.5 kilovolt (“**kV**”) underground distribution lines located on
5 private property and municipal and county right-of-ways, which are essential to the
6 Project in that they will convey electricity from each of the wind turbines to a transformer
7 station, from which an overhead 44 kV line will convey the electricity to the existing
8 local distribution system of Hydro One Networks Inc. (“**HONI**”) and ultimately to the
9 IESO-controlled grid (collectively, the “**Distribution System**”).¹ East Durham has
10 proposed to locate certain power lines, poles and other facilities associated with this
11 Distribution System within certain public rights-of-way, streets and highways owned by
12 West Grey, as set out in Part 2.0 hereof.

13 In choosing to locate a portion of the Distribution System within the Road Allowances,
14 East Durham relied on its right pursuant to Section 41 of the Electricity Act to locate
15 distribution facilities within any public street or highway without the consent of the
16 owner. However, given that West Grey has effectively refused to agree on the precise
17 location of East Durham’s Distribution System within the Road Allowances, Section
18 41(9) of the Electricity Act states that the Board shall determine such location. Because

¹ The Distribution System is further described in Exhibit B, Tab 2, Schedule 1 of the Application.

1 of the limited scope of Section 41(9), the only issue before the Board is determining that
2 location.²

3 **2.0 PROPOSAL FOR LOCATION OF THE DISTRIBUTION SYSTEM**

4 East Durham proposes that the location of the Distribution System within the Road
5 Allowances should be as follows:

- 6 • The Distribution System shall generally be located in the Road Allowances listed
7 in the following table:

<u>Distribution Facility</u>	<u>Functionality</u>	<u>Degree of Necessity</u>	<u>Relevant Road Allowance</u>	<u>Side of Road Allowance</u>	<u>Approximate Length of Line Segment</u>
Segment 1	Transmit Wind Energy Centre generation to Connection Point	Essential	Boot Jack Ranch Road	Western	2006m
Segment 1	Transmit Wind Energy Centre generation to Connection Point	Essential	Southline	Southern	1507m
Segment 1	Transmit Wind Energy Centre generation to Connection Point	Essential	The Glen Road	Eastern	347m
Segment 1	Transmit Wind Energy Centre generation to Connection Point	Essential	Grey Road 4	Northern	1043m
Segment 2	Transmit Wind Energy Centre generation to Connection Point	Essential	Grey Road 4	Northern	851m
Segment 3	Transmit Wind Energy Centre generation to Connection Point	Essential	Grey Road 4	Northern	1049m
Segment 4	Transmit Wind Energy Centre generation to Connection Point	Essential	Grey Road 4	Northern	982m
Segment 1	Transmit Wind Energy Centre generation to Connection Point	Essential	Glenelg Road 23	Eastern	167m
Segment 2	Transmit Wind Energy Centre generation to Connection Point	Essential	Glenelg Road 23	Eastern	772m
Segment 3	Transmit Wind Energy Centre generation to Connection Point	Essential	Glenelg Road 23	Western	290m

² For further details on East Durham's and West Grey's disagreement regarding the location of the Distribution System within the Road Allowances, see Exhibit B, Tab 5, Schedule 1, Pages 2-5 of the Application.

<u>Distribution Facility</u>	<u>Functionality</u>	<u>Degree of Necessity</u>	<u>Relevant Road Allowance</u>	<u>Side of Road Allowance</u>	<u>Approximate Length of Line Segment</u>
Segment 4	Transmit Wind Energy Centre generation to Connection Point	Essential	Glenelg Road 23	Western	1286m
Segment 5	Transmit Wind Energy Centre generation to Connection Point	Essential	Glenelg Road 23	Eastern	658m
Segment 1	Transmit Wind Energy Centre generation to Connection Point	Essential	Concession 4	Southern	1670m
Segment 2	Transmit Wind Energy Centre generation to Connection Point	Essential	Concession 4	Southern	1500m
Segment 3	Transmit Wind Energy Centre generation to Connection Point	Essential	Concession 4	Southern	147m
Segment 4	Transmit Wind Energy Centre generation to Connection Point	Essential	Concession 4	Northern	446m
Segment 1	Transmit Wind Energy Centre generation to Connection Point	Essential	Baptist Church Road	Eastern	1505m

Please note that this table corrects certain minor administrative errors in the table included as Appendix 7 to East Durham's August 26, 2013 interrogatory responses. In particular, due to a map plotting error, the Baptist Church Road segment noted above was omitted from the first map included in Appendix 6 and the table attached as Appendix 7 to the interrogatory responses (even though this road was listed in Exhibit B, Tab 6, Schedule 1 of the Application). In addition, because the name of Sideroad 40 changes to Boot Jack Ranch Road north of County Road 4, the location of this portion of Segment 1 of the Distribution System should identified as Boot Jack Ranch Road as noted in the table above (rather than as Sideroad 40).

The table above has been provided to clarify and confirm the proposed location of the Distribution System in the Road Allowances, and it should replace the table included as Appendix 7 to East Durham's interrogatory responses. Attached hereto as Appendix A is an updated map that also corrects these administrative errors and that should replace the first map included in Appendix 6 to East Durham's interrogatory responses.

- Where practicable, and where it meets all applicable engineering, environmental and health and safety standards, the Distribution System lines shall be located 1-4 metres from the abutting property line.³

³ Once the detailed engineering process is completed, however, East Durham may be required to slightly deviate from the 1-4 metre setback to minimize the need for tree cutting, road crossings and guy anchors on private properties, as well as to accommodate the flow of the ditch drainage.

As well, East Durham is committed to following the diagrams shown at Exhibit B, Tab 6, Schedule 1, Appendices C and D of the Application, where practicable and where they meet all applicable engineering, environmental and health and safety standards, in constructing the Distribution System within the Road Allowances.

As noted in the table above and East Durham's response to Board Staff Interrogatory No. 3(vi), all of the proposed Distribution System facilities are essential to the operation of the Project.

3.0 RATIONALE FOR AND ALTERNATIVES TO PROPOSED LOCATION

Having chosen to locate the Distribution System within the Road Allowances, East Durham has limited choices with respect to the precise location of those facilities within the Road Allowances. That choice is restricted to, for example, whether the Distribution System will be located on or near a traveled or untraveled section of the Road Allowances. Given the limited scope of the choice, there is carefully considered rationale behind the location that East Durham has proposed in this submission. In particular:

- the proposed location of the Distribution System within the Road Allowances is the best balance of various environmental, social, technical and economic considerations;
- East Durham has responded to the concerns raised by West Grey and the intervenors, including those concerns raised in this proceeding, regarding the proposed location of the Distribution System within the Road Allowances; and
- no other party to this proceeding has proposed an alternative location for the Distribution System within the Road Allowances, and therefore there are no suitable alternatives for locating the Distribution System in the Road Allowances other than as proposed herein.

**3.1 ADDRESSING ENVIRONMENTAL, SOCIAL, TECHNICAL AND
ECONOMIC CONSIDERATIONS**

Various environmental and social considerations influenced East Durham's proposed layout of the Distribution System within the Road Allowances. The current Project configuration was determined through an iterative approach and based on an extensive environmental assessment and community consultation process conducted in accordance with Ontario Regulation 359/09.⁴

The environmental assessment process included numerous public open houses and environmental and archeological studies that focused not only on the potential impact of the turbines, but also of the entire Project, including the Distribution System. Information collected through these studies was used by the East Durham design team to modify placement of Project infrastructure in order to minimize impacts to natural heritage features, such as significant woodlots, wetlands, wildlife habitat and waterbodies, as well as to archeological sites. Based on these studies, the use of municipal road right-of-ways for the installation of the Distribution System was a preferred alternative to impacting existing natural heritage features and archeological sites. Information collected through the consultation process was also used to modify placement of Project infrastructure to address any concerns raised by the public, private landowners and other stakeholders.

⁴ See East Durham's responses to Board Staff Interrogatory Nos. 3(i) and (iv).

1 In determining where to locate the Distribution System within the Road Allowances, East
2 Durham also considered applicable regulatory, economic and technical requirements. For
3 example, the Distribution System will be built in accordance with Electrical Safety
4 Authority standards and will adhere to setbacks from features that might interfere with
5 the Distribution System. East Durham has also proposed appropriate setbacks from
6 abutting property lines, so that the Distribution System will not interfere with
7 neighboring lands while still providing sufficient space to facilitate future road
8 improvements and signage.⁵ In addition, East Durham weighed technical considerations,
9 such as the challenges of boring through solid bedrock, when refining the layout and
10 determining crossing infrastructure.

11 The environmental assessment and consultation process, combined with technical and
12 economic considerations, iteratively ruled out alternative Project configurations.
13 Together they indicated that the layout within the Road Allowances proposed by East
14 Durham in Appendix B is the most appropriate location for the Distribution System.

15 **3.2.1 ENGAGEMENT WITH AND RESPONDING TO CONCERNS OF WEST**
16 **GREY**

17 East Durham has repeatedly attempted to engage with West Grey and come to an
18 agreement regarding the location of the Distribution System. West Grey has refused to
19 engage with East Durham, despite the reasonableness of East Durham's consultation and
20 engagement efforts, and has effectively forced this proceeding to take place.

⁵ See also East Durham response's to Board Staff Interrogatory No. 2(iii).

1 East Durham has had an extensive track record of consultation with West Grey on the
2 Project configuration, including the layout of the Distribution System, as set out in
3 Exhibit B, Tab 5, Schedule 1 of the Application and further discussed in East Durham's
4 responses to Board Staff Interrogatory Nos. 1(ii) and 4(i), (iii) and (iv). During the
5 course of this consultation, East Durham has responded to the concerns raised by West
6 Grey with respect to the location of the Distribution System within the Road Allowances.

7 In addition, East Durham has proposed a reasonable road use agreement to West Grey,
8 which would confer certain benefits on and provide numerous protections to West Grey.⁶
9 For example, East Durham would undertake the construction, installation, operation,
10 maintenance and decommissioning of the Distribution System at its own expense and in
11 accordance with good engineering practices; use reasonable efforts to avoid unnecessary
12 adverse impacts on the public use of the Road Allowances; and repair the surface of any
13 Road Allowance that was damaged in the course of the work. East Durham first provided
14 a copy of the proposed road use agreement to West Grey on September 27, 2012 and has
15 made repeated efforts since that time to discuss the proposed agreement with the
16 municipality. West Grey has effectively refused to engage East Durham in discussions
17 regarding where in the Road Allowances the Distribution System will be located, despite
18 East Durham's good faith efforts to initiate those discussions. Instead, West Grey has
19 stated that it is an unwilling host for wind energy development and has indicated that it
20 will only engage in discussions if East Durham agrees to certain other demands.

⁶ For additional information and a copy of the proposed road use agreement, see Exhibit B, Tab 4, Schedule 1 of the Application.

1 As detailed in the Chronology of Events included in Exhibit B, Tab 5, Schedule 1 of the
2 Application and further discussed in East Durham's responses to Board Staff
3 Interrogatory Nos. 4(ii), (iii) and (iv), East Durham has appropriately responded to West
4 Grey's demands regarding stray voltage, concrete encasement and boring under the
5 Saugeen River. East Durham has explained the nature of stray voltage and offered to
6 assist any concerned landowner in the Project area in accessing HONI's existing stray
7 voltage testing and mitigation protocols. East Durham has explained that it is not
8 standard engineering practice to encase underground collection lines in concrete and
9 noted that West Grey Bylaw 59-2012, which applies only to underground direct current
10 electrical cables, does not apply to East Durham's Distribution System, which will only
11 include alternating current electrical cables. East Durham has also explained that the
12 Saugeen River crossing is not a suitable location for underground cables due to the
13 presence of bedrock and indicated that boring through such bedrock would, among other
14 things, cause a much greater impact on the natural environment than locating the
15 collector lines along the bridge over the river.

16 East Durham has always remained, and continues to be, willing to engage in good faith
17 negotiations regarding the location of the Distribution System. In contrast, West Grey
18 has refused to engage with East Durham and has taken various steps in what has appeared
19 to be an attempt to frustrate the Project.

20

1 **3.2.2 ADDRESSING CONCERNS OF INTERVENORS**

2 Mr. Syd and Ms. Karen Parkin (the “**Parkins**”) have intervened in this proceeding and
3 filed various pieces of evidence with the Board. Much of this evidence is policy
4 documentation which, in East Durham’s respectful submission, is both outside of the
5 Board’s jurisdiction generally and outside of the specific jurisdiction of the Board in this
6 application.⁷ The evidence also includes a bill regarding stray voltage that was never
7 passed⁸ and papers which demonstrate that, to the extent that stray voltage becomes an
8 issue, it can be effectively managed and mitigated.⁹

9 Most importantly, the Parkins have not demonstrated any nexus between the evidence
10 filed and the issue before the Board in this proceeding: where the Distribution System
11 should be located within the Road Allowances. Despite filing various materials
12 regarding the potential effect of stray voltage, the Parkins have not filed any evidence
13 suggesting that East Durham’s Distribution System in particular will cause stray voltage
14 or that, if so, the proposed location of the Distribution System in the Road Allowances is

⁷ As the Board noted in Procedural Order Nos. 1 and 2 in this proceeding, the scope of the Board’s jurisdiction in this proceeding is limited to determining the location of East Durham’s distribution facilities within the road allowances owned by West Grey. The consideration of any aspect of the proposed wind generation facilities is not within the Board’s jurisdiction.

⁸ Bill 143, *An Act respecting ground current pollution in Ontario*, is a private member’s bill that was tabled on October 4, 2006 and has shown no change in status since being referred to the Standing Committee on Justice Policy following its Second Reading on October 19, 2006: see http://www.ontla.on.ca/web/bills/bills_detail.do?locale=en&BillID=468&detailPage=bills_detail_status.

⁹ For example, the papers suggest several measures to resolve stray voltage issues, including repairing any defects such as defective splices; improving load balancing; improving grounding by adding more ground rods; bonding together structures’ conductive components; installing equipotential planes; installing slatted floors; and installing various isolating devices: see Ontario Energy Board, EB-2007-0709, Staff Discussion Paper, “Farm Stray Voltage: Issues and Regulatory Options” (May 2008), pp. 44-55; “Report of the Ground Current Working Group to the Utility Advisory Council” (September 20, 2007), Appendix B, Stray Voltage Mitigation Distribution System Standard Test”, p. 12, s. 7.0 and Appendix C, “Electrical Contractors Solutions Guide to Stray Voltage”, pp. 4-5; and J. Rodenberg and B. Lang, Ontario Ministry of Agriculture, Food and Rural Affairs, “Stray Voltage and Robotic Milking of Dairy Cows” (December 2009), pp. 4-5.

1 such that stray voltage would cause an adverse impact on the Parkins or any other person,
2 facility, livestock or equipment.

3 As discussed in Exhibit B, Tab 5, Schedule 1, Appendices C and E of the Application and
4 East Durham's response to Board Staff Interrogatory No. 4(ii), wind turbines do not
5 specifically cause stray voltage. As the local distribution system operator, HONI is
6 responsible for overseeing stray voltage issues and has developed a protocol to
7 proactively test for stray voltage and mitigate any concerns, if found, at no cost to
8 landowners. East Durham will assist any concerned landowners in the Project area, such
9 as the Parkins, who wish to access HONI's existing stray voltage testing and mitigation
10 protocols.

11 **3.3 NO FEASIBLE ALTERNATIVES**

12 It is important to note that East Durham has submitted the only proposal regarding the
13 location of the Distribution System. West Grey has not put forward an alternative
14 proposal, provided comments on East Durham's proposed road use agreement, or even
15 submitted evidence in this hearing. The Parkins have similarly failed to submit an
16 alternative proposal. In fact, East Durham is the only party in this proceeding that has
17 submitted evidence regarding a location for the Distribution System in the Road
18 Allowances. Therefore, East Durham respectfully requests that the Board approve East
19 Durham's proposed location given that no alternative proposal was filed in the evidence
20 in this proceeding.

1 As discussed in Part 4.1 of this submission, East Durham developed the Project
2 configuration, including the decision to locate the Distribution System within the Road
3 Allowances, based on extensive environmental assessment and public consultation. East
4 Durham conducted a detailed siting process and developed comprehensive mitigation
5 measures for the Project's environmental and social impacts, many of which measures
6 informed the proposed location of the Distribution System. The proposed location also
7 ensures that the Distribution System will meet applicable regulatory, economic and
8 technical requirements. Satisfying all of these criteria so restricts the already limited
9 options for locating the Distribution System within the Road Allowances that there are no
10 other feasible alternatives.

11 **4.0 ORDER SOUGHT**

12 East Durham therefore requests that the Board, pursuant to Section 41(9) of the
13 Electricity Act, issue an order or orders establishing the location of the Distribution
14 System within the Road Allowances owned by West Grey. More particularly, East
15 Durham requests that the Board issue an order or orders establishing such location in
16 accordance with the location proposed in Part 2.0 of this submission.

1 DATED at Toronto, Ontario, this 4th day of September, 2013.

2

3 All of which is respectfully submitted by:

4 EAST DURHAM WIND, INC.
5 By its counsel,

6

7

8


Tyson Dyck

Appendix A

Aerial Map of Proposed Distribution System Location including Baptist Church Road



Legend

- Turbine Location
- Collection - ROW
- Collection - Private
- Other Road
- County Road
- Provincial Road
- Parcel Boundaries

Date: 9/3/2013
PROPRIETARY AND CONFIDENTIAL
Projection: NAD_1983_UTM_Zone_17N
Datum: NAD 83
Provided for general visual reference

East Durham

