



McCarthy Tétrault LLP
PO Box 48, Suite 5300
Toronto-Dominion Bank Tower
Toronto ON M5K 1E6
Canada
Tel: 416-362-1812
Fax: 416-868-0673

Kerri Lui
Associate
Direct Line: (416) 601-7619
Direct Fax: (416) 868-0673
Email: klui@mccarthy.ca

November 16, 2012

Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street
P.O. Box 2319
Suite 2700
Toronto ON M4P 1E4

Dear Madame:

Re: Application for a leave to construct under section 92 and subsection 96(2) of the Ontario Energy Board Act, 1998, S.O. c. 15, Sched. B. (the "OEB Act")

On behalf of Varna Wind, Inc. (the "**Applicant**") and pursuant to section 92 and subsection 96(2) of the OEB Act respectively, please find enclosed an application for a leave to construct transmission facilities.

This Application is being submitted under the Board's Regulatory Electronic Submission System. Accordingly, two hard copies have been couriered to the Board's office as per filing requirements. The Applicant further requests that this Application be disposed via written hearing, and submits this letter as evidence of consent of same.

Kindly let us know if you require anything further in order to consider this Application.

Yours very truly,

McCarthy Tétrault LLP

Per:

Kerri Lui
Associate

KL/djk
Enclosure

INDEX			
Exhibit	Tab	Schedule	Contents
A	1	1	Index Table
B	1	1	Application for Leave to Construct
	2	1	Project Overview Documents
	2	2	Project Location
	2	3	Single Line Diagram
	3	1	Need for the Project
C	1	1	Project Planning
	1	2	Gantt Chart
D	1	1	Project Details
	1	2	Project Route, Easements and Municipal Rights-of-Way
	1	3	Planning Profile Summary Table
	1	4	Pole Configuration Drawing
E	1	1	Design Specifications and Operational Data
F	1	1	Land Matters
	1	2	Option Agreements
	1	3	Interconnection Easement Option
	1	4	Option to Purchase
G	1	1	Community and Stakeholder Communication
	1	2	Aboriginal Consultation Report
	1	3	Final Public Meeting Documents
	1	4	Final Consultation Report

H	1	1	System Impact Assessment (Discussion)
	1	2	System Impact Assessment
I	1	1	Customer Impact Assessment (Discussion)
	1	2	Customer Impact Assessment
J	1	1	Connection Project Impacts on Transmission System

ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act, 1998, S.O. 1998, c. 15, Sch. B, as amended (the "OEB Act")*;

AND IN THE MATTER OF an application by Varna Wind, Inc. for an order under section 92 and subsection 96(2) of the OEB Act granting leave to construct an electricity transmission line and related facilities.

APPLICATION FOR LEAVE TO CONSTRUCT

1. Varna Wind, Inc. (the "**Applicant**") is a special purpose vehicle established for the development, construction and operation of the Bluewater Wind Energy Centre ("**BWEC**"). The Applicant is a corporation constituted under the laws of New Brunswick. The Applicant is a wholly-owned subsidiary of NextEra Energy Canada, LLC, which in turn is a wholly-owned subsidiary of NextEra Energy Resources Inc. NextEra Energy Canada, ULC was incorporated as an Alberta corporation in 2006, with its head office in the City of Toronto, Ontario. NextEra Energy Canada, ULC and NextEra Energy Resources, LLC through their respective wholly-owned subsidiaries, both carry on the business of developing, owning, and operating energy generation facilities.
2. As the owner and operator of the BWEC, the Applicant is a generator pursuant to section 56 of the OEB Act.
3. The Applicant is seeking the approval of the Ontario Energy Board (the "**Board**") to construct and operate a transmission interconnection facility (the "**Facility**", further described below) to connect the BWEC to the Independent Electricity System Operator ("**IESO**")-controlled grid. The BWEC is a proposed 59.9 MW wind energy generation facility, which was awarded a 20-year power purchase agreement under the Ontario Power Authority's ("**OPA**") Feed in Tariff program (the "**FIT Program**") in July 2011.
4. The BWEC and the Facility are being developed to further the provincial government's policy objective of increasing the amount of renewable energy generation being added to the provincial grid.
5. Both the BWEC and the Facility will be located in Huron County (the "**County**"). The location of the Facility was determined by a strong wind resource and interest expressed by local landowners. Construction of the Facility will be commensurate with construction of the BWEC. The Applicant intends to break ground on both the

BWEC and the Facility in May 2013, with an expected in-service date between the last quarter of 2013 and the second quarter of 2014.

6. The BWEC and the Facility are subject to the environmental screening process prescribed by *Ontario Regulation 359/09, Renewable Energy Approvals under Part V.0.1 of the Act* made pursuant to *Environmental Protection Act*, R.S.O. 1990, c. E.19 (the "**REA Regulation**"). Accordingly, the Applicant has conducted extensive consultation with interested stakeholders and the REA Application was submitted to the Ministry of the Environment ("**MOE**") on June 26, 2012. The REA Application was deemed complete on August 30, 2012. The Applicant expects to receive a decision from the MOE regarding its REA early in the first quarter of 2013. In addition to the environmental approvals, the Applicant has received the final interconnection reports issued by the IESO and Hydro One Networks Inc. ("**HONI**"), both of which conclude that the Facility, as proposed, is acceptable from a technical standpoint.
7. Accordingly, the Applicant hereby applies to the Board for:
 - (i) an order granting leave to construct the Facility pursuant to Section 92 of the OEB Act; and
 - (ii) approval of the form of easement agreement that has been offered to landowners (the "**Transmission Easement**"), attached hereto as schedule E of the Option Agreement pursuant to Section 97 of the OEB Act.
8. The following Schedules consist of the Applicant's pre-filed evidence:

Exhibit B, Tab 2, Schedule 2	Project Location
Exhibit B, Tab 2, Schedule 3	Single Line Diagram
Exhibit C, Tab 1, Schedule 2	Gantt Chart
Exhibit D, Tab 1, Schedule 2	Project Route, Easements and Municipal Rights-of-Way
Exhibit D, Tab 1, Schedule 3	Planning Profile Summary Table
Exhibit D, Tab 1, Schedule 4	Pole Configuration Drawing
Exhibit F, Tab 1, Schedule 2	Option Agreements
Exhibit F, Tab 1, Schedule 3	Interconnection Easement Option
Exhibit F, Tab 1, Schedule 4	Option to Purchase
Exhibit G, Tab 1, Schedule 2	Aboriginal Consultation Report

Exhibit G, Tab 1, Schedule 3	Final Public Meeting Documents
Exhibit G, Tab 1, Schedule 4	Final Consultation Report
Exhibit H, Tab 1, Schedule 2	System Impact Assessment
Exhibit I, Tab 1, Schedule 2	Customer Impact Assessment

9. The individuals below are the authorized representatives of the Applicant for the purpose of serving documents throughout this proceeding:

George Vegh
Kerri Lui
McCarthy Tétrault LLP
Toronto Dominion Bank Tower
66 Wellington St. W
Toronto, ON M5K 1E6

Tel: 416.601.7619
Fax: 416.868.0673
Email: klui@mccarthy.ca

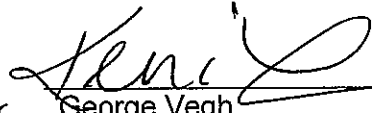
Nicole Geneau
NextEra Energy Canada, ULC
390 Bay Street
Suite 1720
Toronto ON M5H 2Y2

Tel: 416.364.9714
Fax: 416.364.2533
Email: nicole.geneau@nexteraenergy.com

Dated November 16, 2012 at Toronto, Ontario

Varna Wind, Inc.
by its counsel McCarthy Tétrault LLP

Per:


for - George Vegh

PROJECT OVERVIEW DOCUMENTS

10. The BWEC consists of the wind turbines, the collectors lines, the access roads and the interconnection with a newly constructed transforming substation (the "**Substation**") which will step-up the voltage from 34.5 kV to 115 kV, comprising a single 85/68/51 Wye-Delta step up transformer. More precisely, the Substation components up to and including the pull-off tower form part of the BWEC. The remaining Substation components are part of the Facility as defined below.
11. The BWEC is to be located in Huron County, Ontario in the municipalities of Bluewater and Huron East (the "**Municipalities**"), along the shore of Lake Huron south of the town of Bayfield to north of Zurich, east of Highway 21. The Facility will connect the BWEC to HONI's Seaforth Transformer Station ("**Seaforth TS**"), all within the County. A map showing the proposed layout for the Facility, including the route of the Transmission Line and the respective locations of the Substation and Breaker (as defined below), is attached as Exhibit B, Tab 2, Schedule 2.
12. The BWEC and the Facility encompasses approximately 10,000 acres of privately owned land parcels, of which only 630 acres constitute the potential disturbance area for construction and includes the area with BWEC and Facility components on them. Land use is predominantly cash-crop agriculture, although some areas are pasture and there are pockets of wooded areas.
13. The Facility will consist of the following components:
 - (a) a 115 kV transmission line (the "**Transmission Line**"), comprising a single circuit overhead line extending from the Substation to the point of interconnection at an independent breaker (described below) that connects to an existing HONI transformer station, Seaforth TS, approximately 23 km in length;
 - (b) the Substation from the pull-off tower; and
 - (c) a newly constructed independent breaker (the "**Breaker**"), to be constructed and owned by BWEC connecting to HONI's Seaforth TS.

A single line diagram of the proposed Facility is included at Exhibit B, Tab 2, Schedule 3. The lands upon which the Facility is located is hereinafter referred to as the "**Corridor**".

14. Thirty-seven (37) GE 1.62 MW wind turbines will be constructed on a reinforced concrete foundation. Underground and overhead cables will interconnect individual turbines and eventually connect to the Substation. The operation of the wind turbines will be monitored remotely from an operations building located near the Substation, or within proximity to the wind towers.

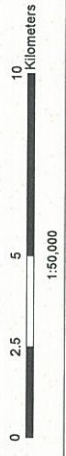
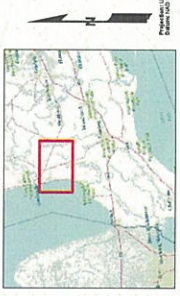
PROJECT LOCATION



- SVG Turbines
- Project Collection Line
- Project Service Roads
- Proposed Transmission
- Existing Transmission
- Collector Substation
- Station Breaker
- Ontario Lots

Bluewater Proposed Infrastructure

Huron County, Ontario, Canada



1:50,000

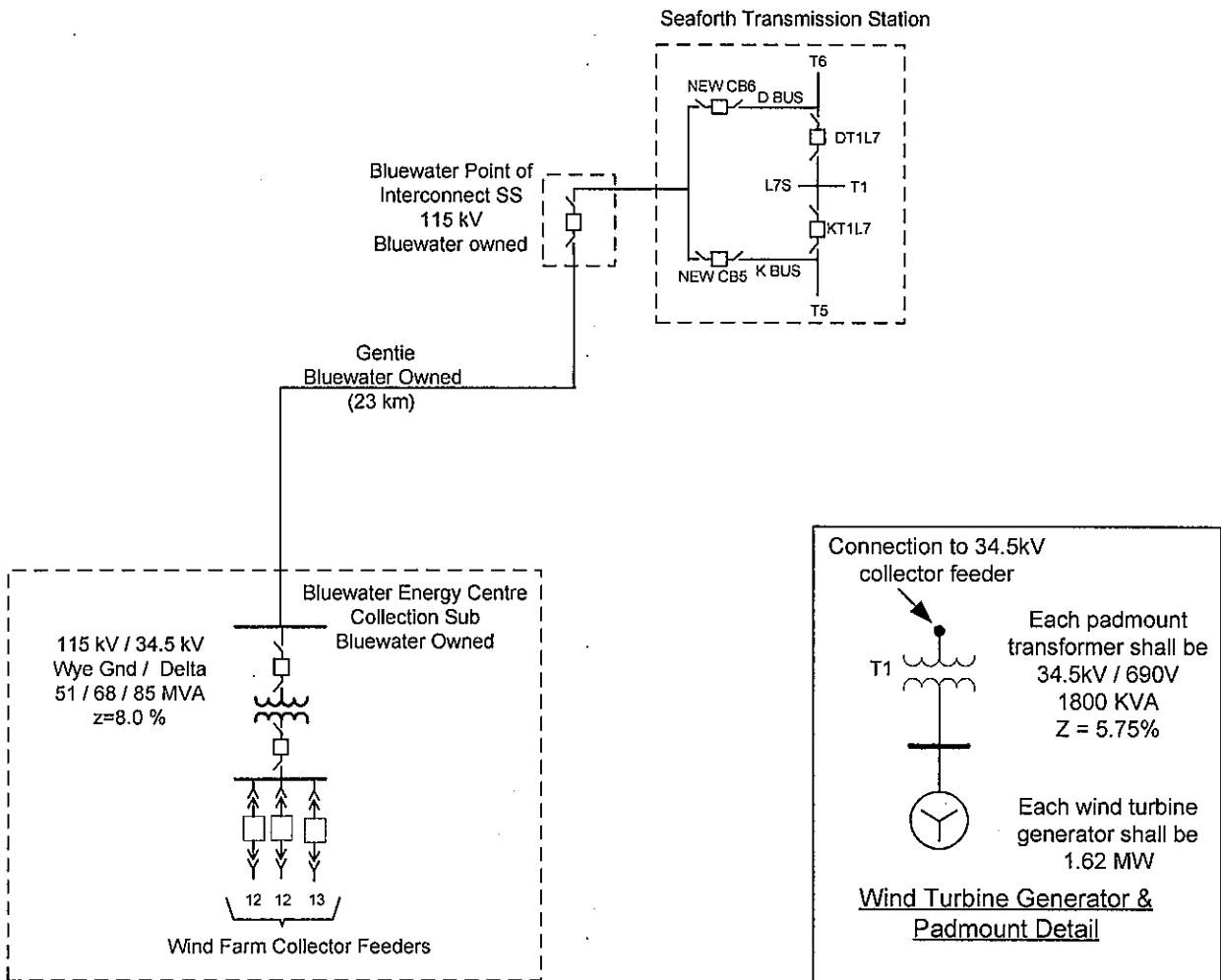
Copyright 2015 NextEra Energy Resources. All rights reserved. The information shown on this map is for informational purposes only and does not constitute an offer of any financial product or service. The information is provided as a general overview and is not intended to be used as a basis for any investment decision. The information is provided as a general overview and is not intended to be used as a basis for any investment decision. The information is provided as a general overview and is not intended to be used as a basis for any investment decision.



DATE: 08/18/15
 PROPRIETARY AND CONFIDENTIAL

SINGLE LINE DIAGRAM

Bluewater Wind Energy Centre 60 MW Conceptual One Line Diagram



Preliminary, Not For Construction, Subject To Review & Approval By Transmission Provider

NEED FOR THE PROJECT

15. The BVEC and the Facility are being developed to further the provincial government's policy objective of increasing the amount of renewable energy generation being added to the provincial grid. In particular, the government's policy regarding renewable energy is outlined in the *Green Energy and Green Economy Act, 2009, S.O. 2009, c. 12*, which amended key pieces of legislation to promote the use and generation of electricity from renewable energy sources, including the OEB Act.¹

¹ *Green Energy and Green Economy Act, 2009, S.O. 2009, c. 12*

PROJECT PLANNING

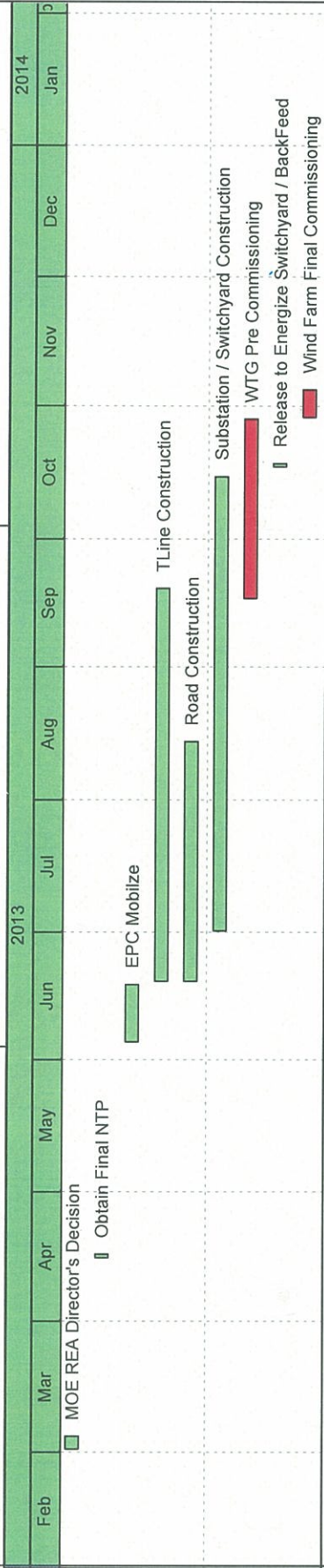
16. Construction of the Facility will be commensurate with the construction of the BWEC, beginning in May 2013, with a proposed in-service date between the last quarter of 2013 and the second quarter of 2014. The following is a list of milestone dates that are key components of our detailed construction schedule, as described in the Gantt Chart, attached as Exhibit C, Tab 1 Schedule 2:

Receipt of REA	March 2013
Receipt of Notice to Proceed from OPA	March 2013
Construction Mobilization ²	May 2013
Construction of roads and foundations begins	June 2013
Construction Phase	May 2013 – November 2013
Erection of poles and transmission line	June 2013 – September 2013
Back-feed Power	October 2013
Commissioning & Start-Up	November 2013

17. This schedule is based on the Applicant's understanding of current timelines prescribed by the MOE relating to the REA process outlined in the REA Regulation and is dependent on the Applicant's receipt of regulatory approvals required for construction and operation of the BWEC and Facility in a timely manner.
18. Other critical constraints that may have an impact on the construction schedule include:
- High wind days which can extend the turbine assembly timelines; and
 - Construction windows due to environmental constraints.

² Construction office established, laydown yard prepared, labourers on-site.

GANTT CHART



PROJECT DETAILS

19. Please refer to paragraph 13 (Exhibit B, Tab 2, Schedule 1) for a description of the physical design of the project.
20. The proposed BVEC will interconnect to HONI's electrical system via the Facility, which is comprised of the Transmission Line, the Substation and the Breaker. A copy of the single line diagram of the Facility can be found in Exhibit B, Tab 2, Schedule 3. In particular, the Transmission Line will originate at the Substation and terminate at the Breaker, to be built adjacent to the existing HONI Seaforth TS. Sections of the Transmission Line will be constructed within Municipal rights-of-way, and the remaining sections will be built on easements acquired from private land owners. Please see Exhibit D, Tab 1, Schedule 2 for a map illustrating the route of the line, the lot number and concession number through or adjacent to which the line runs and the location of private easements and the Municipal rights-of-way.
21. The Facility will be built above ground. Please see Exhibit D, Tab 1, Schedule 3 for a table summarizing clearances to the land profile.
22. In order to minimize the physical and visual impact of the Facility, a mono-pole configuration has been chosen for the Transmission Line. All poles will be either round wood, laminated wood, steel or round concrete poles, designed per all Applicable Codes (defined below), approximately 25 meters in height above ground. These poles will be framed vertically (all insulators will be on one side so that the conductors are pushed away from the private land and overhang the road), with braced polymer post insulators. There will be one 1272 or 1351 ACSR conductor per phase, as well as an optical ground wire (OPGW) installed for both line communications and fault-shielding purposes. Please see Exhibit D, Tab 1, Schedule 4 for a typical pole configuration drawing.

PROJECT ROUTE, EASEMENTS AND MUNICIPAL RIGHTS-OF-WAY



THIS DRAWING IS NOT TO BE CONSIDERED AS A PROPOSED PROJECT AND IS NOT TO BE USED AS A PROPOSED PROJECT. THE DRAWING IS FOR INFORMATIONAL PURPOSES ONLY. THE DRAWING IS NOT TO BE USED AS A PROPOSED PROJECT. THE DRAWING IS FOR INFORMATIONAL PURPOSES ONLY.

- Existing Transmission
- Private Easement 33 ft
- Road ROW 66 ft
- Bluewater Substation
- Ontario Lots

Bluewater Proposed Transmission Huron County, Ontario, Canada



Date: 10/20/2013
PROPRIETARY AND CONFIDENTIAL

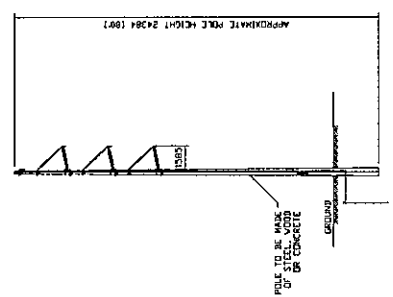
PLANNING PROFILE SUMMARY TABLE

Minimum Vertical Clearances at Maximum Sag for Bluewater Transmission Line

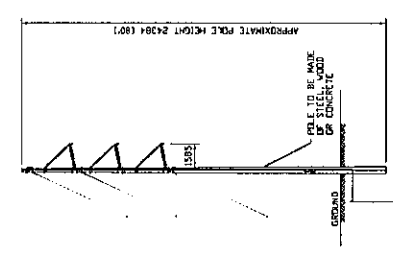
Clearance Description	Code & Regulation	Vertical Clearance in m
Vehicular Clearance	CSA C22.3 No.1 Table 2	6.2*
Over U/G Pipes	CSA C22.3 No.1 Table 2	6.2*
Pedestrian / ATV	CSA C22.3 No.1 Table 2	4.7*
Railroad	CSA C22.3 No.1 Table 2	8.4
Building Crossing	CSA C22.3 No.1 Table 9	4.2
Lighting, Sign, etc.	CSA C22.3 No.1 Table 9	4.2
Bridge Crossing	CSA C22.3 No.1 Table 10	3.5
Provincial HWY	MTOD-2245.020	6.0
Provincial Vehicular	MTOD-2245.020	5.8
Provincial Pedestrian	MTOD-2245.020	4.3
Provincial Railroad Crossing	MTOD-2245.020	8.7
Water Crossing Class 0	CSA C22.3 No.1 Table 3	5.5
Water Crossing Class 1	CSA C22.3 No.1 Table 3	6.7
Water Crossing Class 2	CSA C22.3 No.1 Table 3	8.7
Water Crossing Class 3	CSA C22.3 No.1 Table 3	10.7
Water Crossing Class 4	CSA C22.3 No.1 Table 3	12.7
Water Crossing Class 5	CSA C22.3 No.1 Table 3	14.7
Water Crossing Class 6	CSA C22.3 No.1 Table 3	16.7

*0.7 meter is included to account for mean annual maximum snow depth for the area

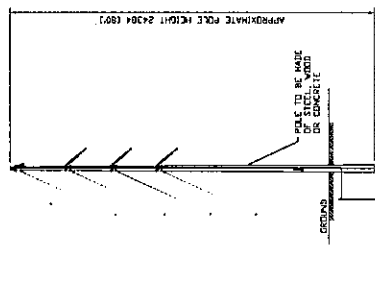
POLE CONFIGURATION DRAWING



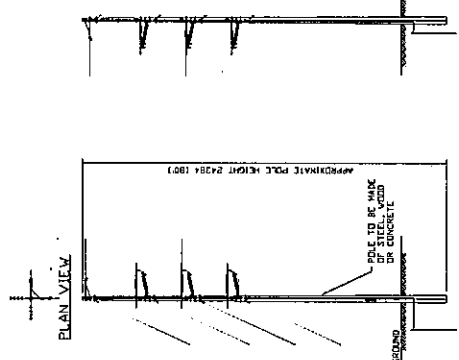
115KV TRANSMISSION LINE
TANGENT (0 - 5°) FRAMING



115KV TRANSMISSION LINE
LIGHT ANGLE (5 - 15°) FRAMING



115KV TRANSMISSION LINE
MEDIUM ANGLE (15 - 45°) FRAMING



115KV TRANSMISSION LINE
HEAVY ANGLE (45 - 90°) BEND FRAMING



Chimax Inc.
2500 Woodbine Ave., Unit 104
Markham, Ontario L3R 9Y7
Tel: (905) 477-1111
Fax: (905) 477-1112

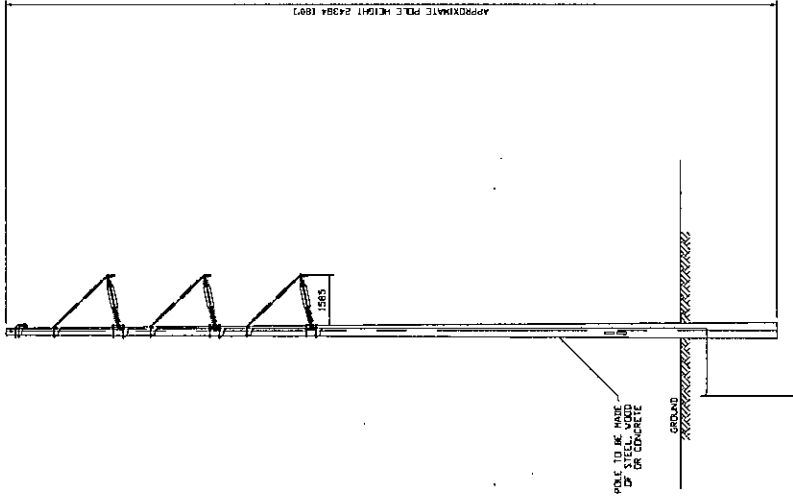
CLIENT NO. NO.	1235-1-1021-A
DRAWING NO.	1235-1-1021-A
REV.	A

CLIENT PROJECT NO.	1235-1-1021-A
PROJECT NAME	115KV TRANSMISSION LINE STRUCTURE SUMMARY
PROJECT NO.	
ACTIVITY NO.	
DATE	
SCALE	
N.T.S.	

BY	DATE	BY	DATE
DESIGNED	12/20/11	CHECKED	12/20/11
DRAWN		APP'D	

STANDARD
CONFORMS TO THE CANADIAN STANDARDS ASSOCIATION (CSA) AND U.S. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA) STANDARDS.

NO.	DESCRIPTION	DATE	BY	CHKD.	REV.
1					
2					
3					
4					
5					
6					
7					
8					
9					



115KV TRANSMISSION LINE
TANGENT (0 - 57) FRAMING

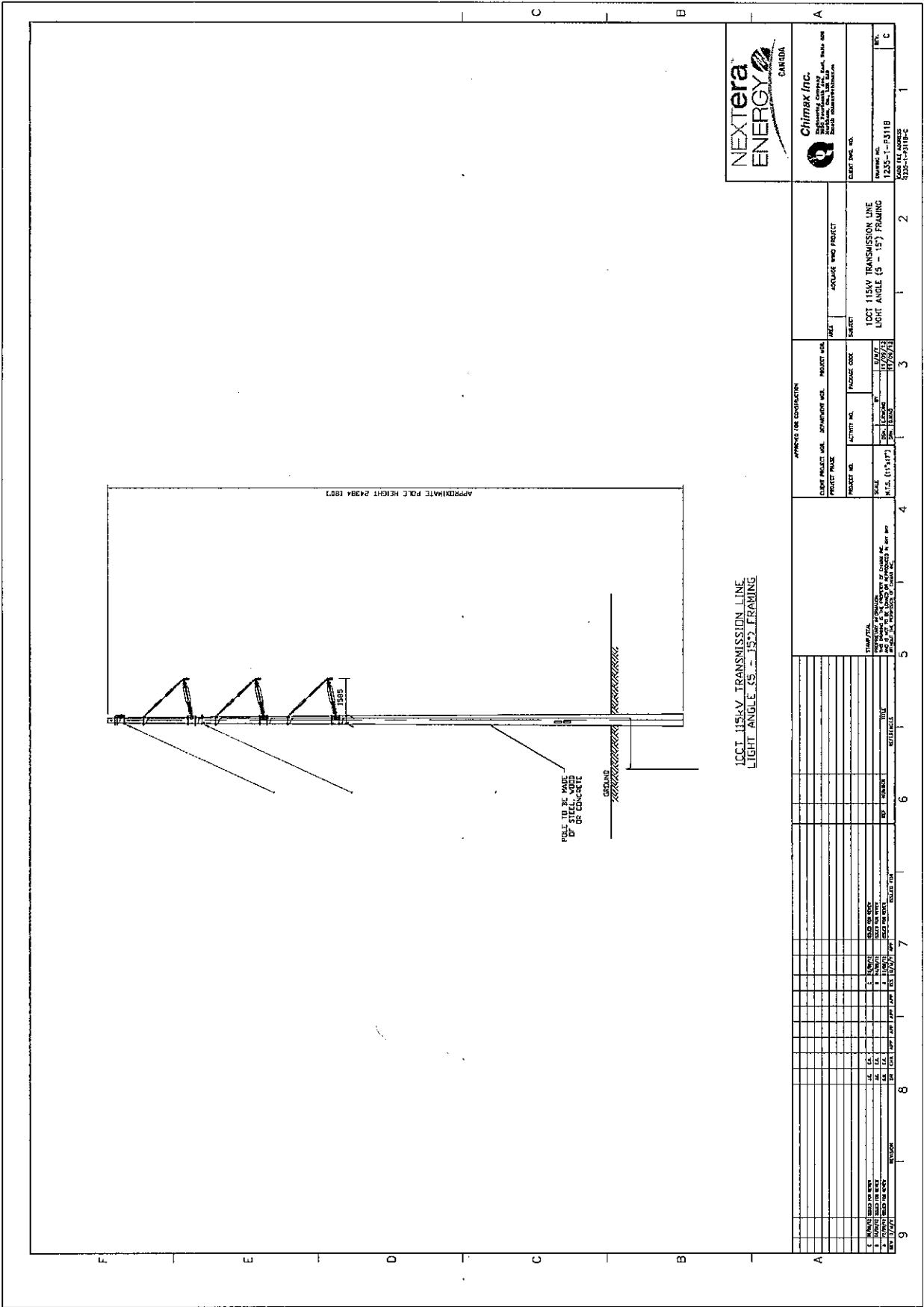
Nextera ENERGY CANADA

Chimmax Inc.
 2000 Highway 104, Suite 100
 St. John's, NL A1A 2S6
 Tel: (709) 576-1100
 Fax: (709) 576-1101

CLIENT: CHIMMAX INC.
 PROJECT NO.: 1235-1-PS108
 DRAWING NO.: 1235-1-PS108-C

APPROVED FOR CONSTRUCTION		PROJECT INFO		PROJECT DATA		PROJECT NO.		PROJECT NAME		PROJECT NO.		PROJECT NAME		PROJECT NO.		PROJECT NAME	
DATE	BY	SCALE	PROJECT NO.	PROJECT NAME	PROJECT NO.	PROJECT NAME	PROJECT NO.	PROJECT NAME	PROJECT NO.	PROJECT NAME	PROJECT NO.	PROJECT NAME	PROJECT NO.	PROJECT NAME	PROJECT NO.	PROJECT NAME	
11/27/15	...	AS SHOWN	1235-1-PS108	115KV TRANSMISSION LINE	1235-1-PS108	115KV TRANSMISSION LINE	1235-1-PS108	115KV TRANSMISSION LINE	1235-1-PS108	115KV TRANSMISSION LINE	1235-1-PS108	115KV TRANSMISSION LINE	1235-1-PS108	115KV TRANSMISSION LINE	1235-1-PS108	115KV TRANSMISSION LINE	
11/27/15	...	AS SHOWN	1235-1-PS108	115KV TRANSMISSION LINE	1235-1-PS108	115KV TRANSMISSION LINE	1235-1-PS108	115KV TRANSMISSION LINE	1235-1-PS108	115KV TRANSMISSION LINE	1235-1-PS108	115KV TRANSMISSION LINE	1235-1-PS108	115KV TRANSMISSION LINE	1235-1-PS108	115KV TRANSMISSION LINE	

1 2 3 4 5 6 7 8 9



NEXTERA ENERGY CANADA

Chimik Inc.
 10000 15th Avenue S.E.
 Surrey, BC V3T 4V6
 TEL: 604-273-1111 FAX: 604-273-1112

CLIENT PROJ. NO. 1235-1-PS11B
 DRAWING NO. 1235-1-PS11B
 DATE 12/21/12

PROJECT: 115KV TRANSMISSION LINE LIGHT ANGLE (5 - 15) FRAMING

DATE: 12/21/12

PROJECT CODE: 1235-1-PS11B

APPROVE FOR CONSTRUCTION

CLIENT PROJECT NO. 1235-1-PS11B
 PROJECT NAME: 115KV TRANSMISSION LINE LIGHT ANGLE (5 - 15) FRAMING

ACTIVITY NO. 1235-1-PS11B-01
 PROJECT CODE: 1235-1-PS11B

SCALE: 1/4" = 1'-0"

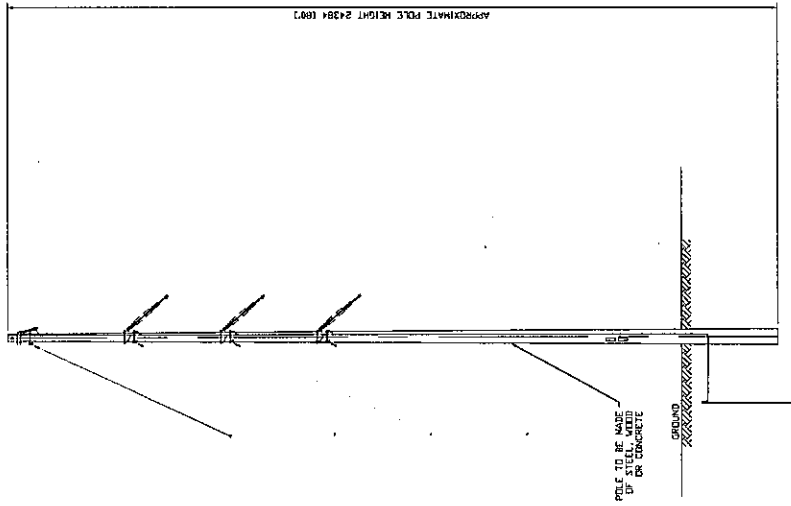
STAMP AREA

DATE: 12/21/12

BY: [Signature]

FOR: [Signature]

NO.	DESCRIPTION	DATE	BY	FOR
1	ISSUED FOR PERMIT	12/21/12	[Signature]	[Signature]
2	ISSUED FOR CONSTRUCTION	12/21/12	[Signature]	[Signature]
3	ISSUED FOR AS-BUILT	12/21/12	[Signature]	[Signature]
4	ISSUED FOR RECORD	12/21/12	[Signature]	[Signature]
5	ISSUED FOR ARCHIVE	12/21/12	[Signature]	[Signature]
6	ISSUED FOR PROJECT CLOSE	12/21/12	[Signature]	[Signature]
7	ISSUED FOR PROJECT REVIEW	12/21/12	[Signature]	[Signature]
8	ISSUED FOR PROJECT COMPLETION	12/21/12	[Signature]	[Signature]
9	ISSUED FOR PROJECT ARCHIVE	12/21/12	[Signature]	[Signature]



10CT 115KV TRANSMISSION LINE
MEDIUM ANGLE 45 - 45° FRAMING

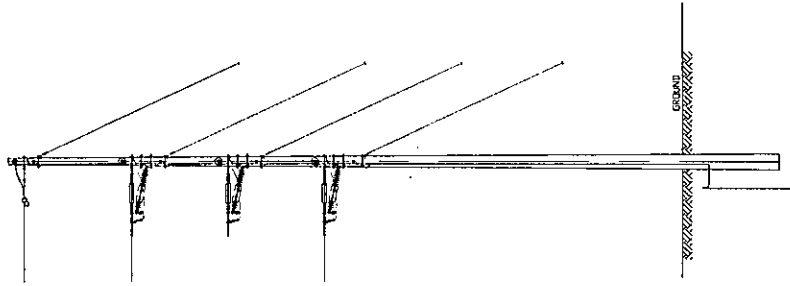
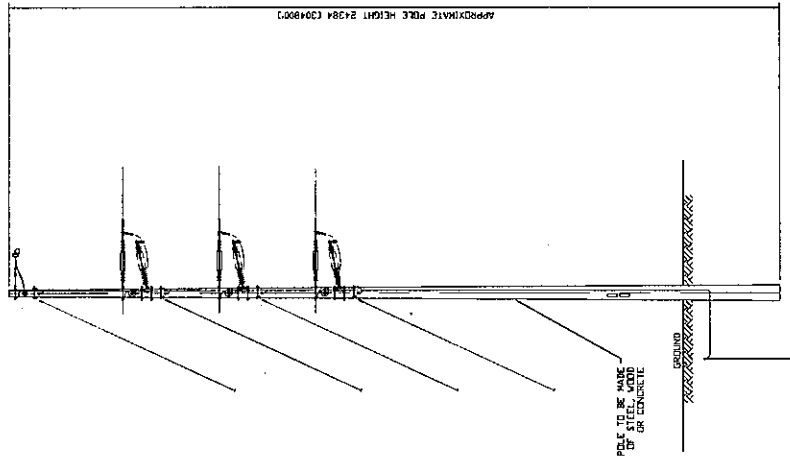
Nextera ENERGY
CANADA

Chimax Inc.
2100 Highway 104
Suite 100
North York, Ontario M2N 6K2
Tel: (416) 491-1100

CLIENT PROJECT NO. 1234-1-0138
DATE 12/21/11

APPROVED FOR CONSTRUCTION		MATERIALS AND PRODUCT		PROJECT		PROJECT		PROJECT	
CLIENT PROJECT NO.	DEPARTMENT NO.	PROJECT NO.	PROJECT NAME	PROJECT NO.	PROJECT NAME	PROJECT NO.	PROJECT NAME	PROJECT NO.	PROJECT NAME
1234-1-0138		10CT 115KV	TRANSMISSION LINE	10CT 115KV	TRANSMISSION LINE	10CT 115KV	TRANSMISSION LINE	10CT 115KV	TRANSMISSION LINE
			MEDIUM ANGLE (15 - 45°)		MEDIUM ANGLE (15 - 45°)		MEDIUM ANGLE (15 - 45°)		MEDIUM ANGLE (15 - 45°)
DATE 12/21/11		DATE 12/21/11		DATE 12/21/11		DATE 12/21/11		DATE 12/21/11	
DRAWN BY: [Name]		CHECKED BY: [Name]		APPROVED BY: [Name]		APPROVED BY: [Name]		APPROVED BY: [Name]	
SCALE: 1:1		SCALE: 1:1		SCALE: 1:1		SCALE: 1:1		SCALE: 1:1	
PROJECT NO. 1234-1-0138		PROJECT NO. 1234-1-0138		PROJECT NO. 1234-1-0138		PROJECT NO. 1234-1-0138		PROJECT NO. 1234-1-0138	
PROJECT NAME: 10CT 115KV TRANSMISSION LINE		PROJECT NAME: 10CT 115KV TRANSMISSION LINE		PROJECT NAME: 10CT 115KV TRANSMISSION LINE		PROJECT NAME: 10CT 115KV TRANSMISSION LINE		PROJECT NAME: 10CT 115KV TRANSMISSION LINE	
PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV	
PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE	
PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV	
PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE	
PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV	
PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE	
PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV	
PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE	
PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV	
PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE	
PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV	
PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE	
PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV	
PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE	
PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV		PROJECT NO. 10CT 115KV	
PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE		PROJECT NAME: TRANSMISSION LINE	

PLAN VIEW



100T 115KV TRANSMISSION LINE
HEAVY ANGLE (45 - 90) DEADEND FRAMING

NO.	DESCRIPTION	DATE	BY	CHECKED	DATE
1	ISSUED FOR PERMIT	10/12/17	...	...	...
2	ISSUED FOR CONSTRUCTION	11/28/17	...	...	...
3	ISSUED FOR CONSTRUCTION	11/28/17	...	...	...
4	ISSUED FOR CONSTRUCTION	11/28/17	...	...	...
5	ISSUED FOR CONSTRUCTION	11/28/17	...	...	...
6	ISSUED FOR CONSTRUCTION	11/28/17	...	...	...
7	ISSUED FOR CONSTRUCTION	11/28/17	...	...	...
8	ISSUED FOR CONSTRUCTION	11/28/17	...	...	...
9	ISSUED FOR CONSTRUCTION	11/28/17	...	...	...

CLIENT PROJECT NO.	DEPARTMENT NO.	PROJECT NO.	PROJECT NAME
...

Nextera ENERGY CANADA

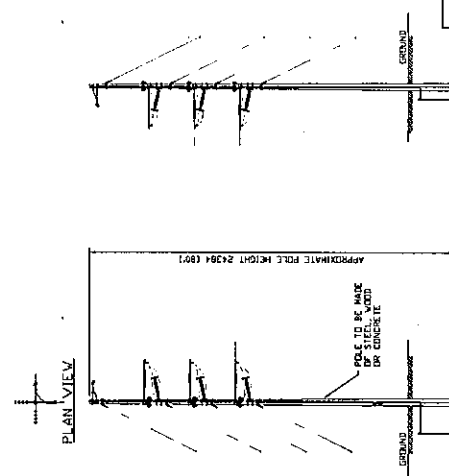
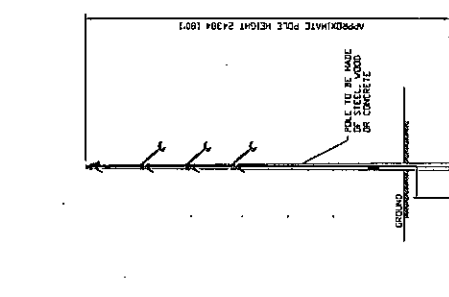
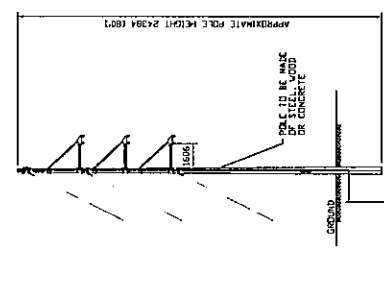
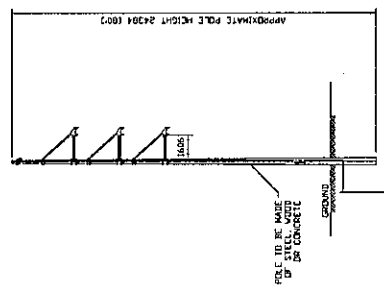
Chimax Inc.

 2000 ...

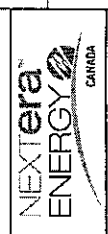
CLIENT PROJ. NO. ...

 DRAWING NO. 1235-1-P3148

 SHEET NO. 1



PLAN VIEW



Chimax Inc.
Engineering Company
2500, Avenue 138, St. E.
Edmonton, Alberta T7C 1K4
Canada

CLIENT PROJECT NO.	1233-2-PO21-A
CLIENT PROJECT NAME	1233-2-PO21-A
CLIENT PROJECT LOCATION	
CLIENT PROJECT DATE	

CLIENT PROJECT NO.	1233-2-PO21-A
CLIENT PROJECT NAME	1233-2-PO21-A
CLIENT PROJECT LOCATION	
CLIENT PROJECT DATE	

CLIENT PROJECT NO.	1233-2-PO21-A
CLIENT PROJECT NAME	1233-2-PO21-A
CLIENT PROJECT LOCATION	
CLIENT PROJECT DATE	

CLIENT PROJECT NO.	1233-2-PO21-A
CLIENT PROJECT NAME	1233-2-PO21-A
CLIENT PROJECT LOCATION	
CLIENT PROJECT DATE	

CLIENT PROJECT NO.	1233-2-PO21-A
CLIENT PROJECT NAME	1233-2-PO21-A
CLIENT PROJECT LOCATION	
CLIENT PROJECT DATE	

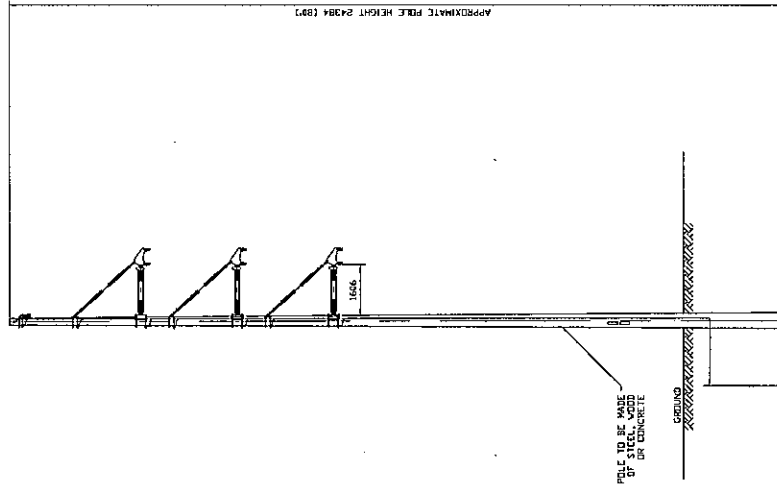
CLIENT PROJECT NO.	1233-2-PO21-A
CLIENT PROJECT NAME	1233-2-PO21-A
CLIENT PROJECT LOCATION	
CLIENT PROJECT DATE	

CLIENT PROJECT NO.	1233-2-PO21-A
CLIENT PROJECT NAME	1233-2-PO21-A
CLIENT PROJECT LOCATION	
CLIENT PROJECT DATE	

CLIENT PROJECT NO.	1233-2-PO21-A
CLIENT PROJECT NAME	1233-2-PO21-A
CLIENT PROJECT LOCATION	
CLIENT PROJECT DATE	

10CT 115KV TRANSMISSION LINE STRUCTURE SUMMARY

NO.	DESCRIPTION	DATE	BY	CHECKED	SCALE	PROJECT NO.	PROJECT NAME	PROJECT LOCATION	PROJECT DATE
1	10CT 115KV TRANSMISSION LINE TANGENT 40 - 50 FRAMING	17/09/15							
2	10CT 115KV TRANSMISSION LINE LIGHT ANGLE 65 - 100 FRAMING	17/09/15							
3	10CT 115KV TRANSMISSION LINE MEDIUM ANGLE 415 - 450 FRAMING	17/09/15							
4	10CT 115KV TRANSMISSION LINE HEAVY ANGLE 645 - 900 BEARND FRAMING	17/09/15							



10CT 115KV TRANSMISSION LINE
TANGENT (0 - 5) FRAMING

NEXTERA ENERGY CANADA

Chimex Inc.
 10000 100th Ave. Unit 100
 Edmonton, Alberta T5A 0A6
 Canada

CLIENT: EPIC INC.
 DRAWING NO.: 1235-2-FS10B
 DATE: 12/18/13

PROJECT NAME	10CT 115KV TRANSMISSION LINE TANGENT (0 - 5) FRAMING
PROJECT NO.	10CT115KV
PROJECT CODE	115KV
PROJECT USE	TRANSMISSION
PROJECT AREA	EDMONTON WIND PROJECT

APPROVE FOR CONSTRUCTION	DATE	BY
CLIENT PROJECT USE	24/07/13	115KV
PROJECT NAME	10CT 115KV TRANSMISSION LINE TANGENT (0 - 5) FRAMING	115KV
PROJECT NO.	10CT115KV	115KV
PROJECT CODE	115KV	115KV
PROJECT USE	TRANSMISSION	115KV
PROJECT AREA	EDMONTON WIND PROJECT	115KV

SCALE	AS SHOWN
DATE	12/18/13
BY	115KV
CHECKED BY	115KV
DATE	12/18/13
PROJECT NO.	10CT115KV
PROJECT CODE	115KV
PROJECT USE	TRANSMISSION
PROJECT AREA	EDMONTON WIND PROJECT

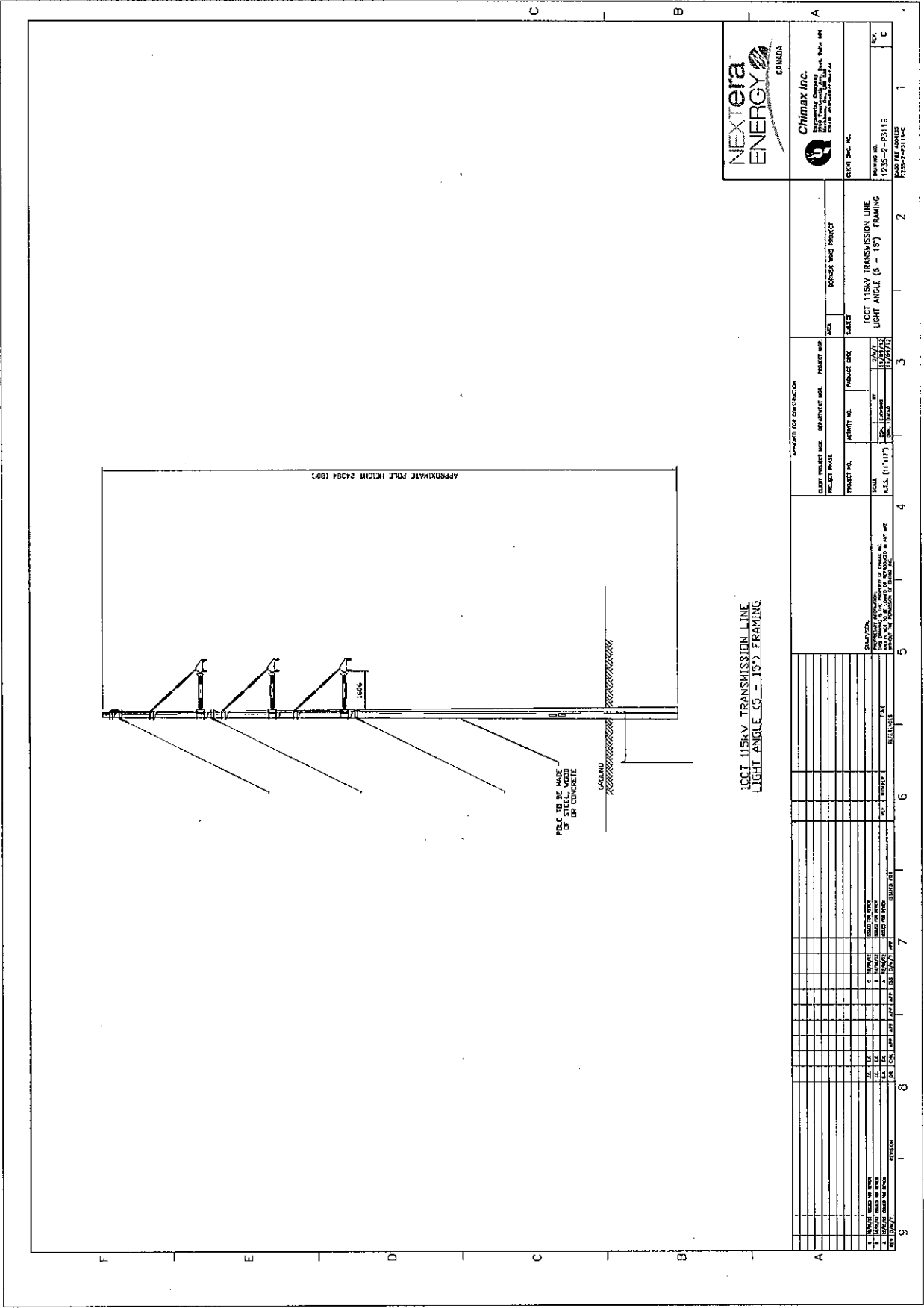
STANDARD	AS SHOWN
DATE	12/18/13
BY	115KV
CHECKED BY	115KV
DATE	12/18/13
PROJECT NO.	10CT115KV
PROJECT CODE	115KV
PROJECT USE	TRANSMISSION
PROJECT AREA	EDMONTON WIND PROJECT

STANDARD	AS SHOWN
DATE	12/18/13
BY	115KV
CHECKED BY	115KV
DATE	12/18/13
PROJECT NO.	10CT115KV
PROJECT CODE	115KV
PROJECT USE	TRANSMISSION
PROJECT AREA	EDMONTON WIND PROJECT

STANDARD	AS SHOWN
DATE	12/18/13
BY	115KV
CHECKED BY	115KV
DATE	12/18/13
PROJECT NO.	10CT115KV
PROJECT CODE	115KV
PROJECT USE	TRANSMISSION
PROJECT AREA	EDMONTON WIND PROJECT

STANDARD	AS SHOWN
DATE	12/18/13
BY	115KV
CHECKED BY	115KV
DATE	12/18/13
PROJECT NO.	10CT115KV
PROJECT CODE	115KV
PROJECT USE	TRANSMISSION
PROJECT AREA	EDMONTON WIND PROJECT

STANDARD	AS SHOWN
DATE	12/18/13
BY	115KV
CHECKED BY	115KV
DATE	12/18/13
PROJECT NO.	10CT115KV
PROJECT CODE	115KV
PROJECT USE	TRANSMISSION
PROJECT AREA	EDMONTON WIND PROJECT



10CT 115KV TRANSMISSION LINE
LIGHT ANGLE (S - 15°) FRAMING



Chimax Inc.
2200 17th Ave. N.W.
Edmonton, Alberta T6E 6K1
Canada
Tel: 780-441-1111
Fax: 780-441-1112

CLIENT PROJECT NO.	PROJECT WSP.
PROJECT NAME	SUBJECT
APPROVED FOR CONSTRUCTION	DATE
APPROVED FOR CONSTRUCTION	DATE

CLIENT PROJECT NO.	PROJECT WSP.
PROJECT NAME	SUBJECT
APPROVED FOR CONSTRUCTION	DATE
APPROVED FOR CONSTRUCTION	DATE

CLIENT PROJECT NO.	PROJECT WSP.
PROJECT NAME	SUBJECT
APPROVED FOR CONSTRUCTION	DATE
APPROVED FOR CONSTRUCTION	DATE

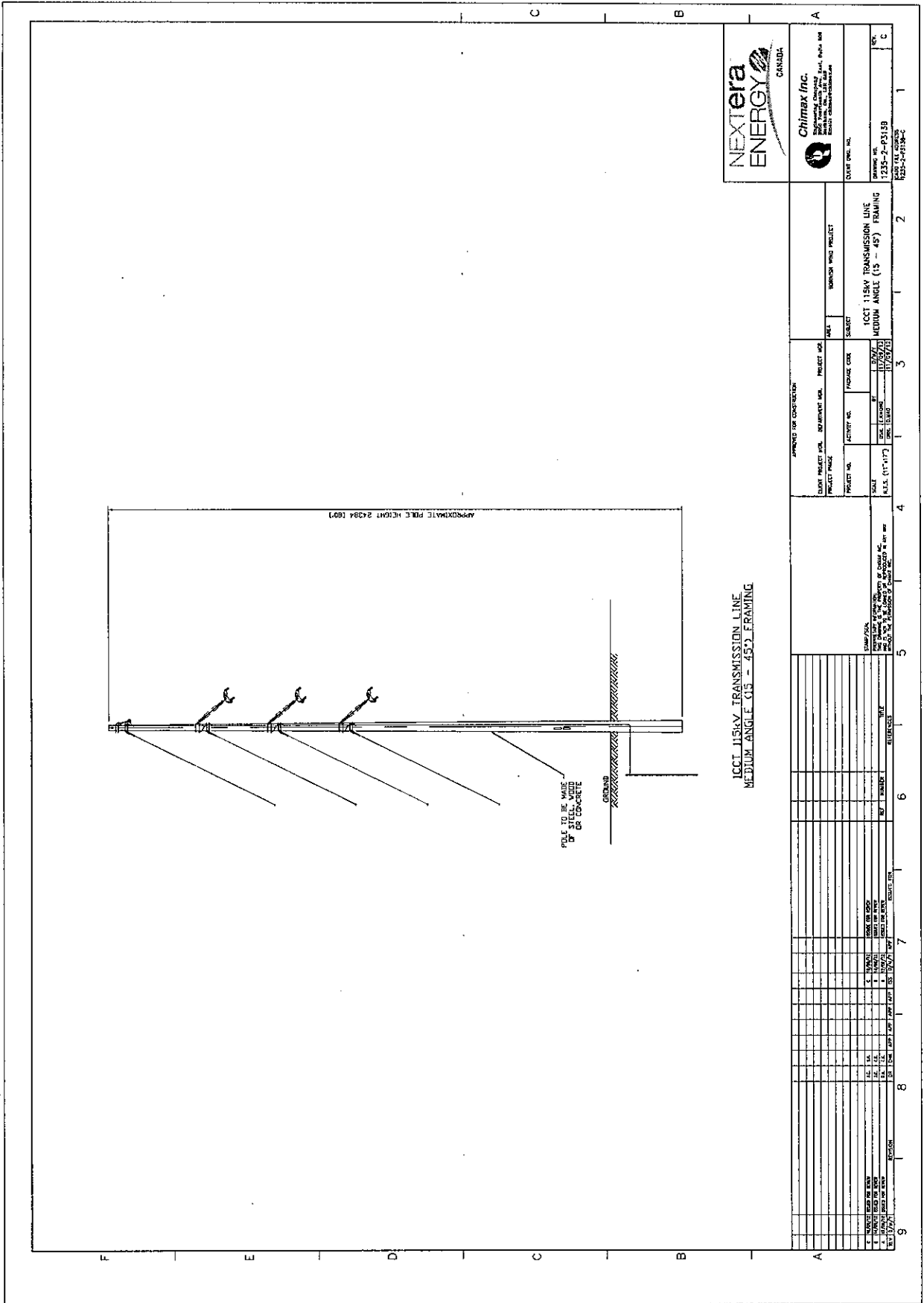
CLIENT PROJECT NO.	PROJECT WSP.
PROJECT NAME	SUBJECT
APPROVED FOR CONSTRUCTION	DATE
APPROVED FOR CONSTRUCTION	DATE

CLIENT PROJECT NO.	PROJECT WSP.
PROJECT NAME	SUBJECT
APPROVED FOR CONSTRUCTION	DATE
APPROVED FOR CONSTRUCTION	DATE

CLIENT PROJECT NO.	PROJECT WSP.
PROJECT NAME	SUBJECT
APPROVED FOR CONSTRUCTION	DATE
APPROVED FOR CONSTRUCTION	DATE

CLIENT PROJECT NO.	PROJECT WSP.
PROJECT NAME	SUBJECT
APPROVED FOR CONSTRUCTION	DATE
APPROVED FOR CONSTRUCTION	DATE

10CT 115KV TRANSMISSION LINE
LIGHT ANGLE (S - 15°) FRAMING



APPROXIMATE PILE HEIGHT 24384 (897)

POLE TO BE MADE OF STEEL, WOOD OR CONCRETE

100KT 115KV TRANSMISSION LINE
MEDIUM ANGLE (15 - 45°) FRAMING



Chimax Inc.
2000 Highway 101, Suite 100
Burlington, Ontario L7R 4K6
Tel: 905-335-2222

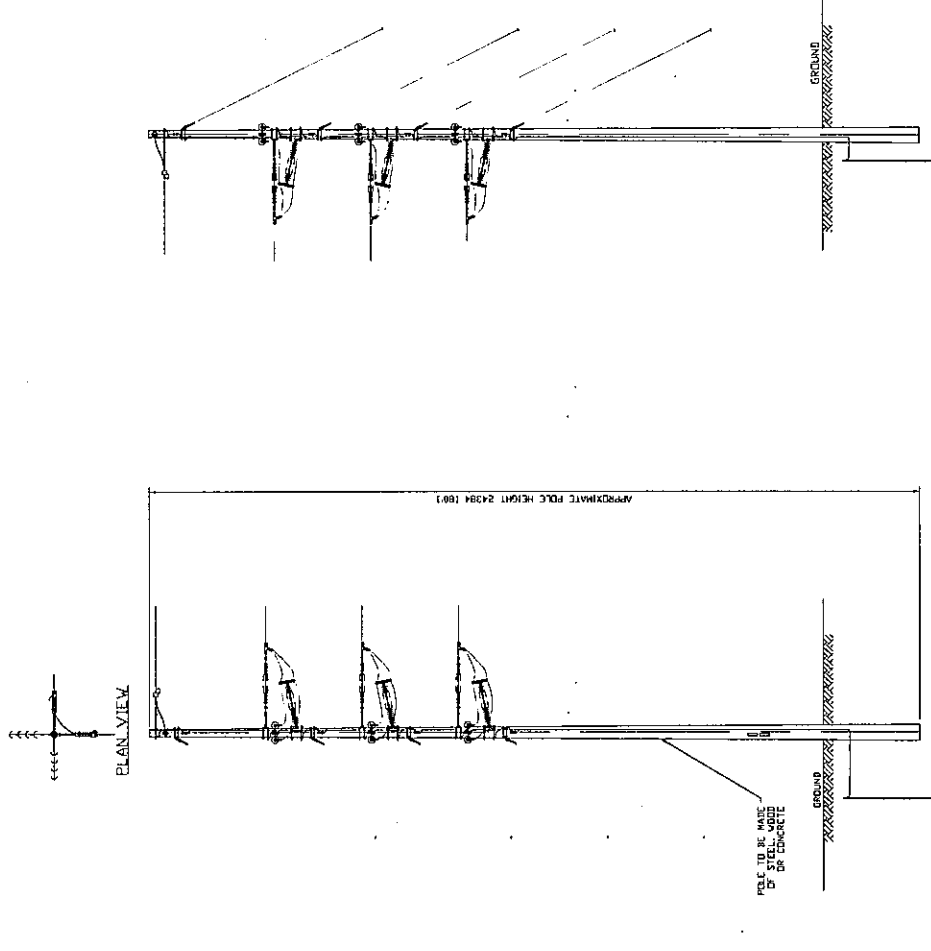
CLIENT: NEXTERA ENERGY
PROJECT NO.: 1235-7-03139
DATE: 12/27/2012

CLIENT PROJECT NO.	2000 HWY 101, SUITE 100, BURLINGTON, ONTARIO L7R 4K6
PROJECT NAME	100KT 115KV TRANSMISSION LINE MEDIUM ANGLE (15 - 45°) FRAMING
PROJECT NO.	1235-7-03139
DATE	12/27/2012

APPROVED FOR CONSTRUCTION	DATE	PROJECT NO.	PROJECT NAME
PROJECT NO.	1235-7-03139	PROJECT NO.	1235-7-03139
ACTIVITY NO.	100KT 115KV TRANSMISSION LINE MEDIUM ANGLE (15 - 45°) FRAMING	PROJECT NO.	1235-7-03139
DATE	12/27/2012	PROJECT NO.	1235-7-03139

STATION	1+00.00
DATE	12/27/2012
PROJECT NO.	1235-7-03139
PROJECT NAME	100KT 115KV TRANSMISSION LINE MEDIUM ANGLE (15 - 45°) FRAMING

NO.	DESCRIPTION	DATE	BY	CHECKED BY
1	ISSUED FOR PERMIT	12/27/2012	J. SMITH	M. JONES
2	ISSUED FOR CONSTRUCTION	12/27/2012	J. SMITH	M. JONES
3	ISSUED FOR AS-BUILT	12/27/2012	J. SMITH	M. JONES
4	ISSUED FOR RECORD	12/27/2012	J. SMITH	M. JONES



100kV 115KV TRANSMISSION LINE
HEAVY ANGLE (45 - 90) DEADEND FRAMING



CLIENT ENG. NO.
DRAWING NO.
1235-2-10148
DATE
2018-11-16

PROJECT NAME
PROJECT NO.
PROJECT CODE
PROJECT USE
SUBJECT

APPROVED FOR CONSTRUCTION
CLIENT PROJECT NO.
DEPARTMENT NO.
PROJECT NO.
PROJECT NAME

SCALE
DATE
DRAWN BY
CHECKED BY
APPROVED BY

STAMP/SEAL
ANY CHANGES TO THIS DRAWING MUST BE MADE BY THE ORIGINAL DESIGNER OR AN APPROVED ENGINEER

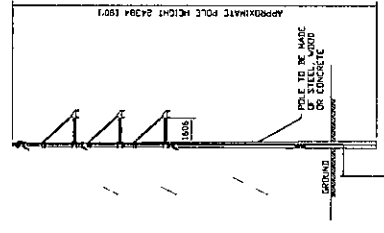
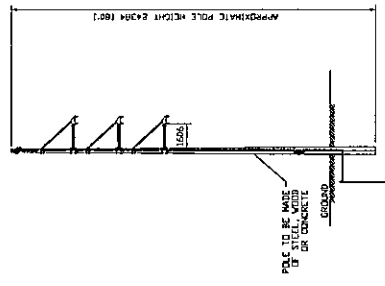
REVISIONS

NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		
7		
8		
9		

REVISIONS

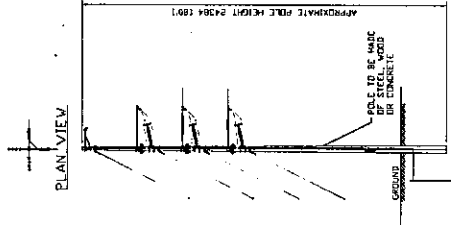
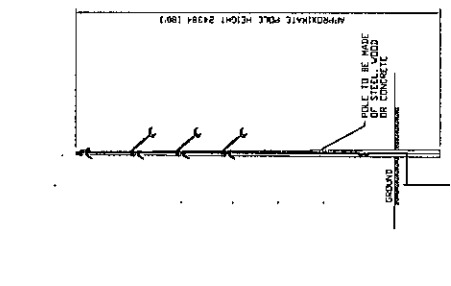
REVISIONS

REVISIONS



ICCT 115KV TRANSMISSION LINE
TANGENT (0 - 5°) FRAMING

ICCT 115KV TRANSMISSION LINE
LIGHT ANGLE (5 - 15°) FRAMING



ICCT 115KV TRANSMISSION LINE
MEDIUM ANGLE (15 - 45°) FRAMING

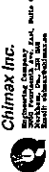
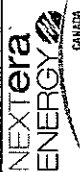
ICCT 115KV TRANSMISSION LINE
HEAVY ANGLE (45 - 90°) DEPEND FRAMING



Chimney Inc.
3100 AVENUE 101, SUITE 100
MISSISSAUGA, ONTARIO L4V 1L1
TEL: 905.276.1111

CLIENT PROJECT NO.	DEPARTMENT NO.	PROJECT NO.	AREA	ARTICLE NO.	PROJECT
PROJECT NO.	CLIENT NO.	REV. 1	DATE	BY	CHK
SCALE	PROJECT CODE	DATE	DATE	DATE	DATE
SYNOPSIS					
THIS DRAWING IS THE PROPERTY OF NEXTERA ENERGY INC. AND IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.					
CLIENT NO. NO.	CLIENT NO. NO.	CLIENT NO. NO.	CLIENT NO. NO.	CLIENT NO. NO.	CLIENT NO. NO.
DRAWING NO.	DRAWING NO.	DRAWING NO.	DRAWING NO.	DRAWING NO.	DRAWING NO.
REV.	REV.	REV.	REV.	REV.	REV.

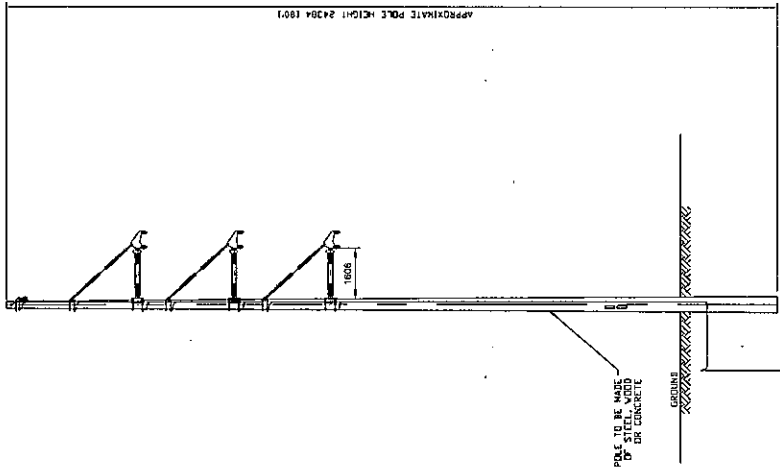
CLIENT PROJECT NO.	DEPARTMENT NO.	PROJECT NO.	AREA	ARTICLE NO.	PROJECT
PROJECT NO.	CLIENT NO.	REV. 1	DATE	BY	CHK
SCALE	PROJECT CODE	DATE	DATE	DATE	DATE
SYNOPSIS					
THIS DRAWING IS THE PROPERTY OF NEXTERA ENERGY INC. AND IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.					
CLIENT NO. NO.	CLIENT NO. NO.	CLIENT NO. NO.	CLIENT NO. NO.	CLIENT NO. NO.	CLIENT NO. NO.
DRAWING NO.	DRAWING NO.	DRAWING NO.	DRAWING NO.	DRAWING NO.	DRAWING NO.
REV.	REV.	REV.	REV.	REV.	REV.



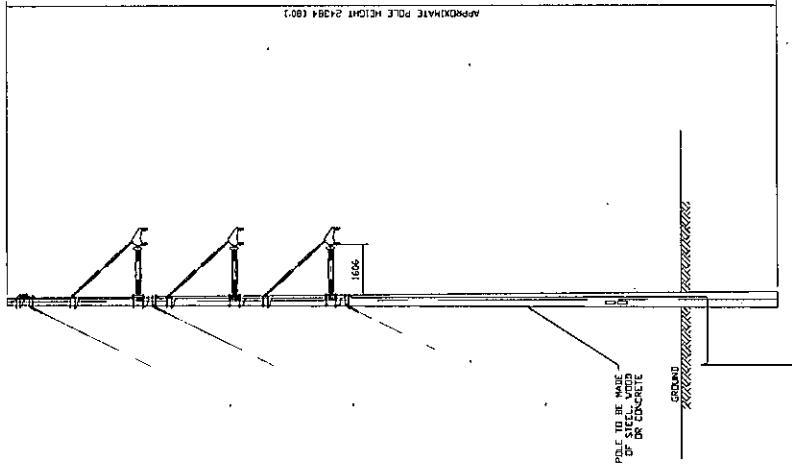
CLIENT: CHEMEX INC.
 CHEMEX NO. 1235-3-PS100
 1000-147-0002

100kV 115kV TRANSMISSION LINE
 TANGENT (0 - 5) FRAMING

REV.	DATE	BY	CHKD	DESCRIPTION
1	03/11/2011			ISSUE FOR PERMITTING
2	03/11/2011			ISSUE FOR CONSTRUCTION
3	03/11/2011			ISSUE FOR CONSTRUCTION



Engineering drawing showing framing for a 100kV/115kV transmission line tangent. The drawing includes a technical diagram of a tower and framing structure, a title block, and a revision table. The project is for Chemex Inc. The drawing is labeled '100kV 115kV TRANSMISSION LINE TANGENT (0 - 5) FRAMING'. Grid lines A-C and 1-9 are indicated.



10CT 115KV TRANSMISSION LINE
LIGHT ANGLE (9 - 15) FRAMING



Chimax Inc.
2007 PRODUCE ROAD, SUITE 100
BARKER, ALBERTA T8B 0K8
CANADA

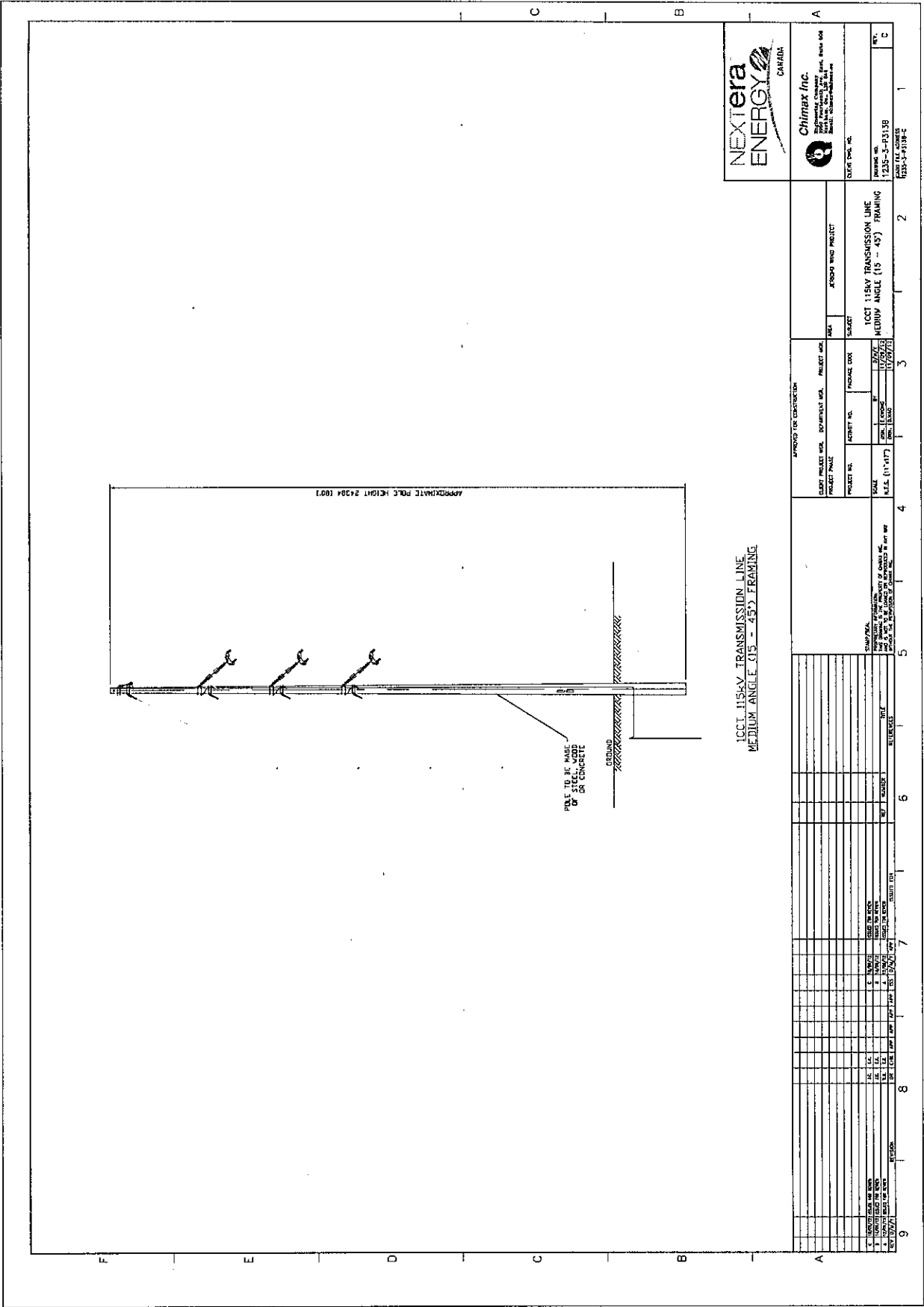
CLIENT: CHIMAX INC.
PROJECT NO.: 1235-3-PS118
DATE: 11/29/18
SCALE: 1/8" = 1'-0"

CLIENT PROJECT NO.	APPROXIMATE POLE HEIGHT	PROJECT NO.	PROJECT NAME
1235-3-PS118	24384 (801)	1235-3-PS118	10CT 115KV TRANSMISSION LINE LIGHT ANGLE (9 - 15) FRAMING

APPROVED FOR CONSTRUCTION	CLIENT PROJECT NO.	APPROXIMATE POLE HEIGHT	PROJECT NO.	PROJECT NAME
11/29/18	1235-3-PS118	24384 (801)	1235-3-PS118	10CT 115KV TRANSMISSION LINE LIGHT ANGLE (9 - 15) FRAMING

DATE	BY	DESCRIPTION
11/29/18	CHIMAX INC.	ISSUED FOR CONSTRUCTION

NO.	DATE	BY	DESCRIPTION
1	11/29/18	CHIMAX INC.	ISSUED FOR CONSTRUCTION
2			
3			
4			
5			
6			
7			
8			
9			



APPROXIMATE P.O.L.C. HEIGHT 24294 1001

P.O.L.T. TO BE MADE OF REINFORCED CONCRETE

10CT 115KV TRANSMISSION LINE
MEDIUM ANGLE (15 - 45) FRAMING

NEXTERA ENERGY CANADA

Chimax Inc.
2000 Highway 101, Suite 1000
Burlington, Ontario L7R 4K6
Tel: 905-335-1111

PROJECT NO. 1235-3-03130
REV. C
DATE 12/20/11

CLIENT PROJECT NO.	1235-3-03130
PROJECT NAME	10CT 115KV TRANSMISSION LINE MEDIUM ANGLE (15 - 45) FRAMING
PROJECT NO.	1235-3-03130
SCALE	1:1 (1/4" = 1')

APPROVED FOR CONSTRUCTION	DATE
CLIENT PROJECT NO.	1235-3-03130
PROJECT NAME	10CT 115KV TRANSMISSION LINE MEDIUM ANGLE (15 - 45) FRAMING
PROJECT NO.	1235-3-03130
SCALE	1:1 (1/4" = 1')

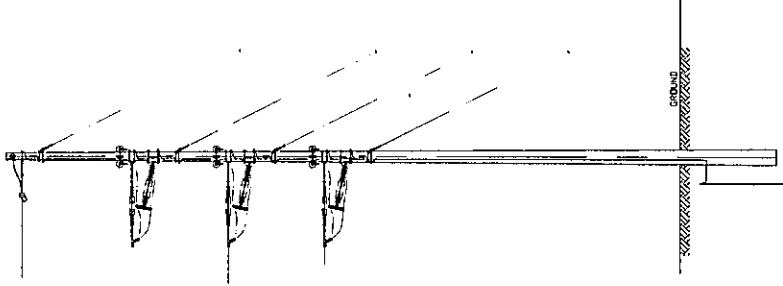
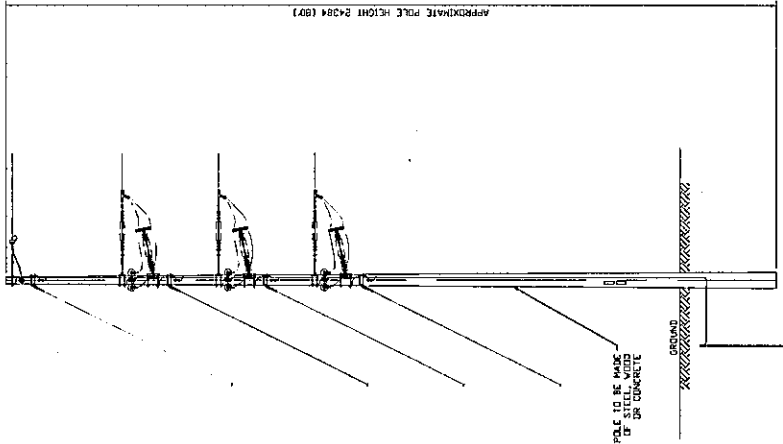
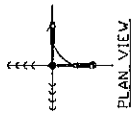
DATE	12/20/11
SCALE	1:1 (1/4" = 1')
PROJECT NO.	1235-3-03130
PROJECT NAME	10CT 115KV TRANSMISSION LINE MEDIUM ANGLE (15 - 45) FRAMING
CLIENT PROJECT NO.	1235-3-03130

DATE	12/20/11
SCALE	1:1 (1/4" = 1')
PROJECT NO.	1235-3-03130
PROJECT NAME	10CT 115KV TRANSMISSION LINE MEDIUM ANGLE (15 - 45) FRAMING
CLIENT PROJECT NO.	1235-3-03130

DATE	12/20/11
SCALE	1:1 (1/4" = 1')
PROJECT NO.	1235-3-03130
PROJECT NAME	10CT 115KV TRANSMISSION LINE MEDIUM ANGLE (15 - 45) FRAMING
CLIENT PROJECT NO.	1235-3-03130

DATE	12/20/11
SCALE	1:1 (1/4" = 1')
PROJECT NO.	1235-3-03130
PROJECT NAME	10CT 115KV TRANSMISSION LINE MEDIUM ANGLE (15 - 45) FRAMING
CLIENT PROJECT NO.	1235-3-03130

DATE	12/20/11
SCALE	1:1 (1/4" = 1')
PROJECT NO.	1235-3-03130
PROJECT NAME	10CT 115KV TRANSMISSION LINE MEDIUM ANGLE (15 - 45) FRAMING
CLIENT PROJECT NO.	1235-3-03130



ICC1 115KV TRANSMISSION LINE
HEAVY ANGLE (45 - 90) DEADEND FRAMING

APPROVED FOR CONSTRUCTION

CLIENT PROJECT NO.	DEPARTMENT NO.	PROJECT NO.
PROJECT PHASE	DATE	PROJECT NO.
PROJECT NO.	REV. NO.	PROJECT NO.
DATE (11-11-17)	DATE (11-11-17)	DATE (11-11-17)

NO.	DATE	BY	CHKD BY	REV	DESCRIPTION
1	11/11/17				ISSUED FOR PERMIT
2	11/11/17				ISSUED FOR REVIEW
3	11/11/17				ISSUED FOR PERMIT
4	11/11/17				ISSUED FOR PERMIT
5	11/11/17				ISSUED FOR PERMIT
6	11/11/17				ISSUED FOR PERMIT
7	11/11/17				ISSUED FOR PERMIT
8	11/11/17				ISSUED FOR PERMIT
9	11/11/17				ISSUED FOR PERMIT

Nextera ENERGY
CANADA

Chimex Inc.
1233-3-PS143
1233-3-PS143
1233-3-PS143

CLIENT PROJECT NO.	DEPARTMENT NO.	PROJECT NO.
PROJECT PHASE	DATE	PROJECT NO.
PROJECT NO.	REV. NO.	PROJECT NO.
DATE (11-11-17)	DATE (11-11-17)	DATE (11-11-17)

DESIGN SPECIFICATIONS AND OPERATIONAL DATA

23. The BWEC will include the erection of a permanent operations and maintenance (“O&M”) facility, or a suitable existing facility will be leased within proximity to the BWEC. The O&M facility will deal with operational issues related to the BWEC and the Facility. The O&M facility will be staffed, or have someone on-call, at all times.
24. The Facility will include installation of maintenance, protection and control systems capable of minimizing the severity and extent of disturbances to the Transmission Line. Facilities will be monitored from the O&M building as well as remotely from an operations center owned by the Applicant’s parent company, NextEra Energy Resources, LLC in Juno Beach, Florida.
25. Visual Transmission Line inspections will be scheduled at least once every six months to ensure continued compliance with all applicable codes and standards. Detailed thermography scans will be conducted on critical connection points immediately after energization as well as at least once every year during the BWEC’s operational life.
26. The Facility will be designed to meet technical and safety specifications and standards outlined in the Transmission System Code, the Ontario Electric Safety Code and the IESO Market Rules (collectively, the “Applicable Codes”).³ The Facility will be designed to meet or exceed the more stringent of the Applicable Code requirements in each of the areas listed below:
 - (i) Cable tension criteria
 - (ii) Cable and conductor sagging criteria
 - (iii) Structure loading criteria
 - (iv) Load and strength factors
 - (v) Vertical clearance requirements
 - (vi) Horizontal clearance requirements
 - (vii) Galloping recommendations.
27. The table below lists the documents and permits that must be obtained before the Project can be implemented, the reason why it is required, and how they relate to specific components of the Project.

³ The Applicant will also meet the ANSI Standards for all components of the Facility for which it is responsible for (i.e. BWEC, Transmission Line, Substation).

Documents and Permits Required	Reason Required	Relationship to Project Components	Issuer of Permit
Renewable Energy Approval	The Facility is part of a renewable energy project in Ontario, subject to O. Reg. 359/09.	Applies to all of BWEC and the Facility.	Ministry of Environment (Ontario)
County/Municipal Road Use Agreement	The Facility is partially located in Municipal rights-of-way.	Applies to collection and transmission facilities for BWEC and the Facility, respectively.	Huron County; Municipalities of Bluewater and Huron East
Navigable Waters	The Facility crosses potential navigable waters, defined as waterways wider than 15 metres.	Three potential crossings: (i) Bannockburn River, (ii) Bayfield River and (iii) a tributary of the Bayfield River. Transport Canada needs to do an assessment of the application to determine if a permit is required. Assessment underway.	Transport Canada
Species at Risk	If the Facility is determined to impact any species at risk or their habitat, a permit will be required.	Linear facility will require some removal of trees, which have been assessed per provincial guidelines and local by-laws. SAR Permit application process underway.	Ministry of Natural Resources (Ontario)
Crown Land Permit	If the Facility is deemed to cross Crown land, a permit will be needed.	The riverbeds of (i) Bannockburn River, (ii) Bayfield River and (iii) a tributary of the Bayfield River are considered Crown Land.	Ministry of Natural Resources (Ontario)

LAND MATTERS

Description of Land and Land Rights

28. The Corridor land rights that have been acquired for the construction of the Facility consist of permanent easements and, in the case of temporary construction access, temporary easements or Municipal rights-of-way.
29. The Applicant has acquired rights to private lands needed for the Transmission Line. All affected landowners were offered one of two standard form transmission easement option agreements (each an "**Option Agreement**"). The two forms of Option Agreements offered by the Applicant are attached at Exhibit F, Tab 1, Schedule 2. The Transmission Easement is at schedule E of both Option Agreements.
30. The Corridor will have a typical width of 10 meters. Typical easement cross sections, when on private land, will be placed as close to Municipal rights-of-way as is reasonable. Poles placed within the Municipal rights-of-way will be located to minimize impact to landowners adjacent to the Corridor (the "**Adjacent Landowners**"). If poles are placed within the Municipal rights-of-way, additional aerial overhang, guy and anchor and temporary construction easements may be acquired from the Adjacent Landowners under certain circumstances.
31. The Applicant has had extensive discussions regarding the Transmission Line and the Transmission Easement with all of the landowners along the Corridor, including Adjacent Landowners. A report summarizing the consultations for the Facility is attached as Exhibit G, Tab 1, Schedule 4.
32. Most construction activities (including road, river crossings, etc.) will take place within the Corridor. Some activities, such as conductor pulls, will require additional rigging outside of the Corridor. Temporary pull sites (typically 30 m x 30 m) will be established at major inflection points along the Transmission Line route to set up tensioning and wire reel equipment during the conductor pull process.
33. Approximately twelve (12) kilometres of the Transmission Line is planned to be located in the Municipal rights-of-way. Please refer to Exhibit D, Tab 1, Schedule 2 for a map illustrating the location of these Municipal rights-of-way. A road use agreement will be entered into between the Applicant and the affected Municipalities, which will address the Applicant's access to the Municipal rights-of-way.
34. The Applicant has entered into an option to acquire an easement and rights-of-way ("**Interconnection Easement Option**") with a landowner for the land required for at the point of interconnection for the Breaker. The form of Interconnection Easement Option is attached hereto as Exhibit F, Tab 1, Schedule 3.
35. The Applicant has entered into an option to purchase ("**Option to Purchase**") with a landowner for the land required for the Substation. The form of Option to Purchase is

attached hereto as Exhibit F, Tab 1, Schedule 4. The form of purchase and sale agreement is at Exhibit "C" of the Option to Purchase.

36. Care will be taken during detailed design to place poles in the most accessible, upland areas available. Construction crews will utilize existing roads and bridges, including making improvements to them when necessary, wherever possible to avoid excessive land disturbance.
37. The tables below list publicly available information that identifies the parcels of land that, as a whole, are or may be required for the proposed Facility. The tables include possible crossings known to the Applicant derived from PIN searches. The Applicant has surveyed the Corridor, verified crossings and is in the process of contacting external parties to arrange crossing agreements. Table A describes the privately-owned land parcels that will have Transmission Line infrastructure built directly on them. Table B describes the land parcels containing the Municipal rights-of-way with Transmission Line infrastructure. Note that the land parcels in Table B are described by reference to the closest adjacent PIN and will not be impacted by access to the Municipal rights-of-way.

Table A: Privately-Owned Land Parcels with Transmission Line Infrastructure

PIN	LOT	CON	Easement on Title	Nature of Impact	Crossing Type
412090051	11	9	No other easements on title.	Infrastructure located on property.	None.
412090079	11	8	Lease registered on title.	Infrastructure located on property.	Possible crossings with Zur-Ban, Moffat Lake Explorations Ltd., Bank of Commerce, Stanley Reef Resources Ltd., HONI, and Paladin Petroleum Corporation.
412090072	PT 11	7	Lease registered on title.	Infrastructure located on property.	Possible crossings with Elliott's Land Services Ltd. and HONI.
412100033	11	5	No other easements on title.	Infrastructure located on property.	Possible crossing with HONI.
412130017	PT 11	4	No other easements on title.	Infrastructure located on property.	None.
412130012	PT 11	4	No other easements on title.	Infrastructure located on property.	Possible crossing with HONI.
412140004	10	1	Lease registered on title.	Infrastructure located on property.	Possible crossing with Bell Telephone Company.

PIN	LOT	CON	Easement on Title	Nature of Impact	Crossing Type
412140018	PT 10	1	No other easements on title.	Infrastructure located on property.	Railroad crossing. Possible crossing with Tuckersmith Communications Co-Operative Ltd.
412140006	PT 10	1	No other easements on title.	Infrastructure located on property.	Possible crossing with Tuckersmith Communications Co-Operative Ltd. and HONI.
412760004	PT 25	1	Lease registered on title.	Infrastructure located on property.	Possible crossings with Mikac Oil Co. Ltd., E.V. McCollum & Co., ██████████, Milton Resources Ltd., Tuckersmith Communications Co-Operative Ltd., and HONI.
412810081	26	2	No other easements on title.	Infrastructure located on property.	Possible crossing with HONI.
412810103	PT 26	4	No other easements on title.	Infrastructure located on property.	Possible crossing with HONI.
412770009	14	7	No other easements on title.	Infrastructure located on property.	None.
412770010	13	7	No other easements on title.	Infrastructure located on property.	Possible crossing with HONI.
412770012	PT 11	7	No other easements on title.	Infrastructure located on property.	Possible crossing with HONI.
412980030	PT 5	4	No other easements on title.	Infrastructure located on property.	Possible crossing with HONI.
412980006	PT 5	1	No other easements on title.	Infrastructure located on property.	Railroad crossing.

Table B: Land Parcels with Municipal Rights-of-Way

PIN	LOT	CON	Easement on Title	Nature of Impact	Crossing Type
Adjacent to 412160020	10	9	No other easements on title.	Infrastructure located within rights-of-way.	Possible crossing with Tuckersmith Communications Co-Operative Ltd.
Adjacent to 412100028	11	6	No other easements on title.	Infrastructure located within rights-of-way.	None.
Adjacent to 412130032	11&1 2	3	Lease registered on title.	Infrastructure located within rights-of-way.	Possible crossing with HONI.
Adjacent to 412130033	11	3	No other easements on title.	Infrastructure located within rights-of-way.	Possible crossing with HONI.
Adjacent to 412130045	11	2	No other easements on title.	Infrastructure located within rights-of-way.	None.
Adjacent to 412810068	26	1 LRS	No other easements on title.	Infrastructure located within rights-of-way.	Possible crossing with HONI.
Adjacent to 412760027	24&2 5	2 LRS	No other easements on title.	Infrastructure located within rights-of-way.	None.
Adjacent to 412810091	26&2 7	3 LRS	No other easements on title.	Infrastructure located within rights-of-way.	Possible crossing with HONI.
Adjacent to 412800037	26	5 LRS	No other easements on title.	Infrastructure located within rights-of-way.	None.
Adjacent to 412770005	25	5 LRS	No other easements on title.	Infrastructure located within rights-of-way.	Possible crossing with HONI.
Adjacent to 412770011	12	7 HRS	No other easements on title.	Infrastructure located within rights-of-way.	Possible crossing with HONI.
Adjacent to 412770014	10	7 HRS	No other easements on title.	Infrastructure located within rights-of-way.	Possible crossing with HONI.

PIN	LOT	CON	Easement on Title	Nature of Impact	Crossing Type
Adjacent to 412770015	9	7 HRS	No other easements on title.	Infrastructure located within rights-of-way.	Possible crossing with HONI.
Adjacent to 412790100	9	6 HRS	No other easements on title.	Infrastructure located within rights-of-way.	Possible crossings with Tuckersmith Communications Co-Operative Ltd. and HONI.
Adjacent to 412790100	9	6 HRS	No other easements on title.	Infrastructure located within rights-of-way.	None.
Adjacent to 412790099	8	6 HRS	No other easements on title.	Infrastructure located within rights-of-way.	Possible crossing with HONI.
Adjacent to 412790129	7	6 HRS	No other easements on title.	Infrastructure located within rights-of-way.	None.
Adjacent to 412790128	7	6 HRS	No other easements on title.	Infrastructure located within rights-of-way.	Possible crossing with HONI.
Adjacent to 412790097	6	6 HRS	Lease registered on title.	Infrastructure located within rights-of-way.	Possible crossing with HONI.
Adjacent to 412780010	5	6 HRS	No other easements on title.	Infrastructure located within rights-of-way.	Possible crossing with HONI.
Adjacent to 412780005	5	5 HRS	No other easements on title.	Infrastructure located within rights-of-way.	Possible crossing with HONI.
Adjacent to 412980032	5	4 HRS	No other easements on title.	Infrastructure located within rights-of-way.	Possible crossing with HONI.
Adjacent to 412980031	5	4 HRS	No other easements on title.	Infrastructure located within rights-of-way.	Possible crossing with HONI.
Adjacent to 412790084	6	4 HRS	No other easements on title.	Infrastructure located within rights-of-way.	Possible crossing with HONI.

PIN	LOT	CON	Easement on Title	Nature of Impact	Crossing Type
Adjacent to 412790083	6	3 HRS	No other easements on title.	Infrastructure located within rights-of-way.	Possible crossings with Tuckersmith Communications Co-Operative Ltd. and HONI.
Adjacent to 412980005	5	1&2 HRS	Easement on title.	Infrastructure located within rights-of-way.	Possible crossings with Ontario Natural Gas Storage and Pipelines Ltd. and HONI.
Adjacent to 412980004	5	1 HRS	Lease registered on title.	Infrastructure located within rights-of-way.	Possible crossing with HONI.
Adjacent to 412970021	6	1 HRS	Lease registered on title.	Infrastructure located within rights-of-way.	Possible crossing with HONI.

38. In lieu of executing a separate damage release form, the Applicant has included damage release and waiver language in the Option Agreement, the Interconnection Easement Option and the Option to Purchase.⁴

Alternatives Considered

39. The Applicant employed a range of criteria in selecting the route for connecting the Facility to the Seaforth TS. The following paragraphs summarize the process that the Applicant used and the rationale that the Applicant relied upon for selecting the route for the Facility.

Selection Process

40. In selecting the preferred route for connecting the Facility to the Seaforth TS, the Applicant consulted extensively with members of the community, municipal officials, HONI and other stakeholders. Particular consultation, carried out as part of the Applicant's REA process, included issuing informational notices, delivering presentations, participating in meetings with local government officials and holding public meetings and information sessions in the community. A detailed description of the Applicant's community and stakeholder consultation efforts is set out in Exhibit G, Tab 1, Schedule 1.
41. Through these consultations, the Applicant shared information and received feedback from stakeholders regarding the potential transmission routes. This feedback,

⁴ Please refer to (i) sections 1.4 and 2.9(a) of each Option Agreement; (ii) sections 6, 7 and 24 of Schedule E of each Option Agreement; (iii) sections 1.4 and 2.9(a) of the Interconnection Easement Option; (iv) sections 3.5 and 4.1 of Schedule C of the Interconnection Easement Option; (v) section 23 of the Option to Purchase and (vi) sections 6, 7 and 24 of Exhibit "C" of the Option to Purchase.

together with the Applicant's extensive technical review of proposed routes and environmental constraints identified through the REA process, helped identify the transmission options available to the Applicant and specific concerns along each route. To address stakeholder concerns and the constraints identified through the REA study process, the Applicant has made refinements along the route Corridor to the extent feasible.

Rationale for Selecting the Proposed Transmission Route

42. The Facility includes a Transmission Line that runs approximately 23 km from the proposed Substation in the Municipality of Bluewater to the Seaforth TS in the Municipality of Huron East. As previously described in Exhibit B, Tab 2, Schedule 1, the Facility also includes the Breaker (a disconnect switch, a breaker and an entrance structure) and the pull-off tower adjacent to the Seaforth TS in the Municipality of Huron East .
43. Early in the development process, it was determined that the least environmental impact from the overhead Transmission Line would occur if the Transmission Line ran along an existing Municipal right-of-way (upper or lower tier municipal road). The Applicant gathered data regarding land use along the entire Corridor and chose the Centennial-Hensall road combination as the most direct route from the Substation to the Seaforth TS, with the least number of residences and commercial/industrial customers along the route. A number of routes along 'back-country' corridors were considered in various places along the route, but were disqualified due to unacceptable environmental impacts (provincially significant wetland interference or tree clearing) or disinterest of landowners to participate in the project. In addition, several other roads were considered as corridors or routes but were disqualified due to higher concentrations of residences, large amounts of pre-existing infrastructure in the right-of-way or unacceptable environmental impacts.
44. Accordingly, the Applicant's proposed Transmission Line route is comprised of a Corridor that includes Centennial and Hensall Roads and certain private lands adjacent thereto, from the site of the Substation on the south side of Centennial Road between Goshen Line and Babylon Line in the Municipality of Bluewater to the site of the Seaforth TS on the east side of Hensall Road between Front Road and South King Street in the Municipality of Huron East .
45. Within this Corridor, the Applicant has considered the options available to it with respect to the potential use of Municipal rights-of-way on either side of Centennial and Hensall Roads, having regard to existing facilities within those Municipal rights-of-way as well as the potential to use adjacent private easements on either side of the roads. The proposed Transmission Line route has been designed based on analysis of these options as well as related consultations regarding affected landowners and stakeholders.

Corridor Land Acquisition Process and Consultations with HONI

46. The Applicant found that along approximately 8.5 km or 37% of the route, there are no existing utility poles or structures in the Municipal rights-of-way. In these areas, the Applicant proposes to construct the line within the Municipal rights-of-way or within a private easement adjacent to the Municipal rights-of-way.
47. The Applicant found that there are existing HONI distribution poles within the Municipal rights-of-way along approximately 14.5 km or 63% of the Transmission Line route. For approximately four months, the Applicant consulted with HONI concerning the Applicant's interest in co-locating these portions of the proposed Transmission Line along HONI's distribution poles and structures through a joint use arrangement. HONI advised that it has instituted an internal policy under which it will not accommodate requests for joint use of distribution poles to support transmission lines rated above 50 kV.
48. In addition, the Applicant has made efforts to secure private easements along various portions of the route, including areas where there are existing HONI distribution facilities. The Applicant has approached all of the Adjacent Landowners to offer them an opportunity to enter into an Option Agreement. At the time of this application, several of the Adjacent Landowners have agreed to and signed an Option Agreement. Negotiations continue with the remaining unsigned Adjacent Landowners. Identification of all existing or potentially impacted landowners is included in the table above.
49. Based on these efforts, the Applicant proposes to construct approximately 11.5 km or 50% of the Transmission Line within private easements, of which approximately 5.9 km are on private lands on the opposite side of the road from where HONI's distribution facilities are situated. Of the 11.7 km of the Transmission Line within the Municipal rights-of-way, approximately 8.6 km or 74% are on the opposite side of the road from HONI's distribution facilities.
50. The Applicant continues to engage with the Adjacent Landowners, community residents, the Municipalities and HONI to finalize the land use rights.

OPTION AGREEMENTS

TRANSMISSION EASEMENT OPTION AGREEMENT

THIS TRANSMISSION EASEMENT OPTION AGREEMENT (“Agreement”) is made as of the _____ day of _____ 2012 (hereinafter referred to as the “**Effective Date**”) by and between **Varna Wind, Inc.**, a company incorporated pursuant to the laws of the Province of New Brunswick and authorized to conduct business in the Province of Ontario (hereinafter, referred to as “**Developer**”) and _____ (hereinafter, referred to as “**Owner**”), who are sometimes individually referred to herein as a “**Party**” and collectively, as “**Parties**”.

WHEREAS, Owner is the registered and beneficial owner of the lands and premises legally described in **Schedule A** attached hereto (the “**Property**”); and

AND WHEREAS, Developer is a wind power developer and operator and is currently developing a wind power project known as the **Bluewater Wind Energy Centre** wind project (the “**Project**”) in the vicinity of the Property; and

AND WHEREAS, Developer and Owner have agreed to enter into this Agreement for the purpose of granting to Developer an exclusive option to acquire an easement and right-of-way over, along, across and through a portion of the Property for the purposes of erecting, constructing, replacing, relocating, improving, enlarging, removing, maintaining, operating and utilizing, from time to time, a line of transmission structures or poles (which may include lattice or truss towers or structures on the Property, but only with Owner’s consent which shall not be unreasonably withheld, conditioned or delayed), with such wires, guy wires, and/or cables (whether above ground or buried), for the transmission of electrical energy, and all necessary and proper foundations, footings, cross arms and other appliances, facilities and fixtures for use in connection therewith (collectively, the “**Transmission Facilities**”);

NOW THEREFORE THIS AGREEMENT WITNESSETH that in consideration of the mutual covenants and obligations contained herein and other good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, the Parties covenant and agree as follows:

1. Option to Enter Into Easement and Right-Of-Way

1.1 Subject to the terms and conditions set out herein, Owner hereby grants Developer the exclusive option (“**Option**”) to acquire an easement and right-of-way in respect of any portion of the Property (the “**Optioned Property**”), for the purposes of constructing, owning and/or operating the Transmission Facilities on the Optioned Property. For greater certainty, the Optioned Property excludes certain portions of the Property identified in **Schedule B** attached hereto (the “**Excluded Property**”) and Developer acknowledges and agrees that it shall not be permitted to exercise the Option in respect of any portion of the Excluded Property with respect to the Transmission Facilities. The Option shall be exercisable by Developer upon its sole, absolute and subjective discretion. If, at the time Developer exercises the Option, the owner of the Property is the Owner as first named above, then Developer is irrevocably authorized and directed by the Owner to finalize the transmission easement attached hereto as **Schedule E** (hereinafter referred to as “**Easement**”) by

completing any missing information such as the Commencement Date and the description of the Easement Area (including, without limitation, the reference plan number and the parts identified thereon) and thereafter, Developer shall execute the Easement and provide the completed and fully executed Easement to Owner. If, at the time Developer exercises the Option, the owner of the Property is not the Owner as first named above, then such Owner agrees that it shall duly execute and deliver to Developer on such date as is specified by Developer to Owner, the Easement substantially in the form attached hereto as **Schedule E** upon the terms and conditions provided therein. In the event such Owner fails to execute and deliver to Developer the Easement by the date specified by Developer to Owner, then such Owner hereby irrevocably constitutes and appoints Developer the true and lawful attorney of such Owner to execute the Easement and all other instruments, approvals and documents as provided for in the Easement. The Option shall be exercised by Developer by providing written notice to Owner (the "**Exercise Notice**") at any time prior to the expiry of the Option Term (as herewith defined). Accompanying the Exercise Notice shall be a draft or final reference plan identifying the portion of the Optioned Property that will be the subject of the Easement. Owner hereby authorizes Developer to deposit the reference plan on title to the Property.

1.2 The Option shall be exercisable by Developer at any time from the Effective Date up to and including the date which is the third anniversary of the Effective Date ("**Option Term**"). Notwithstanding anything to the contrary herein, however, if Developer shall give written notice to the Owner prior to the expiry of the Option Term that Developer has submitted, or is in the process of submitting, an application to the Ontario Energy Board (or equivalent government or public authority) for approval to transmit or distribute energy pursuant to the Transmission Facilities and such application references this Option and/or the Optioned Property, then Developer may, in its sole discretion, elect to extend the Option Term for an additional period of two (2) years ("**Extended Option Term**") on the same terms, conditions and privileges as set forth hereunder, at the payment then being paid as herein provided, by providing written notice to Owner of such extension, which shall accompany payment pursuant to **Schedule D**, no less than sixty (60) days prior to the expiration of the Option Term. The Option Term and the Extended Option Term may sometimes be collectively referred to herein as the "**Term**".

1.3 Developer shall pay Owner the amounts set forth in **Schedule D** as the consideration for the Option Term ("**Option Payment**") within sixty (60) days after the Effective Date. The Parties acknowledge and agree that the registration copy of this Agreement will not contain the payment provisions set forth in **Schedule D**, and it is understood and agreed that the deletion of such payment provisions does not and will not in any way affect the validity of this Agreement.

1.4 Owner hereby grants to Developer, during the Term, the right to enter upon the Optioned Property, at such times as are agreed to by the Parties, acting reasonably, to allow Developer to undertake studies and tests on, above and below the Optioned Property and to construct and install scientific equipment and any other equipment necessary to perform required studies and tests (collectively "**Scientific Equipment**"). In the event any Scientific Equipment are located within the cultivated Optioned Property of Owner, and in the event any of the above materially interferes with Owner's farming practices, Developer shall pay Owner a one-time payment for crop damage resulting from the construction or installation of the hereinabove described transmission structures and/or poles, or equipment. Owner shall provide written notice to Developer outlining the

basis for Owner's assertion of damage to the Optioned Property, the exact nature of damage, the source of the assertion that the alleged damage is the result of the exercise by Developer of the rights, privileges and license granted by this Agreement and satisfactory evidence of the damage including documentation showing the extent of the damage and the financial impact of such damage. In the event that the Parties cannot agree at any time on the amount of damage payable to Owner for such crop damage, the compensation paid by Developer to Owner for that use shall be the damages for the crops lost or destroyed in the area damaged as calculated below; in consideration of this payment, no additional damages shall be paid in future years for that episode of damage. Damages will be calculated by the following formula: Unit Price x Unit Yield Per Acre x Acres Damaged = Damages. Prices for damaged or destroyed crops will be based on the average of the previous March 1st and September 1st using the prices for the crop provided by the local grain elevator. Yield will be the average of the previous three (3) years' yields according to Owner's records for the smallest parcel of land that includes the damaged area. If Owner does not have yield records available, the Parties will use commonly used yield information available for the area. The Parties shall try in good faith to agree to the extent of damage and acreage affected. If they cannot agree, they shall have the area measured and extent of damage assessed by an impartial party such as a crop insurance adjuster or extension agent. Any costs for such assessment shall be paid by Developer. Payment shall be made within sixty (60) days after determining the extent of the damage. In the event that Developer requests that Owner move livestock located on the Optioned Property, Owner shall promptly move the livestock to a mutually acceptable location and Developer shall reimburse Owner for the reasonable cost of moving the livestock.

2. Covenants, Representations & Warranties.

2.1 Owner represents and warrants that, as of the Effective Date, Owner is:

(a) at least eighteen (18) years of age and either not a spouse within the meaning of the *Family Law Act*, R.S.O. 1990, c.F.3, as amended; or

(b) at least eighteen (18) years of age and if a spouse within the meaning of the *Family Law Act*, R.S.O. 1990, c.F.3, as amended, then this Agreement has been executed by both spouses together comprising Owner or consented to in writing by Owner's spouse as is evidenced by the signature of the spouse on the Consent attached hereto as **Schedule C**; or

(c) if a corporation, then no building(s) located on the Optioned Property has been ordinarily occupied by any officer, director or shareholder of the corporation or by any of their spouses as a family residence or matrimonial home within the meaning of the *Family Law Act*, R.S.O. 1990, c.F-3, as amended.

2.2 Developer hereby represents and warrants that it is duly organized, validly existing and in good standing under the laws of New Brunswick, is authorized to conduct business in the Province of Ontario and has the right, power and privilege to execute and deliver this Agreement and to perform its obligations hereunder.

2.3 Owner acknowledges that Owner has had the full opportunity to obtain independent legal representation or advice in connection with this Agreement.

2.4 Owner hereby agrees and covenants:

(a) that subsequent to the execution and delivery of this Agreement and without any additional consideration made or cost to Owner, Owner will execute and deliver or cause to be executed and delivered any further legal instruments, including, without limitation, any required consents or acknowledgements in favour of Developer's lenders, and perform any acts which are or may become necessary to effectuate the purposes of this Agreement and to complete the transactions contemplated hereunder;

(b) that Owner will appoint Developer to act as Owner's agent for the purpose of executing such consents or authorizations as may be necessary for Developer to make any application for re-zoning or site plan approval pursuant to this Agreement, and agrees to cooperate in any such applications; and

(c) that any information which Owner has access to or which comes into Owner's possession relating to Developer's activities, including any wind assessment data or the terms and conditions of this Agreement (including the Easement) (collectively, the "**Confidential Information**") shall be held in the strictest confidence by Owner, and Owner shall not disclose any Confidential Information to any third party except as may be required by law, or on the same confidential basis as provided herein and then only to Owner's prospective purchasers or legal and financial advisors who have a bona fide and actual need to know same ("**Authorized Agents**"); (ii) Owner or the Authorized Agents will not use any such Confidential Information, other than as may be required or permitted to perform any of its obligations under this Agreement; and (iii) Owner or its Authorized Agents will not exploit (whether for commercial or other purposes) or otherwise use any such Confidential Information. Owner acknowledges that a breach of any of the provisions contained herein would cause Developer to suffer loss which could not be adequately compensated for by damages and Developer may, in addition to any other remedy or relief, enforce the performance of the provisions of this Section by injunction or specific performance upon application to a court of competent jurisdiction without proof of actual damage. Upon the expiration or earlier termination of this Agreement, all Confidential Information will continue to be kept confidential by Owner.

2.5 Developer hereby covenants that should it elect to exercise the Option, it shall, at its sole cost and expense and prior to accessing the Optioned Property for any purpose related to the assessment or construction of the Transmission Facilities contemplated to be erected by Developer herein, provide and maintain in full force and effect with financially responsible insurance carriers, insurance with commercially reasonable coverages, which shall remain in effect during the term of the Easement or any extension thereof or as otherwise specified herein and which shall, if applicable, include (but not be limited to):

(a) automobile liability insurance covering owned, non-owned, hired, leased and rented automobiles and automotive equipment providing coverage for injury, death, or property damage;

(b) commercial general liability insurance covering bodily injury, death, personal injury and damage to property; and

(c) workers compensation as required by the Ontario *Workplace Safety and Insurance Act* (Ontario) or similar legislation covering all persons employed by Developer or subcontractors for work performed under this Agreement,

2.6 Title Search

(a) If, after the Effective Date, Developer conducts a title search and such search reveals that Owner is not the legal and beneficial owner of the Optioned Property or does not have the legal right and authority to grant to Developer, its employees, servants, agents, consultants, contractors and sub-contractors, the rights under this Agreement or has granted an easement, right-of-way, lease, financial encumbrance or other property right(s) related to the Optioned Property (“**Prior Encumbrance**”) to any other person that would interfere with the rights granted to Developer hereunder, Developer may, in its sole discretion, terminate this Agreement effective immediately. If Developer elects not to terminate this Agreement, Owner agrees to cooperate with Developer to obtain from the holder of such Prior Encumbrance any non-disturbance agreement, postponement, mutual co-existence agreement or related agreements, that Developer or its lender(s) may reasonably require. Without limiting the generality of the foregoing, Owner covenants and agrees to use its best efforts to obtain from any prior mortgagee of the Property, either a postponement of such mortgage to this Agreement and any Easement or a non-disturbance agreement in favour of Developer.

(b) If the title search reveals a Prior Encumbrance, Developer, in its sole and absolute discretion, may decide to consult with the holder of such Prior Encumbrance and Owner shall cooperate with Developer to resolve any issues that may arise out of the exercise of the Option vis-à-vis the Prior Encumbrance with the goal of determining whether the Prior Encumbrance and the Easement can co-exist over the Optioned Property.

(c) Notwithstanding Section 2.6(b), Developer may choose to terminate this Agreement at any time pursuant to Section 2.6(a).

2.7 Owner hereby represents and warrants that it is the legal and beneficial owner[s] in fee simple of the Property and has the legal right and authority to grant to Developer, its servants, employees, agents, consultants, contractors and sub-contractors the rights under this Agreements on the terms and conditions set out herein and has not and will not grant an option, easement, lease or any other property rights related to the Optioned Property to any other person that would interfere with the rights granted to Developer hereunder, save and except for any easements, rights-of-way, petroleum or natural gas leases or any other property rights granted by the Owner prior to the Effective Date.

2.8 Owner covenants and agrees to execute all applications, consents, permissions, agreements, postponements, partial discharges and any other documents which Developer may require in connection with obtaining any and all approvals including, but not limited to, rezoning, governmental approvals, consents, permits or variances (collectively, “**Approvals**”) and in connection with entering into by Developer of any agreements with such governmental and public authorities as may be necessary to give due force and effect to and in furtherance of Developer’s

applications, and the Owner shall produce all other documents and information which may be required in connection with such applications. All applications for Approvals shall be made by Developer, at its sole cost and expense and any costs associated with such Approvals shall be borne by Developer. Developer agrees that the obligation of the Owner pursuant to this paragraph shall be restricted to execution of documents and production of documents and information and shall not impose upon the Owner any financial obligation whatsoever.

2.9 Mutual Indemnities

(a) Developer shall indemnify and hold harmless the Owner against all actions, suits, claims, demands and expenses made or suffered by any person or persons, in respect of loss, injury, damage or obligation to compensate, arising out of or in connection with or as a result of:

- (i) the negligence or wilful misconduct of Developer; or
- (ii) any breach by Developer of the terms and conditions of this Agreement; or

provided that Developer shall not be liable under this Section to the extent to which such loss, damage or injury is caused or contributed to by the negligence or default of Owner, its servants or agents. For greater certainty, Developer shall not be liable to Owner for the actions of Owner, its agents, employees, invitees or representatives who enter upon the Optioned Property.

(b) Owner shall indemnify and hold harmless Developer against all actions, suits, claims, demands and expenses made or suffered by any person or persons, in respect of loss, injury, damage or obligation to compensate, arising out of or in connection with, or as a result of the negligence or wilful misconduct of Owner, as well as, in respect of any loss, injury or damage arising out of or in connection with, any breach by Owner of the terms and conditions of this Agreement; provided that Owner shall not be liable under this Section to the extent to which such loss, damage or injury is caused or contributed to, by the negligence or default of Developer, its servants or agents. For greater certainty, Owner shall not be liable to Developer for the actions of: (i) Developer, its agents, employees, or representatives who enter upon the Optioned Property, or (ii) any trespasser or unauthorized person who enters upon the Optioned Property.

(c) Notwithstanding the foregoing, the Parties hereto shall only be liable for reasonably anticipated and foreseeable damages.

3. Termination

3.1 Except as otherwise stipulated herein, this Agreement shall terminate at the earlier of:

(a) failure by Developer to pay the requisite payments provided for hereunder, after written demand by the Owner, unless otherwise agreed to by the Parties;

(b) receipt by the Owner of notice from Developer of Developer's desire to terminate the Agreement at any time during the Term;

(c) termination by Developer pursuant to Section 2.6; or

(d) the expiry of the Term of the Option as set out in Section 1.2.

3.2 The representations, warranties, covenants and agreements contained in Section 2 hereof shall survive the termination of this Agreement and remain in full force and effect.

3.3 In the event that this Agreement is terminated on the date stipulated in Section 3.1(b) (the “**Early Termination Date**”), Developer shall be released from having to pay any further Option Payment under this Agreement.

4. Notices

4.1 Any notice or other writing required or permitted to be given under this Agreement or for the purposes of this Agreement (referred to in this Section as a “**Notice**”) to the other Party shall be sufficiently given if delivered personally, or if sent by prepaid registered mail or if transmitted by fax or other form of recorded communication tested prior to transmission to such other Party:

In the case of Notice to Developer, to:

Varna Wind, Inc.
5500 North Service Road, Suite 205
Burlington, ON L7L 6W6, Canada
Attention: Business Management
Telephone: (905) 335-4904
Facsimile: (905) 335-5731

With a copy to:

Varna Wind, Inc.
700 Universe Blvd.
Juno Beach, FL 33408
Attention: Business Management
Telephone: (561) 691-7171
Facsimile: (561) 691-7307

In the case of the Owner, to:

Telephone: _____

or at such other address as the Party to whom such writing is to be given shall have last notified to the Party giving the same in the manner provided in this Section. Any notice personally delivered to

the Party to whom it is addressed as provided in this Section shall be deemed to have been given and received on the day it is so delivered at such address, provided that if such day is not a Business Day then the notice shall be deemed to have been given and received on the Business Day next following such day. Any notice mailed to the address and in the manner provided for in this Section shall be deemed to have been given and received on the fifth Business Day next following the date of its mailing in Ontario. Any notice transmitted by fax shall be deemed to have been given and received on the first Business Day after its transmission.

4.2 For the purposes of this Section, the term “**Business Day**” means every day except Saturdays, Sundays and statutory holidays in the Province of Ontario.

5. General Provisions

5.1 This Agreement shall be governed by the laws of the Province of Ontario and the federal laws of Canada applicable therein.

5.2 All matters in dispute between the Parties pursuant to this Agreement shall be resolved by good-faith negotiation. If the Parties are unable to resolve amicably any dispute arising out of or in connection with this Agreement, each shall have all remedies available at law or in equity. **Each Party waives all right to trial by jury and specifically agrees that trial of suits or causes of action arising out of this Agreement shall be to the Court.** Time is of the essence with regard to the terms and conditions of this Agreement.

5.3 Assignment

(a) Subject to Subsection 5.3(c) below, this Agreement may be assignable by Owner to a successor in title.

(b) Subject to Subsection 5.3(c) below, Developer shall be able to assign this Agreement or any portion of its interest in the Optioned Property derived under the Agreement and the Easement to be granted thereunder to one or more persons or entities without the prior consent of Owner to any persons, including to its lender(s) as security for Developer's obligations to such lender(s). Owner shall execute and deliver any consent and acknowledgement reasonably requested by such lender.

(c) No assignment by Owner shall be effective unless and until the assignee executes an assumption agreement (“**Assumption Agreement**”) with respect to this Agreement agreeing to be bound by the terms hereof to the same extent as if it had been an original party hereto. For greater certainty, Owner covenants and agrees that in the event Owner transfers or conveys the Property or any portion that comprises the Optioned Property, Owner will obtain from any such transferee or purchaser an Assumption Agreement in favour of Developer.

5.4 This Agreement shall be binding upon and inure to the benefit of the Parties hereto, their respective heirs, executors, administrators and other legal representatives and, to the extent permitted hereunder, their respective successors and permitted assigns.

5.5 If any provision of this Agreement is determined to be invalid or unenforceable in whole or in part, such invalidity or unenforceability shall attach only to such provision (or part thereof) and everything else in this Agreement shall continue in full force and effect.

5.6 No change or modification of this Agreement shall be valid unless it is in writing and signed by each Party hereto.

5.7 This Agreement constitutes the entire agreement between the Parties hereto with respect to the subject matter of this Agreement. The Parties hereto acknowledge that there is no representation, warranty, and agreement or understanding between them, whether express or implied, which has induced any of the Parties hereto to enter into this Agreement except as expressly stated herein.

5.8 No failure on the part of any Party to exercise, and no delay by any Party in exercising, any right under this Agreement shall operate as a waiver of such right, unless the Party gives written notice to the other Party of its intention to waive such right.

5.9 This Agreement shall commence on the Effective Date.

5.10 Time shall be of the essence of this Agreement.

5.11 The section headings herein have been inserted for ease of reference only and shall not affect the construction or the interpretation of this Agreement.

5.12 This Agreement may be executed in several counterparts, each of which so executed shall be deemed to be an original, and such counterparts together shall constitute but one and the same instrument.

5.13 Delivery of this Agreement by facsimile transmission shall constitute valid and effective delivery.

5.14 Any monies to be paid pursuant to this Agreement shall be in Canadian funds.

5.15 This Agreement shall be effective to create an interest in the Optioned Property for the Term.

5.16 Developer shall be entitled, at its cost and expense, to register this Agreement or a notice in respect thereof and any required reference plans in the Land Registry Office for the area in which the Property is situated and Owner agrees to execute, at no cost to Developer, all necessary instruments, plans and documentation for that purpose.

5.17 This Agreement shall be effective to create an interest in the Optioned Property only if the subdivision control provisions of the *Planning Act* (Ontario) are complied with.

[Remainder of page intentionally left blank, signature page follows]

IN WITNESS WHEREOF the Parties hereto have executed this Agreement on the date first above written.

Owner:

Witness:

Name:

Address:

Date:

Name:

Developer:

Varna Wind, Inc.

a New Brunswick company

Per: _____

Dean R. Gosselin, Vice President

“I have the authority to bind the corporation”

SCHEDULE A

TO TRANSMISSION EASEMENT OPTION AGREEMENT

DESCRIPTION OF PROPERTY

SCHEDULE B

TO TRANSMISSION EASEMENT OPTION AGREEMENT

DEPICTION OF PROPERTY AND EXCLUDED PROPERTY

SCHEDULE C
TO TRANSMISSION EASEMENT OPTION AGREEMENT
CONSENT OF SPOUSE

I, _____, being the spouse of _____,
do hereby give my consent to the grant of the option made in the Transmission Easement Option
Agreement dated _____, 20 ____ in respect of the following property:

DATED this _____ day of _____, 20 ____.

WITNESS:

SPOUSE OF OWNER

Name:
Address:

Name:
Address:

SCHEDULE D
TO TRANSMISSION OPTION

Compensation

Payment terms available upon request by a person who has an interest in the subject lands.

In consideration for granting a Transmission Option to **Varna Wind, Inc.**, a company incorporated pursuant to the laws of the Province of New Brunswick and authorized to conduct business in the Province of Ontario ("**Developer**"), _____ ("**Owner**") shall receive the following compensation:

1. The greater of (a) a lump sum payment of • (\$•), or (b) • (\$•) per acre for the number of acres depicted as the Optioned Property, less the Excluded Property, on Schedule "B", for the Option Term.
2. The greater of (a) a lump sum payment of • (\$•), or (b) • (\$•) per acre for the number of acres depicted as the Optioned Property, less the Excluded Property, on Schedule "B", for the Extended Option Term, if applicable.
3. All payments shall include harmonized sales tax ("**HST**"), if applicable.

Payment shall be distributed as follows:

100% to

Address

Telephone: _____

Signature required for each payee:

Name:

Date: _____

Name:

Date: _____

SCHEDULE E

TO TRANSMISSION EASEMENT OPTION AGREEMENT

FORM OF TRANSMISSION EASEMENT

(See Attached)

TRANSMISSION EASEMENT
(in Gross)

THIS TRANSMISSION EASEMENT (IN GROSS) (“Grant”), is executed and made effective this ____ day of _____, 20__ (“Effective Date”) by and between _____ (“Grantor”) and **Varna Wind, Inc.**, a company incorporated pursuant to the laws of the Province of New Brunswick and authorized to conduct business in the Province of Ontario (“Grantee”).

PREMISES

A. Grantor is the registered owner of an estate in fee simple composed of certain parcels or tracts of land and premises more particularly described on **Exhibit A** attached hereto and made a part hereof (“Property”); and

B. Grantor desires to grant, convey and transfer to Grantee an exclusive easement and right-of-way in perpetuity for the erection, installation and maintenance of certain facilities for the transmission of electric power over and across a certain portion of the Property.

IN CONSIDERATION of the foregoing and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

1. **Grant.** Grantor does hereby grant, convey and transfer to Grantee, an exclusive easement and right-of-way in perpetuity (the “Transmission Easement”) in, on, over, across, along and under that portion of the Property more particularly described on **Exhibit B** (“Easement Area”), with such persons, vehicles and equipment necessary for the purposes of erecting, constructing, replacing, relocating, improving, enlarging, removing, maintaining, operating and utilizing, from time to time, a line of transmission structures or poles (which may include lattice or truss towers or structures in the Easement Area, but only with Owner’s consent which shall not be unreasonably withheld, conditioned or delayed) , with such wires, guy wires, and/or cables (whether above ground or buried), for the transmission of electrical energy, and all necessary and proper foundations, footings, cross arms and other appliances, facilities and fixtures for use in connection therewith (collectively, the “Transmission Facilities”) in, on, over, across, along and under the Easement Area; together with (i) the right of ingress to and egress from the Transmission Facilities over and along the Property; and (ii) a temporary non-exclusive easement and right-of-way in, over, across, along and under the Property during the initial construction and installation of the Transmission Facilities (the “Construction Easement”). Once the final reference plan describing the extent of the Easement Area has been prepared and deposited by Grantee on title to the Property, Grantor confirms that Grantee is irrevocably authorized and directed to insert the Part No(s). and Reference Plan No. into the attached **Exhibit B** without the requirement of any further approval or action by Grantor.

2. **No Interference.** Grantor covenants and agrees that it shall not construct, install, or permit to be constructed or installed, any improvements, fences, structures, buildings, foliage

or vegetation, utility lines or other improvements of any type whatsoever upon or near the Easement Area which would inhibit or impair any of Grantee's rights or benefits as set forth in this Grant. Grantee shall have the right, without compensation to Grantor, to cut, prune and remove or otherwise dispose of any foliage or vegetation on or near the Easement Area that Grantee deems a threat or potential threat to Grantee's Transmission Facilities or its rights hereunder. Grantor shall not grant or permit any person or person(s) claiming through Grantor, other than Grantee, any right-of-way, encumbrance, easement or other right or interest in, to or affecting the Easement Area, without the prior written consent of Grantee in each instance, which consent Grantee may grant, withhold or deny in its sole, absolute and subjective discretion.

3. **Term**. The term of this Grant shall commence on the Effective Date and continue in perpetuity (the "Term").

4. **Authority**. Grantor hereby represents and warrants to Grantee that it is the sole registered owner of the Property in fee simple, subject to no liens or encumbrances registered in priority to this Transmission Easement, except as may be disclosed by registered title to the Property on or before the Effective Date, and is fully authorized and empowered to grant the rights, privileges and benefits granted to Grantee in this Grant.

5. **Compensation**. Grantee shall pay Grantor the amounts set forth in **Exhibit C** as the consideration for the Grant. The parties acknowledge and agree that the registration copy of this Grant will not contain the payment provisions set forth in **Exhibit C**, and it is understood and agreed that the deletion of such payment provisions does not and will not in any way affect the validity of this Grant.

6. **Crop Compensation**. Crop damage that can be reasonably demonstrated to have been caused by Grantee as a result of performing the activities authorized in this Grant, shall be paid for by Grantee according to the established yield per acre as documented in crop insurance documentation for the Property and using the price provided by the local grain elevator. Each time Grantee exercises its rights under the Transmission Easement, Grantee shall compensate Grantor for all crops lost or damaged by reason of the use.

7. **Indemnification and Insurance**. Grantee shall maintain general liability insurance insuring Grantee and Grantor against loss caused by Grantee's use of the Property. The amount of insurance shall be not less than \$● of combined single limit liability coverage. Grantee shall indemnify and at its expense defend Grantor against liability for injuries and claims for direct damage to the extent that they are caused by Grantee's exercise of rights granted in this Grant. This indemnity does not cover losses of rent, business opportunities, crop production, and profits that may result from Grantor's loss of use of the Property and for greater certainty, Grantee shall only be liable for reasonably anticipated and foreseeable damages.

8. **Grantee's Property**. Notwithstanding that in constructing, maintaining and operating the Transmission Facilities, Grantee may install equipment and appurtenances in, on, over, along, under or across the Easement Area in such a manner that it or they become

affixed to the Easement Area, the title to such equipment and appurtenances shall at all times remain the personal property of Grantee.

9. **Assignment by Grantor.** It will be a condition to any transfer or conveyance of the whole or any part of the Property by Grantor that Grantor shall cause the purchaser of any portion of the Property to execute an agreement in favour of Grantee agreeing to be bound by the terms hereof to the same extent as if such purchaser had been an original party hereto. The purchaser shall also agree to extract a similar covenant from any future purchaser of any portion of the Property.

10. **Assignment by Grantee; Mortgage Rights.**

(a) **Right to Mortgage & Assign.** Grantee, upon notice to Grantor, but without Grantor's consent or approval shall have the right to mortgage, charge, collaterally assign, or otherwise encumber and grant security interests in all or any part of its interest in this Transmission Easement or the Easement Area, or the Transmission Facilities (collectively, its "**Facilities Assets**"). These various security interests in all or a part of the Facilities Assets are collectively referred to as "**Mortgages**" and the holders of the Mortgages, their designees, successors and assigns are referred to as "**Mortgagees**". Grantee's notice to Grantor shall include the name and address of each Mortgagee and/or Assignee. Grantee shall also have the right without Grantor's consent to sell, convey, lease, sublease, grant or assign all or any portion of its Facilities Assets on either an exclusive or a non-exclusive basis, or to grant sub-easements co-easements, separate easements, leases, licenses or similar rights, however denominated (collectively, "**Assignment**"), to one or more persons or entities (collectively, "**Assignees**"). Assignees and Mortgagees shall use the Facilities Assets only for the uses permitted under this Grant. Assignees and Mortgagees shall have all rights and remedies allowed them under then existing laws except as limited by their individual agreements with Grantee, provided that under no circumstances shall any Mortgagee or Assignee have any greater rights of ownership or use of the Property than the rights granted to Grantee in this Grant.

(b) **Grantor Obligations:** Grantor agrees to consent in writing to and to execute financing documents, including customary three party lender agreements, as may reasonably be required by Mortgagees. As a precondition to exercising any rights or remedies related to any alleged default by Grantee under this Grant, Grantor shall give written notice of the default to each Mortgagee and Assignee at the same time it delivers notice of default to Grantee, specifying in detail the alleged event of default and the required remedy. Each Mortgagee and Assignee shall have the same amount of time to cure the default as to Grantee's entire interest or its partial interest in the Facilities Assets as is given to Grantee and the same right to cure any default as Grantee or to remove any property of Grantee, Mortgagees or Assignees located on the Easement Area. The cure period for each Mortgagee and Assignee shall begin to run at the end of the cure period given to Grantee in this Grant, but in no case shall the cure period for any Mortgagee or Assignee be less than ninety (90) days after receipt of the default notice. Failure by Grantor to give a Mortgagee or Assignee notice of default shall not diminish Grantor's rights against Grantee, but shall preserve all rights of the Mortgagee or Assignee to cure any default and to remove any property of Grantee, the Mortgagee or Assignee located on the Easement Area.

(c) Mortgagee/Assignee Obligations. Any Mortgagee or Assignee that does not directly hold an interest in the Facilities Assets, or whose interest is held solely for security purposes, shall have no obligation or liability under this Grant prior to the time the Mortgagee or Assignee directly holds an interest in this Grant, or succeeds to absolute title to Grantee's interest. A Mortgagee or Assignee shall be liable to perform obligations under this Grant only for and during the period it directly holds such interest or absolute title. Any Assignment permitted under this Grant shall release Grantee or other assignor from obligations accruing after the date that liability is assumed by the Assignee.

(d) Right to Cure Defaults/Notice of Defaults/Right to New Transmission Easement.

(1) To prevent Grantor's exercise of any remedies available to it in respect of a default by Grantee under this Grant, the Transmission Easement, or any partial interest in this Grant and the Transmission Easement, Grantee, any Mortgagee or Assignee shall have the right, but not the obligation, at any time to perform any act necessary to cure any default and to prevent the exercise of Grantor's remedies in respect of a default by Grantee under this Grant or any interest in the Facilities Assets.

(2) In the event of an uncured default by the holder of Grantee's entire interest in this Grant, or in the event of a termination of this Grant by agreement, by operation of law or otherwise, each Mortgagee or Assignee of a partial interest in the Facilities Assets shall have the right to have Grantor either recognize the Mortgagee's or Assignee's interest or, in the event of a termination, grant new easements substantially identical to this Grant and the Transmission Easement. Under the new easements, the Mortgagee or Assignee shall be entitled to, and Grantor shall not disturb, Mortgagee's or Assignee's continued use and enjoyment for the remainder of the Term.

(e) Extended Cure Period. If any default by Grantee under this Grant cannot be cured without obtaining possession of all or part of the Facilities Assets, then any such default shall be deemed remedied if a Mortgagee or Assignee: (a) within ninety (90) days after receiving notice from Grantor as set forth in Section 10(b), acquires possession of all or part of the Facilities Assets, or begins appropriate judicial or nonjudicial proceedings to obtain the same; (b) diligently prosecutes any such proceedings to completion; and (c) after gaining possession of all or part of the Facilities Assets cures defects that are reasonably capable of being cured and not otherwise personal to Grantor and performs all other obligations as and when the same are due in accordance with the terms of this Grant. If a Mortgagee or Assignee is prohibited by any court or by operation of any bankruptcy or insolvency laws from commencing or prosecuting the proceedings described above, the ninety (90) day period specified above for commencing proceedings shall be extended for the period of such prohibition.

(f) Certificates. Grantor shall execute estoppel certificates (certifying as to truthful matters, including without limitation that no default then exists under this Grant, if such be the case), consents to assignment, direct lender agreements and non-disturbance agreements as Grantee or any Mortgagee or Assignee may reasonably request from time to time. Grantor and Grantee shall cooperate in amending this Grant from time to time to

include any provision that may be reasonably requested by Grantee or any Mortgagee or Assignee to implement the provisions contained in this Grant or to preserve a Mortgagee's security interest in the Facilities Assets.

11. **Mortgagee Protection.** Any Mortgagee, upon delivery to Grantor of notice of its name and address, for so long as its Mortgage is in existence shall be entitled to the following protections which shall be in addition to those granted elsewhere in this Grant:

(a) **Mortgagee's Right to Possession, Right to Acquire and Right to Assign.** A Mortgagee shall have the absolute right without Grantor's consent: (a) to assign its Mortgage; (b) to enforce its lien, including, to acquire title to all or any portion of the Facilities Assets by any lawful means; (c) to take possession of and operate all or any portion of the Facilities Assets and to perform all obligations to be performed by Grantee under this Grant, or to cause a receiver or a receiver and manager to be appointed to do so; and (d) to acquire all or any portion of the Facilities Assets by foreclosure, by an assignment in lieu of foreclosure or by quit claim and thereafter without Grantor's consent to assign or transfer all or any portion of the Facilities Assets to a third party. A Mortgagee which assigns or transfers the Facilities Assets to a third party shall notify Grantor of the name and address of the Assignee or transferee.

(b) **Opportunity to Cure.**

(1) During any period of possession of the Easement Area by a Mortgagee (or a receiver or receiver and manager requested by a Mortgagee) and/or while any foreclosure, power of sale or other enforcement proceedings instituted by a Mortgagee are pending, the Mortgagee shall pay or cause to be paid the fees and all other monetary charges, if any, payable by Grantee under this Grant which have accrued and are unpaid at the commencement of the period and those which accrue thereafter during the period. Following acquisition of all or a portion of the Facilities Assets by the Mortgagee as a result of either foreclosure, acceptance of an assignment in lieu of foreclosure, quit claim or by a purchaser under a power of sale or judicial sale, this Grant shall continue in full force and effect and the Mortgagee or party acquiring title to the Facilities Assets shall, as promptly as reasonably possible, commence the cure of all defaults under this Grant and thereafter diligently process such cure to completion, whereupon Grantor's rights relating to such default shall be deemed waived; provided, however, that the Mortgagee or party acquiring title to the Facilities Assets shall not be required to cure those defaults which are not reasonably susceptible of being cured or performed by such party ("**non-curable defaults**"). Non-curable defaults shall be deemed waived by Grantor upon completion of foreclosure proceedings or acquisition of Grantee's interest in this Grant under a power of sale or judicial sale.

(2) Any Mortgagee or other party who acquires Grantee's interest in the Facilities Assets pursuant to foreclosure, assignment in lieu of foreclosure, quit claim, under a power of sale or judicial sale or otherwise shall not be liable to perform the obligations imposed on Grantee by this Grant incurred or accruing after the party no longer has ownership or possession of the Facilities Assets.

(c) **New Easement.**

(1) If this Grant is terminated for any reason, if the Facilities Assets are foreclosed, or if this Grant is rejected, repudiated, resiliated or disaffirmed pursuant to bankruptcy law or other law affecting creditor's rights and, within ninety (90) days after such event, Grantee or any Mortgagee or Assignee shall have arranged to the reasonable satisfaction of Grantor for the payment of all fees or other charges due and payable by Grantee as of the date of such event, then Grantor shall execute and deliver to Grantee or such Mortgagee or Assignee or to a designee of one of these parties, as the case may be, a new easement to the Easement Area which (i) shall be for a term equal to the remainder of the Term before giving effect to such rejection, repudiation, resiliation or termination; (ii) shall contain the same covenants, agreements, terms, provisions and limitations as this Grant (except for any requirements that have been fulfilled by Grantee or any Mortgagee or Assignee prior to rejection, repudiation, resiliation or termination of this Grant); and, (iii) shall include that portion of the Easement Area in which Grantee or such other Mortgagee or Assignee had an interest on the date of rejection, repudiation, resiliation or termination.

(2) After the termination, repudiation, resiliation, rejection or disaffirmation of this Grant and during the period thereafter during which any Mortgagee shall be entitled to enter into new easements for the Easement Area, Grantor will not terminate the rights of any Assignee unless in default under its Assignment.

(3) If more than one Mortgagee makes a written request for a new easement pursuant to this provision, the new easements shall be delivered to the Mortgagee requesting such new easement whose Mortgage is prior in lien, and the written request of any other Mortgagee whose lien is subordinate shall be void and of no further force or effect.

(4) The provisions of this Section shall survive the termination, rejection, repudiation, resiliation or disaffirmation of this Grant and shall continue in full force and effect thereafter to the same extent as if this Section were a separate and independent contract made by Grantor, Grantee and each Mortgagee, and, from the effective date of such termination, rejection, repudiation, resiliation or disaffirmation of this Grant to the date of execution and delivery of such new easements, such Mortgagee may use and enjoy the Easement Area without hindrance by Grantor or any person claiming by, through or under Grantor; provided that all of the conditions for the new easements as set forth above are complied with.

(d) Mortgagee's Consent to Amendment, Termination or Surrender. Notwithstanding any provision of this Grant to the contrary, the parties agree that so long as there exists an unpaid Mortgagee, this Grant shall not be modified or amended, and Grantor shall not accept a surrender, abandonment, cancellation or release of all or any part of the Easement Area from Grantee, prior to expiration of the Term without the prior written consent of the Mortgagee. This provision is for the express benefit of and shall be enforceable by each Mortgagee as if it were a party named in this Grant.

(e) No Merger. There shall be no merger of this Grant or of the Transmission Easement with the fee estate in the Easement Area by reason of the fact that this Grant or any interest in the Transmission Easement may be held, directly or indirectly, by or for the account of any person or persons who shall own any interest in the fee estate. No merger

shall occur unless and until all persons at the time having an interest in the fee estate in the Easement Area and all persons (including each Mortgagee) having an interest in this Grant or in the estate of Grantor and Grantee shall sign and record a written instrument effecting such merger.

(f) Liens. On the commencement of the Term, title to the Easement Area shall be free and clear of all monetary liens other than those expressly approved by Grantee. With respect to any such liens approved by Grantee, Grantor shall nevertheless obtain either non-disturbance agreements or postponements from the holders of such liens in favour of Grantee and this Transmission Easement, such agreements or postponements, as the case may be, to be reasonably satisfactory to Grantee. Thereafter, any assignment of this Grant, mortgage, deed of trust or other monetary lien placed on the Easement Area by Grantor, or permitted by Grantor to be placed or to remain on the Easement Area, shall be subject to and subordinate to this Grant, to any Assignment or Mortgage then in existence on the Facilities Assets as permitted by this Grant, to Grantee's right to encumber the Facilities Assets, and to any and all documents executed or to be executed by Grantor in connection with Grantee's development of all or any part of the Easement Area. Grantor agrees to cause any monetary liens placed on the Easement Area by Grantor in the future to incorporate the conditions of this Section.

(g) Further Amendments. At Grantee's request, Grantor shall amend this Grant to include any provision which may reasonably be requested by a proposed Mortgagee; provided, however, that such amendment shall not impair any of Grantor's rights under this Grant or increase the burdens or obligations of Grantor under this Grant. Upon the request of any Mortgagee, Grantor shall execute any additional instruments reasonably required to evidence such Mortgagee's rights under this Grant.

12. Legal Fees. In the event of any controversy, claim or dispute arising out of or relating to the Transmission Easement or the enforcement or breach hereof, the prevailing party shall be entitled to recover from the losing party the prevailing party's reasonable costs, expenses and legal fees.

13. Binding Effect; Governing Law. This Grant shall be binding upon and shall inure to the benefit of both Grantor and Grantee, and their respective heirs, successors and assigns, and shall be deemed a covenant running with the land for all purposes. The provisions hereof shall be governed by and construed in accordance with the laws of the Province of Ontario. Grantee agrees that this Transmission Easement and the rights, privileges and easements granted pursuant thereto shall be declared to be: (i) for the purposes of electricity transmission lines or electricity distribution lines within the meaning of Part VI of the *Ontario Energy Board Act*, 1998, and (ii) an easement in favour of a generator, transmitter or distributor for the purpose of generation, transmission or distribution within the meaning of Section 42.1 of the *Electricity Act*, 1998.

14. Termination. Grantee shall have the right to terminate this agreement at any time upon 30 days written notice to Grantor. Upon full or partial termination of the Transmission Easement, Grantee shall remove all physical material pertaining to the Transmission Facilities and restore the area formerly occupied by the Transmission Easement to

substantially the same physical condition that existed immediately before the installation of the Transmission Facilities. In the event of termination, Grantee has no right to recover any amounts previously paid to Grantor as consideration for this Grant.

15. **Notices.**

All notices to be given hereunder shall be in writing and all such notices and any payments to be made hereunder may be made or served personally or by registered letter addressed to Grantor at:

To Grantor:

To Grantee:

Varna Wind, Inc.
5500 North Service Road, Suite 205
Burlington, ON L7L 6W6, Canada
Attention: Business Management
Telephone: (905) 335-4904
Facsimile: (905) 335-5731

With a copy to:

Varna Wind, Inc.
700 Universe Blvd.
Juno Beach, FL 33408
Attention: Business Management
Telephone: (561) 691-7171
Facsimile: (561) 691-7307

or such other address, as Grantor or Grantee respectively may from time to time advise and any such notices or payments shall be deemed to be given and received by the addressee upon personal service or, if served by registered letter, fourteen (14) days after mailing thereof, postage prepaid. In the event of a postal interruption, all notices to be given and all payments to be made hereunder may be made or served personally or delivered to the intended recipient at the address of the recipient set out above. Grantee shall also be permitted to make any payment to Grantor electronically at Grantee's discretion and subject to Grantor's consent.

16. **Severability.** If any term or provision of this Transmission Easement, or the application thereof to any person or circumstances shall, to any extent, be determined by judicial order or decision to be invalid or unenforceable, the remainder of this Transmission Easement or the application of such term or provision to persons or circumstances other than

those as to which it is held to be invalid, shall be enforced to the fullest extent permitted by law.

17. **Counterparts.** This Transmission Easement may be executed in two or more counterparts, each of which will be deemed an original, but all of which together shall constitute one and the same instrument.

18. **Family Law Act.** Grantor represents and warrants to Grantee that if Grantor is an individual, Grantor is either not married, or if married, his or her spouse either comprises a Grantor hereunder or such spouse has consented to the grant of the Transmission Easement to Grantee pursuant to the terms herein by executing a copy of this Transmission Easement, and if Grantor is a corporation, the Easement Area has never been occupied by any of the directors, officers or shareholders of Grantor or the spouses of such directors, officers or shareholders and there are no shares in existence entitling the holders of such shares to occupation of the buildings. Accordingly, the Easement Area does not comprise a family residence within the meaning of the *Family Law Act*.

19. **Grantee's Statutory Rights.** This Transmission Easement shall not affect or prejudice Grantee's statutory rights to acquire the Easement Area under any laws, including, without limitation, Grantee's statutory rights under the *Ontario Energy Board Act, 1998*, which rights may be exercised at Grantee's discretion, in the event, Grantor being unable or unwilling for any reason to perform this Transmission Easement, or, give to Grantee a clear and unencumbered title to the easement and right-of-way herein granted.

20. **Planning Act.** This Transmission Easement and the provisions hereof which create, or, are intended to create an interest in the Easement Area shall be effective to create such an interest only if the subdivision control provisions of the *Planning Act, R.S.O. 1990 c. P. 13*, as amended are complied with.

21. **Registration.** Grantee shall be entitled, at its cost and expense, to register this Transmission Easement or a notice in respect thereof, and any required reference plans in the applicable Land Registry Office, and, Grantor agrees to execute, at no cost to Grantee, all necessary instruments, plans and documentation for that purpose.

22. **Setback Waiver.** To the extent that (a) Grantor now or in the future owns or leases any land adjacent to the Easement Area, or (b) Grantee leases or holds an easement/license or a lease over land adjacent to Easement Area, and has installed or constructed or desires to install or construct any Transmission Facilities on said land at and/or near the common boundary between the Easement Area and said land, Grantor hereby waives any and all setbacks and setback requirements, whether imposed by law or by any person or entity, including, without limitation, any setback requirements described in the zoning by-laws of the County and/or Province or in any governmental entitlement or permit heretofore or hereafter issued to Lessee. If so requested by Grantee, Grantor shall promptly, without demanding additional consideration therefore, execute, and if appropriate cause to be acknowledged, any setback waiver, setback elimination or other document or instrument required by any governmental authority or that Grantee deems necessary or convenient to the obtaining of any entitlement or permit.

23. **Removal of Debris.** Within 120 days of the Commercial Operations Date, Grantee shall remove all debris from Property. For purposes of this Agreement "Commercial Operations Date" shall mean the date that the Transmission Facilities at the Project are commercially operational and delivering energy, as determined by the Grantee.

24. **Drainage Tile.** If any drainage tiles on or under the Easement area have been damaged as a direct result of Grantee's activities in connection with the construction of the Transmission Facilities, Grantee shall pay to Grantor the cost to repair or replace the drainage tiles.

25. **Fencing.** Grantee shall not fence the Easement Area or any part thereof, with the exception of transformer stations, without the written consent of the Grantor.

[Remainder of page intentionally left blank, signature page follows]

IN WITNESS WHEREOF the Parties hereto have executed this Agreement on the date first above written.

Owner:

Witness:

Name: _____

Address: _____

Date: _____

Name: _____

Developer:

Varna Wind, Inc.
a New Brunswick company

Per: _____
Dean R. Gosselin, Vice President
"I have the authority to bind the corporation"

EXHIBIT A
TO TRANSMISSION EASEMENT

Legal Description of Property

{INSERT LEGAL DESCRIPTION OF PROPERTY}.

EXHIBIT B

TO TRANSMISSION EASEMENT

Legal Description of Easement Area

(Insert description from reference plan)

PT ___ LT ___, CON _____, DESIGNATED AS PART(S) _____ ON PLAN •-_____,
BEING PART OF PIN NO. _____

EXHIBIT C
TO TRANSMISSION EASEMENT

Compensation

Payment terms available upon request by a person who has an interest in the subject lands.

In consideration for granting a Transmission Easement to **Varna Wind, Inc.**, a company incorporated pursuant to the laws of the Province of New Brunswick and authorized to conduct business in the Province of Ontario ("**Grantee**"), _____ ("**Grantor**") shall receive the following compensation:

1. A one-time payment, the greater of (a) a lump sum payment of ● (\$●), or (b) ● (\$●) per acre for the number of acres depicted as the Easement Area on Exhibit "B".
2. A one-time payment of ● (\$●) per pole constructed on the Property.
3. A one-time payment of ● (\$●) per guy wire anchor constructed upon the Property.
4. All payments shall include harmonized sales tax ("**HST**"), if applicable.

Payment shall be made to Grantor as follows: Fifty percent (50%) of the total amount due shall be paid within sixty (60) days of the Effective Date. Fifty percent (50%) shall be paid within thirty (30) days after completion of a final survey of the entire transmission line. Said survey shall determine the exact lineal footage/acreage upon which payment shall be made from Grantee to Grantor.

Payment shall be distributed as follows:

100% to

Address

Signature required for each payee:

Name:

Date: _____

Name:

Date: _____

EXHIBIT D
TO TRANSMISSION EASEMENT
CONSENT OF SPOUSE

I, _____, being the spouse of _____,
do hereby give my consent to the grant of the lands made in the Transmission Easement the _____
day of _____, 20____ in respect of the following property:

DATED this _____ day of _____, 20____.

WITNESS:

SPOUSE OF GRANTOR

Name:
Address:

Name:
Address:

STATUTORY DECLARATION

RE: PLANNING ACT

FLORIDA) IN THE MATTER OF the easement (the "Easement") in
) favour of Varna Wind, Inc. (the "Grantee"), with respect
) to the lands more particularly described in Exhibit "A"
 COUNTY OF PALM BEACH) hereto (the "Easement Lands")

I, Dean R. Gosselin, of the Town of Juno Beach, in the State of Florida, DO SOLEMNLY DECLARE, in my capacity as Vice President of Varna Wind, Inc. a company incorporated pursuant to the laws of the Province of New Brunswick and authorized to conduct business in the Province of Ontario, and without personal liability that:

1. I am the Vice President of Varna Wind, Inc., a company incorporated pursuant to the laws of the Province of New Brunswick and authorized to conduct business in the Province of Ontario, (the "Grantee") and, as such, am aware of the matters herein deposed to save where same are stated to be upon information and belief, and where so stated, I verily believe same to be true.
2. The Easement Lands being acquired by the Grantee pursuant to the Easement are being acquired for the purpose of an electricity distribution line, electricity transmission line, hydrocarbon distribution line or hydrocarbon transmission line within the meaning of Part VI of the *Ontario Energy Board Act*, 1998, in respect of which this Statutory Declaration has been made pursuant to sub-clause 50(3)(d) of the *Planning Act* (Ontario), as amended.

AND I MAKE THIS SOLEMN DECLARATION conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath.

STATE OF FLORIDA)
) ss:
 COUNTY OF PALM BEACH)

 Dean R. Gosselin, Vice President
 "I have the authority to bind the corporation"

The foregoing instrument was acknowledged before me this ____ day of _____, 20__ by Dean R. Gosselin, as Vice President of Varna Wind, Inc., a company incorporated pursuant to the laws of the Province of New Brunswick and authorized to conduct business in the Province of Ontario,.

In witness whereof I hereunto set my hand and official seal.

(Seal)

Notary Public: _____
 My Commission Expires: _____

TRANSMISSION EASEMENT OPTION AGREEMENT

THIS TRANSMISSION EASEMENT OPTION AGREEMENT (“Agreement”) is made as of the ____ day of _____ 2012 (hereinafter referred to as the “**Effective Date**”) by and between **Varna Wind, Inc.**, a company incorporated pursuant to the laws of the Province of New Brunswick and authorized to conduct business in the Province of Ontario (hereinafter, referred to as “**Developer**”) and _____ (hereinafter, referred to as “**Owner**”), who are sometimes individually referred to herein as a “**Party**” and collectively, as “**Parties**”.

WHEREAS, Owner is the registered and beneficial owner of the lands and premises legally described in **Schedule A** attached hereto (the “**Property**”); and

AND WHEREAS, Developer is a wind power developer and operator and is currently developing a wind power project known as the **Blewater Wind Energy Centre** wind project (the “**Project**”) in the vicinity of the Property; and

AND WHEREAS, Developer and Owner have agreed to enter into this Agreement for the purpose of granting to Developer an exclusive option to acquire an easement and right-of-way over, along, across and through a portion of the Property for the purposes of erecting, constructing, replacing, relocating, improving, enlarging, removing, maintaining, operating and utilizing, from time to time, a line of transmission structures or poles (which may include lattice or truss towers or structures on the Property, but only with Owner’s consent which shall not be unreasonably withheld, conditioned or delayed), with such wires, guy wires, and/or cables (whether above ground or buried), for the transmission of electrical energy, and all necessary and proper foundations, footings, cross arms and other appliances, facilities and fixtures for use in connection therewith (collectively, the “**Transmission Facilities**”);

NOW THEREFORE THIS AGREEMENT WITNESSETH that in consideration of the mutual covenants and obligations contained herein and other good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, the Parties covenant and agree as follows:

1. Option to Enter Into Easement and Right-Of-Way

1.1 Subject to the terms and conditions set out herein, Owner hereby grants Developer the exclusive option (“**Option**”) to acquire an easement and right-of-way in respect of any portion of the Property (the “**Optioned Property**”), for the purposes of constructing, owning and/or operating the Transmission Facilities on the Optioned Property. For greater certainty, the Optioned Property excludes certain portions of the Property identified in **Schedule B** attached hereto (the “**Excluded Property**”) and Developer acknowledges and agrees that it shall not be permitted to exercise the Option in respect of any portion of the Excluded Property with respect to the Transmission Facilities. The Option shall be exercisable by Developer upon its sole, absolute and subjective discretion. If, at the time Developer exercises the Option, the owner of the Property is the Owner as first named above, then Developer is irrevocably authorized and directed by the Owner to finalize the transmission easement attached hereto as **Schedule E** (hereinafter referred to as “**Easement**”) by

completing any missing information such as the Commencement Date and the description of the Easement Area (including, without limitation, the reference plan number and the parts identified thereon) and thereafter, Developer shall execute the Easement and provide the completed and fully executed Easement to Owner. If, at the time Developer exercises the Option, the owner of the Property is not the Owner as first named above, then such Owner agrees that it shall duly execute and deliver to Developer on such date as is specified by Developer to Owner, the Easement substantially in the form attached hereto as **Schedule E** upon the terms and conditions provided therein. In the event such Owner fails to execute and deliver to Developer the Easement by the date specified by Developer to Owner, then such Owner hereby irrevocably constitutes and appoints Developer the true and lawful attorney of such Owner to execute the Easement and all other instruments, approvals and documents as provided for in the Easement. The Option shall be exercised by Developer by providing written notice to Owner (the "**Exercise Notice**") at any time prior to the expiry of the Option Term (as herewith defined). Accompanying the Exercise Notice shall be a draft or final reference plan identifying the portion of the Optioned Property that will be the subject of the Easement. Owner hereby authorizes Developer to deposit the reference plan on title to the Property.

1.2 The Option shall be exercisable by Developer at any time from the Effective Date up to and including the date which is the third anniversary of the Effective Date ("**Option Term**"). Notwithstanding anything to the contrary herein, however, if Developer shall give written notice to the Owner prior to the expiry of the Option Term that Developer has submitted, or is in the process of submitting, an application to the Ontario Energy Board (or equivalent government or public authority) for approval to transmit or distribute energy pursuant to the Transmission Facilities and such application references this Option and/or the Optioned Property, then Developer may, in its sole discretion, elect to extend the Option Term for an additional period of two (2) years ("**Extended Option Term**") on the same terms, conditions and privileges as set forth hereunder, at the payment then being paid as herein provided, by providing written notice to Owner of such extension, which shall accompany payment pursuant to **Schedule D**, no less than sixty (60) days prior to the expiration of the Option Term. The Option Term and the Extended Option Term may sometimes be collectively referred to herein as the "**Term**".

1.3 Developer shall pay Owner the amounts set forth in **Schedule D** as the consideration for the Option Term ("**Option Payment**") within sixty (60) days after the Effective Date. The Parties acknowledge and agree that the registration copy of this Agreement will not contain the payment provisions set forth in **Schedule D**, and it is understood and agreed that the deletion of such payment provisions does not and will not in any way affect the validity of this Agreement.

1.4 Owner hereby grants to Developer, during the Term, the right to enter upon the Optioned Property, at such times as are agreed to by the Parties, acting reasonably, to allow Developer to undertake studies and tests on, above and below the Optioned Property and to construct and install scientific equipment and any other equipment necessary to perform required studies and tests (collectively "**Scientific Equipment**"). In the event any Scientific Equipment are located within the cultivated Optioned Property of Owner, and in the event any of the above materially interferes with Owner's farming practices, Developer shall pay Owner a one-time payment for crop damage resulting from the construction or installation of the hereinabove described transmission structures and/or poles, or equipment. Owner shall provide written notice to Developer outlining the

basis for Owner's assertion of damage to the Optioned Property, the exact nature of damage, the source of the assertion that the alleged damage is the result of the exercise by Developer of the rights, privileges and license granted by this Agreement and satisfactory evidence of the damage including documentation showing the extent of the damage and the financial impact of such damage. In the event that the Parties cannot agree at any time on the amount of damage payable to Owner for such crop damage, the compensation paid by Developer to Owner for that use shall be the damages for the crops lost or destroyed in the area damaged as calculated below; in consideration of this payment, no additional damages shall be paid in future years for that episode of damage. Damages will be calculated by the following formula: Unit Price x Unit Yield Per Acre x Acres Damaged = Damages. Prices for damaged or destroyed crops will be based on the average of the previous March 1st and September 1st using the prices for the crop provided by the local grain elevator. Yield will be the average of the previous three (3) years' yields according to Owner's records for the smallest parcel of land that includes the damaged area. If Owner does not have yield records available, the Parties will use commonly used yield information available for the area. The Parties shall try in good faith to agree to the extent of damage and acreage affected. If they cannot agree, they shall have the area measured and extent of damage assessed by an impartial party such as a crop insurance adjuster or extension agent. Any costs for such assessment shall be paid by Developer. Payment shall be made within sixty (60) days after determining the extent of the damage. In the event that Developer requests that Owner move livestock located on the Optioned Property, Owner shall promptly move the livestock to a mutually acceptable location and Developer shall reimburse Owner for the reasonable cost of moving the livestock.

2. Covenants, Representations & Warranties.

2.1 Owner represents and warrants that, as of the Effective Date, Owner is:

(a) at least eighteen (18) years of age and either not a spouse within the meaning of the *Family Law Act*, R.S.O. 1990, c.F.3, as amended; or

(b) at least eighteen (18) years of age and if a spouse within the meaning of the *Family Law Act*, R.S.O. 1990, c.F.3, as amended, then this Agreement has been executed by both spouses together comprising Owner or consented to in writing by Owner's spouse as is evidenced by the signature of the spouse on the Consent attached hereto as **Schedule C**; or

(c) if a corporation, then no building(s) located on the Optioned Property has been ordinarily occupied by any officer, director or shareholder of the corporation or by any of their spouses as a family residence or matrimonial home within the meaning of the *Family Law Act*, R.S.O. 1990, c.F-3, as amended.

2.2 Developer hereby represents and warrants that it is duly organized, validly existing and in good standing under the laws of New Brunswick, is authorized to conduct business in the Province of Ontario and has the right, power and privilege to execute and deliver this Agreement and to perform its obligations hereunder.

2.3 Owner acknowledges that Owner has had the full opportunity to obtain independent legal representation or advice in connection with this Agreement.

2.4 Owner hereby agrees and covenants:

(a) that subsequent to the execution and delivery of this Agreement and without any additional consideration made or cost to Owner, Owner will execute and deliver or cause to be executed and delivered any further legal instruments, including, without limitation, any required consents or acknowledgements in favour of Developer's lenders, and perform any acts which are or may become necessary to effectuate the purposes of this Agreement and to complete the transactions contemplated hereunder;

(b) that Owner will appoint Developer to act as Owner's agent for the purpose of executing such consents or authorizations as may be necessary for Developer to make any application for re-zoning or site plan approval pursuant to this Agreement, and agrees to cooperate in any such applications; and

(c) that any information which Owner has access to or which comes into Owner's possession relating to Developer's activities, including any wind assessment data or the terms and conditions of this Agreement (including the Easement) (collectively, the "**Confidential Information**") shall be held in the strictest confidence by Owner, and Owner shall not disclose any Confidential Information to any third party except as may be required by law, or on the same confidential basis as provided herein and then only to Owner's prospective purchasers or legal and financial advisors who have a bona fide and actual need to know same ("**Authorized Agents**"); (ii) Owner or the Authorized Agents will not use any such Confidential Information, other than as may be required or permitted to perform any of its obligations under this Agreement; and (iii) Owner or its Authorized Agents will not exploit (whether for commercial or other purposes) or otherwise use any such Confidential Information. Owner acknowledges that a breach of any of the provisions contained herein would cause Developer to suffer loss which could not be adequately compensated for by damages and Developer may, in addition to any other remedy or relief, enforce the performance of the provisions of this Section by injunction or specific performance upon application to a court of competent jurisdiction without proof of actual damage. Upon the expiration or earlier termination of this Agreement, all Confidential Information will continue to be kept confidential by Owner.

2.5 Developer hereby covenants that should it elect to exercise the Option, it shall, at its sole cost and expense and prior to accessing the Optioned Property for any purpose related to the assessment or construction of the Transmission Facilities contemplated to be erected by Developer herein, provide and maintain in full force and effect with financially responsible insurance carriers, insurance with commercially reasonable coverages, which shall remain in effect during the term of the Easement or any extension thereof or as otherwise specified herein and which shall, if applicable, include (but not be limited to):

(a) automobile liability insurance covering owned, non-owned, hired, leased and rented automobiles and automotive equipment providing coverage for injury, death, or property damage;

(b) commercial general liability insurance covering bodily injury, death, personal injury and damage to property; and

(c) workers compensation as required by the Ontario *Workplace Safety and Insurance Act* (Ontario) or similar legislation covering all persons employed by Developer or subcontractors for work performed under this Agreement,

2.6 Title Search

(a) If, after the Effective Date, Developer conducts a title search and such search reveals that Owner is not the legal and beneficial owner of the Optioned Property or does not have the legal right and authority to grant to Developer, its employees, servants, agents, consultants, contractors and sub-contractors, the rights under this Agreement or has granted an easement, right-of-way, lease, financial encumbrance or other property right(s) related to the Optioned Property (“**Prior Encumbrance**”) to any other person that would interfere with the rights granted to Developer hereunder, Developer may, in its sole discretion, terminate this Agreement effective immediately. If Developer elects not to terminate this Agreement, Owner agrees to cooperate with Developer to obtain from the holder of such Prior Encumbrance any non-disturbance agreement, postponement, mutual co-existence agreement or related agreements, that Developer or its lender(s) may reasonably require. Without limiting the generality of the foregoing, Owner covenants and agrees to use its best efforts to obtain from any prior mortgagee of the Property, either a postponement of such mortgage to this Agreement and any Easement or a non-disturbance agreement in favour of Developer.

(b) If the title search reveals a Prior Encumbrance, Developer, in its sole and absolute discretion, may decide to consult with the holder of such Prior Encumbrance and Owner shall cooperate with Developer to resolve any issues that may arise out of the exercise of the Option vis-à-vis the Prior Encumbrance with the goal of determining whether the Prior Encumbrance and the Easement can co-exist over the Optioned Property.

(c) Notwithstanding Section 2.6(b), Developer may choose to terminate this Agreement at any time pursuant to Section 2.6(a).

2.7 Owner hereby represents and warrants that it is the legal and beneficial owner[s] in fee simple of the Property and has the legal right and authority to grant to Developer, its servants, employees, agents, consultants, contractors and sub-contractors the rights under this Agreements on the terms and conditions set out herein and has not and will not grant an option, easement, lease or any other property rights related to the Optioned Property to any other person that would interfere with the rights granted to Developer hereunder, save and except for any easements, rights-of-way, petroleum or natural gas leases or any other property rights granted by the Owner prior to the Effective Date.

2.8 Owner covenants and agrees to execute all applications, consents, permissions, agreements, postponements, partial discharges and any other documents which Developer may require in connection with obtaining any and all approvals including, but not limited to, rezoning, governmental approvals, consents, permits or variances (collectively, “**Approvals**”) and in connection with entering into by Developer of any agreements with such governmental and public authorities as may be necessary to give due force and effect to and in furtherance of Developer’s

applications, and the Owner shall produce all other documents and information which may be required in connection with such applications. All applications for Approvals shall be made by Developer, at its sole cost and expense and any costs associated with such Approvals shall be borne by Developer. Developer agrees that the obligation of the Owner pursuant to this paragraph shall be restricted to execution of documents and production of documents and information and shall not impose upon the Owner any financial obligation whatsoever.

2.9 Mutual Indemnities

(a) Developer shall indemnify and hold harmless the Owner against all actions, suits, claims, demands and expenses made or suffered by any person or persons, in respect of loss, injury, damage or obligation to compensate, arising out of or in connection with or as a result of:

- (i) the negligence or wilful misconduct of Developer; or
- (ii) any breach by Developer of the terms and conditions of this Agreement; or

provided that Developer shall not be liable under this Section to the extent to which such loss, damage or injury is caused or contributed to by the negligence or default of Owner, its servants or agents. For greater certainty, Developer shall not be liable to Owner for the actions of Owner, its agents, employees, invitees or representatives who enter upon the Optioned Property.

(b) Owner shall indemnify and hold harmless Developer against all actions, suits, claims, demands and expenses made or suffered by any person or persons, in respect of loss, injury, damage or obligation to compensate, arising out of or in connection with, or as a result of the negligence or wilful misconduct of Owner, as well as, in respect of any loss, injury or damage arising out of or in connection with, any breach by Owner of the terms and conditions of this Agreement; provided that Owner shall not be liable under this Section to the extent to which such loss, damage or injury is caused or contributed to, by the negligence or default of Developer, its servants or agents. For greater certainty, Owner shall not be liable to Developer for the actions of: (i) Developer, its agents, employees, or representatives who enter upon the Optioned Property, or (ii) any trespasser or unauthorized person who enters upon the Optioned Property.

(c) Notwithstanding the foregoing, the Parties hereto shall only be liable for reasonably anticipated and foreseeable damages.

3. Termination

3.1 Except as otherwise stipulated herein, this Agreement shall terminate at the earlier of:

(a) failure by Developer to pay the requisite payments provided for hereunder, after written demand by the Owner, unless otherwise agreed to by the Parties;

(b) receipt by the Owner of notice from Developer of Developer's desire to terminate the Agreement at any time during the Term;

(c) termination by Developer pursuant to Section 2.6; or

(d) the expiry of the Term of the Option as set out in Section 1.2.

3.2 The representations, warranties, covenants and agreements contained in Section 2 hereof shall survive the termination of this Agreement and remain in full force and effect.

3.3 In the event that this Agreement is terminated on the date stipulated in Section 3.1(b) (the “**Early Termination Date**”), Developer shall be released from having to pay any further Option Payment under this Agreement.

4. Notices

4.1 Any notice or other writing required or permitted to be given under this Agreement or for the purposes of this Agreement (referred to in this Section as a “**Notice**”) to the other Party shall be sufficiently given if delivered personally, or if sent by prepaid registered mail or if transmitted by fax or other form of recorded communication tested prior to transmission to such other Party:

In the case of Notice to Developer, to:

Varna Wind, Inc.
5500 North Service Road, Suite 205
Burlington, ON L7L 6W6, Canada
Attention: Business Management
Telephone: (905) 335-4904
Facsimile: (905) 335-5731

With a copy to:

Varna Wind, Inc.
700 Universe Blvd.
Juno Beach, FL 33408
Attention: Business Management
Telephone: (561) 691-7171
Facsimile: (561) 691-7307

In the case of the Owner, to:

Telephone: _____

or at such other address as the Party to whom such writing is to be given shall have last notified to the Party giving the same in the manner provided in this Section. Any notice personally delivered to

the Party to whom it is addressed as provided in this Section shall be deemed to have been given and received on the day it is so delivered at such address, provided that if such day is not a Business Day then the notice shall be deemed to have been given and received on the Business Day next following such day. Any notice mailed to the address and in the manner provided for in this Section shall be deemed to have been given and received on the fifth Business Day next following the date of its mailing in Ontario. Any notice transmitted by fax shall be deemed to have been given and received on the first Business Day after its transmission.

4.2 For the purposes of this Section, the term “**Business Day**” means every day except Saturdays, Sundays and statutory holidays in the Province of Ontario.

5. General Provisions

5.1 This Agreement shall be governed by the laws of the Province of Ontario and the federal laws of Canada applicable therein.

5.2 All matters in dispute between the Parties pursuant to this Agreement shall be resolved by good-faith negotiation. If the Parties are unable to resolve amicably any dispute arising out of or in connection with this Agreement, each shall have all remedies available at law or in equity. **Each Party waives all right to trial by jury and specifically agrees that trial of suits or causes of action arising out of this Agreement shall be to the Court.** Time is of the essence with regard to the terms and conditions of this Agreement.

5.3 Assignment

(a) Subject to Subsection 5.3(c) below, this Agreement may be assignable by Owner to a successor in title.

(b) Subject to Subsection 5.3(c) below, Developer shall be able to assign this Agreement or any portion of its interest in the Optioned Property derived under the Agreement and the Easement to be granted thereunder to one or more persons or entities without the prior consent of Owner to any persons, including to its lender(s) as security for Developer's obligations to such lender(s). Owner shall execute and deliver any consent and acknowledgement reasonably requested by such lender.

(c) No assignment by Owner shall be effective unless and until the assignee executes an assumption agreement (“**Assumption Agreement**”) with respect to this Agreement agreeing to be bound by the terms hereof to the same extent as if it had been an original party hereto. For greater certainty, Owner covenants and agrees that in the event Owner transfers or conveys the Property or any portion that comprises the Optioned Property, Owner will obtain from any such transferee or purchaser an Assumption Agreement in favour of Developer.

5.4 This Agreement shall be binding upon and inure to the benefit of the Parties hereto, their respective heirs, executors, administrators and other legal representatives and, to the extent permitted hereunder, their respective successors and permitted assigns.

5.5 If any provision of this Agreement is determined to be invalid or unenforceable in whole or in part, such invalidity or unenforceability shall attach only to such provision (or part thereof) and everything else in this Agreement shall continue in full force and effect.

5.6 No change or modification of this Agreement shall be valid unless it is in writing and signed by each Party hereto.

5.7 This Agreement constitutes the entire agreement between the Parties hereto with respect to the subject matter of this Agreement. The Parties hereto acknowledge that there is no representation, warranty, and agreement or understanding between them, whether express or implied, which has induced any of the Parties hereto to enter into this Agreement except as expressly stated herein.

5.8 No failure on the part of any Party to exercise, and no delay by any Party in exercising, any right under this Agreement shall operate as a waiver of such right, unless the Party gives written notice to the other Party of its intention to waive such right.

5.9 This Agreement shall commence on the Effective Date.

5.10 Time shall be of the essence of this Agreement.

5.11 The section headings herein have been inserted for ease of reference only and shall not affect the construction or the interpretation of this Agreement.

5.12 This Agreement may be executed in several counterparts, each of which so executed shall be deemed to be an original, and such counterparts together shall constitute but one and the same instrument.

5.13 Delivery of this Agreement by facsimile transmission shall constitute valid and effective delivery.

5.14 Any monies to be paid pursuant to this Agreement shall be in Canadian funds.

5.15 This Agreement shall be effective to create an interest in the Optioned Property for the Term.

5.16 Developer shall be entitled, at its cost and expense, to register this Agreement or a notice in respect thereof and any required reference plans in the Land Registry Office for the area in which the Property is situated and Owner agrees to execute, at no cost to Developer, all necessary instruments, plans and documentation for that purpose.

5.17 This Agreement shall be effective to create an interest in the Optioned Property only if the subdivision control provisions of the *Planning Act* (Ontario) are complied with.

[Remainder of page intentionally left blank, signature page follows]

IN WITNESS WHEREOF the Parties hereto have executed this Agreement on the date first above written.

Owner:

Witness:

Name: _____

Address: _____

Date: _____

Name: _____

Developer:

Varna Wind, Inc.
a New Brunswick company

Per: _____
Dean R. Gosselin, Vice President
"I have the authority to bind the corporation"

SCHEDULE A

TO TRANSMISSION EASEMENT OPTION AGREEMENT

DESCRIPTION OF PROPERTY

SCHEDULE B

TO TRANSMISSION EASEMENT OPTION AGREEMENT

DEPICTION OF PROPERTY AND EXCLUDED PROPERTY

SCHEDULE C
TO TRANSMISSION EASEMENT OPTION AGREEMENT
CONSENT OF SPOUSE

I, _____, being the spouse of _____,
do hereby give my consent to the grant of the option made in the Transmission Easement Option
Agreement dated _____, 20__ in respect of the following property:

DATED this _____ day of _____, 20__.

WITNESS:

SPOUSE OF OWNER

Name:
Address:

Name:
Address:

SCHEDULE D
TO TRANSMISSION OPTION

Compensation

Payment terms available upon request by a person who has an interest in the subject lands.

In consideration for granting a Transmission Option to **Varna Wind, Inc.**, a company incorporated pursuant to the laws of the Province of New Brunswick and authorized to conduct business in the Province of Ontario ("**Developer**"), _____ ("**Owner**") shall receive the following compensation:

1. The greater of (a) a lump sum payment of ● (\$●), or (b) ● (\$●) per acre for the number of acres depicted as the Optioned Property, less the Excluded Property, on Schedule "B", for the Option Term.
2. The greater of (a) a lump sum payment of ● (\$●), or (b) ● (\$●) per acre for the number of acres depicted as the Optioned Property, less the Excluded Property, on Schedule "B", for the Extended Option Term, if applicable.
3. All payments shall include harmonized sales tax ("**HST**"), if applicable.

Payment shall be distributed as follows:

100% to

Address

Telephone: _____

Signature required for each payee:

Name:

Date: _____

Name:

Date: _____

SCHEDULE E
TO TRANSMISSION EASEMENT OPTION AGREEMENT
FORM OF TRANSMISSION EASEMENT

(See Attached)

TRANSMISSION EASEMENT
(in Gross)

THIS TRANSMISSION EASEMENT (IN GROSS) (“Grant”), is executed and made effective this ____ day of _____, 20__ (“Effective Date”) by and between _____ (“Grantor”) and **Varna Wind, Inc.**, a company incorporated pursuant to the laws of the Province of New Brunswick and authorized to conduct business in the Province of Ontario (“Grantee”).

PREMISES

A. Grantor is the registered owner of an estate in fee simple composed of certain parcels or tracts of land and premises more particularly described on **Exhibit A** attached hereto and made a part hereof (“Property”); and

B. Grantor desires to grant, convey and transfer to Grantee an exclusive easement and right-of-way in perpetuity for the erection, installation and maintenance of certain facilities for the transmission of electric power over and across a certain portion of the Property.

IN CONSIDERATION of the foregoing and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

1. **Grant.** Grantor does hereby grant, convey and transfer to Grantee, an exclusive easement and right-of-way in perpetuity (the “Transmission Easement”) in, on, over, across, along and under that portion of the Property more particularly described on **Exhibit B** (“Easement Area”), with such persons, vehicles and equipment necessary for the purposes of erecting, constructing, replacing, relocating, improving, enlarging, removing, maintaining, operating and utilizing, from time to time, a line of transmission structures or poles (which may include lattice or truss towers or structures in the Easement Area, but only with Owner’s consent which shall not be unreasonably withheld, conditioned or delayed) , with such wires, guy wires, and/or cables (whether above ground or buried), for the transmission of electrical energy, and all necessary and proper foundations, footings, cross arms and other appliances, facilities and fixtures for use in connection therewith (collectively, the “Transmission Facilities”) in, on, over, across, along and under the Easement Area; together with (i) the right of ingress to and egress from the Transmission Facilities over and along the Property; and (ii) a temporary non-exclusive easement and right-of-way in, over, across, along and under the Property during the initial construction and installation of the Transmission Facilities (the “Construction Easement”). Notwithstanding anything to the contrary herein, Grantee covenants and agrees that in no event shall transmission structures or poles be erected or constructed on the Property more than three (3) feet from the boundary between the Property and any public right of way which runs parallel thereto. Once the final reference plan describing the extent of the Easement Area has been prepared and deposited by Grantee on title to the Property, Grantor confirms that Grantee is irrevocably authorized and directed to insert the Part No(s). and Reference Plan No. into the attached **Exhibit B** without the requirement of any further approval or action by Grantor.

2. **No Interference.** Grantor covenants and agrees that it shall not construct, install, or permit to be constructed or installed, any improvements, fences, structures, buildings, foliage or vegetation, utility lines or other improvements of any type whatsoever upon or near the Easement Area which would inhibit or impair any of Grantee's rights or benefits as set forth in this Grant. Grantee shall have the right, without compensation to Grantor, to cut, prune and remove or otherwise dispose of any foliage or vegetation on or near the Easement Area that Grantee deems a threat or potential threat to Grantee's Transmission Facilities or its rights hereunder. Grantor shall not grant or permit any person or person(s) claiming through Grantor, other than Grantee, any right-of-way, encumbrance, easement or other right or interest in, to or affecting the Easement Area, without the prior written consent of Grantee in each instance, which consent Grantee may grant, withhold or deny in its sole, absolute and subjective discretion.

3. **Term.** The term of this Grant shall commence on the Effective Date and continue in perpetuity (the "Term").

4. **Authority.** Grantor hereby represents and warrants to Grantee that it is the sole registered owner of the Property in fee simple, subject to no liens or encumbrances registered in priority to this Transmission Easement, except as may be disclosed by registered title to the Property on or before the Effective Date, and is fully authorized and empowered to grant the rights, privileges and benefits granted to Grantee in this Grant.

5. **Compensation.** Grantee shall pay Grantor the amounts set forth in **Exhibit C** as the consideration for the Grant. The parties acknowledge and agree that the registration copy of this Grant will not contain the payment provisions set forth in **Exhibit C**, and it is understood and agreed that the deletion of such payment provisions does not and will not in any way affect the validity of this Grant.

6. **Crop Compensation.** Crop damage that can be reasonably demonstrated to have been caused by Grantee as a result of performing the activities authorized in this Grant, shall be paid for by Grantee according to the established yield per acre as documented in crop insurance documentation for the Property and using the price provided by the local grain elevator. Each time Grantee exercises its rights under the Transmission Easement, Grantee shall compensate Grantor for all crops lost or damaged by reason of the use.

7. **Indemnification and Insurance.** Grantee shall maintain general liability insurance insuring Grantee and Grantor against loss caused by Grantee's use of the Property. The amount of insurance shall be not less than \$● of combined single limit liability coverage. Grantee shall indemnify and at its expense defend Grantor against liability for injuries and claims for direct damage to the extent that they are caused by Grantee's exercise of rights granted in this Grant. This indemnity does not cover losses of rent, business opportunities, crop production, and profits that may result from Grantor's loss of use of the Property and for greater certainty, Grantee shall only be liable for reasonably anticipated and foreseeable damages.

8. **Grantee's Property.** Notwithstanding that in constructing, maintaining and operating the Transmission Facilities, Grantee may install equipment and appurtenances in,

on, over, along, under or across the Easement Area in such a manner that it or they become affixed to the Easement Area, the title to such equipment and appurtenances shall at all times remain the personal property of Grantee.

9. **Assignment by Grantor.** It will be a condition to any transfer or conveyance of the whole or any part of the Property by Grantor that Grantor shall cause the purchaser of any portion of the Property to execute an agreement in favour of Grantee agreeing to be bound by the terms hereof to the same extent as if such purchaser had been an original party hereto. The purchaser shall also agree to extract a similar covenant from any future purchaser of any portion of the Property.

10. **Assignment by Grantee; Mortgage Rights.**

(a) **Right to Mortgage & Assign.** Grantee, upon notice to Grantor, but without Grantor's consent or approval shall have the right to mortgage, charge, collaterally assign, or otherwise encumber and grant security interests in all or any part of its interest in this Transmission Easement or the Easement Area, or the Transmission Facilities (collectively, its "**Facilities Assets**"). These various security interests in all or a part of the Facilities Assets are collectively referred to as "**Mortgages**" and the holders of the Mortgages, their designees, successors and assigns are referred to as "**Mortgagees**". Grantee's notice to Grantor shall include the name and address of each Mortgagee and/or Assignee. Grantee shall also have the right without Grantor's consent to sell, convey, lease, sublease, grant or assign all or any portion of its Facilities Assets on either an exclusive or a non-exclusive basis, or to grant sub-easements co-easements, separate easements, leases, licenses or similar rights, however denominated (collectively, "**Assignment**"), to one or more persons or entities (collectively, "**Assignees**"). Assignees and Mortgagees shall use the Facilities Assets only for the uses permitted under this Grant. Assignees and Mortgagees shall have all rights and remedies allowed them under then existing laws except as limited by their individual agreements with Grantee, provided that under no circumstances shall any Mortgagee or Assignee have any greater rights of ownership or use of the Property than the rights granted to Grantee in this Grant.

(b) **Grantor Obligations:** Grantor agrees to consent in writing to and to execute financing documents, including customary three party lender agreements, as may reasonably be required by Mortgagees. As a precondition to exercising any rights or remedies related to any alleged default by Grantee under this Grant, Grantor shall give written notice of the default to each Mortgagee and Assignee at the same time it delivers notice of default to Grantee, specifying in detail the alleged event of default and the required remedy. Each Mortgagee and Assignee shall have the same amount of time to cure the default as to Grantee's entire interest or its partial interest in the Facilities Assets as is given to Grantee and the same right to cure any default as Grantee or to remove any property of Grantee, Mortgagees or Assignees located on the Easement Area. The cure period for each Mortgagee and Assignee shall begin to run at the end of the cure period given to Grantee in this Grant, but in no case shall the cure period for any Mortgagee or Assignee be less than ninety (90) days after receipt of the default notice. Failure by Grantor to give a Mortgagee or Assignee notice of default shall not diminish Grantor's rights against Grantee, but shall preserve all

rights of the Mortgagee or Assignee to cure any default and to remove any property of Grantee, the Mortgagee or Assignee located on the Easement Area.

(c) Mortgagee/Assignee Obligations. Any Mortgagee or Assignee that does not directly hold an interest in the Facilities Assets, or whose interest is held solely for security purposes, shall have no obligation or liability under this Grant prior to the time the Mortgagee or Assignee directly holds an interest in this Grant, or succeeds to absolute title to Grantee's interest. A Mortgagee or Assignee shall be liable to perform obligations under this Grant only for and during the period it directly holds such interest or absolute title. Any Assignment permitted under this Grant shall release Grantee or other assignor from obligations accruing after the date that liability is assumed by the Assignee.

(d) Right to Cure Defaults/Notice of Defaults/Right to New Transmission Easement.

(1) To prevent Grantor's exercise of any remedies available to it in respect of a default by Grantee under this Grant, the Transmission Easement, or any partial interest in this Grant and the Transmission Easement, Grantee, any Mortgagee or Assignee shall have the right, but not the obligation, at any time to perform any act necessary to cure any default and to prevent the exercise of Grantor's remedies in respect of a default by Grantee under this Grant or any interest in the Facilities Assets.

(2) In the event of an uncured default by the holder of Grantee's entire interest in this Grant, or in the event of a termination of this Grant by agreement, by operation of law or otherwise, each Mortgagee or Assignee of a partial interest in the Facilities Assets shall have the right to have Grantor either recognize the Mortgagee's or Assignee's interest or, in the event of a termination, grant new easements substantially identical to this Grant and the Transmission Easement. Under the new easements, the Mortgagee or Assignee shall be entitled to, and Grantor shall not disturb, Mortgagee's or Assignee's continued use and enjoyment for the remainder of the Term.

(e) Extended Cure Period. If any default by Grantee under this Grant cannot be cured without obtaining possession of all or part of the Facilities Assets, then any such default shall be deemed remedied if a Mortgagee or Assignee: (a) within ninety (90) days after receiving notice from Grantor as set forth in Section 10(b), acquires possession of all or part of the Facilities Assets, or begins appropriate judicial or nonjudicial proceedings to obtain the same; (b) diligently prosecutes any such proceedings to completion; and (c) after gaining possession of all or part of the Facilities Assets cures defects that are reasonably capable of being cured and not otherwise personal to Grantor and performs all other obligations as and when the same are due in accordance with the terms of this Grant. If a Mortgagee or Assignee is prohibited by any court or by operation of any bankruptcy or insolvency laws from commencing or prosecuting the proceedings described above, the ninety (90) day period specified above for commencing proceedings shall be extended for the period of such prohibition.

(f) Certificates. Grantor shall execute estoppel certificates (certifying as to truthful matters, including without limitation that no default then exists under this Grant, if

such be the case), consents to assignment, direct lender agreements and non-disturbance agreements as Grantee or any Mortgagee or Assignee may reasonably request from time to time. Grantor and Grantee shall cooperate in amending this Grant from time to time to include any provision that may be reasonably requested by Grantee or any Mortgagee or Assignee to implement the provisions contained in this Grant or to preserve a Mortgagee's security interest in the Facilities Assets.

11. **Mortgage Protection.** Any Mortgagee, upon delivery to Grantor of notice of its name and address, for so long as its Mortgage is in existence shall be entitled to the following protections which shall be in addition to those granted elsewhere in this Grant:

(a) **Mortgagee's Right to Possession, Right to Acquire and Right to Assign.** A Mortgagee shall have the absolute right without Grantor's consent: (a) to assign its Mortgage; (b) to enforce its lien, including, to acquire title to all or any portion of the Facilities Assets by any lawful means; (c) to take possession of and operate all or any portion of the Facilities Assets and to perform all obligations to be performed by Grantee under this Grant, or to cause a receiver or a receiver and manager to be appointed to do so; and (d) to acquire all or any portion of the Facilities Assets by foreclosure, by an assignment in lieu of foreclosure or by quit claim and thereafter without Grantor's consent to assign or transfer all or any portion of the Facilities Assets to a third party. A Mortgagee which assigns or transfers the Facilities Assets to a third party shall notify Grantor of the name and address of the Assignee or transferee.

(b) **Opportunity to Cure.**

(1) During any period of possession of the Easement Area by a Mortgagee (or a receiver or receiver and manager requested by a Mortgagee) and/or while any foreclosure, power of sale or other enforcement proceedings instituted by a Mortgagee are pending, the Mortgagee shall pay or cause to be paid the fees and all other monetary charges, if any, payable by Grantee under this Grant which have accrued and are unpaid at the commencement of the period and those which accrue thereafter during the period. Following acquisition of all or a portion of the Facilities Assets by the Mortgagee as a result of either foreclosure, acceptance of an assignment in lieu of foreclosure, quit claim or by a purchaser under a power of sale or judicial sale, this Grant shall continue in full force and effect and the Mortgagee or party acquiring title to the Facilities Assets shall, as promptly as reasonably possible, commence the cure of all defaults under this Grant and thereafter diligently process such cure to completion, whereupon Grantor's rights relating to such default shall be deemed waived; provided, however, that the Mortgagee or party acquiring title to the Facilities Assets shall not be required to cure those defaults which are not reasonably susceptible of being cured or performed by such party ("**non-curable defaults**"). Non-curable defaults shall be deemed waived by Grantor upon completion of foreclosure proceedings or acquisition of Grantee's interest in this Grant under a power of sale or judicial sale.

(2) Any Mortgagee or other party who acquires Grantee's interest in the Facilities Assets pursuant to foreclosure, assignment in lieu of foreclosure, quit claim, under a power of sale or judicial sale or otherwise shall not be liable to perform the obligations

imposed on Grantee by this Grant incurred or accruing after the party no longer has ownership or possession of the Facilities Assets.

(c) New Easement.

(1) If this Grant is terminated for any reason, if the Facilities Assets are foreclosed, or if this Grant is rejected, repudiated, resiliated or disaffirmed pursuant to bankruptcy law or other law affecting creditor's rights and, within ninety (90) days after such event, Grantee or any Mortgagee or Assignee shall have arranged to the reasonable satisfaction of Grantor for the payment of all fees or other charges due and payable by Grantee as of the date of such event, then Grantor shall execute and deliver to Grantee or such Mortgagee or Assignee or to a designee of one of these parties, as the case may be, a new easement to the Easement Area which (i) shall be for a term equal to the remainder of the Term before giving effect to such rejection, repudiation, resiliation or termination; (ii) shall contain the same covenants, agreements, terms, provisions and limitations as this Grant (except for any requirements that have been fulfilled by Grantee or any Mortgagee or Assignee prior to rejection, repudiation, resiliation or termination of this Grant); and, (iii) shall include that portion of the Easement Area in which Grantee or such other Mortgagee or Assignee had an interest on the date of rejection, repudiation, resiliation or termination.

(2) After the termination, repudiation, resiliation, rejection or disaffirmation of this Grant and during the period thereafter during which any Mortgagee shall be entitled to enter into new easements for the Easement Area, Grantor will not terminate the rights of any Assignee unless in default under its Assignment.

(3) If more than one Mortgagee makes a written request for a new easement pursuant to this provision, the new easements shall be delivered to the Mortgagee requesting such new easement whose Mortgage is prior in lien, and the written request of any other Mortgagee whose lien is subordinate shall be void and of no further force or effect.

(4) The provisions of this Section shall survive the termination, rejection, repudiation, resiliation or disaffirmation of this Grant and shall continue in full force and effect thereafter to the same extent as if this Section were a separate and independent contract made by Grantor, Grantee and each Mortgagee, and, from the effective date of such termination, rejection, repudiation, resiliation or disaffirmation of this Grant to the date of execution and delivery of such new easements, such Mortgagee may use and enjoy the Easement Area without hindrance by Grantor or any person claiming by, through or under Grantor; provided that all of the conditions for the new easements as set forth above are complied with.

(d) Mortgagee's Consent to Amendment, Termination or Surrender. Notwithstanding any provision of this Grant to the contrary, the parties agree that so long as there exists an unpaid Mortgagee, this Grant shall not be modified or amended, and Grantor shall not accept a surrender, abandonment, cancellation or release of all or any part of the Easement Area from Grantee, prior to expiration of the Term without the prior written consent of the Mortgagee. This provision is for the express benefit of and shall be enforceable by each Mortgagee as if it were a party named in this Grant.

(e) No Merger. There shall be no merger of this Grant or of the Transmission Easement with the fee estate in the Easement Area by reason of the fact that this Grant or any interest in the Transmission Easement may be held, directly or indirectly, by or for the account of any person or persons who shall own any interest in the fee estate. No merger shall occur unless and until all persons at the time having an interest in the fee estate in the Easement Area and all persons (including each Mortgagee) having an interest in this Grant or in the estate of Grantor and Grantee shall sign and record a written instrument effecting such merger.

(f) Liens. On the commencement of the Term, title to the Easement Area shall be free and clear of all monetary liens other than those expressly approved by Grantee. With respect to any such liens approved by Grantee, Grantor shall nevertheless obtain either non-disturbance agreements or postponements from the holders of such liens in favour of Grantee and this Transmission Easement, such agreements or postponements, as the case may be, to be reasonably satisfactory to Grantee. Thereafter, any assignment of this Grant, mortgage, deed of trust or other monetary lien placed on the Easement Area by Grantor, or permitted by Grantor to be placed or to remain on the Easement Area, shall be subject to and subordinate to this Grant, to any Assignment or Mortgage then in existence on the Facilities Assets as permitted by this Grant, to Grantee's right to encumber the Facilities Assets, and to any and all documents executed or to be executed by Grantor in connection with Grantee's development of all or any part of the Easement Area. Grantor agrees to cause any monetary liens placed on the Easement Area by Grantor in the future to incorporate the conditions of this Section.

(g) Further Amendments. At Grantee's request, Grantor shall amend this Grant to include any provision which may reasonably be requested by a proposed Mortgagee; provided, however, that such amendment shall not impair any of Grantor's rights under this Grant or increase the burdens or obligations of Grantor under this Grant. Upon the request of any Mortgagee, Grantor shall execute any additional instruments reasonably required to evidence such Mortgagee's rights under this Grant.

12. Legal Fees. In the event of any controversy, claim or dispute arising out of or relating to the Transmission Easement or the enforcement or breach hereof, the prevailing party shall be entitled to recover from the losing party the prevailing party's reasonable costs, expenses and legal fees.

13. Binding Effect; Governing Law. This Grant shall be binding upon and shall inure to the benefit of both Grantor and Grantee, and their respective heirs, successors and assigns, and shall be deemed a covenant running with the land for all purposes. The provisions hereof shall be governed by and construed in accordance with the laws of the Province of Ontario. Grantee agrees that this Transmission Easement and the rights, privileges and easements granted pursuant thereto shall be declared to be: (i) for the purposes of electricity transmission lines or electricity distribution lines within the meaning of Part VI of the *Ontario Energy Board Act*, 1998, and (ii) an easement in favour of a generator, transmitter or distributor for the purpose of generation, transmission or distribution within the meaning of Section 42.1 of the *Electricity Act*, 1998.

14. **Termination.** Grantee shall have the right to terminate this agreement at any time upon 30 days written notice to Grantor. Upon full or partial termination of the Transmission Easement, Grantee shall remove all physical material pertaining to the Transmission Facilities and restore the area formerly occupied by the Transmission Easement to substantially the same physical condition that existed immediately before the installation of the Transmission Facilities. In the event of termination, Grantee has no right to recover any amounts previously paid to Grantor as consideration for this Grant.

15. **Notices.**

All notices to be given hereunder shall be in writing and all such notices and any payments to be made hereunder may be made or served personally or by registered letter addressed to Grantor at:

To Grantor:

To Grantee:

Varna Wind, Inc.
5500 North Service Road, Suite 205
Burlington, ON L7L 6W6, Canada
Attention: Business Management
Telephone: (905) 335-4904
Facsimile: (905) 335-5731

With a copy to:

Varna Wind, Inc.
700 Universe Blvd.
Juno Beach, FL 33408
Attention: Business Management
Telephone: (561) 691-7171
Facsimile: (561) 691-7307

or such other address, as Grantor or Grantee respectively may from time to time advise and any such notices or payments shall be deemed to be given and received by the addressee upon personal service or, if served by registered letter, fourteen (14) days after mailing thereof, postage prepaid. In the event of a postal interruption, all notices to be given and all payments to be made hereunder may be made or served personally or delivered to the intended recipient at the address of the recipient set out above. Grantee shall also be permitted to make any payment to Grantor electronically at Grantee's discretion and subject to Grantor's consent.

16. **Severability.** If any term or provision of this Transmission Easement, or the application thereof to any person or circumstances shall, to any extent, be determined by judicial order or decision to be invalid or unenforceable, the remainder of this Transmission Easement or the application of such term or provision to persons or circumstances other than those as to which it is held to be invalid, shall be enforced to the fullest extent permitted by law.

17. **Counterparts.** This Transmission Easement may be executed in two or more counterparts, each of which will be deemed an original, but all of which together shall constitute one and the same instrument.

18. **Family Law Act.** Grantor represents and warrants to Grantee that if Grantor is an individual, Grantor is either not married, or if married, his or her spouse either comprises a Grantor hereunder or such spouse has consented to the grant of the Transmission Easement to Grantee pursuant to the terms herein by executing a copy of this Transmission Easement, and if Grantor is a corporation, the Easement Area has never been occupied by any of the directors, officers or shareholders of Grantor or the spouses of such directors, officers or shareholders and there are no shares in existence entitling the holders of such shares to occupation of the buildings. Accordingly, the Easement Area does not comprise a family residence within the meaning of the *Family Law Act*.

19. **Grantee's Statutory Rights.** This Transmission Easement shall not affect or prejudice Grantee's statutory rights to acquire the Easement Area under any laws, including, without limitation, Grantee's statutory rights under the *Ontario Energy Board Act*, 1998, which rights may be exercised at Grantee's discretion, in the event, Grantor being unable or unwilling for any reason to perform this Transmission Easement, or, give to Grantee a clear and unencumbered title to the easement and right-of-way herein granted.

20. **Planning Act.** This Transmission Easement and the provisions hereof which create, or, are intended to create an interest in the Easement Area shall be effective to create such an interest only if the subdivision control provisions of the *Planning Act*, R.S.O. 1990 c. P. 13, as amended are complied with.

21. **Registration.** Grantee shall be entitled, at its cost and expense, to register this Transmission Easement or a notice in respect thereof, and any required reference plans in the applicable Land Registry Office, and, Grantor agrees to execute, at no cost to Grantee, all necessary instruments, plans and documentation for that purpose.

22. **Setback Waiver.** To the extent that (a) Grantor now or in the future owns or leases any land adjacent to the Easement Area, or (b) Grantee leases or holds an easement/license or a lease over land adjacent to Easement Area, and has installed or constructed or desires to install or construct any Transmission Facilities on said land at and/or near the common boundary between the Easement Area and said land, Grantor hereby waives any and all setbacks and setback requirements, whether imposed by law or by any person or entity, including, without limitation, any setback requirements described in the zoning by-laws of the County and/or Province or in any governmental entitlement or permit heretofore or hereafter issued to Lessee. If so requested by Grantee, Grantor shall promptly, without

demanding additional consideration therefore, execute, and if appropriate cause to be acknowledged, any setback waiver, setback elimination or other document or instrument required by any governmental authority or that Grantee deems necessary or convenient to the obtaining of any entitlement or permit.

23. **Removal of Debris.** Within 120 days of the Commercial Operations Date, Grantee shall remove all debris from Property. For purposes of this Agreement "Commercial Operations Date" shall mean the date that the Transmission Facilities at the Project are commercially operational and delivering energy, as determined by the Grantee.

24. **Drainage Tile.** If any drainage tiles on or under the Easement area have been damaged as a direct result of Grantee's activities in connection with the construction of the Transmission Facilities, Grantee shall pay to Grantor the cost to repair or replace the drainage tiles.

25. **Fencing.** Grantee shall not fence the Easement Area or any part thereof, with the exception of transformer stations, without the written consent of the Grantor.

[Remainder of page intentionally left blank, signature page follows]

IN WITNESS WHEREOF the Parties hereto have executed this Agreement on the date first above written.

Owner:

Witness:

Name: _____

Address: _____

Date: _____

Name: _____

Developer:

Varna Wind, Inc.
a New Brunswick company

Per: _____
Dean R. Gosselin, Vice President
"I have the authority to bind the corporation"

EXHIBIT A
TO TRANSMISSION EASEMENT

Legal Description of Property

{INSERT LEGAL DESCRIPTION OF PROPERTY}.

EXHIBIT B

TO TRANSMISSION EASEMENT

Legal Description of Easement Area

(Insert description from reference plan)

PT ____ LT ____, CON _____, DESIGNATED AS PART(S) _____ ON PLAN ●-_____,
BEING PART OF PIN NO. _____

EXHIBIT C
TO TRANSMISSION EASEMENT

Compensation

Payment terms available upon request by a person who has an interest in the subject lands.

In consideration for granting a Transmission Easement to **Varna Wind, Inc.**, a company incorporated pursuant to the laws of the Province of New Brunswick and authorized to conduct business in the Province of Ontario ("**Grantee**"), _____ ("**Grantor**") shall receive the following compensation:

1. A one-time payment, the greater of (a) a lump sum payment of ● (\$●), or (b) ● (\$●) per acre for the number of acres depicted as the Easement Area on Exhibit "B".
2. A one-time payment of ● (\$●) per pole constructed on the Property.
3. A one-time payment of ● (\$●) per guy wire anchor constructed upon the Property.
4. All payments shall include harmonized sales tax ("**HST**"), if applicable.

Payment shall be made to Grantor as follows: Fifty percent (50%) of the total amount due shall be paid within sixty (60) days of the Effective Date. Fifty percent (50%) shall be paid within thirty (30) days after completion of a final survey of the entire transmission line. Said survey shall determine the exact lineal footage/acreage upon which payment shall be made from Grantee to Grantor.

Payment shall be distributed as follows:

100% to
Address

Signature required for each payee:

Name:

Date: _____

Name:

Date: _____

EXHIBIT D
TO TRANSMISSION EASEMENT
CONSENT OF SPOUSE

I, _____, being the spouse of _____,
do hereby give my consent to the grant of the lands made in the Transmission Easement the _____
day of _____, 20____ in respect of the following property:

DATED this _____ day of _____, 20____.

WITNESS:

SPOUSE OF GRANTOR

Name:
Address:

Name:
Address:

STATUTORY DECLARATION

RE: PLANNING ACT

FLORIDA) IN THE MATTER OF the easement (the "Easement") in
) favour of Varna Wind, Inc. (the "Grantee"), with respect
) to the lands more particularly described in Exhibit "A"
 COUNTY OF PALM BEACH) hereto (the "Easement Lands")

I, Dean R. Gosselin, of the Town of Juno Beach, in the State of Florida, DO SOLEMNLY DECLARE, in my capacity as Vice President of Varna Wind, Inc. a company incorporated pursuant to the laws of the Province of New Brunswick and authorized to conduct business in the Province of Ontario, and without personal liability that:

1. I am the Vice President of Varna Wind, Inc., a company incorporated pursuant to the laws of the Province of New Brunswick and authorized to conduct business in the Province of Ontario, (the "Grantee") and, as such, am aware of the matters herein deposed to save where same are stated to be upon information and belief, and where so stated, I verily believe same to be true.
2. The Easement Lands being acquired by the Grantee pursuant to the Easement are being acquired for the purpose of an electricity distribution line, electricity transmission line, hydrocarbon distribution line or hydrocarbon transmission line within the meaning of Part VI of the *Ontario Energy Board Act, 1998*, in respect of which this Statutory Declaration has been made pursuant to sub-clause 50(3)(d) of the *Planning Act* (Ontario), as amended.

AND I MAKE THIS SOLEMN DECLARATION conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath.

STATE OF FLORIDA)
) ss:
 COUNTY OF PALM BEACH)

 Dean R. Gosselin, Vice President
 "I have the authority to bind the corporation"

The foregoing instrument was acknowledged before me this ____ day of _____, 20__ by Dean R. Gosselin, as Vice President of Varna Wind, Inc., a company incorporated pursuant to the laws of the Province of New Brunswick and authorized to conduct business in the Province of Ontario,.

In witness whereof I hereunto set my hand and official seal.

(Seal)

Notary Public: _____

My Commission Expires: _____

INTERCONNECTION EASEMENT OPTION

LICENSE AND OPTION AGREEMENT

THIS LICENSE AND OPTION AGREEMENT (“**Agreement**”) is made as of the _____ day of _____, 2012 (hereinafter referred to as the “**Effective Date**”) by and between _____ whose mailing address is _____ (hereinafter, collectively referred to as “**Grantor**”) and VARNA WIND, INC., whose mailing address is 5500 North Service Road, Suite 205, Burlington, Ontario, L7L 6W6, Canada (“**Grantee**”), who are sometimes individually referred to herein as a “**Party**” and collectively, as “**Parties.**”

RECITALS

A. Grantor is the registered and beneficial owner of an estate in fee simple, subject, however, to the exceptions, conditions, encumbrances, liens and interests contained in or noted upon the existing parcel register attached hereto as **Schedule A** of and in that certain parcel or tract of land situate, lying and being in the Province of Ontario as more particularly described in the attached Schedule A (“**Grantor’s Property**”), and Grantee desires to construct and operate an interconnection facility on a portion of Grantor’s Property to serve a wind energy project, all or a portion of which will be located on Grantor’s Property and/or on other lands within the vicinity of Grantor’s Property (“**Wind Energy Center**”).

B. Grantor desires to grant and convey to Grantee an irrevocable option for the right, liberty, privilege, and easement for the construction, operation and maintenance of interconnection facilities and appurtenant facilities (collectively, “**Interconnection Facilities**”) on a three (3) acre portion of Grantor’s Property as more particularly described and depicted in the preliminary plan attached hereto as **Schedule A-1** (“**Interconnection Parcel**”) in order to serve the Wind Energy Center. For the purposes of this Option Agreement, **Interconnection Facilities** shall include any and all buildings, switchyard facilities, circuit breakers (all fenced in), control and protective devices, and metering facilities or any other devices, buildings, electrical transmission cables (above ground or below ground), required to connect the Wind Energy Project from the Interconnection Facilities, to and with the applicable transmission system, up to and on a delivery point.

IN CONSIDERATION of Ten Dollars and No Cents (\$10.00) and other good and valuable consideration, as well as, the mutual benefits derived herefrom, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. Option to Enter into Easement, License & Compensation.

1.1 Subject to the terms and conditions set out herein, Grantor hereby grants Grantee the exclusive and irrevocable option (“**Option**”) to acquire an easement and rights-of-way in respect of the Interconnection Parcel (hereinafter referred to as “**Interconnection Easement**”) for the purposes of, among other things, owning, constructing and/or operating the Interconnection Facilities on the Interconnection Parcel. The Option shall be exercisable by Grantee upon its sole discretion. If, at the time Grantee exercises the Option, the owner of Grantor’s Property is Grantor as first named above, then Grantee is irrevocably authorized and directed by Grantor to finalize the Interconnection Easement attached hereto as **Schedule C** by completing any missing information such as the

Commencement Date and the description of the Interconnection Parcel and thereafter, Grantee shall execute the Interconnection Easement and provide two (2) completed and fully executed Interconnection Easement to Grantor. If, at the time Grantee exercises the Option, the owner of Grantor's Property is not Grantor as first named above, then such Grantor agrees that it shall duly execute and deliver to Grantee on such date as is specified by Grantee to Grantor, the Interconnection Easement in substantially the same form as attached hereto as Schedule C upon the terms and conditions provided therein. In the event such Grantor fails to execute and deliver to Grantee the Interconnection Easement by the date specified by Grantee to Grantor, then such Grantor hereby irrevocably constitutes and appoints Grantee the true and lawful attorney of such Grantor to complete any missing information contained in the Interconnection Easement and to execute the Interconnection Easement and all other instruments, approvals and documents as provided for in the Interconnection Easement.

1.2 The Option shall be exercisable by Grantee at any time from the Effective Date up to and including, the date which is three (3) years after the Effective Date ("**Option Term**"), provided that prior to the expiry of the Option Term, if Grantee shall give written notice to Grantor that Grantee has submitted, or is in the process of submitting, an application which references this Option and/or Grantor's Property to the Ontario Power Authority (or equivalent government or public authority) for approval to generate, transmit or distribute energy from wind turbine(s), then the Option Term shall automatically be extended on the same terms, conditions and privileges as hereunder, for an additional two successive periods one (1) year each ("**Extended Option Term**") at the payment then being paid as herein provided for each additional one (1) year period. Such Extended Option Term shall be subject to all the provisions hereof, excluding this provision for extension. The Option Term and the Extended Option Term may sometimes be collectively referred to herein as the "**Term**".

1.3 In consideration of the Option granted by Grantor, Grantee shall make an annual payment to Grantor in the amount of _____ for the Option during the Option Term in respect of the Interconnection Parcel, plus all applicable harmonized sales taxes and any other applicable sales or value added taxes (the "**Option Payment**"). The Option Payment shall be made by Grantee to Grantor within sixty (60) days of the Effective Date. Additionally, Grantee shall make a one time payment of _____ to Grantor within sixty (60) days of the Effective Date.

1.4 Grantor hereby grants to Grantee, during the Term, the right in the nature of an irrevocable license to enter upon Grantor's Property, at such times as are agreed to by the Parties, acting reasonably, to allow Grantee to undertake studies and tests on, above and below Grantor's Property. In the event Grantee installs any permanent or temporary improvements within cultivated portions of Grantor's Property, and in the event any of the above materially interferes with Grantor's farming practices, Grantee shall pay Grantor a one-time payment for crop damage resulting from the construction or installation of the hereinabove described improvements. Grantor shall provide written notice to Grantee outlining the basis for Grantor's assertion of damage to Grantor's Property, the exact nature of damage, the source of the assertion that the alleged damage is the result of the exercise by Grantee of the rights, privileges and license granted by this Agreement and satisfactory evidence of the damage including documentation showing the extent of the damage and the financial

impact of such damage. In the event that the Parties cannot agree at any time on the amount of damage payable to Grantor for such crop damage, the compensation paid by Grantee to Grantor shall be the damages for the crops lost or destroyed in the area compacted as calculated below; in consideration of this payment, no additional damages shall be paid in future years for that episode of compaction. Damages will be calculated by the following formula: Unit Price x Unit Yield Per Acre x Acres Damaged = Damages. Prices for damaged or destroyed crops will be based on the average of the previous March 1st and September 1st using the prices for the crop provided by the local grain elevator. Yield will be the average of the previous three (3) years' yields according to Grantor's records for the smallest parcel of land that includes the damaged area. If Grantor does not have yield records available, the Parties will use commonly used yield information available for the area. The Parties shall try in good faith to agree to the extent of damage and acreage affected. If they cannot agree, they shall have the area measured and extent of damage assessed by an impartial party such as a crop insurance adjuster or extension agent. Any costs for such assessment shall be paid by Grantee. Payment shall be made within sixty (60) days after determining the extent of the damage.

2. Covenants, Representations & Warranties.

2.1 Grantor represents and warrants that, as of the Effective Date, Grantor is:

(a) at least eighteen (18) years of age and either not a spouse within the meaning of the *Family Law Act*, R.S.O. 1990, c.F.3, as amended; or

(b) at least eighteen (18) years of age and if a spouse within the meaning of the *Family Law Act*, R.S.O. 1990, c.F.3, as amended, then this Agreement has been executed by both spouses together comprising Grantor or consented to in writing by Grantor's spouse as is evidenced by the signature of the spouse on the Consent attached hereto as **Schedule B**; or

(c) if a corporation, then no building(s) located on Grantor's Property has been ordinarily occupied by any officer, director or shareholder of the corporation or by any of their spouses as a family residence or matrimonial home within the meaning of the *Family Law Act*, R.S.O. 1990, c.F-3, as amended.

2.2 Grantee hereby represents and warrants that it is a limited partnership, duly organized, validly existing and in good standing under the laws of Ontario and has the right, power and privilege to execute and deliver this Agreement and to perform its obligations hereunder.

2.3 Grantor acknowledges that Grantor has had the full opportunity to obtain independent legal representation or advice in connection with this Agreement.

2.4 Grantor hereby agrees and covenants:

(a) that subsequent to the execution and delivery of this Agreement and without any additional consideration made or cost to Grantor, Grantor will execute and deliver or cause to be executed and delivered any further legal instruments, including, without limitation, any required consents, certificates or acknowledgements in favour of Grantee's lenders, and perform any acts

which are or may become necessary to effectuate the purposes of this Agreement and to complete the transactions contemplated hereunder;

(b) that Grantor will appoint Grantee to act as Grantor's agent for the purpose of executing such consents or authorizations as may be necessary for Grantee to make any application for re-zoning or site plan approval pursuant to this Agreement, and agrees to cooperate in any such applications; and

(c) that any information which Grantor has access to or which comes into Grantor's possession relating to Grantee's activities, including any wind assessment data or the terms and conditions of this Agreement (including the Interconnection Easement) (collectively, the "**Confidential Information**"), shall be held in the strictest confidence by Grantor, and Grantor shall not disclose any Confidential Information to any third party except as may be required by law, or on the same confidential basis as provided herein and then only to Grantor's prospective purchasers or legal and financial advisors who have a bona fide and actual need to know same ("**Authorized Agents**"); (ii) Grantor or the Authorized Agents will not use any such Confidential Information, other than as may be required or permitted to perform any of its obligations under this Agreement; and (iii) Grantor or its Authorized Agents will not exploit (whether for commercial or other purposes) or otherwise use any such Confidential Information. Grantor acknowledges that a breach of any of the provisions contained herein would cause Grantee to suffer loss which could not be adequately compensated for by damages and Grantee may, in addition to any other remedy or relief, enforce the performance of the provisions of this Section by injunction or specific performance upon application to a court of competent jurisdiction without proof of actual damage. Upon the expiration or earlier termination of this Agreement, all Confidential Information will continue to be kept confidential by Grantor.

2.5 Grantee hereby covenants that should it elect to exercise the Option, it shall, at its sole cost and expense and prior to accessing Grantor's Property for any purpose related to the siting, assessment or construction of the Interconnection Facilities contemplated to be erected by Grantee herein, provide and maintain in full force and effect with financially responsible insurance carriers, insurance with commercially reasonable coverages, which shall remain in effect during the term of the Interconnection Easement or any extension thereof or as otherwise specified herein and which shall, if applicable, include (but not be limited to):

(a) automobile liability insurance covering owned, non-owned, hired, leased and rented automobiles and automotive equipment providing coverage for injury, death, or property damage;

(b) commercial general liability insurance covering bodily injury, death, personal injury and damage to property; and

(c) workers compensation as required by the Ontario *Workplace Safety and Insurance Act* (Ontario) or similar legislation covering all persons employed by Grantee or subcontractors for work performed under this Agreement,

and Grantee shall, prior to starting work on the Interconnection Parcel, supply Grantor with a certificate of insurance outlining the applicable coverages and indicating that the coverages will not

be cancelled, non-renewed, nor materially changed by endorsement or through issuance of other policies of insurance which restricts or reduces coverage, without ninety (90) days' advance written notice to Grantor.

2.6 Title Search.

(a) If, after the Effective Date, Grantee conducts a title search and such search reveals that Grantor is not the legal and beneficial owner of Grantor's Property or does not have the legal right and authority to grant to Grantee, its employees, servants, agents, consultants, contractors and sub-contractors, the rights under this Agreement or has granted an easement, lease, financial encumbrance or other property right(s) related to Grantor's Property ("**Prior Encumbrance**") to any other person that would interfere with the rights granted to Grantee hereunder, Grantee may, in its sole discretion, terminate this Agreement effective immediately. If Grantee elects not to terminate this Agreement, Grantor agrees to obtain from the holder of such Prior Encumbrance any non-disturbance agreement, postponement, mutual co-existence agreement or related agreements, that Grantee or its lender(s) may reasonably require. Without limiting the generality of the foregoing, Grantor covenants and agrees to obtain from any prior mortgagee of Grantor's Property, either a postponement of such mortgage to this Agreement and any Interconnection Easement or a non-disturbance agreement in favour of Grantee.

(b) If the title search reveals a Prior Encumbrance, Grantee, in its sole and absolute discretion, may decide to consult with the holder of such Prior Encumbrance and Grantor shall cooperate with Grantee to resolve any issues that may arise out of the exercise of the Option vis-à-vis the Prior Encumbrance with the goal of determining whether the Prior Encumbrance and the Interconnection Easement can co-exist over the Interconnection Parcel.

(c) Notwithstanding Section 2.6(b), Grantee may choose to terminate this Agreement at any time pursuant to Section 2.6(a).

2.7 Grantor hereby represents and warrants that it is the legal and beneficial owner in fee simple of Grantor's Property and has the legal right and authority to grant to Grantee, its servants, employees, agents, consultants, contractors and sub-contractors the rights under this Agreements on the terms and conditions set out herein and has not and will not grant an option, easement, lease or any other property rights related to Grantor's Property to any other person that would interfere with the rights granted to Grantee hereunder, save and except for any easements, petroleum or natural gas leases or any other property rights granted by Grantor prior to the Effective Date.

2.8 Grantor covenants and agrees to execute all applications, consents, permissions, agreements, postponements, partial discharges and any other documents which Grantee may require in connection with obtaining any and all approvals including, but not limited to renewable energy approvals, rezoning, governmental approvals, consents, permits or variances (collectively, "**Approvals**") and in connection with entering into by Grantee of any agreements with such governmental and public authorities as may be necessary to give due force and effect to and in furtherance of Grantee's applications, and Grantor shall produce all other documents and information which may be required in connection with such applications. All applications for Approvals shall be made by Grantee, at its sole cost and expense and any costs associated with such Approvals shall be

borne by Grantee. Grantee agrees that the obligation of Grantor pursuant to this paragraph shall be restricted to execution of documents and production of documents and information and shall not impose upon Grantor any financial obligation whatsoever.

2.9 Mutual Indemnities.

(a) Grantee shall indemnify and hold harmless Grantor against all actions, suits, claims, demands and expenses made or suffered by any person or persons, in respect of loss, injury, damage or obligation to compensate, arising out of or in connection with or as a result of:

- (i) the negligence or wilful misconduct of Grantee; or
- (ii) any breach by Grantee of the terms and conditions of this Agreement,

provided that Grantee shall not be liable under this Section to the extent to which such loss, damage or injury is caused or contributed to by the negligence or default of Grantor, its servants or agents. For greater certainty, Grantee shall not be liable to Grantor for the actions of Grantor, its agents, employees, invitees or representatives who enter upon Grantor's Property.

(b) Grantor shall indemnify and hold harmless Grantee against all actions, suits, claims, demands and expenses made or suffered by any person or persons, in respect of loss, injury, damage or obligation to compensate, arising out of or in connection with, or as a result of the negligence or wilful misconduct of Grantor, as well as, in respect of any loss, injury or damage arising out of or in connection with, any breach by Grantor of the terms and conditions of this Agreement; provided that Grantor shall not be liable under this Section to the extent to which such loss, damage or injury is caused or contributed to, by the negligence or default of Grantee, its servants or agents. For greater certainty, Grantor shall not be liable to Grantee for the actions of: (i) Grantee, its agents, employees, or representatives who enter upon Grantor's Property, or (ii) any trespasser or unauthorized person who enters upon Grantor's Property.

(c) Notwithstanding the foregoing, the Parties hereto shall only be liable for reasonably anticipated and foreseeable damages.

3. Termination.

3.1 Except as otherwise stipulated herein, this Agreement shall terminate at the earlier of:

- (a) failure by Grantee to pay the requisite payments provided for hereunder, within thirty (30) days after written demand by Grantor, unless otherwise agreed to by the Parties;
- (b) receipt by Grantor of notice from Grantee of Grantee's desire to terminate the Agreement;
- (c) termination by Grantee pursuant to Section 2.6; or
- (d) the expiry of the Term of the Option as set out in Section 1.2.

3.2 The representations, warranties, covenants and agreements contained in Section 2 hereof shall survive the termination of this Agreement and remain in full force and effect.

3.3 In the event that this Agreement is terminated on the date stipulated in Section 3.1(b) (the “**Early Termination Date**”), Grantee shall be released from having to pay any further Option Payments under this Agreement.

4. Notices.

4.1 Any notice or other writing required or permitted to be given under this Agreement or for the purposes of this Agreement (referred to in this Section as a “**Notice**”) to the other Party shall be sufficiently given if delivered personally, or if sent by prepaid registered mail or if transmitted by fax or other form of recorded communication tested prior to transmission to such other Party:

In the case of Notice to Grantee, to:

Varna Wind, Inc.
5500 North Service Road, Suite 205
Burlington, ON L7L 6W6 Canada
Attention: Business Management
Telephone: (905) 335-4904
Facsimile: (905) 335-5731

With a copy to:

Varna Wind, Inc.
700 Universe Blvd. LAW/JB
Juno Beach, FL 33408
Attention: General Counsel
Telephone: (561) 691-2359
Facsimile: (561) 691-7103

In the case of Grantor, to:

Telephone:

or at such other address as the Party to whom such writing is to be given shall have last notified to the Party giving the same in the manner provided in this Section. Any notice personally delivered to the Party to whom it is addressed as provided in this Section shall be deemed to have been given and received on the day it is so delivered at such address, provided that if such day is not a Business Day then the notice shall be deemed to have been given and received on the Business Day next following

such day. Any notice mailed to the address and in the manner provided for in this Section shall be deemed to have been given and received on the fifth Business Day next following the date of its mailing in Ontario. Any notice transmitted by fax shall be deemed to have been given and received on the first Business Day after its transmission.

4.2 For the purposes of this Section, the term “**Business Day**” means every day except Saturdays, Sundays and statutory holidays in the Province of Ontario.

5. General Provisions.

5.1 This Agreement shall be governed by the laws of the Province of Ontario and the federal laws of Canada applicable therein.

5.2 All matters in dispute between the Parties pursuant to this Agreement shall be resolved by good-faith negotiation. If the Parties are unable to resolve amicably any dispute arising out of or in connection with this Agreement, each shall have all remedies available at law or in equity. Each Party waives all right to trial by jury and specifically agrees that trial of suits or causes of action arising out of this Agreement shall be to the Court. Time is of the essence with regard to the terms and conditions of this Agreement.

5.3 Assignment.

(a) Subject to Subsection 5.3(c) below, this Agreement may be assignable by Grantor to a successor in title.

(b) Subject to Subsection 5.3(c) below, Grantee shall be able to assign this Agreement or any portion of its interest in Grantor’s Property derived under the Agreement and the Interconnection Easement to be granted thereunder to one or more persons or entities without the prior consent of Grantor, including to its lender(s) as security for Grantee’s obligations to such lender(s). Grantor shall execute and deliver any consent and acknowledgement reasonably requested by such lender.

(c) No assignment by either Grantee (except in the case of an assignment of this Agreement to its lender(s)) or Grantor shall be effective unless and until the assignee executes an assumption agreement (“**Assumption Agreement**”) with respect to this Agreement agreeing to be bound by the terms hereof to the same extent as if it had been an original party hereto. For greater certainty, Grantor covenants and agrees that in the event Grantor transfers or conveys Grantor’s Property or any portion thereof, Grantor will obtain from any such transferee or purchaser an Assumption Agreement in favour of Grantee.

5.4 This Agreement shall be binding upon and inure to the benefit of the Parties hereto, their respective heirs, executors, administrators and other legal representatives and, to the extent permitted hereunder, their respective successors and permitted assigns.

5.5 If any provision of this Agreement is determined to be invalid or unenforceable in whole or in part, such invalidity or unenforceability shall attach only to such provision (or part thereof) and everything else in this Agreement shall continue in full force and effect.

5.6 No change or modification of this Agreement shall be valid unless it is in writing and signed by each Party hereto.

5.7 This Agreement constitutes the entire agreement between the Parties hereto with respect to the subject matter of this Agreement. The Parties hereto acknowledge that there is no representation, warranty, and agreement or understanding between them, whether express or implied, which has induced any of the Parties hereto to enter into this Agreement except as expressly stated herein.

5.8 No failure on the part of any Party to exercise, and no delay by any Party in exercising, any right under this Agreement shall operate as a waiver of such right, unless the Party gives written notice to the other Party of its intention to waive such right.

5.9 This Agreement shall commence on the Effective Date.

5.10 The section headings herein have been inserted for ease of reference only and shall not affect the construction or the interpretation of this Agreement.

5.11 This Agreement may be executed in several counterparts, each of which so executed shall be deemed to be an original, and such counterparts together shall constitute but one and the same instrument.

5.12 Delivery of this Agreement by facsimile transmission shall constitute valid and effective delivery.

5.13 Any monies to be paid pursuant to this Agreement shall be in Canadian funds.

5.14 This Agreement shall be effective to create an interest in Grantor's Property for the Term.

5.15 Grantee shall be entitled, at its cost and expense, to register this Agreement or a notice in respect thereof and any required reference plans in the Land Registry Office for the area in which Grantor's Property is situated and Grantor agrees to execute, at no cost to Grantee, all necessary instruments, plans and documentation for that purpose.

5.16 This Agreement shall be effective to create an interest in Grantor's Property only if the subdivision control provisions of the *Planning Act* (Ontario) are complied with.

5.17 If Grantor signs this Agreement, then Grantee shall reimburse the Grantor for reasonable legal fees, not to exceed

IN WITNESS WHEREOF the Parties hereto have executed this Agreement on the date first above written.

Grantee:

Varna Wind, Inc.

By: _____
Dean R. Gosselin, Vice President

Date: _____

Grantor:

Witness

Print Name:

Date

SCHEDULE A

TO LICENSE AND OPTION AGREEMENT

Copy of Parcel Register and Legal Description of Grantor's Property

BEING THE WHOLE OF PIN NO. _____

SCHEDULE A-1

TO LICENSE AND OPTION AGREEMENT

Preliminary Plan and Legal Description of Interconnection Parcel

BEING THE WHOLE OF PIN NO. _____

(See attached)

SCHEDULE B

TO LICENSE AND OPTION AGREEMENT

Consent of Spouse

I, _____, being the spouse of _____, do hereby give my consent to the grant of license and the option made in the License and Option Agreement dated _____, 2012 in respect of the following property:

DATED this ____ day of _____, 2012.

WITNESS:

SPOUSE OF GRANTOR

Name:

Name:

Address:

Address:

SCHEDULE C

TO LICENSE AND OPTION AGREEMENT

Form of Transfer of Interconnection Easement

(see attached)

THIS TRANSFER AND GRANT OF INTERCONNECTION EASEMENT (IN GROSS) (“**Agreement**”) made as of the ____ day of _____, 2012 (“**Effective Date**”), between _____, whose mailing address is _____ (“**Grantor**”) and **Varna Wind, Inc.**, whose mailing address is 5500 North Service Road 2nd Floor, Burlington, Ontario, L7L 6W6, Canada (“**Grantee**”).

RECITALS

A. Grantor is the registered and beneficial owner of an estate in fee simple of and in that certain parcel or tract of land situate, lying and being in the Province of Ontario as more particularly described in the attached **Exhibit “A”** (“**Grantor’s Property**”), and Grantee desires to construct and operate interconnection facilities and appurtenant facilities (collectively, “**Interconnection Facilities**”), on the portion of Grantor’s Property hereinafter described to serve a wind energy project, all or a portion of which will be located on Grantor’s Property and/or on other lands within the vicinity of Grantor’s Property (“**Wind Energy Center**”). For the purposes of this Option Agreement, Interconnection Facilities shall include any and all buildings, switchyard facilities, circuit breakers (all fenced in), control and protective devices, and metering facilities or any other devices, buildings, electrical transmission cables (above ground or below ground), required to connect the Wind Energy Project from the Interconnection Facilities, to and with the applicable transmission system, up to and on a delivery point

B. Grantor desires to grant and transfer to Grantee an exclusive easement and right-of-way for the construction, operation and maintenance of Interconnection Facilities on a portion of Grantor’s Property as more particularly described and depicted in the preliminary plan attached hereto as **Exhibit “A-1”** (“**Interconnection Parcel**”) which Interconnection Parcel shall serve the Wind Energy Center.

IN CONSIDERATION of Ten Dollars and No Cents (\$10.00) and other good and valuable consideration as well as the mutual benefits derived herefrom, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. **Grant.** Grantor does hereby grant and transfer to Grantee, its licensees, sublessees, successors and assigns, the unobstructed and exclusive right, liberty and privilege of an easement and right-of-way upon, above, under, over and across the Interconnection Parcel for the purposes set out herein. Notwithstanding the foregoing provisions of this paragraph, it is Grantee’s intention that once it has finalized the plans for location of the Interconnection Facilities (as hereinafter defined), which shall occur no later than One Hundred Fifty (150) days from the Effective Date, Grantee shall have the right at any time thereafter to amend the legal description of the Interconnection Parcel from what is currently identified in **Exhibit “A-1”**. For greater certainty, Grantee shall have the right, at any time during the Term, and in its sole discretion, to amend the legal description of the Interconnection Parcel by providing Grantor a reference plan, survey or sketch (each, a “**Final Interconnection Parcel Plan**”) which identifies the amended legal description of the

Interconnection Parcel that is the subject of the rights granted under this Agreement. If Grantee elects to prepare a Final Interconnection Parcel Plan identifying the amended legal description of the Interconnection Parcel, Grantor hereby irrevocably authorizes and directs Grantee to deposit such plan on title to Grantor's Property. Upon the delivery by Grantee to Grantor of the Final Interconnection Parcel Plan, the description of the Interconnection Parcel as set out in **Exhibit "A-1"** shall automatically be replaced by the amended legal description of the Interconnection Parcel as set out in the Final Interconnection Parcel Plan without the requirement of any further action on behalf of either Grantor or Grantee, provided that Grantor agrees that it shall, at the request of Grantee, execute an amendment to this Agreement which specifically sets out the amended legal description of the Interconnection Parcel in accordance with the Final Interconnection Parcel Plan and which reconfirms and ratifies the grant and transfer in favour of Grantee of the exclusive easement and right-of-way of the Interconnection Parcel, as hereby amended.

Grantor does hereby further grant and transfer to Grantee, its licensees, sublessees, successors and assigns a non-exclusive right, liberty and privilege of an easement and right-of-way for vehicular and pedestrian ingress and egress over, across and along the Grantor's Property to and from the Interconnection Parcel ("**Roadway Easement**"), including, by means of any existing roads or lanes on the Grantor's Property, or otherwise by such route or routes as Grantee or Grantor may construct from time to time, which Roadway Easement shall include the right of Grantee to construct, maintain and repair any new and existing temporary and permanent roadways and other means of ingress and egress over, across and along the Grantor's Property and to provide access to and egress from the Interconnection Parcel, including paving or surfacing of the roadways with asphalt, gravel or other roadway materials, and the construction and installation of culverts, bridges, drainage ditches, gates, cattle guards and similar structures and facilities (the "**Roadway Improvements**").

Grantee agrees to maintain and repair all Roadway Improvements located on the Grantor's Property for the joint use thereof by Grantor and Grantee for ingress and egress over, across, and along the Grantor's Property; provided, however, Grantor shall reimburse Grantee for any costs and expenses incurred by Grantee to repair any damage or perform any special maintenance of the roadway(s) caused by any person using the roadway with Grantor's permission.

2. Term.

2.1 Further to the Declaration attached hereto as **Exhibit "C,"** the term of this Agreement shall commence on _____, 201__ ("**Commencement Date**") and shall expire on the day immediately preceding the fiftieth (50th) anniversary of the Commencement Date ("**Term**"), unless Grantee shall have notified Grantor in writing prior to the expiration of the Term that it is electing to terminate the Term pursuant to Section 23 of this Agreement.

3. Use.

3.1 Grantee shall have the exclusive right and privilege to use the Interconnection Parcel for the purposes of, *inter alia*, erection, installation, construction, operation, inspection, repair,

replacement, patrol and maintenance of Interconnection Facilities and equipment and vehicles associated therewith, attachments and appurtenant equipment and other buildings required for the Interconnection Facilities and any and all other uses consistent with the operation the Interconnection Facilities (, together with the right and privilege from time to time to reconstruct, inspect, alter, improve, change the voltage, as well as the nature or physical characteristics of, replace, remove or relocate such Interconnection Facilities or any part of them upon, across, over or under the Interconnection Parcel with all rights and privileges necessary or convenient for the full enjoyment or the use thereof for the herein described purposes and solely for the use, transmission and delivery of electrical energy produced by the Wind Energy Center. As used herein, the "**Commercial Operation Date**" shall mean the date when all the Interconnection Facilities shall have been constructed and installed and the entire Wind Energy Center has achieved the status of a commercially operable wind-powered electrical generation and transmission facility.

3.2 The use of the Interconnection Parcel by Grantee shall be at the sole risk and expense of Grantee. Grantee agrees to warn its employees, agents, contractors and invitees of the fact that the electrical Facilities and appurtenances installed or to be installed within the Interconnection Parcel are of high voltage electricity and agrees to use, or cause to be used, reasonable safety and precautionary measures when working under or near the Interconnection Facilities.

3.3 The rights and privileges hereby granted shall include, without limiting the generality of the foregoing, the right to erect, install, construct, operate, maintain, inspect, patrol, remove, replace, reconstruct, relocate, alter and repair on the Interconnection Parcel the Interconnection Facilities as Grantee may deem necessary for the full enjoyment of any or all of the rights and privileges herein granted

3.4 Grantee, its tenants, officers, agents, servants, employees, contractors and licensees, with or without vehicles, tools, equipment, apparatus and materials of whatsoever nature and kind, shall have the full, free and uninterrupted right to enter upon, use and occupy the Interconnection Parcel for all purposes connected with, or incidental to, the rights and privileges herein granted including, without limitation, the right to make and keep the Interconnection Parcel free from brush, trees, damaging growths, water in dangerous quantities and other obstructions. Where Grantee reasonably considers it necessary by reason of the nature or condition of Grantor's Property or the circumstances then existing, Grantee shall have the right to go on or across any part of Grantor's Property for the purpose of gaining access to the Interconnection Parcel.

3.5 Grantee will erect, install and construct the Interconnection Facilities within, upon or over the Interconnection Parcel in a proper and workmanlike manner so as to do as little injury as possible to Grantor's Property and will keep and maintain the same in good repair and will at the termination of this Agreement take down, dismantle and remove from the Interconnection Parcel the Interconnection Facilities and will fill up all holes caused by such removal and restore the surface of the Interconnection Parcel as far as may be reasonable and possible.

4. Indemnification.

4.1 Grantee shall indemnify and hold harmless Grantor against all actions, suits, claims, demands and expenses made or suffered by any person or persons, in respect of loss, injury, damage or obligation to compensate, arising out of or in connection with or as a result of:

- (a) the negligence or wilful misconduct of Grantee;
- (b) any breach by Grantee of the terms and conditions of this Agreement; or
- (c) the property of Grantee or the operation of the property of Grantee,

provided that Grantee shall not be liable under this Section to the extent to which such loss, damage or injury is caused by the negligence or default of Grantor or Grantor's servants or agents. For greater certainty, Grantee shall not be liable to Grantor for the actions of (i) Grantor, its agents, employees, or representatives who enter upon Grantor's Property, or (ii) any trespasser or unauthorized person who enters upon Grantor's Property.

4.2 Grantor shall indemnify and hold harmless Grantee against all actions, suits, claims, demands and expenses made or suffered by any person or persons, in respect of loss, injury, damage or obligation to compensate, arising out of or in connection with, or as a result of the negligence or wilful misconduct of Grantor, as well as in respect of any loss, injury or damage arising out of or in connection with, any breach by Grantor of the terms and conditions of this Agreement; provided that Grantor shall not be liable under this Section to the extent to which such loss, damage or injury is caused by the negligence or default of Grantee, its servants or agents. For greater certainty, Grantor shall not be liable to Grantee for the actions of (i) Grantee, its agents, employees, or representatives who enter upon Grantor's Property, or (ii) any trespasser or unauthorized person who enters upon Grantor's Property.

4.3 All accrued and undischarged obligations under this Section shall survive the expiration or termination of this Agreement for the applicable statute of limitations period.

4.4 Notwithstanding the foregoing, the Parties hereto shall only be liable for reasonably anticipated and foreseeable damages.

5. Environmental Representations. Grantor represents and warrants that, to the best of Grantor's knowledge, Grantor's Property is not and has not been in violation of any Environmental Laws, and Grantor has not received any notice or other communication from any governmental authorities alleging that Grantor's Property is in violation of any Environmental Laws. "Environmental Laws" shall mean and refer to any statute, law, decree, ordinance or regulation which relates to or deals with human health or the environment, including, without limitation, all regulations promulgated by a regulatory body pursuant to any statute, law, ordinance or regulation. "Hazardous Materials" shall mean any asbestos containing materials, petroleum, explosives, toxic materials, or substances regulated as hazardous wastes, hazardous materials, hazardous substances,

or toxic substances under any federal, provincial, or local law or regulation. Grantor represents and warrants that, except as disclosed to Grantee in writing, to the best of Grantor's knowledge, no underground storage tanks and no Hazardous Materials are or were located on Grantor's Property during or prior to Grantor's ownership of Grantor's Property. Grantor shall not violate in a material way any Environmental Law relating to Grantor's Property. All accrued and undischarged obligations under this clause shall survive the expiration or termination of this Agreement.

6. **Roads.** Grantor agrees that Grantee may construct or improve roads from time to time on the Grantor's Property (as provided for in Section 1 above) for the purposes of access, ingress and egress to the Interconnection Parcel.

7. **Taxes.** Grantee shall pay any increase in the real property taxes on the Interconnection Parcel that is directly attributable to the installation of Interconnection Facilities or to a reclassification of the Interconnection Parcel because of the rights and privileges created under this Agreement. If the Interconnection Facilities are subject to real property taxes, Grantee shall request that the Interconnection Facilities be separately assessed and that taxing authorities bill Grantee directly for taxes attributable to the Interconnection Facilities. Grantee shall not be liable for taxes attributable to any other facilities or other installations of any kind installed by Grantor or others on the Interconnection Parcel or for any increase due to any other cause. Grantee agrees to reimburse Grantor for any taxes paid by Grantor that are properly payable by Grantee under the terms of this Agreement. To receive reimbursement, Grantor must submit the real property tax bill payable by Grantor to Grantee for reimbursement within a reasonable time after Grantor receives the bill from a taxing authority. The parties agree to fully cooperate to obtain any available tax refunds or tax abatements.

8. **Warranties and Representations.** Grantor represents and warrants to Grantee that he/she has sufficient right, title and interest in and to the Interconnection Parcel to convey the rights and interests transferred and granted herein. Grantor represents and warrants that, as of the Effective Date, Grantor is:

(a) at least eighteen (18) years of age and either not a spouse within the meaning of the *Family Law Act*, R.S.O. 1990, c.F.3, as amended; or

(b) at least eighteen (18) years of age and if a spouse within the meaning of the *Family Law Act*, R.S.O. 1990, c.F.3, as amended, then this Agreement has been executed by both spouses together comprising Grantor or consented to in writing by Grantor's spouse as is evidenced by the signature of the spouse on the Consent attached hereto as **Exhibit "B"**; or

(c) if a corporation, then no building(s) located on Grantor's Property has been ordinarily occupied by any officer, director or shareholder of the corporation or by any of their spouses as a family residence or matrimonial home within the meaning of the *Family Law Act*, R.S.O. 1990, c.F-3, as amended.

Grantee hereby represents and warrants that it is a limited partnership, duly organized, validly existing and in good standing under the laws of Ontario and has the right, power and privilege to execute and deliver this Agreement and to perform its obligations hereunder.

9. Assignment; Mortgage Rights.

9.1 Grantee, upon notice to Grantor, but without Grantor's consent or approval, may mortgage, charge, collaterally assign, or otherwise encumber and grant security interests in all or any part of its interest in the Agreement and the Interconnection Parcel. These various security interests in all or a part of this Agreement and the Interconnection Parcel are collectively referred to as "Mortgages" and the holders of the Mortgages, their designees and assigns are referred to as "Mortgagees." Grantee's notice to Grantor shall include the name and address of each Mortgagee and/or Assignee (as hereinafter defined). Grantee shall also have the right without Grantor's consent to sell, convey, sub-lease, or assign all or any of Grantee's interests in this Agreement and in the Interconnection Parcel, or to grant sub-easements co-easements, separate easements, licenses or similar rights, however denominated (collectively, "Assignment"), to one or more persons or entities (collectively, "Assignees"). Assignees and Mortgagees shall use the Interconnection Parcel only for the uses permitted under the Agreement. Assignees and Mortgagees shall have all rights and remedies allowed them under then existing laws except as limited by their individual agreements with Grantee, provided that under no circumstances shall any Mortgagee or Assignee have any greater rights of ownership or use of the Interconnection Parcel than the rights granted to Grantee in the Agreement.

9.2 Grantor agrees to consent in writing to financing documents as may reasonably be required by Mortgagees. As a precondition to exercising any rights or remedies related to any alleged default by Grantee under this Agreement, Grantor shall give written notice of the default to each Mortgagee and Assignee at the same time it delivers notice of default to Grantee, specifying in detail the alleged event of default and the required remedy. Each Mortgagee and Assignee shall have the same amount of time to cure the default as to Grantee's entire interest or its partial interest in the Interconnection Parcel as is given to Grantee and the same right to cure any default as Grantee or to remove any property of Grantee, Mortgagees or Assignees located on the Interconnection Parcel. The cure period for each Mortgagee and Assignee shall begin to run at the end of the cure period given to Grantee in the Agreement, but in no case shall the cure period for any Mortgagee or Assignee be less than ninety (90) days after receipt of the default notice. Failure by Grantor to give a Mortgagee or Assignee notice of default shall not diminish Grantor's rights against Grantee, but shall preserve all rights of the Mortgagee or Assignee to cure any default and to remove any property of Grantee, the Mortgagee or Assignee located on the Interconnection Parcel.

9.3 Any Mortgagee or Assignee that does not directly hold an interest in the Interconnection Parcel, or whose interest is held solely for security purposes, shall have no obligation or liability under this Agreement prior to the time the Mortgagee or Assignee directly holds an interest in this Agreement, or succeeds to absolute title to Grantee's interest. A Mortgagee or Assignee shall be liable to perform obligations under this Agreement only for and during the period it directly holds such interest or absolute title. Any Assignment provided for under this Agreement

shall release Grantee or other assignor from obligations accruing after the date that liability is assumed by the Assignee.

9.4 To prevent termination of this Agreement, or any partial interest in this Agreement, Grantee, any Mortgagee or Assignee shall have the right, but not the obligation, at any time to perform any act necessary to cure any default and to prevent the termination of this Agreement or any interest in the Agreement and Grantor agrees to accept the rectification of any default by any Mortgagee or Assignee as if it was rectified by Grantee.

9.5 In the event of an uncured default by the holder of Grantee's entire interest in this Agreement, or in the event of a termination of this Agreement by agreement, by operation of law or otherwise, each Mortgagee or Assignee of an interest in the Agreement that is not in default of its obligations, shall have the right to have Grantor either recognize the Mortgagee's or Assignee's interest or grant a new agreement substantially identical to this Agreement. Under the new easement, the Mortgagee or Assignee shall be entitled to, and Grantor shall not disturb, Mortgagee's or Assignee's continued use and enjoyment for the remainder of the Term and any renewal period, or such shorter term as an Assignee may otherwise be entitled pursuant to its Assignment.

9.6 If any default by Grantee under this Agreement cannot be cured without obtaining possession of all or part of the Interconnection Parcel, then any such default shall be deemed remedied if a Mortgagee or Assignee: (a) within ninety (90) days after receiving notice from Grantor acquires possession of all or part of the Interconnection Parcel, or begins appropriate judicial or nonjudicial proceedings to obtain the same; (b) diligently prosecutes any such proceedings to completion; and (c) after gaining possession of all or part of the Interconnection Parcel cures defects that are capable of being remedied and performs all other obligations as and when the same are due in accordance with the terms of this Agreement. If a Mortgagee or Assignee is prohibited by any court or by operation of any bankruptcy or insolvency laws from commencing or prosecuting the proceedings described above, the ninety (90) day period specified above for commencing proceedings shall be extended for the period of such prohibition.

9.7 Grantor shall execute estoppel certificates (certifying as to truthful matters, including without limitation that no default then exists under this Agreement, if such be the case), consents to assignment and non-disturbance agreements as Grantee or any Mortgagee or Assignee may reasonably request from time to time, which may incorporate the provisions contained in this Section 8. Grantor and Grantee shall cooperate in amending this Agreement from time to time to include any provision that may be reasonably requested by Grantee or any Mortgagee or Assignee to implement the provisions contained in this Agreement or to preserve a Mortgagee's security interest in the Interconnection Parcel.

9.8 Any Mortgagee, upon delivery to Grantor of notice of its name and address, for so long as its Mortgage is in existence shall be entitled to the following protections which shall be in addition to those granted elsewhere in this Agreement:

(a) A Mortgagee shall have the absolute right: (a) to assign its Mortgage; (b) to amend, renew, extend, restate or supplement its Mortgage; (c) to enforce its lien and acquire title to all or any portion of the Interconnection Parcel by any lawful means; (d) to take possession of and operate all or any portion of the Interconnection Parcel and to perform all obligations to be performed by Grantee under this Agreement, or to cause a receiver to be appointed to do so; and (e) to acquire all or any portion of the Interconnection Parcel by foreclosure or a quit claim in lieu of foreclosure and thereafter without Grantor's consent to assign or transfer all or any portion of the Interconnection Parcel to a third party. A Mortgagee which assigns or transfers Interconnection Parcel to a third party shall notify Grantor of the name and address of the Assignee or Transferee.

(b) During any period of possession of the Interconnection Parcel by a Mortgagee (or a receiver requested by a Mortgagee) and/or while any foreclosure proceedings instituted by a Mortgagee are pending, the Mortgagee shall pay or cause to be paid the fees and all other monetary charges payable by Grantee under this Agreement which have accrued and are unpaid at the commencement of the period and those which accrue thereafter during the period. Following acquisition of all or a portion of the Interconnection Parcel by the Mortgagee as a result of either foreclosure or a quit claim in lieu of foreclosure, or by a purchaser under a private or judicial power of sale, this Agreement shall continue in full force and effect and the Mortgagee or party acquiring title to the Interconnection Parcel shall, as promptly as reasonably possible, commence the cure of all defaults under this Agreement and thereafter diligently process such cure to completion, whereupon Grantor's right to terminate this Agreement based upon such defaults shall be deemed waived; provided, however, that the Mortgagee or party acquiring title to Grantee's interests shall not be required to cure those defaults which are not reasonably susceptible of being cured or performed by such party ("**non-curable defaults**"). Non-curable defaults shall be deemed waived by Grantor upon completion of foreclosure proceedings or a quit claim in lieu of foreclosure or acquisition of Grantee's interest in this Agreement by such party.

(c) Any Mortgagee or other party who acquires Grantee's interest in the Interconnection Parcel pursuant to foreclosure or a quit claim in lieu of foreclosure shall not be liable to perform the obligations imposed on Grantee by this Agreement incurred or accruing after the party no longer has ownership or possession of the Interconnection Parcel.

(d) If this Agreement terminates because of Grantee's default, as a result of a foreclosure, or if this Agreement is rejected, disaffirmed, resiliated, repudiated or disclaimed pursuant to bankruptcy law or other law affecting creditor's rights and, within ninety (90) days after such event, Grantee or any Mortgagee or Assignee shall have arranged to the reasonable satisfaction of Grantor for the payment of all fees or other charges due and payable by Grantee as of the date of such event, then Grantor shall execute and deliver to Grantee or such Mortgagee or Assignee or to a designee of one of these parties, as the case may be, a new agreement to the Interconnection Parcel which (i) shall be for a term equal to the remainder of the Term, including any renewal period before giving effect to such rejection, resiliation, disclaimer, repudiation or termination; (ii) shall contain the same covenants, agreements, terms, provisions and limitations as this Agreement (except for any requirements that have been fulfilled by Grantee or any Mortgagee or Assignee prior to rejection, resiliation, disclaimer, repudiation or termination of this Agreement); and, (iii) shall include that

portion of the Interconnection Parcel in which Grantee or such other Mortgagee or Assignee had an interest on the date of rejection, rescission, disclaimer, repudiation or termination.

(e) After the termination, rescission, repudiation, rejection, disclaimer or disaffirmation of this Agreement and during the period thereafter during which any Mortgagee shall be entitled to enter into a new agreement for the Interconnection Parcel, Grantor will not terminate the rights of any Assignee unless in default under its Assignment.

(f) If more than one Mortgagee makes a written request for a new agreement pursuant to this provision, the new agreement shall be delivered to the Mortgagee requesting such new agreement whose Mortgage is prior in lien, and the written request of any other Mortgagee whose lien is subordinate shall be void and of no further force or effect.

(g) The provisions of this Section shall survive the termination, rejection, disclaimer, rescission, repudiation or disaffirmation of this Agreement and shall continue in full force and effect thereafter to the same extent as if this Section were a separate and independent contract made by Grantor, Grantee and each Mortgagee, and, from the effective date of such termination, rejection, disclaimer, rescission, repudiation or disaffirmation of this Agreement to the date of execution and delivery of such new agreement, such Mortgagee may use and enjoy the Interconnection Parcel without hindrance by Grantor or any person claiming by, through or under Grantor; provided that all of the conditions for the new agreement as set forth above are complied with.

(h) Notwithstanding any provision of this Agreement to the contrary, the parties agree that so long as there exists an unpaid Mortgage, this Agreement shall not be modified or amended, and Grantor shall not accept a surrender, cancellation or release and abandonment of all or any part of this Agreement or the Interconnection Parcel from Grantee, prior to expiration of the Term without the prior written consent of the Mortgagee. This provision is for the express benefit of and shall be enforceable by each Mortgagee as if it were a party named in this Agreement.

(i) There shall be no merger of this Agreement with the fee estate in the Interconnection Parcel by reason of the fact that this Agreement, directly or indirectly, by or for the account of any person or persons who shall own any interest in the fee estate. No merger shall occur unless and until all persons at the time having an interest in the fee estate in the Interconnection Parcel and all persons (including each Mortgagee) having an interest in this Agreement or in the estate of Grantor and Grantee shall sign and register a written instrument effecting such merger.

(j) On the commencement of the Term, the Interconnection Parcel shall be free and clear of all monetary liens other than those expressly approved by Grantee. Thereafter, any assignment of this Agreement, mortgage, charge, deed of trust or other monetary lien placed on the Interconnection Parcel by Grantor, or permitted by Grantor to be placed or to remain on the Interconnection Parcel, shall be subject to this Agreement, to any Assignment or Mortgage then in existence on the Interconnection Parcel, to Grantee's right to encumber the Interconnection Parcel, and to any and all documents executed or to be executed by Grantor in connection with Grantee's development of all or

any part of the Interconnection Parcel. Grantor agrees to cause any monetary liens placed on the Interconnection Parcel by Grantor in the future to incorporate the conditions of this Section.

(k) At Grantee's request, Grantor shall amend this Agreement to include any provision which may reasonably be requested by a proposed Mortgagee; provided, however, that such amendment shall not impair any of Grantor's rights under this Agreement or increase the burdens or obligations of Grantor under this Agreement. Upon the request of any Mortgagee, Grantor shall execute any additional instruments reasonably required to evidence such Mortgagee's rights under this Agreement.

10. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the Province of Ontario, Canada, without reference to the conflict of laws principles thereof. The parties hereto agree that any rule of construction to the effect that ambiguities are to be resolved in favor of any particular party shall not be employed in the interpretation hereof, and is hereby waived. Any references herein to specific legislation shall be deemed a reference to amending or successor legislation thereto once same is enacted and in force.

11. Registration. Grantee shall be entitled, at its cost and expense, to register this Agreement or a notice in respect thereof, any amendments to this Agreement or any notice in respect thereof pursuant to Section 1 hereof, and any required reference plans, surveys or sketches in the applicable Land Registry Office having jurisdiction over the Grantor's Property, and Grantor agrees to execute, at no cost to Grantee, all necessary instruments, plans and documentation for that purpose.

12. Income Tax Act. Prior to the Commencement Date, Grantor shall deliver to Grantee a certificate issued under the provisions of Section 116 of the Income Tax Act (Canada) or satisfactory evidence by way of statutory declaration that Grantor is not then a non-resident of Canada within the meaning of the *Income Tax Act* (Canada). In the event that Grantor's residency status changes at any time during the Term, Grantor shall provide prompt written notice of same to Grantee.

13. Default. Notwithstanding anything herein contained to the contrary, Grantee shall not be in default in the performance of any of its covenants or obligations under this Agreement, including the payment of compensation or rental, unless and until Grantor has notified Grantee of such default in writing and Grantee has failed to commence action to remedy the same within forty-five (45) days of receipt of such notice and thereafter fails to diligently continue to complete such remedial action.

14. Notice. All notices, communications, payments and deliveries (collectively called the "Notices") to be given hereunder shall be given in writing. All such Notices and all payments to be tendered hereunder may be given personally or by registered letter addressed to the party to whom the Notice is to be given. When delivered personally, such Notice shall be deemed received on the day of delivery, and when mailed, such Notice shall be deemed to be given to, and received by, the addressee four (4) days after the mailing thereof, postage prepaid, provided however that if a Notice

is mailed and a disruption of postal services occurs before the date of deemed receipt of such Notice, such Notice shall not be deemed to be received until the expiration of four (4) days following the resumption of postal service.

15. **Addresses.** Unless changed by written notice the addresses of the parties hereto shall be:

In the case of Notice to Grantee, to:

Varna Wind, Inc.
5500 North Service Road, 2nd Floor
Burlington, ON L7L 6W6 Canada
Attention: Business Management
Telephone: (905) 335-4904
Facsimile: (905) 335-5731

With a copy to:

Varna Wind, Inc.
700 Universe Blvd. LAW/JB
Juno Beach, FL 33408
Attention: General Counsel
Telephone: (561) 691-2359
Facsimile: (561) 691-7103

In the case of Grantor, to:

Telephone:

16. **Severability.** If, and to the extent that, any court of competent jurisdiction determines that it is impossible to construe any provision of this Agreement and as a consequence holds that provision to be invalid, such holding shall not affect the validity of the other provisions of this Agreement, which shall remain in full force and effect.

17. **Enurement.** This Agreement and everything herein contained shall enure to the benefit of and be binding upon Grantor, his/her heirs, executors, administrators, successors and assigns and upon Grantee, its successors and assigns.

18. **Compensation.** Grantee shall pay Grantor the amounts set forth in **Exhibit "D"** as the consideration for the Agreement.

19. **Discharge of Encumbrances.** Grantee may at its option pay or discharge all or part of any balance owing under any agreement for sale or mortgage, or of any withholding or other tax, charge, lien or encumbrance of any kind or nature whatsoever which may now or hereafter exist on or against or in any way affect the Interconnection Parcel, in which event Grantee shall be subrogated to the rights of the holder or holders thereof, and may in addition thereto, at its option, reimburse itself by applying on account of repayment of the amount so paid by it the rentals or other sums accrued or accruing to Grantor under the terms of this Agreement. Any sums so applied shall, for all purposes of this Agreement, be deemed to have been paid to and received by Grantor in payment of such rentals or other sums accrued or accruing to Grantor under the terms of this Agreement. Grantor also agrees to obtain from any prior mortgagee of Grantor's Property, either a postponement of such mortgage or charge to this Agreement or a non-disturbance agreement in favour of Grantee.

20. **Approvals.** Grantor covenants and agrees to execute all applications, consents, permissions, agreements, postponements, site plan control agreements, partial discharges and any other documents which Grantee may require in connection with obtaining any renewable energy approvals, rezoning, governmental approvals, consents, permits or variances (collectively, "**Approvals**") and in connection with entering into by Grantee of any agreements with such governmental and public authorities as may be necessary to give due force and effect to and in furtherance of Grantee's applications, and Grantor shall produce all other documents and information which may be required in connection with such applications. All applications for Approvals shall be made by Grantee, at its sole cost and expense, and any costs to Grantor associated with such Approvals shall be borne by Grantee. Grantee agrees that the obligation of Grantor pursuant to this section shall be restricted to execution of documents and production of documents and information and shall not impose upon Grantor any financial obligation whatsoever.

21. **Fencing and Access.** Grantee shall have the full, free and exclusive right to fence the Interconnection Parcel or so much thereof as it, in its sole and absolute discretion, may deem necessary in the exercise of any of its rights and privileges herein granted. Grantor, and all persons claiming by, through or under Grantor, may be denied access to, and use of, the Interconnection Parcel or so much thereof as Grantee, in its sole and absolute discretion, may deem necessary from time to time for the safe and efficient use and operation of the Interconnection Facilities.

22. **Equity.** Grantor covenants with Grantee that upon Grantee, its successors and assigns, performing and observing the covenants and conditions on its part to be performed and observed, Grantee, its successors and assigns, shall peaceably hold and enjoy the rights, liberties, privileges and easement hereby granted during the period as aforesaid. Notwithstanding any rule of law or equity, all property, improvements and equipment placed or operated on the Interconnection Parcel by or on behalf of Grantee shall, at all times, remain the personal property of Grantee even though attached to Grantor's Property.

23. **Termination.** In the event Grantee no longer requires the right to maintain Interconnection Facilities on the Interconnection Parcel, it may remove the Interconnection Facilities. Grantee may also, if it so chooses, elect to terminate all rights and obligations hereunder. Upon Grantee so electing to terminate the rights hereunder, Grantee shall remove all Interconnection

Facilities from the Interconnection Parcel and shall restore the Interconnection Parcel to the same condition, to the extent such restoration is practical, as the Interconnection Parcel was prior to entry thereon and use thereof by Grantee, and Grantee shall remove and discharge any instrument or encumbrance registered against title to the Interconnection Parcel and related to its interest in the Interconnection Parcel. If Grantee should terminate this agreement within twenty (20) years of the Effective Date, the Grantee shall pay the Grantor a Termination Fee. The Termination Fee is equal to a onetime payment of the Net Present Value (NPV) of payments from the date of termination through year 20 of this agreement. The rate used to discount future cash flows to the present value, the Discount Rate, used in the NPV calculation is ten percent (10%). For greater clarity, the amount owed to Grantor by Grantee for the Termination Fee after each applicable annual payment is the amount shown as Remaining NPV in the attached Exhibit E.

24. Sale. Grantor shall notify Grantee promptly and in writing of any change in ownership of Grantor's Property and Grantee shall be entitled to continue to make payments to the existing Grantor until satisfied of the status of the new Grantor. Grantor will obtain an assumption agreement in favour of Grantee from any transferee or purchaser of Grantor's interest in Grantor's Property, pursuant to which such transferee or purchaser agrees to be bound by the terms of this Agreement.

25. Covenant. This Agreement is and shall be the same force and effect, to all intents and purposes, as a covenant running with the Interconnection Parcel and these presents, including all of the covenants and conditions herein contained, shall extend, be binding upon and inure to the benefit of the parties hereto, their executors, administrators, successors and assigns, as the case may be. Grantee agrees that this Agreement and the rights, privileges and easements granted pursuant thereto is an easement in favour of a generator, transmitter or distributor for the purpose of generation, transmission or distribution in accordance with Section 42.1 of the *Electricity Act*, 1998 (Ontario). Grantee shall have the right from time to time, in its sole discretion to grant franchises, licenses or assignments of its rights acquired hereunder, in whole or in part, to third parties, without further consideration becoming payable to Grantor herein.

26. Miscellaneous. The titles or headings inserted herein are for convenience of reference only and shall not affect the interpretation or construction of this Agreement. In the event of any conflict between a metric and imperial expression of measurement in this Agreement, the metric expression of measurement shall govern. IT IS UNDERSTOOD AND AGREED by and between the parties hereto that this Agreement and all of the covenants and conditions herein contained, shall extend to, be binding upon and enure to the benefit of, respectively, the executors, administrators, successors and assigns of Grantor, the owner or owners for the time being of Grantor's Property, and the successors and assigns of Grantee, and wherever the singular or masculine is used throughout this Agreement, the same shall be construed as meaning plural, or feminine, or a body corporate, where the context or the parties hereto so admit or require.

27. No Affect on Statutory Rights. Nothing in this Agreement shall adversely affect Grantee's ability to exercise any rights or powers authorized under any instrument issued by the

Ontario Energy Board pursuant to the *Ontario Energy Board Act*, 1998 (and any other successor legislation).

28. Planning Act. This Agreement and the provisions hereof, which create or are intended to create an interest in Grantor's Property and the Interconnection Parcel, shall be effective to create such an interest only if the subdivision control provisions of the *Planning Act*, as amended, are complied with. Notwithstanding the foregoing, Grantee hereby declares that the interests in Grantor's Property and the Interconnection Parcel being acquired by Grantee pursuant to this Agreement are for the purposes of a renewable energy generation facility or renewable energy generation project in accordance with Section 50(3)(d.1) or 50(5)(c.1) of the *Planning Act*.

[Remainder of page intentionally left blank, signature page follows]

IN WITNESS WHEREOF Grantor has affixed his/her/their hand(s) and seal(s) and Grantee has affixed its corporate seal duly attested to by the hands of its proper officers, all as of the day and year first above written.

GRANTOR:

**SIGNED, SEALED AND
DELIVERED**

in the presence of:

Witness

(seal)

**GRANTEE:
GOSHEN WIND, INC**

Per: _____
Dean R. Gosselin, Vice President
"I have authority to bind the corporation."

EXHIBIT "A"

TO INTERCONNECTION EASEMENT

Legal Description of Grantor's Property

BEING THE WHOLE OF PIN NO.

EXHIBIT "A-1"

TO INTERCONNECTION EASEMENT

Legal Description and Preliminary Plan of Interconnection Parcel

(See attached)

BEING THE WHOLE OF PIN NO.

EXHIBIT "B"

TO INTERCONNECTION EASEMENT

Consent of Spouse

I, _____, being the spouse of _____, do hereby give my consent to the grant of license and the option made in the License and Option Agreement dated _____, 2012 in respect of the following property:

DATED this _____ day of _____, 2012.

WITNESS:

SPOUSE OF GRANTOR

Name:

Name:

Address:

Address:

EXHIBIT "C"

TO INTERCONNECTION EASEMENT

**DECLARATION REQUIRED UNDER SECTION
50 OF THE PLANNING ACT, R.S.O. 1990, as amended**

I, DEAN R. GOSSELIN, of the City of JUNO BEACH, in the State of FLORIDA,

DO SOLEMNLY DECLARE THAT

1. I am the Vice-President of Varna Wind, Inc., the Grantee in the attached Interconnection Easement and as such have knowledge of the matters herein deposed to.

2. The use of or right in the land described in the said Interconnection Easement is being acquired by Varna Wind, Inc., for a period of 21 or more years but not more than 50 years for the purpose of a renewable energy generation facility or renewable energy project in accordance with Section 50(3)(d.1) or 50(5)(c.1) of the *Planning Act* (Ontario) and I hereby make this declaration that it is being acquired for such purpose.

AND I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath, and by virtue of *The Canada Evidence Act*.

VARNA WIND, INC.

Per: Dean R. Gosselin, Vice President
"I have authority to bind the corporation."

DECLARED before me at the Town of Juno Beach, in the State of Florida this ____ day of _____, 2012, by Dean R. Gosselin, as Vice President of Varna Wind, Inc. He is personally known to me or provided _____ as identification.

A Notary Public in and for the State of Florida

EXHIBIT "D"

TO INTERCONNECTION EASEMENT

Compensation

In consideration for granting an Interconnection Easement to **Varna Wind, Inc.** ("Grantee"),
_____ ("Grantor") shall receive the following payment:

(a) A one time payment of _____ within sixty (60) days of the Effective Date.

(b) Annual Compensation for the Interconnection Parcel:

Annual payment of _____ with the first payment to be made within sixty (60) days of the Effective Date. Fourteen (14) additional annual payments of _____ each, commencing on the first anniversary of the Effective Date and on each anniversary thereafter, up to and including the payment on the fourteenth (14th) anniversary of the Effective Date. All payments shall include harmonized sales tax ("HST"), if applicable. The final payment shall be on the fourteenth (14th) anniversary of the Effective Date. For greater clarity, there are fifteen (15) total annual payments as full payment for the entire Term of this Agreement.

Compensation payments to be distributed as follows:

100% to _____

_____ Date

OPTION TO PURCHASE

OPTION TO PURCHASE AGREEMENT

THIS OPTION TO PURCHASE AGREEMENT (this "Option Agreement") is made as of _____, 2011 by and between _____, (hereinafter referred to as "Grantor" or "Seller") and Varna Wind, Inc., a company incorporated pursuant to the laws of the Province of New Brunswick and authorized to conduct business in the Province of Ontario, ("Grantee" or "Buyer"). Grantee and Grantor are sometimes referred to herein individually as a "Party" or collectively as the "Parties."

RECITALS

A. Grantor is the registered and beneficial owner of an estate in fee simple of and in that certain parcel or tract of land situate, lying and being in the Province of Ontario as more particularly described in the attached Exhibit "A" ("Property");

B. Grantee desires to obtain an option to purchase a portion of the Property, together with the right to obtain certain license and/or easement rights over a portion of the Property for ingress and egress in order to construct and operate Substation Facilities, as defined herein, on a portion of the Property to serve a wind energy project, such project to be located on the Property and/or within the vicinity of the Property ("Wind Energy Project"). For the purposes of this Option Agreement, "Substation Facilities" shall include any one or more of the following: an electric substation, an operations and maintenance building, parking area, one or more electric transmission and distribution lines (either below or above ground), transformer(s), switchyard and equipment and vehicles associated therewith, attachments and appurtenant equipment and other buildings required for an electric substation and any and all other uses consistent with the operation of an electric substation.

C. Grantor desires to grant and convey to Grantee an option for the exclusive right to purchase a portion of the Property comprising approximately 13 acres ("Substation Facilities Parcel"), all as more particularly described and depicted in the preliminary plan attached hereto as Exhibit "A-1" (the "Draft Plan"). For greater certainty, the Buyer shall have the right, at any time during the Term, to amend the description of the Property by providing to the Lessor a reference plan (the "Reference Plan") which identifies the amended description of the Property that is being conveyed to Buyer. The Seller hereby irrevocably authorizes and directs the Buyer to deposit such plan on title to the Property. Upon the delivery by the Buyer to the Seller of the Reference Plan, the description of the Property as set out in Schedule "A-1" shall automatically be replaced by the amended description of the Property as set out in the Reference Plan, without the requirement of any further action on behalf of either the Buyer or Seller, provided that the Seller agrees that it shall, at the request of the Buyer, execute an Amendment amending Agreement which sets out the amended description of the Property in accordance with the Reference Plan. Buyer shall use commercially best efforts to consult with Seller as to location of the Property.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Grantee and Grantor hereby agree as follows:

1. **Grant of Option.** Grantor hereby grants to Grantee and its successors and assigns, subject to the terms and conditions set forth in this Option Agreement, an exclusive, irrevocable option to purchase and acquire from Grantor, the Substation Facilities Parcel, together with such additional rights as are more fully described herein (the “**Option**”), for the payments and on the terms and conditions hereinafter set forth.
2. **Grant of License.** Grantor hereby grants and conveys to Grantee an irrevocable license on over, and across the Property to come upon the Property and to install, operate, and maintain such equipment as may be necessary to conduct studies of wind energy, wind profiles, transmission interconnection, soils, and other meteorological and geotechnical data (including measurement devices, controls, and instrumentation) (the “**License**”). This License shall be effective throughout the entire Option Term (as defined below). The License also includes the right to construct, use, repair, replace, relocate, transport and remove said equipment and appropriate vehicles over existing roads and pathways on the Property and the right to carry out, at Grantee’s expense and without liability to Grantor, such tests, including but not limited to environmental audits, surveys and inspections of the Property as Grantee may deem necessary. Grantee agrees to repair any damage caused by any such tests at Grantee’s expense in a good and workmanlike manner. The License may be exercised by Grantee and by Grantee’s employees, agents, contractors, permittees and invitees. Grantee will consult with Grantor to schedule and coordinate Grantee’s activities on the Property. The location of any equipment to be installed on the Property shall be agreed to by the parties acting reasonably and without undue delay taking into consideration the purpose of the studies to be conducted and the need for certain studies to be conducted in specific locations. Once determined, the location of the equipment shall not be changed save by the agreement of the parties who shall act reasonably and without undue delay.
3. **Term.** This Option will become effective when all Parties have signed this Option Agreement (the “**Effective Date**”) and will end three (3) years after the Effective Date unless earlier terminated in accordance with the provisions herein (the “**Option Term**”).
4. **Option Payment.** On the Effective Date, Grantee shall pay Grantor I plus all harmonized sales tax applicable thereon (“**HST**”); and on the first and second anniversaries of the Effective Date, respectively, unless this Option has been earlier terminated in accordance with the provisions herein, Grantee shall pay Grantor a further sum of plus all applicable HST (“**Option Payment**”). All Option Payments shall be credited to the Purchase Price as defined in the Purchase Agreement attached to this Option as Exhibit “C”.
5. **Grantor’s Authority.** Grantor represents and warrants to Grantee that Grantor is the sole legal and beneficial owner in fee simple of the Property with a good and marketable title thereto and has the unrestricted right, power, privilege and authority to execute and deliver this Option; to grant Grantee the rights granted in this Option; and, to complete the transactions contemplated by the Purchase Agreement (as defined below) if Grantee exercises this Option.

6. **Status of Grantor.**

6.1 Grantor represents and warrants to Grantee that if Grantor is an individual, Grantor is either not married, or if married, his or her spouse either comprises a Grantor hereunder or such spouse has consented to the grant of the Option to Grantee pursuant to the terms herein by executing a copy of this Option Agreement, and if Grantor is a corporation, the Property has never been occupied by any of the directors, officers or shareholders of Grantor or the spouses of such directors, officers or shareholders and there are no shares in existence entitling the holders of such shares to occupation of the buildings. Accordingly, the Property does not comprise a family residence within the meaning of the *Family Law Act*.

6.2 Grantor acknowledges that Grantor has had the full opportunity to obtain independent legal representation or advice in connection with this Option Agreement and the Purchase Agreement and has arranged for the completion and execution of the Certificate included as Exhibit "B".

7. **Exercise of Option.** At any time during the Option Term, Grantee may exercise this Option by delivering to Grantor a notice of exercise of the Option ("**Exercise Notice**"). The Exercise Notice shall reference this Option and shall state that Grantee is exercising its right to purchase the Substation Facilities Parcel in accordance with the terms and conditions contained in the agreement of purchase and sale attached hereto as Exhibit "C" (the "**Purchase Agreement**") and accompanying such Exercise Notice shall be a copy of the deposited Draft Plan attached hereto as Schedule "C-1" to the Purchase Agreement, to the extent the same has been deposited on title. Upon the delivery of the Exercise Notice to Grantor, a binding agreement of purchase and sale pursuant to which Grantor shall sell and Grantee shall purchase the Substation Facilities Parcel, shall be created without the necessity of any further action on behalf of Grantor or Grantee, subject however to the terms and conditions contained in the Purchase Agreement.

8. **Effect of Option Agreement; Interest in Real Property.** The Parties intend that this Option Agreement create a valid and present interest in the Property in favour of Grantee. Therefore, the Option shall be deemed an interest in and encumbrance upon the Property which shall run with the land and shall be binding upon the Substation Facilities Parcel and Grantor and its successors and assigns and shall inure to the benefit of each of the Parties hereto and their respective successors and assigns. Grantor covenants and agrees that during the Option Term, Grantor shall not, except as otherwise provided herein, convey the Property and the Substation Facilities Parcel or any interest therein or permit any lien or encumbrance to attach to the Property and the Substation Facilities Parcel.

9. **Grantee's Right to Assign.** Grantee may, without the consent of Grantor, sell, assign or transfer all or any portion of its interest in the Option and/or this Option Agreement ("**Assignment**"). Upon an Assignment, Grantee shall have no further liability to Grantor. Any such transfer shall be subject to the terms and requirements of this Option Agreement.

10. **Early Termination.** Grantee shall have the right, at any time during the Option Term, and on written notice to Grantor, to terminate this Option and surrender to Grantor all of Grantee's right, title and interest in and to the Property by executing and delivering to Grantor, or registering against title to the Property, a quitclaim deed, surrender or release respecting the Property. This Option shall

terminate on delivery of any such notice of termination, and Grantee shall have no further obligation for any Option Payments hereunder.

11. **Notice**

12.1 **Writing.** All notices given or permitted to be given hereunder shall be in writing; provided, however, that no writing other than the cheque or other instrument representing the Option payment itself need accompany such payment.

12.2 **Delivery.** Where this Option Agreement or the Purchase Agreement requires notice to be delivered by one Party to the other, such notice shall be given in writing and delivered either personally or by prepaid registered post, or by printed electronic transmission by the Party wishing to give such notice, or by the solicitor acting for such Party, to the other Party or to the solicitor acting for the other Party at the addresses noted below. Such notice shall be deemed to have been given, in the case of personal delivery, on the date of delivery, where given by post, on the third business day following the posting thereof and, where given on a business day by printed electronic transmission prior to 5:00 p.m., on the date of transmission and after 5:00 p.m. on the first business day following such transmission. It is understood that in the event of a threatened or actual postal disruption in the postal service in the postal area through which such notice must be sent, notice must be given, on a business day, personally as aforesaid or by means of printed electronic or printed telephonic communication in which case notice shall be deemed to have been given on the date of transmission thereof:

Notice to Grantor:

Telephone:

Notice to Grantee:

Varna Wind, Inc.
5500 North Service Road, Suite 205
Burlington, ON L7L 6W6, Canada
Attention: Business Management
Telephone: (905) 335-4904
Facsimile: (905) 335-5731

With a copy to:

Varna Wind, Inc.
700 Universe Blvd. LAW/JB
Juno Beach, FL 33408

U.S.A.
Attention: General Counsel
Telephone: (561) 691-2359
Facsimile: (561) 691-7103

12. **Further Assurances.** Each Party agrees to cooperate with the other Party and to execute any additional documents reasonably necessary or proper to carry out the provisions and spirit of this Option Agreement. Without limiting the generality of the foregoing, Grantor hereby agrees and covenants that subsequent to the execution and delivery of this Option Agreement and, without any additional consideration, it shall execute and deliver or cause to be executed and delivered any further legal instruments, including, without limitation, any required consents (including, without limitation, those required under Section 24 below), acknowledgements or lender agreements in favour of Grantee's lenders, and perform any acts which are or may become necessary to effectuate the purposes of this Option Agreement and to complete the transactions contemplated hereunder and if applicable, under the Purchase Agreement. Grantee agrees to reimburse Grantor its actual, reasonable costs incurred in the consideration of, or response to, a request by Grantee to execute any additional documents (as described above) reasonably necessary or proper to carry out the provisions and spirit of this Option Agreement. Grantee will obtain all governmental permits, licenses, certificates, approvals, variances and other entitlements for use ("**Permits**") necessary for the construction, installation and operation of the Substation Facilities. Grantor hereby gives its consent to any action taken by Grantee in applying for any and all Permits Grantee finds necessary or desirable for the construction, installation or operation of the Substation Facilities. Grantor agrees to assist and reasonably cooperate with Grantee in obtaining the Permits, and Grantor hereby appoints Grantee its agent for applying for such Permits. Grantee will carry out the activities set forth in this Section 12 in accordance with all applicable laws, rules, codes and ordinances.

13. **Construction of Agreement**

14.1 **Governing Law.** The laws of the Province of Ontario and the federal laws of Canada applicable therein shall govern the interpretation and enforcement of this Option Agreement and the rights and covenants granted hereunder. The venue for any application to interpret or enforce the provisions of this Option Agreement shall be Toronto, Ontario, Canada.

14.2 **Interpretation.** The Parties agree that the terms and provisions of this Option Agreement embody their mutual intent and that such terms and conditions are not to be construed more liberally in favour, nor more strictly against, either Party.

14.3 **Partial Invalidity.** If any term or provision of this Option Agreement, or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, a provision shall be added to this Option Agreement as similar in terms to such invalid or unenforceable provision as may be possible, and be legal, valid and enforceable, and the remainder of this Option Agreement or the application of such term or provision to persons or circumstances other than those to which it is held invalid or unenforceable, shall not be affected thereby.

14. **Solicitors' Fees.** In the event of a dispute arising out of or relating to this Option Agreement and resulting in litigation or arbitration between or affecting the Parties hereto, the prevailing Party shall be entitled to recover reasonable solicitors' fees and costs.

15. **Registration of Option Agreement.** Grantee shall be entitled, at its cost and expense, to register this Option Agreement or a notice thereof and any required reference plans, in the applicable Land Registry Office having jurisdiction over the Property, and Grantor agrees to execute, at no cost to Grantee, all necessary instruments, plans and documentation for that purpose.

16. **Counterparts.** This Option Agreement may be executed and recorded in counterparts, each of which shall be deemed an original and all of which, when taken together, shall constitute one and the same instrument.

17. **Time of the Essence.** Time shall be of the essence in this Option Agreement.

18. **Currency.** Any monies to be paid pursuant to this Option Agreement shall be in Canadian funds.

19. **Planning Act.** This Option Agreement shall be effective to create an interest in the Property only if the subdivision control provisions of the *Planning Act* (Ontario) are complied with.

20. **Additional Requirements of Grantor.** Within thirty (30) days following the execution of this Option Agreement by both Parties, Grantor will deliver to Grantee, to the extent in Grantor's possession or control, the following:

20.1 all current surveys, easement plans, servicing plans, grading plans and other plans (collectively the "**Plans**") relating to the Property and the buildings, if any buildings are located thereon (the "**Buildings**");

20.2 copies of all contracts, leases or other obligations, (including, without limitation, maintenance, servicing, management and equipment contracts) deed restrictions, subdivision agreements and site plan agreements, development agreements and any other agreements with any governmental authorities, if any, relating to the Property and the Buildings other than those registered on title to the Property;

20.3 copies of all tests, inspections, studies and reports thereof relating to the Property and the Buildings, if any, including, without limitation, environmental, geotechnical, soil quality and bore hole reports as well as any and all studies;

20.4 any current governmental notices relating to the Property and the Buildings, including, without limitation, tax bills and assessments, work order or deficiency notices, stop work orders and any notices relating to the zoning of the Property for the last 3 years, and any expropriation notices, any notices or decisions pertaining to any development charges, special assessments, levies or fees from the Municipality of Lambton Shores relating to the Property and the Buildings; and

20.5 any and all historical information, not covered above, relating to the Property and Buildings, including, but not limited to, all annual maintenance requirements of the Property

and Buildings, all capital upgrades, renovations and investments made in the Property and Buildings over the last 3 years.

21. **Additional Representations of Grantor.** Grantor represents and warrants to Grantee that as of the Effective Date:

21.1 there are no outstanding work orders, directions or notices relating to any defects in the state of the Property or the Buildings or any notice or direction requiring or recommending any alteration, repair, improvement or other work to be done with respect to the Property or the Buildings or relating to any non-compliance with any building permit, building restriction, by-law, regulation or municipal agreement or any threatened or pending expropriation, save as disclosed in writing by Grantor to Grantee prior to the Effective Date;

21.2 that (1) Grantor, previous to the time of execution of this Option Agreement, has not leased the Property, or any part thereof, under any lease or other instrument that is currently effective except for any lease that is registered against title to the Property as of the date of this Option Agreement; (2) this Option Agreement and the Purchase Agreement created hereby with respect to the Substation Facilities Parcel is free from encumbrances done, made, or suffered by Grantor, or any person claiming under Grantor, except for such encumbrances that are registered against title to the Substation Facilities Parcel as of the date of this Option Agreement; and (3) all persons having any ownership interest in the Property and Buildings (including spouses) have consented to the execution of this Option Agreement;

21.3 to the best of the knowledge of Grantor, Grantor knows of no physical conditions of the Property which would prevent or significantly restrict Grantee's development of the Substation Facilities Parcel for the purposes of connecting the Wind Energy Project from the proposed Substation Facilities or which could, with the passage of time, or the giving of notice, constitute a violation of any governmental law, ordinance, order, rule or regulation;

21.4 to the best of the knowledge of Grantor, the Property and Buildings comply with the provisions of the *Environmental Protection Act* and, each has never been used as a landfill or waste disposal site or for underground fuel storage;

21.5 Grantor has the power and authority to enter into this Option Agreement and to carry out the transaction contemplated herein;

21.6 Grantor is not aware of any litigation, expropriation, change in zoning or other judicial or administrative proceeding existing, pending or threatened relating to the Property or the Buildings;

21.7 Grantor has not withheld any material document or information in its possession or control relating to the Property or the Buildings;

21.8 the Substation Facilities Parcel contains an area of approximately thirteen (13) acres; and

21.9 no person has an option or right of first refusal to purchase the Property or any part thereof or the Buildings.

22. **Insurance.** At all times during which Grantee or any of its consultants are conducting any activities on the Property, Grantee or such consultants shall, at their own cost and expense, obtain and maintain in effect commercial general liability insurance, including bodily injury coverage with minimum limits of One Million Dollars (\$1,000,000) per occurrence.

23. **Indemnification.** Grantee shall save Grantor harmless from any expense arising as a result of any damage to the Property; where such damage is caused by Grantee or any of its representatives or consultants.

24. **Severance of Substation Facilities Parcel.** Grantor covenants and agrees with Grantee as follows:

24.1 at any time following the Effective Date, Grantee shall have the right to make an application to the local land division committee or Committee of Adjustment for the Municipality of Lambton Shores (the "**Committee**") to have the Substation Facilities Parcel severed from the Property, together with any necessary minor variance applications associated with the creation of the Substation Facilities Parcel, all at Grantee's sole cost and expense (the "**Severance/Minor Variance Applications**"). Notwithstanding the foregoing, Grantee shall not be required to appeal the decision of the Committee in the event that the Severance/Minor Variance Applications are not successful, nor shall Grantee be required to proceed with the transactions contemplated by this Option Agreement and the Purchase Agreement if the decisions provide for conditions that are not satisfactory to Grantee, in its sole, absolute and subjective discretion. In the event the Committee does not approve the Severance/Minor Variance Applications during the Option Term and Grantee does not wish to appeal the decisions or in the event the decisions are successful but Grantee is not satisfied with the conditions relating to the severance and/or the minor variances, then this Option Agreement shall be at end and it is agreed that neither Party shall have any further rights or obligations hereunder.

24.2 Grantor agrees, at Grantee's sole cost and expense, to assist with the satisfaction of all reasonable conditions imposed by the Committee, if any, as a pre-condition to the issuance of the severance consent and/or minor variances and Grantor hereby agrees to authorize and appoint and does hereby authorize and appoint Grantee as its agent in connection with any Severance/Minor Variance Applications and Grantor further agrees that it shall execute any and all documentation required in order to confirm the appointment of Grantee as aforesaid and shall further cooperate with Grantee in connection with the Severance/Minor Variance Applications and delivery of any required information reasonably required by the Committee in connection with the consideration of the severance and minor variances and satisfying any conditions related thereto. Notwithstanding anything to the contrary contained in this Option Agreement or the Purchase Agreement, in the event that the consent and decision in a final, binding and unappealable form is not obtained by Varna Wind, Inc., then save as the Parties may otherwise agree in writing, this Option Agreement and any Purchase Agreement resulting from the exercise of the Option shall be null and void and of no further force and effect.

IN WITNESS WHEREOF, the Parties have executed this Option Agreement as of the Effective Date.

“GRANTOR”

Witness:

Name: _____

Address: _____

Date: _____

“GRANTEE”

Varna Wind, Inc.
a New Brunswick company

Per: _____
Dean R. Gosselin, Vice President
“I have the authority to bind the corporation”

EXHIBIT "A" TO OPTION AGREEMENT

LEGAL DESCRIPTION OF THE PROPERTY

ALL AND SINGULAR that certain parcel or tract of land and premises, situate, lying and being in the Municipality of Bluewater, and the Province of Ontario, being composed of:

BEING THE WHOLE OF PIN _____

Stipulated Acreage:

**EXHIBIT "A-1" TO OPTION AGREEMENT
PRELIMINARY PLAN AND LEGAL DESCRIPTION OF
THE SUBSTATION FACILITIES PARCEL**

(See attached)

EXHIBIT "B" TO OPTION AGREEMENT

GRANTOR'S CERTIFICATE OF INDEPENDENT LEGAL ADVICE

I, _____, of the Town of _____, in the Province of Ontario, Solicitor, do hereby certify that I was consulted in my professional capacity by Steven Arnold Keys and Linda Keys, as joint tenants (the "**Grantor**") named in the Option Agreement and the associated Exhibits, dated _____, 2011 with Varna Wind, Inc., as to its obligations and rights under the said agreement, that I acted solely for and explained fully to the Grantor the nature and effect of the said agreement and the Grantor did acknowledge and declare that the Grantor fully understood the nature and effect thereof and did execute the said documents in my presence and did acknowledge and declare and it appeared to me that the Grantor was executing the said documents of its own violation and without fear, threats, compulsion or influence by Grantee or any other person.

DATED at _____, Ontario this ____ day of _____, 2011.

_____, Solicitor

EXHIBIT "C" TO OPTION AGREEMENT
PURCHASE AGREEMENT



Agreement of Purchase and Sale
Commercial

Commercial Division
Toronto Real Estate Board

BUYER, Varna Wind, Inc. (the "Buyer"), agrees to purchase from

SELLER, (the "Seller"), the following

REAL PROPERTY:

Address, fronting on the side of, in the, and having a frontage of more or less by a depth of more or less and legally described as See Schedule "C" (the "property").

PURCHASE PRICE: Dollars (CDN\$)

DEPOSIT:

Buyer submits (Herewith/Upon acceptance) Dollars (CDN\$)

by negotiable cheque payable to to be held in trust without interest pending completion or other termination of this Agreement and to be credited toward the Purchase Price on completion. Buyer agrees to pay the balance as more particularly set out in Schedule A attached.

SCHEDULE(S) A attached hereto form(s) part of this Agreement.

1. CHATELS INCLUDED:

2. FIXTURES EXCLUDED:

3. RENTAL ITEMS: The following equipment is rented and not included in the Purchase Price. The Buyer agrees to assume the rental contract(s), if assumable:

4. IRREVOCABILITY: This Offer shall be irrevocable by until p.m. on the day of 20 after which time, if not accepted, this Offer shall be null and void and the deposit shall be returned to the Buyer in full without interest.

5. COMPLETION DATE: This Agreement shall be completed by no later than 6:00 p.m. on the day of 20. Upon completion, vacant possession of the property shall be given to the Buyer unless otherwise provided for in this Agreement.

6. NOTICES: Seller hereby appoints the Listing Broker as Agent for the purpose of giving and receiving notices pursuant to this Agreement. Only if the Co-operating Broker represents the interests of the Buyer in this transaction, the Buyer hereby appoints the Co-operating Broker as Agent for the purpose of giving and receiving notices pursuant to this Agreement. Any notice relating hereto or provided for herein shall be in writing. This offer, any counter offer, notice of acceptance thereof, or any notice shall be deemed given and received, when hand delivered to the address for service provided in the Acknowledgement below, or where a facsimile number is provided herein, when transmitted electronically to that facsimile number.

FAX No. (For delivery of notices to Seller) FAX No. (For delivery of notices to Buyer)

7. GST: If this transaction is subject to Goods and Services Tax (GST), then such tax shall be in addition to the Purchase Price. The Seller will not collect GST if the Buyer provides to the Seller a warranty that the Buyer is registered under the Excise Tax Act ("ETA"), together with a copy of the Buyer's ETA registration, a warranty that the Buyer shall self-assess and remit the GST payable and file the prescribed form and shall indemnify the Seller in respect of any GST payable. The foregoing warranties shall not merge but shall survive the completion of the transaction. If this transaction is not subject to GST, Seller agrees to certify on or before closing, that the transaction is not subject to GST.

8. TITLE SEARCH: Buyer shall be allowed until 6:00 p.m. on the day of 20 (Requisition Date) to examine the title to the property at his own expense and until the earlier of: (i) thirty days from the later of the Requisition Date or the date on which the conditions in this Agreement are fulfilled or otherwise waived or; (ii) five days prior to completion, to satisfy himself that there are no outstanding

work orders or deficiency notices affecting the property, that its present use may be lawfully continued and that the principal building may be insured against risk of fire. Seller hereby consents to the municipality or other governmental agencies releasing to Buyer details of all outstanding work orders affecting the property, and Seller agrees to execute and deliver such further authorizations in this regard as Buyer may reasonably require.

9. FUTURE USE: Seller and Buyer agree that there is no representation or warranty of any kind that the future intended use of the property by Buyer is or will be lawful except as may be specifically provided for in this Agreement.

INITIALS OF BUYER(S):

INITIALS OF SELLER(S):



10. **TITLE:** Provided that the title to the property is good and free from all registered restrictions, charges, liens, and encumbrances except as otherwise specifically provided in this Agreement and save and except for (a) any registered restrictions or covenants that run with the land providing that such are complied with; (b) any registered municipal agreements and registered agreements with publicly regulated utilities providing such have been complied with, or security has been posted to ensure compliance and completion, as evidenced by a letter from the relevant municipality or regulated utility; (c) any minor easements for the supply of domestic utility or telephone services to the property or adjacent properties; and (d) any easements for drainage, storm or sanitary sewers, public utility lines, telephone lines, cable television lines or other services which do not materially affect the present use of the property. If within the specified times referred to in paragraph 8 any valid objection to title or to any outstanding work order or deficiency notice, or to the fact the said present use may not lawfully be continued, or that the principal building may not be insured against risk of fire is made in writing to Seller and which Seller is unable or unwilling to remove, remedy or satisfy or obtain insurance save and except against risk of fire in favour of the Buyer and any mortgagee, (with all related costs at the expense of the Seller), and which Buyer will not waive, this Agreement notwithstanding any intermediate acts or negotiations in respect of such objections, shall be at an end and all monies paid shall be returned without interest or deduction and Seller, Listing Broker and Co-operating Broker shall not be liable for any costs or damages. Save as to any valid objection so made by such day and except for any objection going to the root of the title, Buyer shall be conclusively deemed to have accepted Seller's title to the property.
11. **CLOSING ARRANGEMENTS:** Where each of the Seller and Buyer retain a lawyer to complete the Agreement of Purchase and Sale of the Property, and where the transaction will be completed by electronic registration pursuant to Part III of the Land Registration Reform Act, R.S.O. 1990, Chapter L4 and the Electronic Registration Act, S.O. 1991, Chapter 44, and any amendments thereto, the Seller and Buyer acknowledge and agree that the exchange of closing funds, non-registrable documents and other items (the "Requisite Deliveries") and the release thereof to the Seller and Buyer will (a) not occur at the same time as the registration of the transfer/deed (and any other documents intended to be registered in connection with the completion of this transaction) and (b) be subject to conditions whereby the lawyer(s) receiving any of the Requisite Deliveries will be required to hold same in trust and not release same except in accordance with the terms of a document registration agreement between the said lawyers, the form of which is as recommended from time to time by the Law Society of Upper Canada. Unless otherwise agreed to by the lawyers, such exchange of the Requisite Deliveries will occur in the applicable Land Titles Office or such other location agreeable to both lawyers.
12. **DOCUMENTS AND DISCHARGE:** Buyer shall not call for the production of any title deed, abstract, survey or other evidence of title to the property except such as are in the possession or control of Seller. If requested by Buyer, Seller will deliver any sketch or survey of the property within Seller's control to Buyer as soon as possible and prior to the Requisition Date. If a discharge of any Charge/Mortgage held by a corporation incorporated pursuant to the Trust And Loan Companies Act (Canada), Chartered Bank, Trust Company, Credit Union, Caisse Populaire or Insurance Company and which is not to be assumed by Buyer on completion, is not available in registrable form on completion, Buyer agrees to accept Seller's lawyer's personal undertaking to obtain, out of the closing funds, a discharge in registrable form and to register same, or cause same to be registered, on title within a reasonable period of time after completion, provided that on or before completion Seller shall provide to Buyer a mortgage statement prepared by the mortgagee selling out the balance required to obtain the discharge, and, where a real-time electronic cleared funds transfer system is not being used, a direction executed by Seller directing payment to the mortgagee of the amount required to obtain the discharge out of the balance due on completion.
13. **INSPECTION:** Buyer acknowledges having had the opportunity to inspect the property and understands that upon acceptance of this Offer there shall be a binding agreement of purchase and sale between Buyer and Seller.
14. **INSURANCE:** All buildings on the property and all other things being purchased shall be and remain until completion at the risk of Seller. Pending completion, Seller shall hold all insurance policies, if any, and the proceeds thereof in trust for the parties as their interests may appear and in the event of substantial damage, Buyer may either terminate this Agreement and have all monies paid returned without interest or deduction or else take the proceeds of any insurance and complete the purchase. No insurance shall be transferred on completion. If Seller is taking back a Charge/Mortgage, or Buyer is assuming a Charge/Mortgage, Buyer shall supply Seller with reasonable evidence of adequate insurance to protect Seller's or other mortgagee's interest on completion.
15. **PLANNING ACT:** This Agreement shall be effective to create an interest in the property only if Seller complies with the subdivision control provisions of the Planning Act by completion and Seller covenants to proceed diligently at his expense to obtain any necessary consent by completion.
16. **DOCUMENT PREPARATION:** The Transfer/Deed shall, save for the Land Transfer Tax Affidavit, be prepared in registrable form at the expense of Seller, and any Charge/Mortgage to be given back by the Buyer to Seller at the expense of the Buyer. If requested by Buyer, Seller covenants that the Transfer/Deed to be delivered on completion shall contain the statements contemplated by Section 50(22) of the Planning Act, R.S.O. 1990.
17. **RESIDENCY:** Buyer shall be credited towards the Purchase Price with the amount, if any, necessary for Buyer to pay to the Minister of National Revenue to satisfy Buyer's liability in respect of tax payable by Seller under the non-residency provisions of the Income Tax Act by reason of this sale. Buyer shall not claim such credit if Seller delivers on completion the prescribed certificate or a statutory declaration that Seller is not then a non-resident of Canada.
18. **ADJUSTMENTS:** Any rents, mortgage interest, realty taxes including local improvement rates and unmetered public or private utility charges and unmetered cost of fuel, as applicable, shall be apportioned and allowed to the day of completion, the day of completion itself to be apportioned to Buyer.
19. **TIME LIMITS:** Time shall in all respects be of the essence hereof provided that the time for doing or completing of any matter provided for herein may be extended or abridged by an agreement in writing signed by Seller and Buyer or by their respective lawyers who may be specifically authorized in that regard.
20. **TENDER:** Any tender of documents or money hereunder may be made upon Seller or Buyer or their respective lawyers on the day set for completion. Money may be tendered by bank draft or cheque certified by a Chartered Bank, Trust Company, Province of Ontario Savings Office, Credit Union or Caisse Populaire.
21. **FAMILY LAW ACT:** Seller warrants that spousal consent is not necessary to this transaction under the provisions of the Family Law Act, R.S.O. 1990 unless Seller's spouse has executed the consent hereinafter provided.
22. **UFFI:** Seller represents and warrants to Buyer that during the time Seller has owned the property, Seller has not caused any building on the property to be insulated with insulation containing ureaformaldehyde, and that to the best of Seller's knowledge no building on the property contains or has ever contained insulation that contains ureaformaldehyde. This warranty shall survive and not merge on the completion of this transaction, and if the building is part of a multiple unit building, this warranty shall only apply to that part of the building which is the subject of this transaction.
23. **LEGAL, ACCOUNTING AND ENVIRONMENTAL ADVICE:** The parties acknowledge that any information provided by the broker is not legal, tax or environmental advice, and that it has been recommended that the parties obtain independent professional advice prior to signing this document.
24. **CONSUMER REPORTS:** The Buyer is hereby notified that a consumer report containing credit and/or personal information may be referred to in connection with this transaction.
25. **AGENCY:** It is understood that the brokers involved in the transaction represent the parties as set out in the Confirmation of Representation below.
26. **AGREEMENT IN WRITING:** If there is conflict or discrepancy between any provision added to this Agreement (including any Schedule attached hereto) and any provision in the standard pre-set portion hereof, the added provision shall supersede the standard pre-set provision to the extent of such conflict or discrepancy. This Agreement including any Schedule attached hereto, shall constitute the entire Agreement between Buyer and Seller. There is no representation, warranty, collateral agreement or condition, which affects this Agreement other than as expressed herein. For the purposes of this Agreement, Seller means vendor and Buyer means purchaser. This Agreement shall be read with all changes of gender or number required by the context.

INITIALS OF BUYER(S):



INITIALS OF SELLER(S):





27. **SUCCESSORS AND ASSIGNS:** The heirs, executors, administrators, successors and assigns of the undersigned are bound by the terms herein.

DATED at.....this..... day of....., 20.11

SIGNED, SEALED AND DELIVERED in the presence of: IN WITNESS whereof I have hereunto set my hand and seal:

Varna Wind, Inc.

Per:..... DATE....., 2011

(Witness)

(Buyer/Authorized Signer) **Dean R. Gosselin, Vice President** (Seal)

"I have the authority to bind the Corporation"

(Witness)

(Buyer/Authorized Signing Officer) (Seal)

I, the Undersigned Seller, agree to the above Offer. I hereby irrevocably instruct my lawyer to pay directly to the Listing Broker the unpaid balance of the commission together with applicable Goods and Services Tax (and any other taxes as may hereafter be applicable), from the proceeds of the sale prior to any payment to the undersigned on completion, as advised by the Listing Broker to my lawyer.

DATED at.....this..... day of....., 20.....

SIGNED, SEALED AND DELIVERED in the presence of: IN WITNESS whereof I have hereunto set my hand and seal:

(Witness)

(Seller/Authorized Signing Officer) (Seal)

DATE....., 2011

(Witness)

(Seller/Authorized Signing Officer) (Seal)

DATE....., 2011

SPOUSAL CONSENT: The Undersigned Spouse of the Seller hereby consents to the disposition evidenced herein pursuant to the provisions of the Family Law Act, R.S.O. 1990, and hereby agrees with the Buyer that he/she will execute all necessary or incidental documents to give full force and effect to the sale evidenced herein.

(Witness)

(Spouse)

DATE..... (Seal)

CONFIRMATION OF EXECUTION: Notwithstanding anything contained herein to the contrary, I confirm this Agreement with all changes both typed and written was finally executed by all parties at.....a.m./p.m. this.....day of....., 20..... (Signature of Seller or Buyer)

CONFIRMATION OF REPRESENTATION

Listing Broker..... Tel.No..... Represents.....

Co-op/Buyer Broker..... Tel.No..... Represents.....

ACKNOWLEDGEMENT

I acknowledge receipt of my signed copy of this accepted Agreement of Purchase and Sale and I authorize the Agent to forward a copy to my lawyer.

I acknowledge receipt of my signed copy of this accepted Agreement of Purchase and Sale and I authorize the Agent to forward a copy to my lawyer.

(Seller) DATE.....

(Buyer) DATE.....

(Seller) DATE.....

(Buyer) DATE.....

Address for Service..... Tel.No.....

Address for Service..... Tel.No.....

Seller's Lawyer.....

Buyer's Lawyer.....

Address.....

Address.....

Tel.No. FAX No.

Tel.No. FAX No.

FOR OFFICE USE ONLY **COMMISSION TRUST AGREEMENT**
To: Co-operating Broker shown on the foregoing Agreement of Purchase and Sale:
In consideration for the Co-operating Broker procuring the foregoing Agreement of Purchase and Sale, I hereby declare that all moneys received or receivable by me in connection with the Transaction or contemplated in the MLS Rules and Regulations of my Real Estate Board shall be receivable and held in trust. This agreement shall constitute a Commission Trust Agreement as defined in the MLS Rules and shall be subject to and governed by the MLS Rules pertaining to Commission Trust.
DATED as of the date and time of the acceptance of the foregoing Agreement of Purchase and Sale. Acknowledged by:
Signature of Listing Broker or authorized representative Signature of Co-operating Broker or authorized representative

Schedule A Agreement of Purchase and Sale – Commercial

This Schedule is attached to and forms part of the Agreement of Purchase and Sale between:

BUYER, Varna Wind, Inc., and

SELLER,

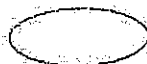
for the purchase and sale of the property legally described in Schedule "C" hereto

Buyer agrees to pay the balance as follows:

- (1) Buyer agrees to pay the balance of the Purchase Price by certified cheque, bank draft or wire transfer on Closing subject to the adjustments set forth herein.

This form must be initialed by all parties to the Agreement of Purchase and Sale:

INITIALS OF BUYER(S):



INITIALS OF SELLER(S):



SCHEDULE "B" TO PURCHASE AGREEMENT

forming part of an agreement of purchase and sale between Varna Wind, Inc., as Buyer, and _____, as Seller, for the lands legally described in Schedule "C" (the "Property")

ARTICLE 1 – DEFINITIONS

1.01 The terms defined herein shall have, for all purposes of this Agreement, the following meanings, unless the context expressly or by necessary implication otherwise requires:

"Agreement" means this agreement of purchase and sale and the schedules attached hereto, as amended from time to time; "Article", "Section" and "Subsection" mean and refer to the specified article, section and subsection of this Agreement.

"Commercial Operation Date" has the meaning ascribed thereto in Article 6.

"Committee" has the meaning ascribed thereto in Article 6.

"date of this Agreement" shall mean the date of receipt by the Seller of the Exercise Notice (as defined in the Option Agreement).

"Draft Plan" means the preliminary reference plan attached hereto as Schedule "C-1". For greater certainty, the Buyer shall have the right, at any time during the Term, to amend the description of the Property by providing to the Lessor a reference plan (the "Reference Plan") which identifies the amended description of the Property that is being conveyed to Buyer. The Seller hereby irrevocably authorizes and directs the Buyer to deposit such plan on title to the Property. Upon the delivery by the Buyer to the Seller of the Reference Plan, the description of the Property as set out in Schedule "A-1" shall automatically be replaced by the amended description of the Property as set out in the Reference Plan, without the requirement of any further action on behalf of either the Buyer or Seller, provided that the Seller agrees that it shall, at the request of the Buyer, execute a an Amendment amending Agreement which sets out the amended description of the Property in accordance with the Reference Plan. Buyer shall use commercially best efforts to consult with Seller as to location of the Property.

"Substation Facilities" shall include any one or more of the following: an electric substation, an operations and maintenance building, parking area, one or more electric transmission and distribution lines (either below or above ground), transformer(s), switchyard and any equipment and vehicles associated therewith, attachments and appurtenant equipment and other buildings required for an electric substation and any and all other uses consistent with the operation of an electric substation..

"License" has the meaning ascribed thereto in Article 7.

"Option Agreement" means the option agreement dated _____, 2011 between the Buyer and the Seller to which this Agreement is attached.

“Seller’s Property” means _____

“Severance/Minor Variance Applications” has the meaning ascribed thereto in Article 6.

“Wind Energy Project” means the wind energy project to be located on the Property and/or within the vicinity of the Property.

ARTICLE 2 – INSPECTION PERIOD

2.01 Within five (5) days following the date of this Agreement, the Seller will deliver to the Buyer, to the extent in the Seller’s possession or control and to the extent not previously delivered to the Buyer, the following:

- (a) all current surveys, easement plans, servicing plans, grading plans and other plans (collectively the “Plans”) relating to the Property;
- (b) copies of all contracts, leases or other obligations, (including, without limitation, maintenance, servicing, management and equipment contracts) deed restrictions, subdivision agreements and site plan agreements, development agreements and any other agreements with any governmental authorities, if any, relating to the Property other than those registered on title to the Property;
- (c) copies of all tests, inspections, studies and reports thereof relating to the Property, including, without limitation, environmental, geotechnical, soil quality and bore hole reports as well as any and all studies;
- (d) any current governmental notices relating to the Property, including, without limitation, tax bills and assessments, work order or deficiency notices, stop work orders and any notices relating to the zoning of the Property for the last 3 years, and any expropriation notices, any notices or decisions pertaining to any development charges, special assessments, levies or fees from Municipality of Bluewater relating to the Property; and
- (e) any and all historical information, not covered above, relating to the Property, including, but not limited to, all annual maintenance requirements of the Property, all capital upgrades, renovations and investments made in or to the Property over the last 3 years.

2.02 The Buyer’s obligations in this Agreement are conditional upon the following conditions being satisfied or waived, which conditions (the “Buyer’s Conditions”) are for the sole benefit of the Buyer and which Buyer’s Conditions or any one of them may, at any time up to and including the Condition Date (as hereinafter defined), by notice in writing to the Seller, be waived or declared satisfactory in whole or in part by the Buyer, namely that:

- (a) all the items provided to the Buyer pursuant to Section 2.01 of this Schedule “B” are satisfactory to the Buyer, in its sole, absolute and subjective discretion;

- (b) the Buyer is satisfied in its sole, absolute and subjective discretion as to the physical and environmental condition and state of repair of the Property, the buildings and the location and nature of all easements and rights-of-way which affect the Property. The Seller shall permit the Buyer access to the Property and buildings at all reasonable times up to and including the date of Closing for the purpose of examining, testing and inspecting the Property and buildings, provided that the Buyer covenants to restore the Property and buildings to its present state and condition following such examinations, tests and inspections in the event that the Buyer does not complete this transaction;
- (c) the Buyer is satisfied in its sole, absolute and subjective discretion that the Property and buildings comply with all the provisions of all environmental laws and contains no polychlorinated biphenyls, hazardous substances or toxic wastes;
- (d) the Buyer is satisfied in its sole, absolute and subjective discretion, with the economic viability or feasibility of purchasing the Property; and
- (e) the Buyer is satisfied in its sole, absolute and subjective discretion that the zoning of the Property will permit the Buyer's intended use thereof.
- (f) Any and all leases or agreements affecting the Property shall be released prior to closing.

If the Buyer's Conditions or any of them are not satisfied or waived by notice on or before that date which is one hundred and eighty (180) days following the date of this Agreement (the "**Condition Date**" or "**Requisition Date**"), the Buyer may in its discretion, by notice in writing at any time up to and including the Condition Date, declare this Agreement null and void in which event, the deposit shall be returned to the Buyer with interest and without deduction and the Seller hereby irrevocably instructs the Deposit Holder holding the deposit to release same as herein provided. If no notice of waiver or satisfaction of the Buyer's Conditions is given by the Buyer, the Buyer's Conditions shall, notwithstanding any intermediate negotiations, be deemed to have not been satisfied, this Agreement shall be declared null and void and the deposit shall be returned to the Buyer as described in this paragraph.

2.03 The Seller's obligations in this Agreement are conditional upon the Buyer moving the culvert shown on the attached Schedule C-2 attached hereto to this Agreement to the approximate location as shown on Schedule C-2. Buyer shall bear all costs in connection therewith.

ARTICLE 3 – REPRESENTATIONS

3.01 The Seller represents and warrants to the Buyer that as of the date of this Agreement and as of Closing:

- (a) there are no outstanding work orders, directions or notices relating to any defects in the state of the Property or any notice or direction requiring or recommending any alteration, repair, improvement or other work to be done with respect to the Property or relating to any non-compliance with any building permit, building restriction, by-law, regulation or municipal agreement or any threatened or pending expropriation,

save as disclosed in writing by the Seller to the Buyer prior to the expiry of the Condition Date;

- (b) to the best of the knowledge of the Seller, but without independent inquiry, the Seller knows of no unregistered leases or agreements affecting the Property and, Seller knows of no physical conditions of the Property which would constitute a violation of any governmental law, ordinance, order, rule or regulation.
- (c) to the best of the knowledge of the Seller, the Property complies with the provisions of the *Environmental Protection Act* and has never been used as a landfill or waste disposal site or for underground fuel storage;
- (d) the Seller is the owner of the Property in fee and has the power and authority to enter into this Agreement and to carry out the transaction contemplated herein;
- (e) the Seller is not aware of any litigation, expropriation, change in zoning or other judicial or administrative proceeding existing, pending or threatened relating to the Property or any buildings thereon;
- (f) the Seller has not withheld any material document or information in its possession or control relating to the Property or any buildings thereon;
- (g) the Property contains an area of approximately thirteen (13) acres;
- (h) vacant possession to the Property shall be given to the Buyer on Closing free from any claims of any person; and
- (i) no person has an option or right of first refusal to purchase the Property or any part thereof or any buildings thereon.

ARTICLE 4 – SELLER’S COVENANTS

4.01 The Seller covenants and agrees with the Buyer that:

- (a) on Closing, there will be no leases, agreements, contracts, written or oral, granted in connection with the operation, management or maintenance of the Property. The Buyer will not be responsible for any of the Seller’s staff relating to the Property or the buildings as of and from Closing and the Seller will terminate all staff in respect of the Property or the buildings on or before Closing;
- (b) all amounts for labour and/or materials in respect of construction or improvements supplied to or in connection with the Property prior to Closing will be fully paid on Closing and no one shall have the right to claim a construction lien in respect of the Property or the buildings;
- (c) from and after the date of this Agreement, the Seller shall not enter into any contract or agreement or lease in any way relating to the Property or the buildings without the written consent of the Buyer;

- (d) it will discharge at its own expense, on or prior to Closing, all construction liens, charges, mortgages and encumbrances affecting the Property;
- (e) it will ensure that its use of the Property is not altered from the use as of the date of this Agreement;
- (f) it will ensure that Property is cleaned of any of the Seller's scrap, garbage, fuel storage tanks;
- (g) at all times prior to Closing, a reasonable level of insurance is maintained on the Property covering common insurable events; and
- (h) at all times prior to Closing, it will permit the Buyer to make site plan, building permit and other development applications to the Municipality of Bluewater, and will consent to, and if necessary, execute same provided all costs related thereto are borne by the Buyer.
- (i) Seller will sign all necessary agreements required by Buyer to conduct the operation of the Wind Energy Project and to ensure the operation of the Substation Facilities on the remainder of Seller's Property, including but not limited to, any and all necessary Transmission Easements the form of which is attached hereto as Schedule "D" and any other document as may be required by Hydro One Networks Inc. and Buyer. All reasonable costs incurred by the Seller in compliance with this subsection shall be paid by the Buyer.

The provisions within this Section 4.01 shall survive and not merge with the Closing.

ARTICLE 5 – CLOSING DOCUMENTS

- 5.01 On or before Closing, the Seller shall deliver to the Buyer the following;
- (a) a transfer in registerable form in favour of the Buyer, or as the Buyer may direct, for the Property.
 - (b) a statement of adjustments which, notwithstanding anything contained to the contrary, shall be delivered at least five (5) days prior to Closing;
 - (c) a mutual undertaking to re-adjust items of adjustment after Closing;
 - (d) a certificate of the Seller confirming that the covenants of the Seller have been performed and that the representation and warranties of the Seller set forth in this Agreement are true and accurate on Closing and do not merge but survive Closing for a period of one (1) year from Closing;

- (e) a general conveyance of all right, title and interest in and to all reports, studies, drawings and specifications prepared by or for the Seller to date relating to the Property;
- (f) an indemnity in respect of liens under the *Construction Lien Act*, as amended arising after Closing relating to services or materials supplied to the Property prior to Closing; and
- (g) such other documents as may be usual for transactions of this nature, including, without limitation, a statutory declaration of possession in respect of the Property.

5.02 On or before Closing, the Buyer shall deliver to the Seller the following:

- (a) the balance of the Purchase Price;

ARTICLE 6 – SEVERANCE OF PROPERTY

6.01 SEVERANCE OF PROPERTY

The Seller covenants and agrees with the Buyer as follows:

- (a) at any time following the date of this Agreement, the Buyer shall have the right to make an application to the local land division committee or Committee of Adjustment for the Municipality of Bluewater (the “**Committee**”) to have the Property severed from the balance of the Seller’s Property together with any necessary minor variance applications associated with the creation of Property, all at the Buyer’s sole cost and expense (the “**Severance/Minor Variance Applications**”). Notwithstanding the foregoing, the Buyer shall not be required to appeal the decision of the Committee in the event that the Severance/Minor Variance Applications are not successful, nor shall the Buyer be required to proceed with the transactions contemplated by this Agreement if the decisions provide for conditions that are not satisfactory to the Buyer, in its sole, absolute and subjective discretion.
- (b) the Seller agrees, at the Buyer’s sole cost and expense, to assist with the satisfaction of all reasonable conditions imposed by the Committee, if any, as a pre-condition to the issuance of the severance consent and/or minor variances and the Seller hereby agrees to authorize and appoint and does hereby authorize and appoint the Buyer as its agent in connection with any Severance/Minor Variance Applications and the Seller further agrees that it shall execute any and all documentation required in order to confirm the appointment of the Buyer as aforesaid and shall further cooperate with the Buyer in connection with the Severance/Minor Variance Applications and delivery of any required information reasonably required by the Committee in connection with the consideration of the severance and minor variances and satisfying any conditions related thereto.

ARTICLE 7 – GENERAL PROVISIONS

7.01 GRANT OF LICENSE

The Seller hereby grants and conveys to the Buyer an irrevocable license on over, and across the Seller's Property to come upon Seller's Property and to install, operate, and maintain such equipment as may be necessary to conduct studies of wind energy, wind profiles, transmission interconnection, soils, and other meteorological and geotechnical data (including measurement devices, controls, and instrumentation) (the "**License**"). This License shall be effective commencing on the date of this Agreement until Closing. The License also includes the right to construct, use, repair, replace, relocate, transport and remove said equipment and appropriate vehicles over existing roads and pathways on the Property and the right to carry out, at the Buyer's expense and without liability to the Seller, such tests, including but not limited to environmental audits, surveys and inspections of the Property as the Buyer may deem necessary. The Buyer agrees to repair any damage caused by any such tests at the Buyer's expense in a good and workmanlike manner. The License may be exercised by the Buyer and by the Buyer's employees, agents, contractors, permittees and invitees. The Buyer will consult with the Seller to schedule and coordinate the Buyer's activities on the Property. The location of any equipment to be installed on the Property shall be agreed to by the parties acting reasonably and without undue delay taking into consideration the purpose of the studies to be conducted and the need for certain studies to be conducted in specific locations. Once determined, the location of the equipment shall not be changed save by the agreement of the parties who shall act reasonably and without undue delay.

7.02 CLOSING

This Agreement shall be completed on the thirtieth (30th) day following the later of: (a) the Condition Date; and (b) Buyer obtaining: (i) the consent of the Committee to the severance of the Property from the balance of the Seller's Property, and (ii) approval from the Committee with respect to any necessary minor variances, with all applicable appeal periods having lapsed with no appeals having been filed, provided that if such date falls on a date that is not a business day, it shall take place on the next business day thereafter (herein referred to as the "**Closing Date**" or "**Closing**" or "**Date of Closing**" or "**Completion Date**"). Notwithstanding anything to the contrary contained in this Agreement, if such consent and decision with respect to the minor variances, in a final, binding form, have not been obtained in accordance with Section 6.01 by August 30, 2015 ("**Final Closing Date**"), then save as the parties may otherwise agree in writing, this Agreement shall be null and void, further force and effect and the Deposit shall be forthwith returned to the Buyer and neither party shall have any further obligations to the other. If, however, Buyer's consent and severance application is conditioned upon the receipt of a final Renewable Energy Approval, then the Final Closing date shall automatically extend ten days after that final condition is satisfied but in any event shall not be later than December 30, 2015.

7.03 ADJUSTMENTS

There shall be adjusted on Closing all usual items of income and expense in transactions of this nature including realty taxes, utility charges, local improvement charges and other similar allowances. Where applicable, each of the adjustments shall be apportioned and allowed up to the date of Closing (it being understood that the date of Closing itself is to be apportioned to the Buyer who shall bear the responsibility for and receive the benefit of that date).

7.04 NOTICES

Where this Agreement requires notice to be delivered by one party to the other, such notice shall be given in writing and delivered either personally or by prepaid registered post, or by printed electronic transmission by the party wishing to give such notice, or by the solicitor acting for such party, to the other party or to the solicitor acting for the other party at the addresses noted below. Such notice shall be deemed to have been given, in the case of personal delivery, on the date of delivery, where given by post, on the third business day following the posting thereof and, where given on a business day by printed electronic transmission prior to 5:00 p.m., on the date of transmission and after 5:00 p.m. on the first business day following such transmission. It is understood that in the event of a threatened or actual postal disruption in the postal service in the postal area through which such notice must be sent, notice must be given, on a business day, personally as aforesaid or by means of printed electronic or printed telephonic communication in which case notice shall be deemed to have been given on the date of transmission thereof:

To the Buyer:

Varna Wind, Inc.
5500 North Service Road, Suite 205
Burlington, ON L7L 6W6, Canada
Attention: Business Management
Telephone: (905) 335-4904
Facsimile: (905) 335-5731

With a copy to:

Varna Wind, Inc.
700 Universe Blvd. LAW/JB
Juno Beach, FL 33408
U.S.A.
Attention: General Counsel
Telephone: (561) 691-2359
Facsimile: (561) 691-7103

To the Seller:

Telephone: _____

7.05 LAWS OF ONTARIO

This Agreement shall be construed in accordance with the laws of the Province of Ontario and the laws of Canada applicable therein and shall be treated in all respects as an Ontario contract.

7.06 ASSIGNMENT

The Buyer shall be entitled to assign its rights and obligations under this Agreement to one or more persons or entities without the consent of the Seller. Upon effecting such assignment, the Buyer shall be released from its covenants and obligations set forth herein. The Buyer shall deliver notice of any such assignment to the Seller.

7.07 COMMISSIONS

Each of the Buyer and the Seller represent and warrant to the other (which representation and warranty shall survive Closing) that it has not dealt with any agent or broker in connection with the purchase of the Property or buildings.

REIMBURSEMENT OF SELLER'S LEGAL EXPENSES

The Buyer agrees to reimburse the Seller up to a maximum of
on account of legal fees incurred by the Seller in connection with this Agreement.

7.08 ENUREMENT

This Agreement shall run with the Seller's Property and shall enure to the benefit of and be binding upon the parties hereto and their respective heirs, executors, administrators, successors and assigns, as the case may be.

7.09 CONFIDENTIALITY

For the purposes of this Agreement. "**Confidential Information**" means the terms and conditions of this Agreement, including but not limited to the Purchase Price, which are not a matter of public record. Seller agrees that Confidential Information shall not, without Purchaser's prior written consent, be disclosed, divulged, or communicated to any other person other than the Seller's professional advisors and any lenders, bona fide third party purchasers or potential purchasers who shall have a "need to know" the Confidential Information, it being understood that such parties shall be informed at the time of disclosure of the confidential nature of such Confidential Information and shall be directed to treat the Confidential Information as such.

SCHEDULE "C" TO PURCHASE AGREEMENT

LEGAL DESCRIPTION OF THE PROPERTY

ALL AND SINGULAR that certain parcel or tract of land and premises, situate, lying and being in the Municipality of Bluewater, and the Province of Ontario, being composed of:

BEING THE WHOLE OF PIN _____

Stipulated Acreage:

**SCHEDULE "C-1" TO PURCHASE AGREEMENT
DRAFT PLAN**

A _____ Acre Parcel (+/-) portion of _____, in the Municipality of Bluewater,
designated as Part ___ on the Draft Reference Plan No. _____ attached hereto, being part of
PIN _____

**SCHEDULE "C-2" TO PURCHASE AGREEMENT
CULVERT SKETCH**

SCHEDULE "D" TO PURCHASE AGREEMENT
Form of Transmission Easement

THIS TRANSMISSION EASEMENT (IN GROSS) ("**Grant**"), is executed and made effective this ● day of ●, 20●, ("**Effective Date**") by and between ● ("**Grantor**") and ● ("**Grantee**").

PREMISES

A. Grantor is the registered owner of an estate in fee simple composed of certain parcels or tracts of land and premises more particularly described on **Exhibit A** attached hereto and made a part hereof ("**Property**"); and

B. Grantor desires to grant, convey and transfer to Grantee an exclusive easement and right-of-way in perpetuity for the erection, installation and maintenance of certain facilities for the transmission of electric power over and across a certain portion of the Property.

IN CONSIDERATION of the foregoing and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

1. **Grant.** Grantor does hereby grant, convey and transfer to Grantee, an exclusive easement and right-of-way in perpetuity (the "**Transmission Easement**") in, on, over, across, along and under that portion of the Property more particularly described on **Exhibit B** ("**Easement Area**"), with such persons, vehicles and equipment necessary for the purposes of erecting, constructing, replacing, relocating, improving, enlarging, removing, maintaining, operating and utilizing, from time to time, a line of towers and/or poles, with such wires, guy wires, and/or cables (whether above ground or buried), for the transmission of electrical energy, and all necessary and proper foundations, footings, cross arms and other appliances, facilities and fixtures for use in connection therewith (collectively, the "**Transmission Facilities**") in, on, over, across, along and under the Easement Area; together with (i) the right of ingress to and egress from the Transmission Facilities over and along the Property; and (ii) a temporary non-exclusive easement and right-of-way in, over, across, along and under the Property during the initial construction and installation of the Transmission Facilities (the "**Construction Easement**"). Once the final reference plan describing the extent of the Easement Area has been prepared and deposited by Grantee on title to the Property, Grantor confirms that Grantee is irrevocably authorized and directed to insert the Part No(s). and Reference Plan No. into the attached **Exhibit B** without the requirement of any further approval or action by Grantor.

2. **No Interference.** Grantor covenants and agrees that it shall not construct, install, or permit to be constructed or installed, any improvements, fences, structures, buildings, foliage or vegetation, utility lines or other improvements of any type whatsoever upon or near the Easement Area which would inhibit or impair any of Grantee's rights or benefits as set forth in this Grant. Grantee shall have the right, without compensation to Grantor, to cut, prune and remove or otherwise dispose of any foliage or vegetation on or near the Easement Area that Grantee deems a threat or potential threat to Grantee's Transmission Facilities or its rights hereunder. Grantor shall not grant or permit any person or person(s) claiming through Grantor, other than Grantee, any right-of-way, encumbrance, easement or other right or interest in, to or affecting the Easement Area, without the

prior written consent of Grantee in each instance, which consent Grantee may grant, withhold or deny in its sole, absolute and subjective discretion.

3. **Term**. The term of this Grant shall commence on the Effective Date and continue in perpetuity (the "**Term**").

4. **Authority**. Grantor hereby represents and warrants to Grantee that it is the sole registered owner of the Property in fee simple, subject to no liens or encumbrances registered in priority to this Transmission Easement, except as may be disclosed by registered title to the Property on or before the Effective Date, and is fully authorized and empowered to grant the rights, privileges and benefits granted to Grantee in this Grant.

5. **Compensation**. Grantee shall pay Grantor the amounts set forth in **Exhibit C** as the consideration for the Grant. The parties acknowledge and agree that the registration copy of this Grant will not contain the payment provisions set forth in **Exhibit C**, and it is understood and agreed that the deletion of such payment provisions does not and will not in any way affect the validity of this Grant.

6. **Crop Compensation**. Crop damage that can be reasonably demonstrated to have been caused by Grantee as a result of performing the activities authorized in this Grant, shall be paid for by Grantee according to the established yield per acre as documented in crop insurance documentation for the Property and using the price provided by the local grain elevator. Each time Grantee exercises its rights under the Transmission Easement, Grantee shall compensate Grantor for all crops lost or damaged by reason of the use.

7. **Indemnification and Insurance**. Grantee shall maintain general liability insurance insuring Grantee and Grantor against loss caused by Grantee's use of the Property. The amount of insurance shall be not less than \$3,000,000.00 of combined single limit liability coverage. Grantee shall indemnify and at its expense defend Grantor against liability for injuries and claims for direct damage to the extent that they are caused by Grantee's exercise of rights granted in this Grant. This indemnity does not cover losses of rent, business opportunities, crop production, and profits that may result from Grantor's loss of use of the Property and for greater certainty, Grantee shall only be liable for reasonably anticipated and foreseeable damages.

8. **Grantee's Property**. Notwithstanding that in constructing, maintaining and operating the Transmission Facilities, Grantee may install equipment and appurtenances in, on, over, along, under or across the Easement Area in such a manner that it or they become affixed to the Easement Area, the title to such equipment and appurtenances shall at all times remain the personal property of Grantee.

9. **Assignment by Grantor**. It will be a condition to any transfer or conveyance of the whole or any part of the Property by Grantor that Grantor shall cause the purchaser of any portion of the Property to execute an agreement in favour of Grantee agreeing to be bound by the terms hereof to the same extent as if such purchaser had been an original party hereto. The purchaser shall also agree to extract a similar covenant from any future purchaser of any portion of the Property.

10. Assignment by Grantee; Mortgage Rights.

(a) Right to Mortgage & Assign. Grantee, upon notice to Grantor, but without Grantor's consent or approval shall have the right to mortgage, charge, collaterally assign, or otherwise encumber and grant security interests in all or any part of its interest in this Transmission Easement or the Easement Area, or the Transmission Facilities (collectively, its "**Facilities Assets**"). These various security interests in all or a part of the Facilities Assets are collectively referred to as "**Mortgages**" and the holders of the Mortgages, their designees, successors and assigns are referred to as "**Mortgagees**". Grantee's notice to Grantor shall include the name and address of each Mortgagee and/or Assignee. Grantee shall also have the right without Grantor's consent to sell, convey, lease, sublease, grant or assign all or any portion of its Facilities Assets on either an exclusive or a non-exclusive basis, or to grant sub-easements co-easements, separate easements, leases, licenses or similar rights, however denominated (collectively, "**Assignment**"), to one or more persons or entities (collectively, "**Assignees**"). Assignees and Mortgagees shall use the Facilities Assets only for the uses permitted under this Grant. Assignees and Mortgagees shall have all rights and remedies allowed them under then existing laws except as limited by their individual agreements with Grantee, provided that under no circumstances shall any Mortgagee or Assignee have any greater rights of ownership or use of the Property than the rights granted to Grantee in this Grant.

(b) Grantor Obligations: Grantor agrees to consent in writing to and to execute financing documents, including customary three party lender agreements, as may reasonably be required by Mortgagees. As a precondition to exercising any rights or remedies related to any alleged default by Grantee under this Grant, Grantor shall give written notice of the default to each Mortgagee and Assignee at the same time it delivers notice of default to Grantee, specifying in detail the alleged event of default and the required remedy. Each Mortgagee and Assignee shall have the same amount of time to cure the default as to Grantee's entire interest or its partial interest in the Facilities Assets as is given to Grantee and the same right to cure any default as Grantee or to remove any property of Grantee, Mortgagees or Assignees located on the Easement Area. The cure period for each Mortgagee and Assignee shall begin to run at the end of the cure period given to Grantee in this Grant, but in no case shall the cure period for any Mortgagee or Assignee be less than ninety (90) days after receipt of the default notice. Failure by Grantor to give a Mortgagee or Assignee notice of default shall not diminish Grantor's rights against Grantee, but shall preserve all rights of the Mortgagee or Assignee to cure any default and to remove any property of Grantee, the Mortgagee or Assignee located on the Easement Area.

(c) Mortgagee/Assignee Obligations. Any Mortgagee or Assignee that does not directly hold an interest in the Facilities Assets, or whose interest is held solely for security purposes, shall have no obligation or liability under this Grant prior to the time the Mortgagee or Assignee directly holds an interest in this Grant, or succeeds to absolute title to Grantee's interest. A Mortgagee or Assignee shall be liable to perform obligations under this Grant only for and during the period it directly holds such interest or absolute title. Any Assignment permitted under this Grant shall release Grantee or other assignor from obligations accruing after the date that liability is assumed by the Assignee.

(d) Right to Cure Defaults/Notice of Defaults/Right to New Transmission Easement.

(i) To prevent Grantor's exercise of any remedies available to it in respect of a default by Grantee under this Grant, the Transmission Easement, or any partial interest in this Grant and the Transmission Easement, Grantee, any Mortgagee or Assignee shall have the right, but not the obligation, at any time to perform any act necessary to cure any default and to prevent the exercise of Grantor's remedies in respect of a default by Grantee under this Grant or any interest in the Facilities Assets.

(ii) In the event of an uncured default by the holder of Grantee's entire interest in this Grant, or in the event of a termination of this Grant by agreement, by operation of law or otherwise, each Mortgagee or Assignee of a partial interest in the Facilities Assets shall have the right to have Grantor either recognize the Mortgagee's or Assignee's interest or, in the event of a termination, grant new easements substantially identical to this Grant and the Transmission Easement. Under the new easements, the Mortgagee or Assignee shall be entitled to, and Grantor shall not disturb, Mortgagee's or Assignee's continued use and enjoyment for the remainder of the Term.

(e) Extended Cure Period. If any default by Grantee under this Grant cannot be cured without obtaining possession of all or part of the Facilities Assets, then any such default shall be deemed remedied if a Mortgagee or Assignee: (a) within ninety (90) days after receiving notice from Grantor as set forth in Section 10(b), acquires possession of all or part of the Facilities Assets, or begins appropriate judicial or nonjudicial proceedings to obtain the same; (b) diligently prosecutes any such proceedings to completion; and (c) after gaining possession of all or part of the Facilities Assets cures defects that are reasonably capable of being cured and not otherwise personal to Grantor and performs all other obligations as and when the same are due in accordance with the terms of this Grant. If a Mortgagee or Assignee is prohibited by any court or by operation of any bankruptcy or insolvency laws from commencing or prosecuting the proceedings described above, the ninety (90) day period specified above for commencing proceedings shall be extended for the period of such prohibition.

(f) Certificates. Grantor shall execute estoppel certificates (certifying as to truthful matters, including without limitation that no default then exists under this Grant, if such be the case), consents to assignment, direct lender agreements and non-disturbance agreements as Grantee or any Mortgagee or Assignee may reasonably request from time to time. Grantor and Grantee shall cooperate in amending this Grant from time to time to include any provision that may be reasonably requested by Grantee or any Mortgagee or Assignee to implement the provisions contained in this Grant or to preserve a Mortgagee's security interest in the Facilities Assets.

11. **Mortgagee Protection.** Any Mortgagee, upon delivery to Grantor of notice of its name and address, for so long as its Mortgage is in existence shall be entitled to the following protections which shall be in addition to those granted elsewhere in this Grant:

(a) Mortgagee's Right to Possession, Right to Acquire and Right to Assign. A Mortgagee shall have the absolute right without Grantor's consent: (a) to assign its Mortgage; (b) to enforce its lien, including, to acquire title to all or any portion of the Facilities Assets by any lawful means; (c) to take possession of and operate all or any portion of the Facilities Assets and to perform all obligations to be performed by Grantee under this Grant, or to cause a receiver or a receiver and manager to be appointed to do so; and (d) to acquire all or any portion of the Facilities Assets by

foreclosure, by an assignment in lieu of foreclosure or by quit claim and thereafter without Grantor's consent to assign or transfer all or any portion of the Facilities Assets to a third party. A Mortgagee which assigns or transfers the Facilities Assets to a third party shall notify Grantor of the name and address of the Assignee or transferee.

(b) Opportunity to Cure.

(i) During any period of possession of the Easement Area by a Mortgagee (or a receiver or receiver and manager requested by a Mortgagee) and/or while any foreclosure, power of sale or other enforcement proceedings instituted by a Mortgagee are pending, the Mortgagee shall pay or cause to be paid the fees and all other monetary charges, if any, payable by Grantee under this Grant which have accrued and are unpaid at the commencement of the period and those which accrue thereafter during the period. Following acquisition of all or a portion of the Facilities Assets by the Mortgagee as a result of either foreclosure, acceptance of an assignment in lieu of foreclosure, quit claim or by a purchaser under a power of sale or judicial sale, this Grant shall continue in full force and effect and the Mortgagee or party acquiring title to the Facilities Assets shall, as promptly as reasonably possible, commence the cure of all defaults under this Grant and thereafter diligently process such cure to completion, whereupon Grantor's rights relating to such default shall be deemed waived; provided, however, that the Mortgagee or party acquiring title to the Facilities Assets shall not be required to cure those defaults which are not reasonably susceptible of being cured or performed by such party ("**non-curable defaults**"). Non-curable defaults shall be deemed waived by Grantor upon completion of foreclosure proceedings or acquisition of Grantee's interest in this Grant under a power of sale or judicial sale.

(ii) Any Mortgagee or other party who acquires Grantee's interest in the Facilities Assets pursuant to foreclosure, assignment in lieu of foreclosure, quit claim, under a power of sale or judicial sale or otherwise shall not be liable to perform the obligations imposed on Grantee by this Grant incurred or accruing after the party no longer has ownership or possession of the Facilities Assets.

(c) New Easement.

(i) If this Grant is terminated for any reason, if the Facilities Assets are foreclosed, or if this Grant is rejected, repudiated, resiliated or disaffirmed pursuant to bankruptcy law or other law affecting creditor's rights and, within ninety (90) days after such event, Grantee or any Mortgagee or Assignee shall have arranged to the reasonable satisfaction of Grantor for the payment of all fees or other charges due and payable by Grantee as of the date of such event, then Grantor shall execute and deliver to Grantee or such Mortgagee or Assignee or to a designee of one of these parties, as the case may be, a new easement to the Easement Area which (i) shall be for a term equal to the remainder of the Term before giving effect to such rejection, repudiation, resiliation or termination; (ii) shall contain the same covenants, agreements, terms, provisions and limitations as this Grant (except for any requirements that have been fulfilled by Grantee or any Mortgagee or Assignee prior to rejection, repudiation, resiliation or termination of this Grant); and, (iii) shall include that portion of the Easement Area in which Grantee or such other Mortgagee or Assignee had an interest on the date of rejection, repudiation, resiliation or termination.

(ii) After the termination, repudiation, rescission, rejection or disaffirmation of this Grant and during the period thereafter during which any Mortgagee shall be entitled to enter into new easements for the Easement Area, Grantor will not terminate the rights of any Assignee unless in default under its Assignment.

(iii) If more than one Mortgagee makes a written request for a new easement pursuant to this provision, the new easements shall be delivered to the Mortgagee requesting such new easement whose Mortgage is prior in lien, and the written request of any other Mortgagee whose lien is subordinate shall be void and of no further force or effect.

(iv) The provisions of this Section shall survive the termination, rejection, repudiation, rescission or disaffirmation of this Grant and shall continue in full force and effect thereafter to the same extent as if this Section were a separate and independent contract made by Grantor, Grantee and each Mortgagee, and, from the effective date of such termination, rejection, repudiation, rescission or disaffirmation of this Grant to the date of execution and delivery of such new easements, such Mortgagee may use and enjoy the Easement Area without hindrance by Grantor or any person claiming by, through or under Grantor; provided that all of the conditions for the new easements as set forth above are complied with.

(d) Mortgagee's Consent to Amendment, Termination or Surrender. Notwithstanding any provision of this Grant to the contrary, the parties agree that so long as there exists an unpaid Mortgagee, this Grant shall not be modified or amended, and Grantor shall not accept a surrender, abandonment, cancellation or release of all or any part of the Easement Area from Grantee, prior to expiration of the Term without the prior written consent of the Mortgagee. This provision is for the express benefit of and shall be enforceable by each Mortgagee as if it were a party named in this Grant.

(e) No Merger. There shall be no merger of this Grant or of the Transmission Easement with the fee estate in the Easement Area by reason of the fact that this Grant or any interest in the Transmission Easement may be held, directly or indirectly, by or for the account of any person or persons who shall own any interest in the fee estate. No merger shall occur unless and until all persons at the time having an interest in the fee estate in the Easement Area and all persons (including each Mortgagee) having an interest in this Grant or in the estate of Grantor and Grantee shall sign and record a written instrument effecting such merger.

(f) Liens. On the commencement of the Term, title to the Easement Area shall be free and clear of all monetary liens other than those expressly approved by Grantee. With respect to any such liens approved by Grantee, Grantor shall nevertheless obtain either non-disturbance agreements or postponements from the holders of such liens in favour of Grantee and this Transmission Easement, such agreements or postponements, as the case may be, to be reasonably satisfactory to Grantee. Thereafter, any assignment of this Grant, mortgage, deed of trust or other monetary lien placed on the Easement Area by Grantor, or permitted by Grantor to be placed or to remain on the Easement Area, shall be subject to and subordinate to this Grant, to any Assignment or Mortgage then in existence on the Facilities Assets as permitted by this Grant, to Grantee's right to encumber the Facilities Assets, and to any and all documents executed or to be executed by Grantor in connection with Grantee's development of all or any part of the Easement Area. Grantor agrees to

cause any monetary liens placed on the Easement Area by Grantor in the future to incorporate the conditions of this Section.

(g) **Further Amendments.** At Grantee's request, Grantor shall amend this Grant to include any provision which may reasonably be requested by a proposed Mortgagee; provided, however, that such amendment shall not impair any of Grantor's rights under this Grant or increase the burdens or obligations of Grantor under this Grant. Upon the request of any Mortgagee, Grantor shall execute any additional instruments reasonably required to evidence such Mortgagee's rights under this Grant.

12. **Legal Fees.** In the event of any controversy, claim or dispute arising out of or relating to the Transmission Easement or the enforcement or breach hereof, the prevailing party shall be entitled to recover from the losing party the prevailing party's reasonable costs, expenses and legal fees.

13. **Binding Effect; Governing Law.** This Grant shall be binding upon and shall inure to the benefit of both Grantor and Grantee, and their respective heirs, successors and assigns, and shall be deemed a covenant running with the land for all purposes. The provisions hereof shall be governed by and construed in accordance with the laws of the Province of Ontario. Grantee agrees that this Transmission Easement and the rights, privileges and easements granted pursuant thereto shall be declared to be: (i) for the purposes of electricity transmission lines or electricity distribution lines within the meaning of Part VI of the *Ontario Energy Board Act*, 1998, and (ii) an easement in favour of a generator, transmitter or distributor for the purpose of generation, transmission or distribution within the meaning of Section 42.1 of the *Electricity Act*, 1998.

14. **Termination.** Grantee shall have the right to terminate this agreement at any time upon 30 days written notice to Grantor. Upon full or partial termination of the Transmission Easement, Grantee shall remove all physical material pertaining to the Transmission Facilities and restore the area formerly occupied by the Transmission Easement to substantially the same physical condition that existed immediately before the installation of the Transmission Facilities. In the event of termination, Grantee has no right to recover any amounts previously paid to Grantor as consideration for this Grant.

15. **Notices.**

All notices to be given hereunder shall be in writing and all such notices and any payments to be made hereunder may be made or served personally or by registered letter addressed to Grantor at:

To Grantor:

Attention:
Telephone:
Facsimile:

To Grantee:

Attention:
Telephone:
Facsimile:

With a copy to:

Attention:
Telephone:
Facsimile:

or such other address, as Grantor or Grantee respectively may from time to time advise and any such notices or payments shall be deemed to be given and received by the addressee upon personal service or, if served by registered letter, fourteen (14) days after mailing thereof, postage prepaid. In the event of a postal interruption, all notices to be given and all payments to be made hereunder may be made or served personally or delivered to the intended recipient at the address of the recipient set out above. Grantee shall also be permitted to make any payment to Grantor electronically at Grantee's discretion and subject to Grantor's consent.

16. **Severability.** If any term or provision of this Transmission Easement, or the application thereof to any person or circumstances shall, to any extent, be determined by judicial order or decision to be invalid or unenforceable, the remainder of this Transmission Easement or the application of such term or provision to persons or circumstances other than those as to which it is held to be invalid, shall be enforced to the fullest extent permitted by law.

17. **Counterparts.** This Transmission Easement may be executed in two or more counterparts, each of which will be deemed an original, but all of which together shall constitute one and the same instrument.

18. **Family Law Act.** Grantor represents and warrants to Grantee that if Grantor is an individual, Grantor is either not married, or if married, his or her spouse either comprises a Grantor hereunder or such spouse has consented to the grant of the Transmission Easement to Grantee pursuant to the terms herein by executing a copy of this Transmission Easement, and if Grantor is a corporation, the Easement Area has never been occupied by any of the directors, officers or shareholders of Grantor or the spouses of such directors, officers or shareholders and there are no shares in existence entitling the holders of such shares to occupation of the buildings. Accordingly, the Easement Area does not comprise a family residence within the meaning of the *Family Law Act*.

19. **Grantee's Statutory Rights.** This Transmission Easement shall not affect or prejudice Grantee's statutory rights to acquire the Easement Area under any laws, including, without limitation, Grantee's statutory rights under the *Ontario Energy Board Act*, 1998, which rights may be exercised at Grantee's discretion, in the event, Grantor being unable or unwilling for any reason to perform this Transmission Easement, or, give to Grantee a clear and unencumbered title to the easement and right-of-way herein granted.

20. **Planning Act.** This Transmission Easement and the provisions hereof which create, or, are intended to create an interest in the Easement Area shall be effective to create such an interest only if the subdivision control provisions of the *Planning Act*, R.S.O. 1990 c. P. 13, as amended are complied with.

21. **Registration.** Grantee shall be entitled, at its cost and expense, to register this Transmission Easement or a notice in respect thereof, and any required reference plans in the applicable Land

Registry Office, and, Grantor agrees to execute, at no cost to Grantee, all necessary instruments, plans and documentation for that purpose.

22. **Setback Waiver**. To the extent that (a) Grantor now or in the future owns or leases any land adjacent to the Easement Area, or (b) Grantee leases or holds an easement/license or a lease over land adjacent to Easement Area, and has installed or constructed or desires to install or construct any Transmission Facilities on said land at and/or near the common boundary between the Easement Area and said land, Grantor hereby waives any and all setbacks and setback requirements, whether imposed by law or by any person or entity, including, without limitation, any setback requirements described in the zoning by-laws of the County and/or Province or in any governmental entitlement or permit heretofore or hereafter issued to Lessee. If so requested by Grantee, Grantor shall promptly, without demanding additional consideration therefore, execute, and if appropriate cause to be acknowledged, any setback waiver, setback elimination or other document or instrument required by any governmental authority or that Grantee deems necessary or convenient to the obtaining of any entitlement or permit.

23. **Removal of Debris**. Within 120 days of the Commercial Operations Date, Grantee shall remove all debris from Property. For purposes of this Agreement "Commercial Operations Date" shall mean the date that the Transmission Facilities at the Project are commercially operational and delivering energy, as determined by the Grantee.

24. **Drainage Tile**. If any drainage tiles on or under the Easement area have been damaged as a direct result of Grantee's activities in connection with the construction of the Transmission Facilities, Grantee shall pay to Grantor the cost to repair or replace the drainage tiles.

25. **Fencing**. Grantee shall not fence the Easement Area or any part thereof, with the exception of transformer stations, without the written consent of the Grantor.

[Remainder of page intentionally left blank, signature page follows]

EXECUTED effective the day and year first hereinabove written.

Grantor:

Witness

{PRINT GRANTOR'S NAME}

Witness

{PRINT GRANTOR'S NAME}

[Spouse of Grantor:]

Witness

{PRINT SPOUSE OF GRANTOR'S NAME}

[Grantee:]

•

Per: _____

Name:

Title:

EXHIBIT A
TO TRANSMISSION EASEMENT

Legal Description of Property

{INSERT LEGAL DESCRIPTION OF PROPERTY}.

EXHIBIT B

TO TRANSMISSION EASEMENT

Legal Description of Easement Area

(Insert description from reference plan)

PT ____ LT ____, CON _____, DESIGNATED AS PART(S) _____ ON PLAN ●- _____,
BEING PART OF PIN NO. _____

EXHIBIT C
TO TRANSMISSION EASEMENT

Compensation

Payment terms available upon request by a person who has an interest in the subject lands.

In consideration for granting a Transmission Easement to • (“Grantee”), • (“Grantor”) shall receive the following compensation:

1. The greater of (a) a lump sum payment of • (\$•), or (b) • (\$•) per acre for the number of acres depicted as the Easement Area on Exhibit “B”.
2. A one time payment of • (\$•) per pole constructed on the Property.
3. A one time payment of • (\$•) per guy wire anchor constructed upon the Property.
4. All payments shall include harmonized sales tax (“HST”), if applicable.

Payment shall be made to Grantor as follows: Fifty percent (50%) of the total amount due shall be paid within sixty (60) days of the Effective Date. Fifty percent (50%) shall be paid within thirty (30) days after completion of a final survey of the entire transmission line. Said survey shall determine the exact lineal footage/acreage upon which payment shall be made from Grantee to Grantor.

Payment shall be distributed as follows:

100% to {INSERT NAME OF PAYEE}

Phone: _____

Signature required for each payee:

{PRINT GRANTOR’S NAME}

Date: •

{PRINT GRANTOR’S NAME}

Date: •

STATUTORY DECLARATION

RE: PLANNING ACT

FLORIDA) IN THE MATTER OF the easement (the "Easement") in
) favour of • (the "Grantee"), with respect to the lands
COUNTY OF PALM BEACH) more particularly described in Exhibit "A" hereto (the
) "Easement Lands")

I, Dean R. Gosselin, of the Town of Juno Beach, in the Florida, DO SOLEMNLY DECLARE, in my capacity as Vice President of the Grantee, and without personal liability that:

1. I am the Vice President of Varna Wind, Inc., a company incorporated pursuant to the laws of the Province of New Brunswick and authorized to conduct business in the Province of Ontario, the Grantee and, as such, am aware of the matters herein deposed to save where same are stated to be upon information and belief, and where so stated, I verily believe same to be true.

2. The Easement Lands being acquired by the Grantee pursuant to the Easement are being acquired for the purpose of an electricity distribution line, electricity transmission line, hydrocarbon distribution line or hydrocarbon transmission line within the meaning of Part VI of the *Ontario Energy Board Act, 1998*, in respect of which this Statutory Declaration has been made pursuant to sub-clause 50(3)(d) of the *Planning Act* (Ontario), as amended.

AND I MAKE THIS SOLEMN DECLARATION conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath.

STATE OF FLORIDA)
) ss:
COUNTY OF PALM BEACH)

Dean R. Gosselin, Vice President
"I have the authority to bind the corporation"

The foregoing instrument was acknowledged before me this _____ day of _____, 2011 by Dean R. Gosselin, as Vice President of Varna Wind, Inc., a company incorporated pursuant to the laws of the Province of New Brunswick and authorized to conduct business in the Province of Ontario.

In witness whereof I hereunto set my hand and official seal.

(Seal)

Notary Public

My Commission Expires: _____

COMMUNITY AND STAKEHOLDER COMMUNICATION

51. Proponents of renewable energy projects are required to obtain a REA from the MOE, which prerequisites (the “**REA Requirements**”) are prescribed by the REA Regulation and include substantive public consultation requirements. In particular, the goal of consultation under the REA Regulation is to ensure that interested stakeholders (including the public, the Municipalities and local Aboriginal groups) have an opportunity to provide input into the project at an early stage, and again at a later stage when the project design is more fully established.
52. In order to meet the REA Requirements, the Applicant is required to notify landowners and the community early in the planning stages, hold at least two public consultation meetings and carry out and document a comprehensive consultation study (the “**Consultation Report**”)⁵ of the potential effects of the BWEC on the surrounding environment. The Consultation Report includes an Aboriginal consultation report (“**Aboriginal Consultation Report**”), excerpts of which are attached as Exhibit G, Tab 1, Schedule 2. In addition to the Consultation Report, several ancillary reports⁶ are required to meet REA Requirements. The Applicant has met the REA Requirements and has also engaged local First Nations, Municipal staff and councils, HONI and local landowners regarding the BWEC generally and the proposed Facility.
53. Public consultation: Landowners in the area were first notified of the proposed BWEC and the Facility in April 2010 by a mass mailing and notices in local papers, and invited to attend an initial public meeting that was held in June 2010. There were a number of meetings to which the general public was invited, including in December 2011. The landowners were again notified in April 2012 of the final public meetings and where they could obtain copies of the REA Application. The final public meetings were held on June 13 and 14, 2012 and included maps and descriptions of the proposed Facility. Copies of the final public meeting documents are attached hereto as Exhibit G, Tab 1, Schedule 3.⁷ A report on the consultations for the Facility is attached as Exhibit G, Tab 1, Schedule 4.
54. Each meeting consisted of multiple panels explaining key aspects of the BWEC and the Facility, and the process of developing, permitting, constructing, operating and decommissioning. Representatives of the Applicant were in attendance along with expert consultants to ensure that the appropriate subject matter experts were on hand to engage in discussion with attendees and provide detailed answers to any questions or concerns that were raised. A full record of public concerns raised and how they were addressed by the Applicant is included in the Consultation Report. A dedicated

⁵ Due to the voluminous nature of the Consultation Report, it is not included in this Application. However, a copy of the Consultation Report can be viewed at www.nexteraenergycanada.com.

⁶ The other reports that make up the REA application include: Archaeological Stage 1 Assessment Report, Archaeological Stage 2 Assessment Report, Construction Plan Report, Consultation Report, Decommissioning Plan Report, Design and Operations Report, Heritage Assessment Report, Natural Heritage Assessment and Project Description Report. These reports can be viewed at www.nexteraenergycanada.com.

⁷ Copies of the additional Public Meeting Handouts are included as Appendix A7 of the Consultation Report.

email account and toll-free number⁸ were made available to the public prior to the initial public meeting and will continue to be maintained by the Applicant until the BWEC is commissioned to allow open communication with interested parties. A communications and emergency response plan is included in the Design & Operations Report within the REA application outlining ongoing communication protocols. The Consultation Report and all draft ancillary reports were made available in draft form on the NextEra Energy Canada, ULC website: www.nexteraenergycanada.com, and in hard copy at the Municipalities' head offices. Certain reports were sent by mail to interested residents upon request.

55. Aboriginal Consultation: As detailed in the Aboriginal Consultation Report and as of the time of this application, no specific concerns related to the Facility or the BWEC have been raised by Aboriginal groups. The Applicant submits that the construction of the Facility will not adversely affect any constitutionally protected Aboriginal or treaty rights of the communities identified in the consultation process and should not result in any negative environmental effects that may be of concern to those communities.

⁸ Email: bluewater.wind@nexteraenergy.com; 1-877-257-7330 (in place until COD), dedicated phone number to be put in place after COD for the Applicant.

ABORIGINAL CONSULTATION REPORT

Appendix C

Aboriginal Consultation

ABORIGINAL (FIRST NATION AND MÉTIS) CONSULTATION REPORT

FOR:

PROPOSED BLUEWATER WIND ENERGY CENTRE

Varna Wind Inc.

(a wholly owned subsidiary of NextEra Energy Canada, ULC)

Report Updated as of June 26, 2012

TABLE OF CONTENTS

Executive Summary	1
1. Context.....	3
1.1 Description of Project.....	3
1.2 Regulatory Framework	6
1.3 NextEra’s Approach to Aboriginal Consultation	7
1.4 Aboriginal Protocols	10
1.5 Aboriginal Consultation Links to Natural Heritage and Archaeology REA Components	10
2. Aboriginal Communities with Potential Interest in the Project	14
2.1 Director’s List.....	14
2.2 Additional Communities Consulted	17
3. Consultation Activities Applicable to All Aboriginal Communities	21
3.1 Description of Activities.....	21
3.2 Additional Consultation Activities	30
4. Community-Specific Aboriginal Consultation.....	33
4.1 Chippewas of Kettle and Stony Point.....	34
4.2 Chippewas of the Thames	37
4.3 Chippewas of Aamjiwnaang	40
4.4 Walpole Island First Nation.....	44
4.5 Oneida Nation of the Thames.....	47
4.6 Historic Saugeen Métis	49
4.7 Munsee–Delaware First Nation.....	52
4.8 Moravian of the Thames Delaware First Nation.....	53
4.9 Saugeen Ojibway Nations (Chippewas of Saugeen, Chippewas of Nawash Unceded First Nation).....	54
4.10 Six Nations of the Grand River Elected Council.....	56
4.11 Haudenosaunee Confederacy Chiefs Council (Six Nations Confederacy Council and Oneida Council of Chiefs)	58

4.12 Métis Nation of Ontario	60
4.13 Summary of changes as a result of consultation activities.....	62
4.14 Summary of Out of Scope Input Received.....	63
5. Conclusion.....	64
6. Next Steps.....	65
LIST OF APPENDICES.....	68



Executive Summary

NextEra Energy Canada, ULC ("NextEra") has undertaken a thorough program of consultation for the Bluewater Wind Energy Centre project ("the Project", or "Bluewater"). The results of the program indicate there will be no impacts to Aboriginal or treaty rights or other environmental impacts that may be of concern to Aboriginal communities if the Project is approved and implemented with the mitigation outlined in the reports and studies that have been submitted in accordance with Ontario Regulation 359/09 ("the Regulation", or "the REA"). Additionally, no concerns have been expressed to date, or other information brought forward by Aboriginal communities that resulted in a need to make changes to the Project.

The Aboriginal Consultation Report describes NextEra's consultation program in detail. It includes evidence of compliance with the notice requirements under the Regulation; information-sharing that has taken place with First Nation and Métis communities; and, the activities undertaken by NextEra to cooperatively review the Bluewater project with those communities.

NextEra Energy Canada, ULC has been communicating with Aboriginal communities about its Ontario FIT projects since 2007. A Director's List of Aboriginal communities to be consulted for Bluewater was requested on August 6, 2010 and received on April 8, 2011. The list included eight Aboriginal governments (i.e. communities). Through inquiries made by NextEra, four additional communities have been included in Project consultation activities. Section 2 of the Aboriginal Consultation Report identifies all communities consulted with for the Project.

Section 3 of this Aboriginal Consultation Report describes both the consultation activities required under the Regulation, and additional activities undertaken by NextEra. Delivery of the required information and notices are summarized in Table 3.1.1. All required notices and information have been delivered, in compliance with the REA. Beyond those requirements, NextEra has made additional information and opportunities for dialogue about both the

Project specifically, and wind energy in general, available to all interested Aboriginal communities.

Section 4 describes the consultation activities undertaken with each individual community in relation to the Project. In many cases, this dialogue is ongoing. Communications and a collaborative approach will continue during the remaining planning, construction and operations phases for Bluewater.

Section 5 of the Aboriginal Consultation Report provides the concluding summary of consultation results to date. No impacts to Aboriginal or treaty rights, or to the natural environment are anticipated, given the results of the studies for the REA Table 1 Reports and NextEra's commitments for mitigation and follow-up. Section 6 further describes NextEra's commitments to ensure the veracity of those conclusions through ongoing communications with Aboriginal communities and a management system approach to address any unexpected issues or concerns that may be raised.

Appendixes to the Aboriginal Consultation Report include: relevant policy documentation; complete chronologies of all contacts with the affected communities; and, cross-references ("Tables of Concordance") to issues or values that were identified by some Aboriginal communities, which NextEra feels have been addressed in the REA Table 1 Reports (i.e. the reports submitted in fulfillment of the Bluewater renewable energy approval application to Ministry of Environment).

1. Context

Development on the Bluewater Wind Energy Centre began in 2006 by Canadian Green Power. In 2007, NextEra and Canadian Green Power began working together. This wind energy project is expected to have a maximum generating capacity of up to 60 megawatts. The wind farm will be located in Bluewater Township, with electrical interconnection extending into Huron East. At the maximum generating capacity, this wind project will produce enough energy for approximately 15,000 homes in Ontario. Bluewater has been awarded a Feed-in-Tariff contract by the Ontario Power Authority and is presently seeking a Renewable Energy Approval.

1.1 Description of Project

Varna Wind Inc. is proposing to construct a wind energy centre project in the Municipalities of Bluewater and Huron East in Huron County, Ontario. The project will be referred to as the Bluewater Wind Energy Centre (the "Project" or "Bluewater") and will be located on private lands east of Highway 21 in the vicinity of the shoreline of Lake Huron (see location map, below).

The Project will be owned and operated by Varna Wind Inc. ("Varna"), a subsidiary of NextEra Energy Canada, ULC ("NextEra"). NextEra's parent company is NextEra Energy Resources, LLC, a global leader in wind energy generation with a current operating portfolio of over 85 wind energy projects in North America.

The Project is located in Huron County, within the Municipalities of Bluewater and Huron East. The Project Study Area consists of the areas being studied for the wind farm components (Wind Energy Centre Study Area), as well as for the interconnection route area being studied for transmission lines to connect the Project to the electrical grid (Transmission Line Study Area). The Wind Energy Centre Study Area is generally bounded by Blackbush/Bronson Line to the west, Mill Road to the north, Concession V Road to the east, and Danceland Road/Staffa Road to the south, in the Municipality of Bluewater. The

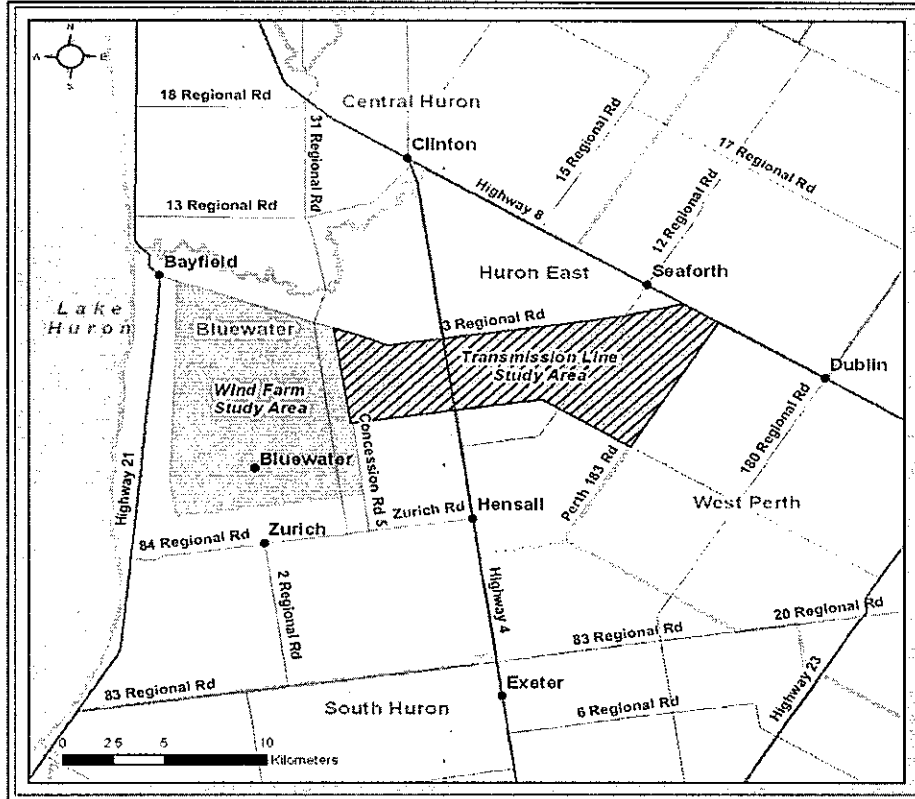
Transmission Line Study Area is located to the east of the Wind Energy Centre Study Area, and is generally bounded by Concession 5 Road to the west, Mill Road to the north, Huron Road and Perth 183 Road to the east, and Staffa Road to the south, extending into the Municipality of Huron East.

The Project components will be located over approximately 2,400 hectares (5,900 acres) of privately owned farmland, although the physical footprint of the project infrastructure is much smaller, at approximately 25 hectares (62 acres) (typically about 0.6 ha or 1.5 acres per turbine). Some overhead electrical lines are expected to be located in municipal right-of-ways. The electrical substation will be located on privately owned lands with lease arrangements. The major components of the Project are proposed to be:

- Up to 41 1.6 MW GE model wind turbine generator locations and pad mounted step-up transformers are proposed for permitting (a maximum of 37 turbines will ultimately be constructed);
- Laydown and storage areas (including temporary staging areas, crane pads and turnaround areas surrounding each wind turbine);
- Approximately 52 km of 34.5 kV underground electrical collection lines to connect the turbines to the proposed transformer substation;
- Approximately 24 km of 115 kV transmission line proposed along Centennial Road and Hensall Road from the proposed transformer substation to the existing Hydro One Seaforth Transformer Station;
- Approximately 40 km of turbine access roads; and,
- An operations and maintenance building.

Additional details are available in the Project Description Report.

Bluewater Project Location Map:



1.2 Regulatory Framework

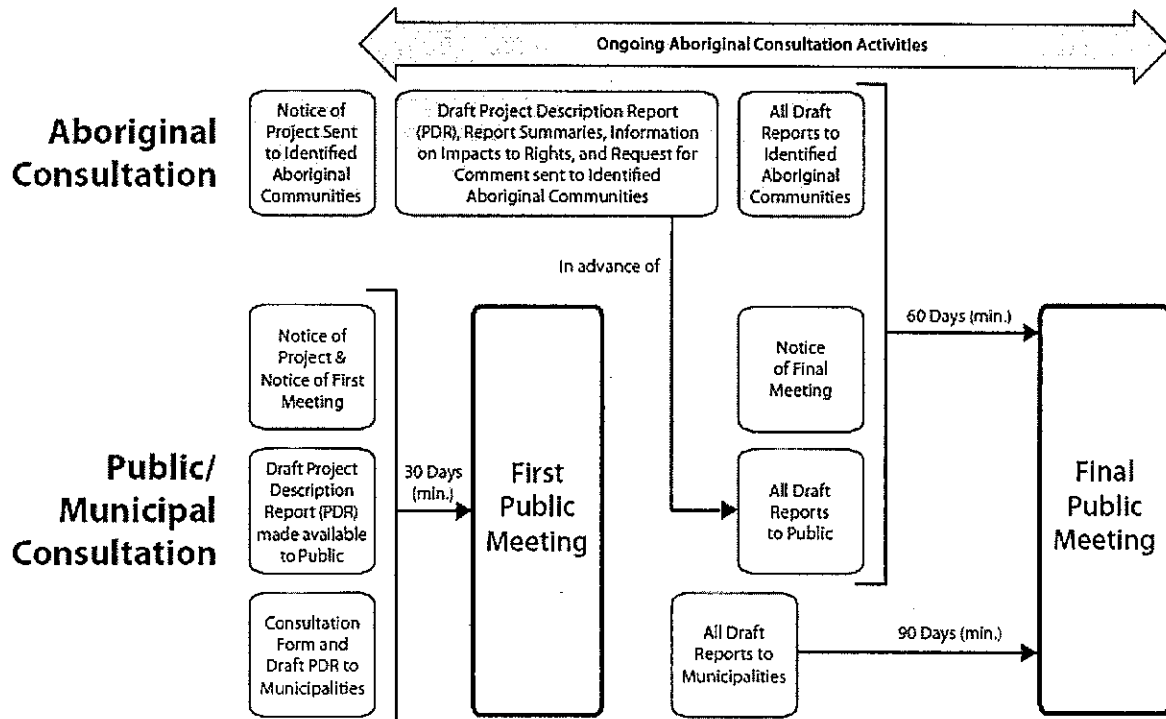
The Crown's Duty to Consult with Aboriginal peoples arises when a government considers an authorization or action that may affect Aboriginal rights or title. The Duty belongs to the Crown. It is grounded in the honour of the Crown and the Crown cannot delegate its Duty to a proponent. The Crown can, and in the case of Ontario Regulation 359/09, has delegated procedural aspects of its Duty to proponents. As an agent of the Crown, Ministry of Environment must ensure that the Duty to Consult has been discharged before taking a decision on a project that may impact Aboriginal rights or interests.

The Project is subject to approval under Ontario Regulation 359/09 (the "Regulation" or the "REA"). In addition, all such projects require a Feed In Tariff Contract ("FIT Contract") from the Ontario Power Authority. The REA contains specific actions that proponents must include in their procedural consultation with Aboriginal communities, and the FIT Contract application emphasizes both the importance of Aboriginal consultation and the applicant's commitment to conducting it in a thorough manner. The process of Aboriginal consultation is sometimes described analogously as "the path we walk together"¹, rather than as a specific step or task in a larger process. As a result, consultation in project development may not, and arguably should not, have a distinct start and end point (see Figure 1.2.1, below). Relationship-building is a very large part of the process.

Procedural consultation guidance to REA proponents is contemplated in a Ministry of Environment "Draft Aboriginal Consultation Guide for Preparing a Renewable Energy Approval Application" ("the Draft Guide"). The Draft Guide was issued in Summer 2011 and has not yet been finalized, however, proponents have been advised by MOE to have regard to it when planning and implementing their Aboriginal consultation programs.

¹ François Paullette, Fort Smith First Nation.

Figure 1.2.1: Aboriginal Consultation



Source: Technical Guide to Renewable Energy Approvals, Ministry of Environment, 2011 Figure 6

The proponent’s responsibility under the REA and FIT Contract is therefore to: seek to establish a process of information-sharing and dialogue with Aboriginal communities who may be affected by its Project; learn about Aboriginal values (rights, interests and way of life) that are relevant to the Project; and, seek mutually acceptable solutions that are within the proponent’s control, ability or authority to avoid or mitigate negative impacts.

1.3 NextEra’s Approach to Aboriginal Consultation

This section describes the general approach NextEra follows in carrying out Aboriginal consultation and the resources it is providing to Aboriginal communities support that process.

NextEra's approach to procedural consultation with interested First Nation and Métis communities is guided by a NextEra Energy Canada, ULC "First Nation and Métis Relationship Policy" ("NextEra's Policy"). NextEra's Policy is based on five key principles:

1. Fostering a collaborative working relationship with potentially impacted First Nation and Métis communities as early as practicable.
2. Understanding and recognizing applicable aboriginal and treaty rights and interests.
3. Understanding and respecting the cultural integrity of First Nation and Métis communities potentially impacted by NEEC's projects.
4. Fulfilling all delegated obligations to consult and (where applicable) accommodate First Nation and Métis communities.
5. Being open to discuss a broader relationship with potentially impacted First Nation and Métis communities and host First Nation and Métis communities.

A copy of NextEra's Policy is enclosed in Appendix A.

NextEra has also developed an "Ontario Projects - Archeological Protocol" document that seeks to establish a respectful and collaborative approach to project archaeology, with clear lines of communications and protocols to address significant finds. An external archaeological consultant reviewed the Protocol to ensure consistency with the Ministry of Tourism and Culture's 2011 "Standards and Guidelines for Consulting Archaeologists". It has also been circulated to interested Aboriginal communities for their review and comment. No specific comments have been received.

A copy of NextEra's Archaeological Protocol is enclosed in Appendix B.

NextEra has been actively communicating with all First Nation and Métis communities who express interest in its projects. In southern Ontario, these efforts have been ongoing since approximately 2007. Up to twenty Aboriginal communities, some of which have interest in

multiple projects, have been contacted for information-sharing for the eight NextEra wind energy projects with FIT Contracts, including Bluewater. Thirteen of those communities (see Section 2.1) were directly consulted about Bluewater, and this process will continue with them throughout the Project's life cycle.

In addition to the requisite information delivered pursuant to Ontario Regulation 359/09, each community has received Project-specific location, planning, process and schedule information. Communities have also been provided with general materials that include information on the wind industry and wind energy technology. This general information is meant to build an information foundation, on which more meaningful Project-specific consultations can be developed, and is comprised of:

1. A NextEra "Community Reference Materials" binder, with general industry, technology, mapping, web site, project summary and contact information. This binder has received compliments from community staff. A copy of the index from the most recent binder update is enclosed in Appendix C.
2. A NextEra general project location map (also in binder), which is reproduced below as Map 2.1.1.
3. A list of NextEra southern Ontario FIT projects, with key milestone dates to assist with planning consultation activities. The list is updated for any significant changes. A copy of the most recently updated list is enclosed in Appendix D.
4. An "Archaeological Communiqué", which describes: planned fieldwork; the responsible archaeologist; names of First Nation and independent monitors (where applicable); and, NextEra contact information. The communiqué is issued twice a year. A copy of the most recent communiqué is enclosed as Appendix E.
5. General community newsletters. A copy of the Bluewater "Wind Energy News" newsletters can be found in Appendix A of the Bluewater Public Consultation Report.

This multi-project experience helps NextEra increase its understanding of Aboriginal-related practices and potential issues. It also provides a good opportunity for communities to learn about wind energy generally, and the various NextEra projects specifically. As information is shared both by NextEra and the communities, the collective knowledge base grows and forms a basis for greater understanding and working together. Information that is shared and learned from one project can improve planning and decision-making on others.

NextEra also works with individual Aboriginal governments to discuss and seek agreement on providing them with appropriate capacity resources they may need to effectively participate in the consultation process. This may include independent archaeological monitoring, third party expertise for draft Project REA Table 1 Reports (see list in section 1.5, below), necessary administrative support and/or community meeting costs to review the Project, or projects. The scope of these discussions includes the project planning, construction and post-construction monitoring stages, however, as explained in NextEra's First Nation and Métis Relationship Policy, the company is open to discussing broader relationships.

1.4 Aboriginal Protocols

NextEra has regard to all consultation protocols and policies that are issued by Aboriginal governments with interests in a NextEra project. All communities being consulted for this Project with such protocols and policies are identified in the individual community consultation narratives in Section 4.0, below, and copies have been included in Appendix F.

1.5 Aboriginal Consultation Links to Natural Heritage and Archaeology REA Components

Over the course of development of the Project REA, First Nations and Métis communities have been provided with information and outcomes of specific studies related to the key

areas of natural and cultural environment. The draft reports and other documents (collectively, "the Project REA Table 1 Reports") provided to Aboriginal communities were:

- Project Description Report and update.
- Natural Heritage Assessment Report (and corresponding sign-off letter from Ministry of Natural Resources).
- Stage 1 and 2 Archaeological Assessment Reports and Heritage Assessment Report.
- Construction Plan Report (and corresponding sign-off letters from Ministry of Tourism, Culture and Sport).
- Design and Operations Report (including Noise Assessment Report).
- Decommissioning Plan Report.
- Water Assessment and Water Body Report.
- Wind Turbine Specification Report.
- "Plain language" summaries of REA reports.
- Shadow Flicker Report.
- Turbine Visualizations.
- Project location mapping, including study area location relative to reserves, claims and First Nation traditional territory/Métis traditional harvest territory.

In short, the information shared with Aboriginal communities touches on three key areas: (A) Natural Environment; (B) Cultural Environment; and, (C) Land.

(A) Natural Environment

Any Project activities that directly or indirectly have a negative impact on species, habitat or ecosystems that are used for food, ceremonial or social purposes that are integral to an Aboriginal right would be of immediate concern. NextEra received information from some communities about species or habitats of importance to those communities ("Aboriginal values"). Preparation of the Project REA Table 1 Reports took these values into consideration and is discussed for the applicable communities in Section 4, below, with cross-reference to the applicable Project REA Table 1 Report in Appendix G.

The overall conclusion of the Natural Heritage Assessment Report and the Water

Assessment and Water Body Report is that, with the mitigation measures proposed in the Project REA Table 1 Reports, this Project can be constructed and operated without any significant adverse residual effects that could harm the natural environment. Therefore, to the extent that an Aboriginal community has a right or interest that is based on use of the natural environment, there should be no significant impact.

Post-construction monitoring related to effects on wildlife, including birds and bats, will also be undertaken to confirm the foregoing conclusion. Please refer to the Project REA Table 1 Reports, submitted as part of the REA Application for this Project for specific descriptions of potential effects and the mitigation measures and monitoring proposed. NextEra has sited its facilities appropriately and will implement all environmental mitigation and monitoring as set out in the Project REA Table 1 Reports. NextEra will continue to work with Aboriginal communities concerning potential environmental concerns during construction and post-construction monitoring, as explained in Section 6 "Next Steps", below.

(B) Cultural

NextEra has completed Stage 1 and 2 archaeological studies for the Project. The Stage 2 assessment resulted in the identification of 25 archaeological sites, including seven historic Euro-Canadian and 18 pre-contact Aboriginal. Of those, four historic Euro-Canadian sites were recommended for a Stage 3 assessment prior to ground disturbance to document any artifacts that may be present. NextEra will continue to work with Aboriginal communities regarding potential archaeological concerns through monitoring during construction, as explained in Section 6 "Next Steps", below

NextEra submits that its ongoing communications and Archaeological Protocol, the presence of an independent First Nations monitor, the results of the archeology work to date and the planned monitoring during ground disturbance activities, will result in no significant cultural impacts that could be of concern to Aboriginal communities.

(C) Land

A strength of claims analysis was completed by outside legal counsel in order to: (a) confirm the completeness of the Directors' List; and (b) fully understand the existing treaties and claims within the Project area, and guide NextEra's consultation program. The strength of claim analysis involved consideration of the Huron Tract Treaty of 1827; and (b) the Nanfan Treaty of 1701. The former was entered into with Chippewa bands in the region, and took a number of years before ultimate signing in 1827. Since then, there have been a number of discrepancies and disputes associated with the Huron Tract Treaty (and its companion Longwoods Treaty). NextEra has considered these treaty rights in its consultation efforts with the Chippewas of the Thames, the Chippewas of Kettle and Stony Point, the Chippewas of Aamjiwnaang, and Walpole Island First Nation (all of which are identified on the Bluewater Director's List (rights)).

The 1701 Nanfan (or Albany) Treaty made between the British Crown and the (then) five Iroquois Nations or Haudenosaunee Confederacy covers virtually all of southern Ontario and therefore the Project is within the Nanfan Treaty area. NextEra has had discussions with Nanfan Treaty successor rights holders in relation to all of NextEra's proposed wind farms, including considerations as to the ability to exercise such treaty rights over private lands as well as the impact of the Bluewater Project on species that migrate across private and public lands.

NextEra does not believe that the Project will not result in significant impacts to any species that may be hunted pursuant to the Nanfan Treaty or Huron Tract Treaty (see also "(A) Natural Environment" above). Consequently, NextEra submits that the Project will not impact on any existing or asserted treaty rights.

2. Aboriginal Communities with Potential Interest in the Project

This section describes the First Nation and Métis governments that have been identified as having potential interests in approval, construction and operation of the Project.

As required by O.Reg.359/09, the draft Project Description Report was provided to the Director of the MOE on July 26 and updated August 6, 2010 in order to obtain the Aboriginal Communities List, as per s.14 (1)(b). The list identifies Aboriginal communities who:

- (i) Have or may have constitutionally protected Aboriginal or treaty rights that may be adversely impacted by the project, or
- (ii) Otherwise may be interested in any negative environmental effects of the project.

The list was received via letter dated April 8, 2011.

2.1 Director's List

The following table identifies communities included in the Director's List of April 8, 2011 (left hand column) and the Director's rationale for including them (right hand column).

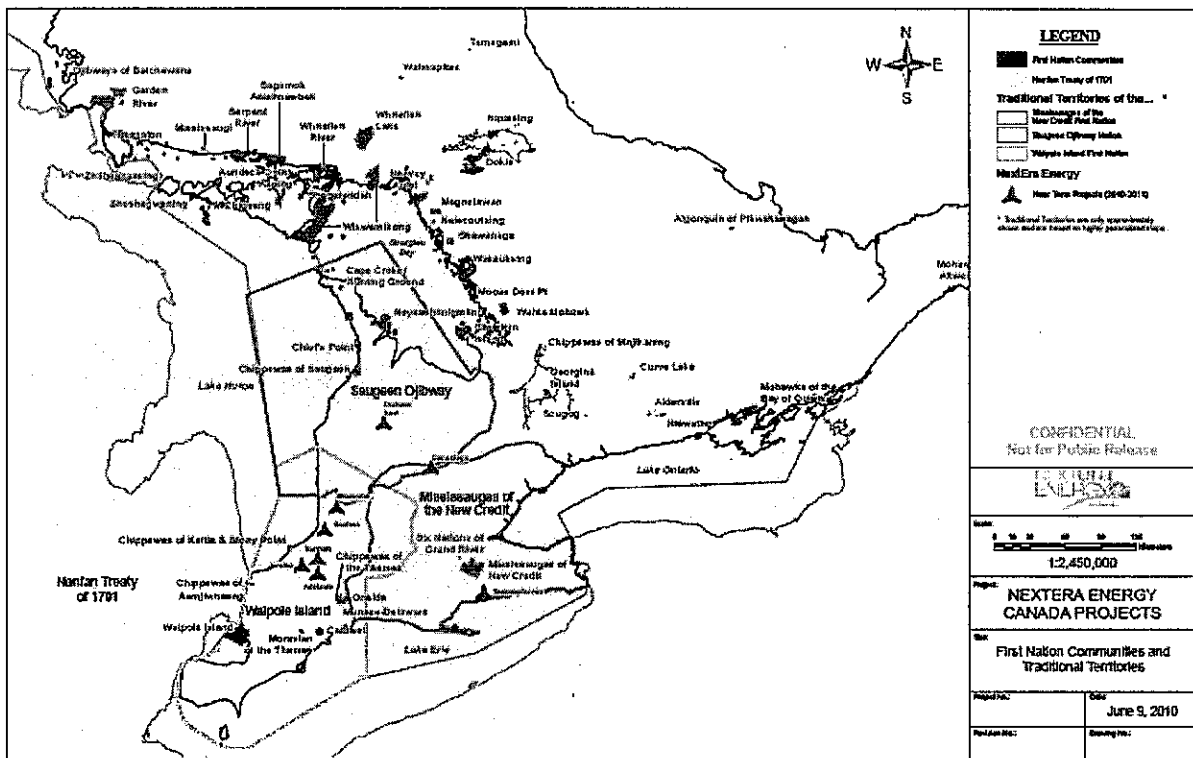
TABLE 2.1.1 ABORIGINAL COMMUNITIES IDENTIFIED

Director's List	Notes
Chippewas of Kettle and Stony Point Kettle Point 44	Identified as may have constitutionally protected Aboriginal or treaty rights.
Chippewas of the Thames First Nation Chippewas of the Thames 42	Identified as may have constitutionally protected Aboriginal or treaty rights.
Aamjiwnaang First Nation Sarnia 45	Identified as may have constitutionally protected Aboriginal or treaty rights.
Bkejwanong Territory Walpole Island First Nation Walpole Island 46	Identified as may have constitutionally protected Aboriginal or treaty rights.
Oneida Nation of the Thames Oneida 41	Identified as may have constitutionally protected Aboriginal or treaty rights.

Director's List	Notes
Historic Saugeen Métis	Identified as may have constitutionally protected Aboriginal or treaty rights.
Munsee-Delaware First Nation Munsee-Delaware Nation 1	Identified as may have interests in potential negative environmental effects.
Delaware Nation Moravian of the Thames Moravian 47	Identified as may have interests in potential negative environmental effects. Referred to in this report as Moravian of the Thames Delaware First Nation.

MAP 2.1.1 Aboriginal Communities and NextEra Ontario FIT Projects

Map 2.1.1 shows the location of southern Ontario First Nations in relation to the Project location, and to NextEra's other eight Ontario FIT projects. Available information for traditional territory areas are shown, as well as the approximate area of assertion for the 1701 Nanfan Treaty.



2.2 Additional Communities Consulted

NextEra determined that additional Aboriginal communities expressed interests in the Project. In some cases, the interest was based on proximity of the Project to a traditional territory, or traditional Métis harvest territory. In other cases, the Project is located in an area where treaty rights are asserted, as explained in Section 1.5 (C), above. The following communities were included in the consultation activities described in this report. The rationale for doing so is also set out in Table 2.2.1, below.

Table 2.2.1 Additional Communities Consulted

Additional Communities Consulted	Rationale
Chippewas of Saugeen First Nation Chippewas of Nawash Unceded First Nation Collectively referred to as the Saugeen Ojibway Nations ("SON")	SON asserts a traditional territory that extends to a point just north of the Project (see Map 2.1.1). Given the proximity of SON's traditional territory to the Project location, and the possibility for impacts to be connected by pathways (migratory routes, for example), NextEra has engaged with SON to consult about this aspect of the Project, as well as archaeological matters.
Métis Nation of Ontario ("MNO")	MNO asserts the Georgian Bay Traditional Harvest Territory ("GBTHT"), which lies somewhere north of the Project (see Map 2.2.1). Given the proximity of MNO's GBTHT to the Project location, and the possibility for impacts to be connected by pathways (migratory pathways, for example), NextEra has engaged with MNO to consult about this aspect of the Project.

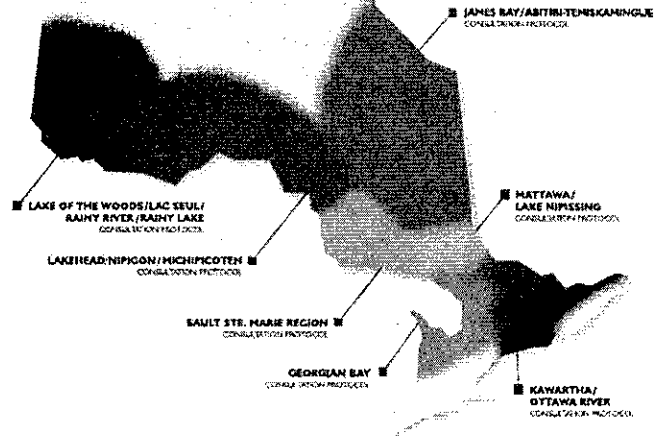
Additional Communities Consulted	Rationale
<p>Haudenosaunee Confederacy Chiefs Council (HCCC)</p>	<p>HCCC assert a treaty right to harvest within the 1701 Nanfan Treaty area (see Map 2.2.2), including both Crown and private lands. NextEra engaged with HCCC, through its delegated staff secretariat, the Haudenosaunee Development Institute (“HDI”) about potential impacts to the natural environment, which may affect harvest activities.</p>
<p>Oneida Council of Chiefs</p>	<p>Oneida Council of Chiefs is one of the traditional councils within the Haudenosaunee Confederacy Council. Oneida Council of Chiefs participates through the HDI process, and was engaged by NextEra as part of HDI’s evaluation of the Project.</p>
<p>Six Nations of the Grand River Elected Council (SNEC)</p>	<p>SNEC have issued a 2011 Consultation and Accommodation Policy, which asserts SNEC’s responsibility to protect the air, land and water within the 1701 Nanfan Treaty area (see Map 2.2.2). NextEra engaged with SNEC to consult about potential impacts to the natural environment.</p>

MAP 2.2.1 Métis Nation of Ontario Traditional Harvest Territories of Southwestern Ontario

Map 2.2 describes approximate boundaries of Métis Nation of Ontario Traditional Harvest Territories located in southwestern Ontario. Consultation protocol committees, as of 2010, are also indicated. The Project location and study area are not located in a Traditional Métis Nation of Ontario Harvest Territory, but is proximate (north of) to the Georgian Bay Traditional Harvest Territory.

REGIONAL CONSULTATION PROTOCOLS

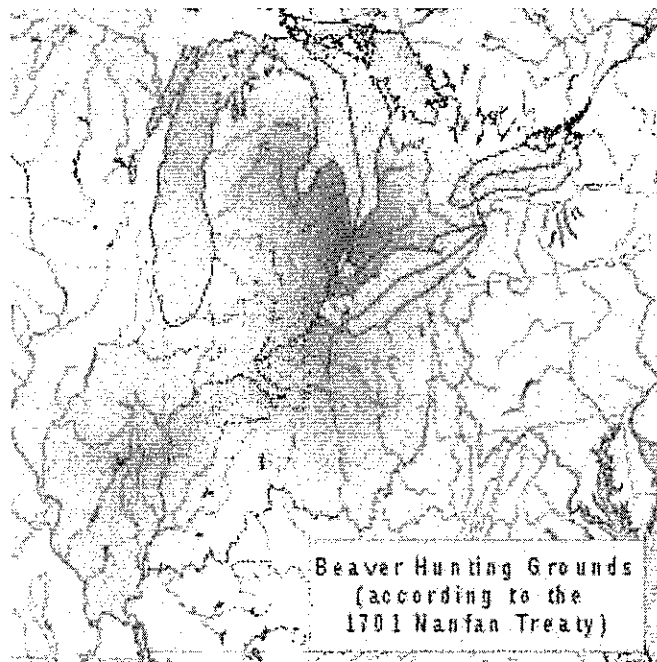
For more information on the Protocol and the MNOC's consultation work visit www.mnoc.org



Map Source: Métis Nation of Ontario Annual Report, 2009-2010

MAP 2.2.2 1701 Nanfan Treaty Beaver Hunting Grounds

Map 2.2.2 identifies the approximate area of the 1701 Nanfan Treaty, and the so-called beaver hunting grounds, between the British Crown and the, then, Five Nations Iroquois Confederacy, or Haudenosaunee. Due to the location of the Project within this area, Aboriginal communities who did not appear on the Director's list but who asserted rights or interests pursuant to the Nanfan Treaty were added for consultation purposes.



3. Consultation Activities Applicable to All Aboriginal Communities

Since the start of the REA process, a variety of consultation activities have taken place to communicate with local and interested Aboriginal communities and to seek input, as required under O.Reg. 359/09.

3.1 Description of Activities

This section gives an overview of the required consultation activities undertaken to ensure local and interested Aboriginal communities were made aware of and kept informed of Project activities and had the opportunity to provide comments, questions and concerns regarding the Project. For a detailed list of compliance activities required under O. Reg. 359/09, methods of consulting, dates and communities involved, please see Table 3.1.1, below.

3.1.1 Preparation of draft PDR

A draft PDR was prepared for the Project, as per Ontario Regulation 359/09, and submitted to the Director of Renewable Energy Approvals July 26, 2010 and updated August 6, 2010.

3.1.2 Obtain Director's List

The Director's List of Aboriginal communities for the Project was requested on August 6, 2010 as per s.14 (1)(b). The list was received via letter dated April 8, 2011.

Applicant's Aboriginal Consultation Process under O. Reg. 359/09

1. Prepare draft Project Description Report (PDR)
2. Obtain Aboriginal Consultation list
3. Provide Notices
4. Distribute draft PDR to communities
5. Hold 1st public meeting
6. Integrate comments
7. Circulate report summaries
8. Discuss and work with communities; integrate comments
9. Provide draft project documents to communities
10. Discuss and work with communities; integrate comments
11. Hold final public meeting
12. Integrate comments
13. Prepare REA application
14. Submit REA application and inform communities

Source: Draft Aboriginal Consultation Guide for preparing Renewable Energy Application, Ministry of the Environment, Spring 2011, pp. 8

3.1.3 Notice of Proposal to Engage in a Renewable Energy Project and Notice of Open House #1

The first open house notice was distributed May 26, 2010 to all Aboriginal communities NextEra had identified with a right or interest related to the Project. Note that the Director's list had not been received at this time. Notices were also published in newspapers as described in section 3.1.15, below.

An additional public open house #1 was held on December 2011. Notice of this open house was circulated through written correspondence dated November 2, 2011 to all Aboriginal communities on the Director's list, as well as the additional communities identified by NextEra (Tables 2.1.1 and 2.2.1, above).

Project Notices were also placed in local newspapers that serve communities within the Project study area. In addition, notices were published in the *Turtle Island News*, which is broadly circulated and accessible on-line in the Aboriginal communities associated with this Project. No other appropriately scheduled and published community newspapers were available. Although many of the communities distribute community newsletters locally they were not compliant with the requirements of Ontario Regulation 359/09, due to circulation frequency, coverage or method. Similarly, the *Métis Voyageur* could not be utilized due to its publication schedule.

3.1.4 Distribute Draft PDR to Communities

The draft PDR was distributed initially as part of the NextEra "Community Reference Materials" binder, delivered to Aboriginal communities in June, July, September and October 2010 as part of a series of meetings and contacts with community consultation staff. Delivery dates are noted in the individual community summaries in section 4, below. The updated PDR was distributed through written correspondence dated November 2, 2011 to all communities on the Director's list, as well as the additional communities identified above (Tables 2.1.1 and 2.2.1, above).

3.1.5 Hold First Public Meeting

The first public meeting for the Project was held at the Bluewater Community Centre on June 28, 2010. A second ("first") public open house #1 was held on December 2011. No attendees identified themselves as Aboriginal community leadership or representatives.

3.1.6 Integrate Comments

Comments received from the public at the Open Houses, and through ongoing communications were addressed and integrated as part of the REA process. No comments specific to Aboriginal values or interests were submitted at the open houses.

General comments received from Aboriginal communities were provided to NextEra's environmental consultants to consider in preparing the draft REA Table 1 Reports. These general issues are described for each community that provided them, in Section 4, and in the Tables of Concordance in Appendix G.

One community, Historic Saugeen Métis, submitted a written list of questions concerning the Project draft PDR, which is described below in Section 4.6. Their questions primarily related to REA reports which were yet to be developed and would be addressed as part of that process.

3.1.7 Circulate Report Summaries

Project REA Table 1 Report summaries, or "plain language summaries", were prepared and delivered with the complete set of draft Project REA Table 1 reports (see 3.1.9, below).

3.1.8 Discuss and Work with Communities

The process of discussing the Project and working with Aboriginal communities began far in advance of delivering the requisite notices and reports, continued through the period of open houses and report deliveries, and is ongoing. NextEra is working with multiple Aboriginal communities, and for multiple projects that are of interest to them. This has resulted in regular, ongoing communications aimed at finding common ground and deeper understanding of all parties' interests. Please see the Project-specific description of consultation activities in Section 4.0, below.

3.1.9 Draft REA Reports and Report Summaries

As per O. Reg. 359/09 S.16 (5) (c and d), the draft Project REA Table 1 Reports were sent to each Aboriginal community on the Project distribution list (i.e. the Director's List plus the additional communities identified by NextEra) on March 15, 2012 in both hard copy and CD versions.

Each community was requested to provide views related to:

- Anticipated adverse impacts the Project may have on constitutionally protected Aboriginal or treaty rights;
- Other concerns about potential negative impacts to the environment they anticipated, and;
- Any suggestions for mitigating impacts they identified.

Written comments or feedback regarding the draft REA Table 1 Reports was requested, so that it could be considered during the planning stages of the Project and for inclusion in the REA application. NextEra also offered to meet with communities regarding the REA reports, so that any comments, concerns or issues could be conveyed and reflected in the REA, if not addressed directly with those communities.

3.1.10 Discuss and Work with Communities

The process of discussing the Project and working with Aboriginal communities began far in advance of delivering the requisite notices and reports, continued through the period of open houses and report deliveries, and is ongoing. NextEra is working with multiple Aboriginal communities, and for multiple projects that are of interest to them. This has resulted in regular, ongoing communications aimed at finding common ground and deeper understanding of all parties' interests. NextEra is addressing, or has addressed requests for capacity assistance to help Aboriginal communities review and provide informed comment on the draft Project REA Table 1 Reports.

Please see the Project-specific description of consultation activities in Section 4.0, below.

3.1.11 Hold Final Open House(s)

This notice was distributed through written correspondence dated April 11, 2012 to all communities on the Director's list, as well as the additional communities identified. Notices were also published in newspapers as described in section 3.1.15, below.

The Open Houses were held on June 13 and 14, 2012. Two open houses were held to cover the two affected municipalities. No attendees identified themselves as Aboriginal community members or representatives.

3.1.12 Integrate Comments

Comments received from the public at the Open Houses, and through ongoing communications were addressed and integrated as part of the REA process. Furthermore, NextEra has provided copies of the draft text from section 4 below, to the relevant Aboriginal community for their review and comment. As of the date of writing this report, no responses have been received on this report's text.

3.1.13 Prepare REA Application

This consultation report has been prepared as part of the Project REA application, and reflects the consultation work completed to date.

3.1.14 Submit REA Application and Notify Communities

NextEra has an established practice of notifying interested Aboriginal communities upon filing its REA applications, upon receipt of the “application complete” status from the Ministry of Environment, and upon receipt of the Ministry Environment posting of its REA decision. These letters will be sent to all Aboriginal communities on the Director’s List for the Project and the additional communities NextEra identified, to notify them that the Project’s REA has been filed.

The following Table summarizes NextEra’s compliance with Ontario Regulation 359/09 notice and information requirements for Aboriginal consultation

Table 3.1.1 Summary of REA Notification Compliance

The following table summarizes the dates, method and recipients of the requisite notices under Ontario Regulation 359/09 for the Project.

O/Reg. 359/09 Section	Action Required	Date Completed	Aboriginal Community	Method
14	Request Director’s List	Requested August 10, 2010 (with submission of updated PDR) Received April 8, 2011	Communities Identified: Chippewas of Kettle and Stony Point Chippewas of the Thames First Nation Aamjiwnaang First Nation Bkejwanong Territory Walpole Island First Nation Oneida Nation of the Thames Historic Saugeen Métis Munsee-Delaware First Nation Delaware Nation Moravian of the Thames	Via letter from Ministry of the Environment
15.3	Publish Notices in Aboriginal Community Newspaper(s)	The date of the first Public Meeting (PM1) was June 28, 2010 in the Municipality of Bluewater (Zurich) and December 7,		

O/Reg. Section	Action Required	Date Completed	Aboriginal Community	Method
		2011 in the Municipality of Huron East (Seaforth). Note: The final public meetings were held on June 13 and 14 in the Municipality of Huron East (Seaforth) and the Municipality of Bluewater (Varna).		
	Notice of Proposal	December 21, 2011		Turtle Island News
	First Public Meeting – Municipality of Bluewater	November 2 and 30, 2011		Turtle Island News
	First Public Meeting – Municipality of Huron East	November 2 and 30, 2011		Turtle Island News
	Final Public Meeting - Municipality of Huron East	April 11 and June 6, 2012		Turtle Island News
	Final Public Meeting – Municipality of Bluewater	April 11 and June 6, 2012		Turtle Island News
15.5.ii	Deliver Notices to all Aboriginal Communities			
	Notice of Proposal/Public Meeting #1 – Municipality of Bluewater	May 26, 2010	Chippewas of Kettle and Stony Point Chippewas of the Thames First Nation Aamjiwnaang First Nation Bkejwanong Territory Walpole Island First Nation Oneida Nation of the Thames Munsee-Delaware First Nation Delaware Nation Moravian of the Thames <i>(Note: The Director's List had not been issued at this time.)</i>	Notice (only) delivered via Canada Post. No covering letters.
	Public Meeting #1 – Municipality of Huron East	November 2, 2011	Chippewas of Kettle and Stony Point Chippewas of the Thames First Nation Aamjiwnaang First Nation Bkejwanong Territory Walpole Island First Nation Oneida Nation of the Thames Historic Saugeen Métis Munsee-Delaware First Nation Delaware Nation Moravian of the Thames Chippewas of Saugeen First Nation Métis Nation of Ontario ("MNO") Haudenosaunee Confederacy Chiefs Council Oneida Council of Chiefs Six Nations of the Grand River Elected Council <i>(Note: To save space, this list is not duplicated in the table. Where all of the above communities were involved, the notation "All communities" appears.)</i>	Written correspondence delivered via courier. See Appendix I.1 for covering letters

O/Reg. Section	Action Required	Date Completed	Aboriginal Community	Method
	Public Meeting #2 – Municipality of Bluewater and Huron East	April 11, 2012	All communities	Written correspondence delivered via courier. See Appendix I.4 for covering letters
16(1)	Hold at least two public meetings.	The date of the first Public Meeting (PM1) was June 28, 2010 in the Municipality of Bluewater (Zurich) and December 7, 2011 in the Municipality of Huron East (Seaforth). Note: The final public meetings were held on June 13 and 14 in the Municipality of Huron East (Seaforth) and the Municipality of Bluewater (Varna).	No Aboriginal community members of representatives identified themselves as such at the two public meetings.	
16.(2)(c)(d)	Make paper copies of draft PDR available at least 30 days prior to PM1. Distribute draft PDR at least 30 days prior to PM1.	Original draft PDR was delivered as part of Community Reference materials in June, July, September and October 2010. Updated PDR was delivered November 2, 2011.	All communities.	Paper copy of updated PDR transmitted by written correspondence delivered via courier. See Appendix I.1 for covering letters
16(1)	Hold at least two public meetings.	The date of the second Public Meeting (PM2) was June 13, 2012 (Seaforth) and June 14, 2012 (Varna).	No Aboriginal community members of representatives identified themselves as such at the two public meetings.	
16.(5)(c)	Make paper copies of draft REA (Table 1) reports available at least 60 days before PM2.	March 15, 2012	All communities.	One paper copy and 2 CD copies transmitted by written correspondence and delivered via courier. See Appendix I.3 for covering letters
16.(5)(d), 16.(6)	Distribute drafts of REA (Table 1) reports. Reports distributed were: <ul style="list-style-type: none"> Natural Heritage Assessment Water Body and Water Assessment Heritage Assessment Stage 1 and 2 Archaeological Assessment Project Description Construction Plan 	March 15, 2012	All communities.	One paper copy and 2 CD copies transmitted by written correspondence and delivered via courier. See Appendix I.3 for covering letters

O/Reg. Section	Action Required	Date Completed	Aboriginal Community	Method
	<ul style="list-style-type: none"> Design and Operations Decommissioning Plan Plain Language Report Summaries 			
	Sign-off Letters from: Ministry of Natural Resources Ministry of Tourism, Culture and Sport	April 12, 2012	All communities.	One paper copy and one CD copy transmitted by written correspondence and delivered via courier. See Appendix I.4 for covering letters.
	Other Reports: <ul style="list-style-type: none"> Shadow Flicker Turbine Visualizations Updated Reports: <ul style="list-style-type: none"> Natural Heritage Assessment Cultural Heritage Assessment Stage 2 Archaeology Assessment 	April 12, 2012	All communities.	One paper copy and one CD copy transmitted by written correspondence and delivered via courier. See Appendix I.4 for covering letters.
17.(1)1.	Distribute draft PDR: First Draft Updated Draft	See 16.(2)(c) and (d), above. See 16.5(d), 16.(6). Above		
17.(1)2.	Provide information on adverse impacts to any Aboriginal or treaty rights identified by the community.		No adverse impacts had been identified or were anticipated, other than those identified in the draft Project REA Table 1 Reports, including the plain language summaries, all of which were delivered to Aboriginal communities.	
17.(1)3.i.	Distribute a summary of all draft REA (Table 1) reports.	March 15, 2012.	All communities.	One paper copy and 2 CD copies transmitted by written correspondence and delivered via courier. See Appendix I.3 for covering letters.
17.(1)4.	Make a written request for information relevant to REA.	March 15, 2012.	All communities.	Written correspondence delivered via courier. See Appendix I.3 for covering letters.
17.(1.1)(a)	Make the s. 17.(1)4 written request before making documents under 16.(5) available.	See 16.(5) and 17.(1)4, above.		
17.(2)(a)	Communicate with each community about any constitutionally protected aboriginal or treaty rights that the community has identified as being adversely impacted	2007 to present and will continue in a manner and frequency as may be agreed to with each Aboriginal community.		See Aboriginal Consultation report, sections 3 and 4.
17.(2)(b)	Communicate with each community about measures	2007 to present and will continue in a		See Aboriginal Consultation report,

O/Reg. 359/09 Section	Action Required	Date Completed	Aboriginal Community	Method
	for mitigating any adverse impacts referred to in clause (a), including any measures identified by the community	manner and frequency as may be agreed to with each Aboriginal community		sections 3 and 4.
54.1(c) and (v)	Give copies of Notice of Draft Site Plan	December 19, 2011	All communities.	Paper copy transmitted by written correspondence delivered via courier. See Appendix I.2 for covering letters.
54.1(d) and (e)	Make copies of Draft Site Plan available and distribute	December 19, 2011	All communities.	Paper copy transmitted by written correspondence delivered via courier. See Appendix I.2 for covering letters.

3.2 Additional Consultation Activities

In order to foster informed ongoing dialogue and engagement about the Project, and other NextEra projects, NextEra also carried out a number of additional Aboriginal consultation-related activities (i.e. beyond those considered in Ontario Regulation 359/09) with all Aboriginal communities noted in Section 2 of this report, as follows:

1. In May 2010, NextEra offered to host leadership from all Ontario Aboriginal communities with potential interests in NextEra Projects, at the CanWEA seminar, titled "Building the Wind Energy Supply Chain in Canada", held on June 9-10, 2010 in Toronto. The purpose was to offer broader information about the wind energy industry that would be of potential interest beyond procedural consultation under the REA and have a chance to meet in person. Three communities sent representative to this seminar out of over twenty invitations offered, and two attended the conference.
2. NextEra has offered to make presentations about its projects to Aboriginal leadership and communities and has done so whenever invited. This includes presentations to leadership, committees of council and attendance at community events. These actions are detailed in the individual consultation summaries in Section 4, below.

3. NextEra has established a practice of circulating an "Archaeological Communiqué" to all Aboriginal communities with interests in its projects; two communiqués have been issued to date (Fall 2011 and Spring 2012). The communiqué describes planned field work, its timing, the consulting archaeologist and contact information for more information, and for the appropriate NextEra representatives.
4. NextEra has also provided capacity funding for a fully independent First Nations archeology monitor for the Project. The monitor, Brandy George of Brandy George Cultural Research Inc. is a licensed Ontario archaeologist and First Nations person. The monitor's mandate is to liaise with interested Aboriginal communities to obtain any relevant information for potential locations of cultural and spiritual importance, and to monitor and report on the activities of the consulting archaeologist's field crews. Her reports are available to all First Nations communities, and are specifically provided to Oneida Council of Chiefs, Kettle & Stony Point First Nation, Aamjiwnaang First Nation and Walpole Island First Nation. To date, the independent monitor has raised no concerns and been satisfied with the consulting archaeologist's fieldwork.
5. NextEra also offers to host field orientation meetings at the outset of archaeological fieldwork. The field orientation meetings were a suggestion from one of the Project Aboriginal communities. They are meant to be an opportunity for community staff and leadership to meet the consulting archaeologist on site, discuss the proposed work and review contact information for NextEra's, "Ontario Projects - Archaeological Protocol". While only one community has responded to these invitations to date, they will continue to be offered as part of the regular Archaeological Communiqué summaries issued twice yearly, prior to the start of fieldwork.
6. NextEra has prepared and delivered a "Community Reference Materials" binder containing: general wind industry and technology information; project location mapping; additional information sources; relevant project information, such as newsletters; and, NextEra contact information. The binder is meant to provide a quick reference for staff or for community members. The initial binder included the

Bluewater draft Project Description Report. One update to the Binder has been circulated, which included the “Bluewater Project: Wind Energy News” newsletter to provide current project status. Please see Section 4 for dates of delivery to individual communities.

7. NextEra distributed project summary tables in the Fall 2011 with information on project locations, nameplate capacities, number of turbines, and current status of fieldwork. To assist Aboriginal community staff with planning for report reviews and related consultation activities an additional summary table was distributed in Spring 2012 with key milestone dates and lists of the Project REA Table 1 Reports to be produced. Copies of these summaries are found in Appendix D.
8. In order to be proactive at all stages of REA development, there has been, and continues to be ongoing personal, telephone and e-mail contact with staff in Aboriginal communities. The number, scope and frequency of these ongoing efforts are illustrated by the Chronologies of Communication reproduced in Appendix H. These Chronologies represent the broader effort of communication, information sharing and engagement across all NextEra FIT projects. Project-specific summaries have been extracted in a narrative for each community in Section 4 that outline the process, discussion and issues, which are specific to Bluewater.
9. NextEra is developing initiatives that seek to establish broader relationships with Aboriginal communities, including: an “opportunities outreach” program to provide information on wind energy and company opportunities in employment and procurement; and, a scholarship program.
10. The draft text of the community summaries in Section 4 of this report was forwarded to individual Aboriginal communities for comment and to ensure that this report adequately reflects any project-related comments received.

4. Community-Specific Aboriginal Consultation

This section builds on the description of required and additional consultation activities in Section 3.0 that are applicable to all communities. It describes the process and results of consultation for each individual community in a narrative format, with specific reference to this Project.

The purpose of Aboriginal engagement as it relates to the Project is to engage interested and local Aboriginal communities in a way that is meaningful and respectful of their Aboriginal and treaty rights and interests in the Project area.

As can be seen from the following sections of this report, the degree of consultation and engagement with Aboriginal communities varies. Although a consistent effort has been made to engage them, not each and every community has responded with the same degree of interest. While NextEra does offer to assist where capacity is needed to enable meaningful participation, each community responds according to the community's own priorities. A wind farm proposal may be only one of any number of issues, events or other matters which community leadership and staff are addressing.

Supporting data for this section is included in the following Appendixes:

- i. Appendix H Chronologies of communication with each community.
- ii. Appendix I Copies of covering letters accompanying information required to be delivered for the REA.
- iii. Appendix F Copies of Aboriginal government consultation protocols and policies.
- iv. Appendix G "Tables of Concordance" that cross-reference lists of Aboriginal values provided to NextEra with Project Table 1 Report sections that address them.

Although the Appendixes provide supporting documentation, each community summary, below is intended to provide a summary description of efforts made, the results achieved and the plans going forward. Updates to these summaries will be provided as meaningful

developments take place, and/or as requested by Ministry of the Environment to assist it in evaluating the Project REA.

4.1 Chippewas of Kettle and Stony Point

Communications and information sharing with Chippewas of Kettle and Stony Point First Nation (“Kettle and Stony Point”) began in 2007 for the Bluewater project. Please see Appendix H.1 for a complete chronology of all communications concerning the five projects of interest to Kettle and Stony, including Bluewater.

All requisite delivery of REA notices and information have been completed, as more specifically set out in Table 3.1.1, above.

The Bluewater project was specifically identified in NextEra’s first “Community Reference Materials” binder, which was developed as a handy reference guide for Aboriginal community staff. The binder included the draft Bluewater Project Description report as well as map of all Ontario projects and general industry and company information. This information was delivered at a meeting with Kettle and Stony Point leadership and staff on June 7, 2010. The binder was updated and delivered to Kettle and Stony Point staff November 11, 2011. It included the NextEra Spring 2011 “Bluewater, Goshen, Jericho Wind Energy News” and web site address to obtain Project information and draft Project REA Table 1 reports.

The June 7, 2010 meeting was in direct response to information received from the independent First Nations Archaeological monitor, Brandy George of Brandy George Cultural Research Inc. As a member of Kettle and Stony Point, and in her monitor role reporting to Kettle and Stony Point leadership, Ms. George had been made aware of potential issues of interest to Chief Liz Cloud. On June 7, 2010, NextEra met with Chief Cloud and two Council environment portfolio holders. Through that discussion, it was determined that many of the issues of interest related to an existing wind farm owned by SkyGen, located immediately adjacent to Kettle and Stony Point community. Other issues were identified, however, that related to this project and potential impacts to the natural environment. These issues were

sent to NextEra's environmental consultants to be considered as part of their preparation of the draft Project REA Table 1 Reports. A "Table of Concordance" cross-referencing the issues/questions to sections of the relevant reports addressing these questions and issues is set out in Appendix G.1. NextEra believes these issues have been addressed in the draft Project REA Table 1 Reports.

In November 2010, Kettle and Stony Point created a staff role with responsibility for consultation. NextEra contacted the new Communications Relations Officer ("CRO") in December 2010, provided overview information of all NextEra projects and offered to arrange a meeting to discuss all projects of interest to Kettle and Stony Point. A number of follow-up offers to meet were sent and a meeting with the CRO, First Nation Manager and Council Environment Committee took place on July 19, 2011. NextEra gave a presentation on all Ontario projects with a specific focus on the five projects of direct interest to Kettle and Stony Point. Issues raised at that meeting which could not be answered at that time were also sent to NextEra's environmental consultant, to be addressed as part of the REA Table 1 Report studies. They have also been included in the Table of set out in Appendix G.1.

A follow-up meeting was arranged with Kettle and Stony's CRO on November 10, 2011 to discuss current public open houses scheduled for various NextEra projects, and make plans for the anticipated release of draft Project REA Table 1 Reports in 2012. The updated copy of the Community Reference Materials binder was also delivered at that meeting. The CRO explained that Kettle and Stony Point had developed a draft Consultation and Accommodation Protocol, but it was not available for external distribution at that time. The possibility was discussed of Kettle and Stony Point taking part in a joint review of NextEra projects where its interests were coincident with Chippewas of Aamjiwnaang and Walpole Island First Nations, and the CRO was open to such a discussion. All three First Nations are included in Director's Lists for the same five NextEra wind projects, including Bluewater.

A joint meeting with staff from Kettle and Stony, Aamjiwnaang First Nation and Walpole Island First Nation took place on January 12, 2012 to further explore the possibility of a joint technical review of the draft Project REA Table 1 Reports. There was agreement in principle

to that idea and options for retaining third party reviewers and capacity funding were discussed. The review would include all five projects (namely Adelaide, Bornish, Bluewater, Goshen and Jericho) that were of common interest to all three First Nations.. It was acknowledged that there may be common issues among the First Nations and there was no desire or need to create duplicate effort and information. A number of follow-up e-mails took place with staff from all three First Nations and on March 22, 2012 NextEra was advised that the three First Nations had agreed to work together as a Joint Assessment Committee (the "JAC") to facilitate review of the five NextEra.

Copies of the draft REA Table 1 Reports were delivered to Kettle and Stony Point on March 15, 2012

On March 23, 2012 a proposal for the technical review work was received by NextEra from JAC's consultant, Ben Porchuk, for review and discussion. Initial telephone discussion took place with the JAC. NextEra then met with staff from the three First Nations (now operating as the JAC) and Ben Porchuk on May 8, 2012 at Aamjiwnaang First Nation to finalize the review proposal. An approach to completing the review work was discussed and a consensus was reached. The terms of reference for the third party reviews were to be two-fold:

1. To review the draft REA Table 1 Reports for three projects, including Bluewater, and provide a draft discussion report of questions or issues. The draft discussion report will form the basis of a meeting between NextEra and JAC, after which it will be finalized and used to inform the consultation processes of the three First Nations;
2. Work with each community, to provide an Issues List Report, specifically addressing the questions posed in Ontario Regulation 359/09 for all five projects of interest to the First Nations represented by JAC, namely:

"What information is available that should be considered in finalizing the Project Companies' [i.e. NextEra's] Renewable Energy Approval reports ("REA Reports") and planning for the Projects, and in particular, what information is available about any potential adverse impacts that the Projects may have on constitutionally protected aboriginal or treaty rights and any measures for mitigating those adverse impacts?"

Work on the REA Review report and Issues List report have begun but were not yet available as of the writing of this report. It is anticipated that the both reports will form the basis of a meeting and further dialogue between the three First Nations and NextEra that will focus on the issues raised and potential solutions, including (if necessary) appropriate mitigation and accommodations.

As of the writing of this report, an offer has been made to negotiate capacity funding budgets that will facilitate completion of Kettle and Stony Point's Consultation process (as well as the other two First Nations' processes).

As more fully explained in section 1.5, above, NextEra is confident that no adverse impacts to Constitutionally protected Aboriginal or treaty rights of Kettle and Stony Point, or significant negative environmental effects will result from approval of the Project. Consultation with Kettle and Stony Point is ongoing. NextEra will continue to work with Kettle and Stony Point using the results of the JAC review process to inform Kettle and Stony Point's Consultation Protocol, and will work directly with them to follow through on their Consultation Protocol process. All results from the JAC process and Kettle and Stony Point Consultation Protocol process will be fully considered and where appropriate will inform and influence the implementation of the Project. Additionally, NextEra will implement all mitigation and monitoring as described in the Project REA Table 1 Reports. Finally, NextEra will implement the systems to receive and resolve issues that may be raised during construction and operation of the Project as described in Section 6, "Next Steps", below.

4.2 Chippewas of the Thames

Communications and information sharing with Chippewas of the Thames First Nation ("COTTFN") began in 2007 for the Bluewater project. While many attempts to follow-up and engage with COTTFN have taken place since then for five of NextEra's Ontario FIT Projects, community capacity limitations have meant that substantive engagement was only able to

begin more recently. Please see Appendix H.6 for a complete chronology of all communications concerning the five projects of interest to COTTFN, including Bluewater.

All requisite delivery of REA notices and information has been completed, as set out in Table 3.1.1, above.

The Bluewater project was first specifically identified to COTTFN in NextEra's first "Community Reference Materials" binder. The binder was developed as a handy reference guide for Aboriginal community staff. The binder included the draft Bluewater Project Description report as well as map of all Ontario projects and general industry and company information. This information was delivered to COTTFN staff on June 15, 2010. The binder was updated and delivered to COTTFN staff October 19, 2011. It included the NextEra Spring 2011 "Bluewater, Goshen, Jericho Wind Energy News" and web site address to obtain Project information and draft Project REA Table 1 reports.

NextEra was able to meet directly with COTTFN staff on May 2, 2012, shortly after the formation of a COTTFN consultation team. An overview of all NextEra Ontario FIT projects was provided, together with a chart of key milestone dates for planning, such as anticipated delivery times for draft REA Table 1 Reports and REA filing targets. The NextEra First Nations and Métis Relationship Policy was also discussed; capacity assistance is one component of that Policy. NextEra had previously sent invitations for COTTFN to consider joining the joint review process that had been developed by Walpole, Aamjiwnaang and Kettle and Stony Point First Nations, called the Joint Assessment Committee, or "JAC". (The JAC is fully described in section 4.1, above.) This suggestion was discussed in more detail at the May 2 meeting. COTTFN staff seemed open to the idea, and agreed to speak with the JAC members. NextEra is very supportive of COTTFN joining the JAC.

COTTFN staff raised the following issues at the May 2, 2012 meeting.

COTTFN Question/Issue	Response Provided
<p>Does the wind industry and/or Ministry of the Environment anticipate there will be cumulative effects from development of multiple wind farms?</p>	<p>Each project is evaluated on its own merits. MOE and MNR will not approve projects unless they are satisfied it will result in no unacceptable impacts.</p> <p>Monitoring programs are conducted to validate performance forecasts and effectiveness of mitigation; operating conditions may be varied in response to monitoring results.</p> <p>The JAC proposal to NextEra includes some work that may help address this question.</p> <p>NextEra will report COTTFN's question in its Aboriginal consultation report to MOE.</p>
<p>COTTFN explained there would be two significant events taking priority in the community in June. Consultations for the June 30, 2012 Big Bear Creek land claim negotiations, and a Truth and Reconciliation Event.</p>	<p>NextEra understands and respects COTTFNs community priorities and will cooperate to provide information about the Project in ways that meet COTTFN's needs.</p>
<p>COTTFN explained that subject to additional research, COTTFN may have traditional territory that extends from outside the Haldimand Tract to Niagara. Based on project location mapping provided to COTTFN, the Summerhaven project may be of interest to COTTFN.</p>	<p>NextEra advised that Summerhaven was approved 2012-03-16 and forwarded a copy of the Director's List for Summerhaven. Arrangements were also made to deliver copies of the Summerhaven REA reports to COTTFN.</p>

As of the date of this report, NextEra is awaiting COTTFN decision whether to join the JAC process, but is also prepared to meet and develop a COTTFN-specific review process for the Bluewater and other projects in which COTTFN has an interest. On June 6, 2012, NextEra was advised that COTTFN had hired a new Renewable Energy Coordinator to have carriage of this file. NextEra responded the same day, offering to meet and review progress made to date, but as of writing this report, no reply has been received.

NextEra will continue to work with COTTFN, whether through the JAC review process to inform COTTFN's consultation process, and/or directly with them to follow through on their process. All results from the JAC process and/or COTTFN process will be fully considered and where appropriate, will inform and influence the implementation of the Project. Additionally, NextEra will implement all mitigation and monitoring as described in the Project REA Table 1 Reports. Finally, NextEra will implement the systems to receive and resolve

issues that may be raised during construction and operation of the Project as described in Section 6, “Next Steps”, below.

4.3 Chippewas of Aamjiwnaang

Communications and information sharing with Chippewas of Aamjiwnaang First Nation (“Aamjiwnaang”) began in 2007 for the Bluewater project. Please see Appendix A.7 for a complete chronology of all communications concerning the five projects of interest to Aamjiwnaang, including Bluewater.

All requisite delivery of REA notices and information has been completed, as more specifically set out in Table 3.1.1, above.

Aamjiwnaang was one of the first Aboriginal communities to work with NextEra to complete a third party review of project REA reports. That review was for the Bornish Wind Energy Centre. It is mentioned here because it was a successful experience and contributed both to Aamjiwnaang’s understanding of the Project, and to NextEra’s understanding of Aamjiwnaang perspectives. Unfortunately, changes in the Bornish project layout took place after the review, and the REA reports had to be redone. But the experience was invaluable and has helped to lay the groundwork for the Bluewater project consultation and the JAC process described in Section 4.1.

The Bluewater project was specifically identified to Aamjiwnaang in NextEra’s first “Community Reference Materials” binder. The binder was developed as a handy reference guide for Aboriginal community staff. It included the draft Bluewater Project Description report as well as map of all Ontario projects and general industry and company information. This information was delivered at a meeting with Aamjiwnaang staff on June 15, 2010. The binder was updated and delivered to Aamjiwnaang staff November 10, 2011. It included the NextEra Spring 2011 “Bluewater, Goshen, Jericho Wind Energy News” and web site address to obtain Project information and draft Project REA Table 1 reports.

At the June 15, 2010 meeting, a request for information about Aboriginal values to be considered in preparing the Project REA Table 1 reports was made, but information was not available at that time. A subsequent request was made November 3, 2011 but information was not available.

At the June 15th meeting, Aamjiwnaang staff put forward the idea of hosting an archaeology fieldwork orientation meeting, prior to work beginning. This suggestion was accepted and extending such an invitation to all First Nations communities became a feature of NextEra's archaeological communiqué process.

In addition to staff contacts, NextEra met with the Aamjiwnaang Health and Environment Committee of Council on July 7, 2011. This was an information-sharing meeting requested by the Committee concerning Adelaide, Bornish, Bluewater, Goshen and Jericho wind energy centre projects; the five projects of interest to Aamjiwnaang. At the meeting, NextEra provided an overview of its Ontario projects including Bluewater. The current schedule and the purpose and process for the draft Project REA Table 1 reports were explained. The following questions and responses were covered in the ensuing discussion:

Aamjiwnaang Question/Issue	Response Provided
Are the NHAs an ongoing process or all finished (question posed in relation to Ravenswood project, which is not a NextEra development).	The process required under Ontario Regulation 359/09 (510-10) ("REA") is for NHA reports to be submitted, plus a construction and operations report. This will include post-construction monitoring for a three-year period to validate predicted impacts and effectiveness of mitigation.
Do turbines affect earthworms?	Not aware of such information from operating wind farms, but a study by Epsilon may help address this question. The study was forwarded to Aamjiwnaang after the meeting.
How do local (non-Aboriginal) communities feel about wind farms?	Based on polls completed by industry, the majority of people support renewable energy. There is a very vocal minority who oppose them. The Kent Breeze wind farm approval was appealed to the Environmental Review Tribunal, and the appeal was turned down. NextEra sent location information on Kent Breeze so that Committee members could visit the site.

Aamjiwnaang Question/Issue	Response Provided
<p>The NextEra presentation used the words "With a good heart" to describe its approach to Aboriginal consultation. To Aboriginal people, this means a binding arrangement. NextEra's presentation states that is a \$23 billion company, but First Nations face huge resource constraints, both in terms of community capacity and access to natural resources that First Nations feel were "stolen" with no compensating benefits to First Nations. Aamjiwnaang will need to know what the benefits of a project are before we say, "OK". In other words, what will we do together to make this a better place?</p>	<p>Some conceptual ideas were put forward at the meeting to start a conversation about what areas to explore for "a better place" noted in bullets below. Additional actions subsequent to the meeting are indicated <i>in underlined italics</i>.</p> <ul style="list-style-type: none"> • NextEra must be prepared to listen and respond to their concerns. For example, the concerns may be those of Aboriginal hunters over impact to harvest species. <u>NextEra will maintain ongoing communications with all Aboriginal communities through the construction and operations phases, and will respond to concerns, as explained in Section 6, below.</u> • Education for youth and future generations is important. <u>NextEra has developed a First Nation and Métis Relationship Policy that includes such initiatives.</u> • Access to information about wind farms and the industry is important. NextEra has provided this information in its Community Reference Binders, presentations and web sites. <u>NextEra is developing an Opportunities Outreach initiative to further address this request.</u> • Aboriginal involvement in [construction and effects] monitoring should be considered. NextEra is open to Aboriginal monitors during construction and post-construction monitoring. <u>NextEra is developing an "Opportunities Outreach" initiative for construction and operations phases.</u> • Provide a list of contractors, and the goods and services the projects will need to Economic Development Officers. <u>This will be addressed in the "Opportunities Initiative".</u> • Keep dialogue open and ongoing. NextEra is maintaining ongoing dialogue. • In short, "Let us be part of the process." NextEra welcomes active involvement of all Aboriginal communities in planning, constructing and operating its facilities. <u>NextEra's First Nation and Métis Relationship Policy includes specific measures to foster Aboriginal involvement at various levels.</u>

On August 10, 2010, NextEra received Aamjiwnaang's Consultation and Accommodation Protocol, and an updated copy is included in Appendix F.1. In addition to describing important values and principles to guide consultation, and the roles of all parties, the Protocol set clear expectations for provision of relevant information and capacity to inform and support the steps in the consultation process. Developing plans to meet this goal has therefore been the focus on consultation efforts prior to and since the delivery of the draft Project REA Table 1 reports on March 15, 2012.

Aamjiwnaang is participating in the First Nations Joint Assessment Committee ("JAC") with Walpole Island and Kettle and Stony Point First Nations. As of the date of writing this report, NextEra is awaiting receipt of the reports from the JAC process and information from Aamjiwnaang to develop a work plan and budget to implement their consultation process for the Project.

As more fully explained in section 1.5, NextEra is confident that no adverse impacts to Constitutionally protected Aboriginal or treaty rights of Aamjiwnaang First Nation, or significant negative environmental effects will result from approval of the Project. Consultation with Aamjiwnaang is ongoing. NextEra will continue to work with Aamjiwnaang using the results of the JAC review process to inform Aamjiwnaang's Consultation Protocol, and directly with Aamjiwnaang to follow through on their Consultation Protocol. All results from the JAC process and Aamjiwnaang Consultation Protocol process will be fully considered and where appropriate, will inform and influence the implementation of the Project. Additionally, NextEra will implement all mitigation and monitoring as described in the Project REA Table 1 reports. Finally, NextEra will implement the systems to receive and resolve issues that may be raised during construction and operation of the Project as described in Section 6, "Next Steps", below.

4.4 Walpole Island First Nation

Communications and information sharing with Walpole Island First Nation (“Walpole”) began in 2007 for the Bluewater project. Please see Appendix G.3 for a complete chronology of all communications concerning the five projects of interest to Walpole, including Bluewater.

All requisite delivery of REA notices and information has been completed, as more specifically set out in Table 3.1.1, above.

The Bluewater project was specifically identified to Walpole in NextEra’s first “Community Reference Materials” binder developed as a handy reference guide for Aboriginal community staff. The binder included the draft Bluewater Project Description report as well as map of all Ontario projects and general industry and company information. This information was delivered at a meeting with Walpole Heritage Centre and Economic Development Department staff on June 7, 2010. The update included NextEra’s Spring 2011 “Bluewater, Goshen, Jericho Wind Energy News” and web site address to obtain Project information and draft Project REA Table 1 reports.

Communications through correspondence, statutory notices, e-mails, telephone and personal meetings with Walpole leadership and staff have been an ongoing and frequent effort, which reflects that five of Next Era’s projects are of interest to them. Primary contact and dialogue has been with staff of the Walpole Heritage Centre, which includes a Renewable Energy Coordinator role. Walpole’s former wind energy consultant, and staff from Economic Development and Employment and Training have also been involved at various times to discuss questions and issues of specific interest to their mandates.

Walpole staff has been consistent in the general issues they raised during discussions with NextEra. These issues are as applicable to Bluewater as they are to any projects; whether proposed by NextEra, or other wind developers. These issues were provided to NextEra’s environmental consultants to be addressed during the preparation of the draft REA Table 1 Reports. A Table of Concordance detailing these issues, NextEra’s response and the corresponding cross-reference in the draft REA Table 1 Reports is included in Appendix G.3.

NextEra believes these issues have been addressed in the draft Project REA Table 1 Reports.

Three overarching themes within Walpole’s issues and identified values are, as follows:

Walpole Question/Issue	Response Provided
<p>Does the wind industry and/or Ministry of the Environment anticipate there will be cumulative effects from development of multiple wind farms?</p>	<p>Although each project is evaluated on its own merits, NextEra does not believe that there are cumulative impacts associated with the development of multiple wind farms. To the extent that Ontario’s wind power developments are replacing fossil fuel generation, there may be a net environmental benefit from Ontario’s wind power development.</p> <p>At the individual project level, MOE and MNR will not approve projects unless they are satisfied it will result in no unacceptable impacts.</p> <p>Monitoring programs are conducted to validate performance forecasts and effectiveness of mitigation; operating conditions may be varied in response to monitoring results.</p> <p>The JAC proposal to NextEra includes some work that may help address this question.</p> <p>NextEra will report Walpole’s question in its Aboriginal consultation report to MOE.</p>
<p>How will an Aboriginal community be better off, after development of a wind farm, than before?</p>	<p>NextEra is engaging with Walpole including exploring opportunities for a broader relationship, in accordance with its First Nation and Métis Relationship Policy.</p> <p>NextEra is working collaboratively with the First nations “Joint Assessment Committee”, of which Walpole is a member, to identify issues of potential interest and explore mutually acceptable solutions.</p> <p>NextEra is initiating an “Opportunities Outreach” program for communities with interests in its projects. The program will provide information on: employment, procurement with NextEra and the industry; scholarship programs; and, steps to pursue them.</p>

Walpole Question/Issue	Response Provided
<p>Walpole prefers a precautionary and an adaptive management approach to potential environmental impacts. Initiatives to increase habitat, restoring SAAR or adopting new wind energy technology (such as radar) as it is developed should be considered.</p>	<p>NextEra is open to discussing environmental initiatives as part of a broader relationship.</p> <p>NextEra uses information from existing extensive operations to inform planning, design and operations across its system. Any variances from acceptable operating conditions are promptly addressed. NextEra has established technical review committees to monitor and address avian issues and implemented post-construction studies to gather more information on the effects of wind on wildlife, including six independent studies at operating wind farms in 2003-2004. NextEra has also joined a group called the Bat and Wind Energy Cooperative (BWEC). Others in this group include the American Wind Energy Association, Bat Conservation International, the Department of Energy National Renewable Energy Laboratory and the U.S. Fish and Wildlife Service. The goal of this three-year collaborative effort is to develop methods to reduce impacts of wind turbines to bat species.</p>

Walpole is participating in the First Nations Joint Assessment Committee (“JAC”) with Aamjiwnaang and Kettle and Stony Point First Nations. The JAC will jointly review five NextEra projects, including Bluewater, of common interest to the three First Nations. The results of that review will inform each individual First Nation’s own Consultation process. NextEra will work with Walpole to follow-through their consultation process. Please see the full explanation of the JAC process and objectives, which is described in the Kettle and Stony Point First Nation summary in section 4.1, above, which is applicable to this Walpole consultation summary.

As of the writing of this report, the plan is to negotiate capacity funding budgets that will facilitate completion of Walpole’s Consultation process. Ideally this will be in place when the JAC consultant’s review reports are completed. A copy of Walpole’s Consultation Protocol is included in Appendix F.2.

As more fully explained in section 1.5, above, NextEra is confident that no adverse impacts to Constitutionally protected Aboriginal or treaty rights of Walpole Island First Nation, or significant negative environmental effects will result from approval of the Project.

Consultation with Walpole is ongoing. NextEra will continue to work with Walpole using the results of the JAC review process to inform Walpole's Consultation Protocol, and directly with Walpole to follow through on their Consultation Protocol. All results from the JAC process and Aamjiwnaang Consultation Protocol process will be fully considered and where appropriate, will inform and influence the implementation of the Project. Additionally, NextEra will implement all mitigation and monitoring as described in the Project REA Table 1 reports. Finally, NextEra will implement the systems to receive and resolve issues that may be raised during construction and operation of the Project as described in Section 6, "Next Steps", below.

4.5 Oneida Nation of the Thames

Communications and information sharing with Oneida Nation of the Thames ("Oneida") began in 2007 for the Bluewater project. Please see Appendix H.8 for a complete chronology of all communications concerning the projects of potential interest to Oneida, including Bluewater.

All requisite delivery of REA notices and information have been completed, as more specifically set out in Table 3.1.1, above.

Oneida staff was provided (hand delivered) with NextEra's Community Reference materials binder on June 15, 2010. An updated Community Reference Material Binder was delivered to staff on October 19, 2011, which included a Bluewater project Wind Energy Newsletter.

NextEra has worked with Oneida staff and leadership to understand the protocol for consultation on Bluewater, and on other Ontario projects. Through e-mails and at meetings with Oneida staff and Alfred Day (now Chief Day) of the Oneida Council of Chiefs in 2010, it was established that the Oneida Council of Chiefs would take the lead on consultation matters related to the Bornish and Adelaide projects, not Oneida Nation of the Thames. Oneida Council of Chiefs is also a participant in the Haudenosaunee Development Institute process ("HDI"). HDI have been delegated consultation matters as the staff secretariat to the

Haudenosaunee Confederacy Council of Chiefs. (See section 4.11, below for Haudenosaunee Confederacy Chiefs Council summary.) Neither Oneida Council of Chiefs, nor Haudenosaunee Confederacy Chiefs Council are included on the Director's Lists for the Project, however, it is NextEra's understanding that both councils assert treaty rights under the 1701 Nanfan Treaty. The nature of these rights was explained in section 1.5 (C) and Table 2.2.1, above. Given the previous advice that Oneida Council of Chiefs would take the lead on certain projects, not Oneida, there has been uncertainty on the nature of Oneida's interest, or role, in regard to the Project. For greater certainty, all required Project correspondence and information required under the REA has been addressed individually to both of the Oneida Council of Chiefs, and Oneida (i.e. Oneida Nation of the Thames).

Clarification of Oneida vs. Oneida Council of Chief's role for the Project was requested from Oneida staff at a meeting of October 19, 2011. Staff's follow-up e-mail of October 26, 2011 confirmed that Oneida wished to meet NextEra about Bluewater and four other projects, and they will require capacity assistance to review the draft REA Table 1 documents. A subsequent November 25, 2011 e-mail was then received indicating that NextEra did not have to meet with Oneida and referring them to the Oneida Council of Chiefs for those projects.

Although e-mail follow-ups, personal meetings and telephone calls have taken place with Oneida staff requesting clarification or confirmation of Oneida's vs. Oneida Council of Chief's role for Bluewater and the other projects, no response has been received.

E-mail follow-ups, personal meetings and telephone calls have also taken place with Oneida staff requesting responses to the Project information and draft Project REA Table 1 Reports that have been delivered. NextEra has offered to discuss capacity assistance for review of Project information in accordance with its First Nation and Métis Relationship Policy. No response has been received to date for those communications either.

No information has been provided from staff or leadership as to any concerns Oneida may have about: potential adverse impacts of the Project to their constitutionally protected

Aboriginal or treaty rights; potential negative impacts to the environment; or, any suggestions to mitigate such impacts.

As more fully explained in section 1.5, above, NextEra is confident that no adverse impacts to Constitutionally protected Aboriginal or treaty rights of Oneida Nation of the Thames, or significant negative environmental effects will result from approval of the Project. NextEra will continue to communicate with Oneida, as with all other communities with potential interests in its projects. Additionally, NextEra will implement all mitigation and monitoring as described in the Project REA Table 1 reports. Finally, NextEra will implement the systems to receive and resolve issues that may be raised during construction and operation of the Project as described in Section 6, "Next Steps", below.

4.6 Historic Saugeen Métis

Communications and information sharing with Historic Saugeen Métis ("HSM") began in 2009. Please see Appendix H.2 for a complete chronology of all communications concerning the projects of potential interest to HSM, including Bluewater.

All requisite delivery of REA notices and information have been completed, as more specifically set out in Table 3.1.1, above.

HSM was formerly a Community Council of the Métis Nation of Ontario ("MNO"). While MNO assert traditional harvest territory in Ontario, it is generally north of the Bluewater project location. Additionally, recent correspondence from the Office of the federal Interlocutor placed HSM's traditional territory well north of the Project. Since HSM's leaving MNO, however, their traditional territory assertion extends south to the Port Franks area. HSM's asserted traditional harvest territory was recognized by the Province of Ontario in the April 8, 2011 Director's List, and as such is a community to be consulted for the Project.

Throughout the period of consultation with HSM, NextEra has included HSM in all general communications to Aboriginal communities, such as Archaeological Communiqués, and

distribution of project schedule milestones for planning purposes. This is in addition to the requisite notices and deliveries required under Ontario Regulation 359/09.

Information-sharing specific to the Bluewater project began in June 2010. HSM was one of three Aboriginal communities that accepted an invitation to be NextEra's guest at a CanWEA seminar in Toronto, titled "Opportunities in the Wind Energy Value Chain". At the meeting, HSM's consultation coordinator was provided with a copy of NextEra's Community Reference materials binder on June 9, 2010, which included: a map of all NextEra FIT projects locations in southern Ontario; general wind technology and industry information; contacts and web site addresses; and, a draft copy of the Bluewater PDR.

At HSM's request, NextEra met with HSM Council and staff on August 11, 2010 to discuss all NextEra projects of interest to HSM in more detail. Bluewater, Goshen, Jericho and East Durham, were still in the pre-REA study phase at that time. HSM outlined their main concern as being any project which has the potential to negatively impact the traditional HSM territory, asserted to be comprised of the Sauble, Saugeen, Maitland, Bayfield and Ausable watersheds from Port Franks to Tobermory. On August 8, 2010 HSM's consultation coordinator followed up with a list of Métis interests that NextEra provided to its environmental consultants to be addressed as part of the draft REA Table 1 Reports, scheduled for 2011-12. This list of issues (or Métis values) is reproduced in Appendix G.2, as a Table of Concordance to demonstrate how NextEra feels the issues have been addressed in the REA studies and to cross-reference the applicable report and section. The schedule for completion of the Project REA studies was explained to HSM's consultation coordinator in an e-mail of September 15, 2010, to provide assurance that the issues would be addressed, at a later time as those studies and reports were developed.

In October 2010, HSM sent a detailed list of questions concerning the Project to NextEra on a privileged and confidential basis. Many questions required additional discussion and clarification from HSM, which was sought at a meeting held February 18, 2011. NextEra's environmental consultant, AECOM, attended the meeting to provide additional input. It was decided that HSM would restate some questions for clarity and NextEra was to address

those that it could as information became available during the REA Table 1 Report process. HSM provided further clarification regarding some of its issues on February 22, 2011 and these were also forwarded to the environmental consultant, and addressed as set out in Appendix G.2 Table of Concordance. NextEra feels it has now responded to most of the HSM "Bluewater questions" in its draft Project REA Table 1 Reports, except those for which a clarification was not received from HSM. Further discussion and resolution of these questions is considered to be part of the ongoing consultation process planned with HSM.

HSM has also sought to enter into a long-term relationship agreement and Memorandum of Understanding ("MOU") for project reviews with NextEra. NextEra received a draft MOU from HSM, including long-term relationship commitments, on July 29, 2011 and a proposed supporting budget was received from HSM on February 17, 2012. NextEra has provided HSM with a copy of its First Nation and Métis Relationship Policy, as it addresses both the relationship and capacity assistance aspect of HSM's documents. Negotiations have taken place with much progress towards reaching agreement on consultation process and capacity, but no final agreement has been reached yet. It is NextEra's intention to continue such negotiations seeking a mutually acceptable agreement with HSM, and to complete consultations for the Project.

As more fully explained in section 1.5, above, NextEra is confident that no adverse impacts to Constitutionally protected Aboriginal rights of the Historic Saugeen Métis, or significant negative environmental effects will result from approval of the Project. NextEra will use good faith efforts to complete the final agreement and budget to facilitate HSM's review and engagement for the Project. Any specific concerns will be addressed with HSM and mutually acceptable mitigation explored. Additionally, NextEra will implement all mitigation and monitoring as described in the Project REA Table 1 reports. Finally, NextEra will implement the systems to receive and resolve issues that may be raised during construction and operation of the Project as described in Section 6, "Next Steps", below.

4.7 Munsee–Delaware First Nation

Communications and information sharing with Munsee-Delaware First Nation (“Munsee”) began in 2007 for the Bluewater project. Please see Appendix H.4 for a complete chronology of all communications concerning the projects of potential interest to Oneida, including Bluewater.

All requisite delivery of REA notices and information have been completed, as more specifically set out in Table 3.1.1, above.

Chief Patrick Waddilove was provided (hand delivered) with NextEra’s Community Reference materials binder on July 20, 2010. An updated Community Reference Material Binder was delivered to the First Nation Manager on October 19, 2011.

At the July 20, 2010 meeting, NextEra requested and was provided with information on issues that would be of concern to Munsee in the development of a wind farm. The issues included specific species, activities and values that would be of importance to Munsee members within their traditional territory. NextEra provided a summary of these issues to its environmental consultant, to be addressed in preparation of the draft REA Table 1 Reports. This information is included in the Munsee-Delaware “Table of Concordance” in Appendix G.4. The table lists the issues, NextEra’s response and a cross-reference to the relevant section in the draft REA Table 1 reports.

Ongoing communications have taken place with Munsee in person, by e-mail and through delivery of the requisite REA notices and reports. An offer was made to discuss capacity assistance for review of all project reports, including Bluewater.

No responses have been provided from staff or leadership as to any concerns Munsee may have about: potential adverse impacts of the Project to their constitutionally protected Aboriginal rights; potential negative impacts to the environment; or, any suggestions to mitigate such impacts.

As more fully explained in section 1.5, above, NextEra is confident that no adverse impacts to Constitutionally protected Aboriginal or treaty rights of Munsee-Delaware First Nation, or

significant negative environmental effects will result from approval of the Project. NextEra will continue to communicate with Munsee, as with all other communities with potential interests in its projects. Additionally, NextEra will implement all mitigation and monitoring as described in the Project REA Table 1 reports. Finally, NextEra will implement the systems to receive and resolve issues that may be raised during construction and operation of the Project as described in Section 6, "Next Steps", below.

4.8 Moravian of the Thames Delaware First Nation

Communications and information sharing with Moravian of the Thames Delaware First Nation ("Moravian") began in 2007 for the Bluewater project. Please see Appendix H.9 for a complete chronology of all communications concerning the projects of potential interest to Moravian, including Bluewater.

All requisite delivery of REA notices and information have been completed, as more specifically set out in Table 3.1.1, above.

On February 18, 2010, NextEra made contact with Chief Gregory Peters, in regard to another project, the Bornish Wind Energy Centre. Chief Peters stated that project was not within Moravian's traditional territory, and so long as there were no impacts to the Thames River, Moravian would have no concerns. The Bornish project is located closer to Moravian than Bluewater.

On June 14, 2010, NextEra contacted Chief Gregory Peters by telephone, to seek clarification on Moravian's interests in the remaining NextEra Ontario FIT projects, including Bluewater. Chief Peters described the Moravian Traditional Territory as being about 58,000 acres, "town line to town line" extending northward into Zone Township and most of Orford Township, south to Highway 3. Zone Township is south of all NextEra Ontario FIT projects.

A written confirmation of the Moravian Traditional Territory has been requested many times, as recorded in the Chronology of Communications in Appendix H.9, but no reply has been received. Absent such a confirmation, NextEra has made sure that Moravian receives all

requisite correspondence and notices required under Ontario Regulation 359/09, and any additional general communications from the company. For example, Moravian received the NextEra Community Reference Binder (which included the Bluewater draft PDR) and update, as well as the Archaeological Communiqués. No response to any of the required or additional communications has been received from Moravian of the Thames Delaware First Nation.

Should Moravian subsequently decide it has an interest in the Project, as more fully explained in section 1.5, above, NextEra is confident that no adverse impacts to Constitutionally protected Aboriginal or treaty rights of Moravian of the Thames Delaware First Nation, or significant negative environmental effects will result from approval of the Project. NextEra will continue to communicate with Moravian, as with all other communities with potential interests in its projects. Additionally, NextEra will implement all mitigation and monitoring as described in the Project REA Table 1 reports. Finally, NextEra will implement the systems to receive and resolve issues that may be raised during construction and operation of the Project as described in Section 6, “Next Steps”, below.

4.9 Saugeen Ojibway Nations (Chippewas of Saugeen, Chippewas of Nawash Unceded First Nation)

Neither Chippewas of Saugeen, nor Chippewas of Nawash Unceded First Nations are included on the Director’s List for Bluewater, but NextEra has engaged with them for the Project, as explained below.

Communications and information sharing with Saugeen Ojibway Nations (“SON”) began in 2009 with the offer of holding a community open house about NextEra’s southwestern Ontario projects. Please see Appendix H.10 for a complete chronology of all communications concerning the projects of potential interest to SON, including Bluewater.

All requisite delivery of REA notices and information have been completed, as more specifically set out in Table 3.1.1, above.

In December 2010, SON Environment Office (“EO”) staff provided a copy of the SON “Principles for Proponents working in the Traditional Territories of the Saugeen Ojibway Nations” (see Appendix F.3). The principles identify values and expectations that are important to SON in consulting with project proponents and NextEra has had regard to them in its engagement with SON.

At the December 2010 meeting, SON also provided a traditional territory map (illustrated on Map 2.1.1, above). Although the Project is south of the traditional territory of the SON, NextEra appreciates SON’s interest in potential impacts to the environment that may connect with their Traditional Territory through pathways such as migratory routes, for example. As a result NextEra has been working with SON for the Bluewater project, as well as the other two NextEra projects that are within their Traditional Territory.

SON EO staff received (hand delivered) NextEra’s Community Reference materials binder on June 10, 2010, which included a copy of the first Bluewater draft Project Description Report. SON staff received an updated Binder on June 1, 2012 including the Bluewater Wind Energy News newsletter.

SON also receives all Archaeological Communiqués, which include information on the Project. Additionally, SON has access to the reports produced by the independent First Nations archaeological monitor for Bluewater, Bandy George Archaeological Research, Inc., but conducts its own independent review of the archaeological studies. Finally, SON has been provided with all draft REA Table 1 Reports for the Project.

At the time of writing this report, NextEra and SON had begun negotiations to establish an overall work plan and capacity budget for SON participation in all three NextEra projects of interest to them, including Bluewater. NextEra and SON have already had a significant amount of experience working together for review of draft REA Table 1 documents in regard to the Conestogo project. It is expected that lessons learned from that project will inform the development of the overall work plan and budget, including the planning, construction and post-construction monitoring stages. It is also expected that discussions will include exploring a broader relationship between SON and NextEra. This is in accordance with NextEra’s First

Nations and Métis Relationship Policy and consistent with the approach taken with other First Nation and Métis governments who wish to be involved in NextEra projects.

As more fully explained in section 1.5, above, NextEra is confident that no adverse impacts to Constitutionally protected Aboriginal or treaty rights of the Saugeen Ojibway Nations, or significant negative environmental effects will result from approval of the Project. NextEra will use good faith efforts to complete the work plan and budget to facilitate SON's review and engagement for the Project. Any specific concerns will be addressed with SON and mutually acceptable mitigation explored. Additionally, NextEra will implement all mitigation and monitoring as described in the Project REA Table 1 reports. Finally, NextEra will implement the systems to receive and resolve issues that may be raised during construction and operation of the Project as described in Section 6, "Next Steps", below.

4.10 Six Nations of the Grand River Elected Council

Six Nations of the Grand River Elected Council ("SNEC") are not included on the Director's List for Bluewater, but NextEra has engaged with them as explained below.

Communications and information sharing with SNEC began in 2007 with the offer of holding a community open house about NextEra's southwestern Ontario projects. Please see Appendix H.12 for a complete chronology of all communications concerning the projects of potential interest to SNEC, including Bluewater.

All requisite delivery of REA notices and information have been completed, as more specifically set out in Table 3.1.1, above.

In January 2008, NextEra made a presentation to SNEC on its southwestern Ontario FIT projects, including Bluewater. While the focus on most communications with SNEC from 2008 through 2011 was on Conestogo (west of Haldimand Tract), Summerhaven (west of Haldimand Tract and closest to Six Nations of the Grand River community), Adelaide and Bornish, SNEC assert their responsibility to protect the air, land and waters within the 1701

Nanfan Treaty area, which encompasses all NextEra projects. This assertion is made in the Six Nations Elected Council Consultation and Accommodation Policy, which can be found in Appendix F.4.

Wind power projects are considered “special projects” within the SNEC Policy and as a result SNEC follows a process that includes both consultation and accommodation. Since the SNEC Policy was new in 2010, there was some discussion in June of that year as to whether, and how NextEra’s projects would fall under the Policy. In September 2010 SNEC determined that it wished to review available REA reports for the NextEra projects and in November 2010 SNEC was provided with capacity funding they requested to complete reviews of the four projects, which had been their main focus. This approach has set a template to follow for review of Bluewater by SNEC.

SNEC first received the Project draft Project Description Report on June 23, 2010, as part of NextEra’s Community Reference materials binder. An updated Community Reference Material Binder was delivered to SNEC Consultation and Accommodation Process Team (“CAP Team”) staff at a meeting on October 17, 2011. Another presentation on all NextEra Ontario FIT Projects was given at that meeting, which detailed current status of each project.

NextEra also provided a project “booth” at the Six Nations of the Grand River Community Awareness Day in 2010 and 2011. Information on current projects was made available in 2010, and the 2011 information focused on archaeology work for the Summerhaven project, which is the closest NextEra project location to Six Nations of the Grand River.

In January 2012, NextEra received draft proposed Capacity Funding Agreements from SNEC for the four project mentioned above, namely: Summerhaven, Conestogo, Adelaide and Bornish. NextEra responded on January 31, 2012, with a copy of its First Nations and Métis Relationship Policy because much of the policy spoke to the same issues dealt with in the proposed capacity funding agreements. NextEra’s preference was, however, to approach all projects of stated interest to SNEC on a comprehensive basis. An initial meeting took place at Ohsweken with the SNEC CAP Team on February 1, 2012 to discuss the capacity funding agreements and NextEra’s proposed approach. A proposed process agreement was shared

with SNEC after the meeting and suggested as a basis for working together on all projects through their planning, construction and post-construction monitoring stages. While this agreement was rejected by SNEC, NextEra has continued to engage with SNEC CAP Team to develop a mutually acceptable process agreement to operationalize the proposed capacity budget for SNEC's review and engagement in the projects of their stated interest, including Bluewater.

Due to SNEC CAP Team priorities with a more immediate and proximate large-scale renewable energy development, a follow-up meeting was not possible until May 7, 2012. Meetings on May 24 and June 19, 2012 aimed at reaching agreement on a work plan, budget and broader relations for all NextEra projects have taken place. As of writing this report, these meetings are ongoing.

As more fully explained in section 1.5, above, NextEra is confident that no adverse impacts to Constitutionally protected Aboriginal or treaty rights of the Six Nations of the Grand River, or significant negative environmental effects will result from approval of the Project. NextEra will use good faith efforts to complete the work plan and budget to facilitate SNEC's review and engagement for the Project. Any specific concerns will be addressed with SNEC and mutually acceptable mitigation explored. Additionally, NextEra will implement all mitigation and monitoring as described in the Project REA Table 1 reports. Finally, NextEra will implement the systems to receive and resolve issues that may be raised during construction and operation of the Project as described in Section 6, "Next Steps", below.

4.11 Haudenosaunee Confederacy Chiefs Council (Six Nations Confederacy Council and Oneida Council of Chiefs)

Haudenosaunee Confederacy Chiefs Council ("HCCC") is not identified on the Director's List for Bluewater. NextEra has engaged with HCCC, in respect to their stated interest in potential negative effects from the Project, which in HCCC's view, could impact asserted treaty rights to hunt.

Communications and information sharing with HCCC began in 2007. Please see Appendix H.12 for a complete chronology of all communications concerning the projects of potential interest to SNEC, including Bluewater.

All requisite delivery of REA notices and information have been completed, as more specifically set out in Table 3.1.1, above.

HCCC first received the Project draft PDR in June 2010 (cover letters dated as of June 4, 2010) as part of NextEra's Community Reference materials binder. An updated Community Reference Material Binder was mailed to Hazel Hill, Acting Secretary of the Haudenosaunee Development Institute ("HDI") on October 13, 2011. A chart of all NextEra Ontario Fit projects was also delivered, outlining their capacity, location, timing of development and status.

HCCC is a traditional government representing the six nations within the confederacy. In Canada, the Oneida and Mohawk are represented within HCCC. NextEra has had direct communications with both the Oneida Council of Chiefs (see discussion within Section 4.5 Oneida Nation of the Thames) and the three Mohawk communities in Ontario, the latter as part of the Summerhaven wind energy centre consultations. HCCC has delegated consultation process management to the HDI, and NextEra's engagement with HCCC has been through senior HDI staff and Board members. In correspondence about another NextEra project (the Conestogo Wind Energy Centre) Oneida Council of Chiefs has advised NextEra that it is participating in the HDI process and that all matters should be referred to HDI. The Mohawk communities have never responded, or responded in writing to requests for clarification of their interests in NextEra's Summerhaven project, or whether they defer matters to HDI's management. As a result, NextEra continues to work with HDI and is seeking HDI's confirmation that it will provide comment on the Project on behalf of all Haudenosaunee communities.

NextEra has had ongoing communications with HDI, as illustrated in Appendix H.12. Given HCCC's asserted interest in all NextEra Ontario FIT projects, that engagement has taken place at a general level, with a focus on overarching issues of interest to HCCC. HDI has requested that all matters of discussion with it be treated in confidence. As a result, NextEra

is limited in the extent to which it can report the content, tenor and progress of its consultations with HCCC, except to say that they are ongoing and NextEra is optimistic of their successful and timely conclusion.

As a general conclusion, however, and as more fully explained in section 1.5, above, NextEra is confident that no adverse impacts to asserted Aboriginal or treaty rights of the Haudenosaunee Confederacy Chiefs Council, and the nations it represents, or to environmental features which may form the basis of such rights, will result from approval of the Project. Additionally, NextEra will implement all mitigation and monitoring as described in the Project REA Table 1 Reports. Finally, NextEra will implement the systems to receive and resolve issues that may be raised during construction and operation of the Project as described in Section 6, "Next Steps", below.

4.12 Métis Nation of Ontario

Métis Nation of Ontario ("MNO") is not included on the Director's List for Bluewater, but NextEra has engaged with them as explained below. Please see Appendix H.5 for a complete chronology of all communications concerning the projects of potential interest to MNO, including Bluewater.

MNO is a province-wide Métis government. Métis communities are regional in nature and expansive. MNO service delivery and governance is done through the provincial Provisional Council of the Métis Nation of Ontario, local Community Councils and Regional Councilors, but Métis Harvest Rights are the focus of Regional Consultation Protocol Committees, which include community, regional and Captain of the Hunt leadership within traditional harvest territory areas (see Map 2.2.1).

The project is located south of, or at the southern extreme of the MNO Georgian Bay Traditional Harvest Territory ("GBTHT"). The GBTHT includes all of MNO Region 7 and a part of MNO Region 9. NextEra appreciates MNO's interest in potential impacts to the environment that may connect with their Traditional Harvest Territory through pathways such

as migratory routes, for example. As a result NextEra has been working with MNO for the Bluewater project.

All requisite delivery of REA notices and information has been completed, as more specifically set out in Table 3.1.1, above.

In 2009, MNO staff provided NextEra with a general list of Métis interests, or values. These issues were sent to NextEra's environmental consultants to be considered as part of their preparation of the draft Project REA Table 1 Reports. A "Table of Concordance" cross-referencing the issues/questions to sections of the relevant reports addressing these questions and issues is set out in Appendix G.5. NextEra believes these issues have been addressed in the draft Project REA Table 1 Reports.

Communications and information sharing with MNO continued in 2009 with a presentation to senior MNO staff about all of NextEra's southwestern Ontario projects. A presentation was made to the Georgian Bay Traditional Harvest Territory Consultation Committee ("GBTHTCC") on November 1, 2010 that covered all NextEra Ontario projects in general, and the Bluewater and Conestogo projects in particular. An overview of all NextEra Ontario projects was given to the Regional Councillor and Community Council Presidents of Region 9 on July 19, 2011.

MNO first received the Project draft Project Description Report on September 3, 2010, as part of NextEra's Community Reference materials binder. An updated Community Reference Material Binder was delivered to MNO staff at a meeting on November 14, 2011.

On February 6, 2012, MNO staff advised that Region 9 would not be commenting on the Bluewater project; Project engagement would be through the GBTHTCC. On February 14, 2012, MNO staff advised that GBTHTCC wished to meet with NextEra but scheduling was not likely until after April 1, 2012. Staff confirmed the process of meeting with GBTHTCC would be the same as the one successfully completed with MNO for NextEra's Conestogo project. After the initial meeting, GBTHTCC would then advise NextEra if the Committee feels further consultation is necessary. NextEra provided a schedule of key milestone dates to

MNO staff on February 23, 2012, including release of the Project draft REA Table 1 Reports and estimated filing date.

The draft Project Table 1 REA Reports were delivered to MNO in accordance with MNO's protocol (i.e. staff of the MNO Consultation Unit) and the GBHTCC Chair on March 15, 2012.

As of writing this report, a budget to support the initial GBHTCC meeting has been agreed to in principle. In early April 2012, MNO staff advised they will forward a proposed Memorandum of Understanding ("MOU") that outlines process and capacity issues prior to the meeting, for discussion with NextEra. NextEra has followed up to inquire about the MOU and the meeting with GBHTCC. Due to workloads and the recent MNO Provisional Council elections, MNO has not yet sent the proposed MOU or proposed meeting dates, but NextEra anticipates receiving them and meeting to discuss the projects of interest to MNO, including Bluewater.

As a general conclusion, however, and as more fully explained in section 1.5, above, NextEra is confident that no adverse impacts to Aboriginal rights of the Métis Nation of Ontario will result from approval of the Project. Additionally, NextEra will implement all mitigation and monitoring as described in the Project REA Table 1 Reports. Finally, NextEra will implement the systems to receive and resolve issues that may be raised during construction and operation of the Project as described in Section 6, "Next Steps", below.

4.13 Summary of changes as a result of consultation activities

As of the writing of this report, NextEra has received no information from Aboriginal communities concerning potential impacts to constitutionally protected Aboriginal rights, or potential negative impacts to the environment that have required a change in the design or proposed construction and operation of the Project.

4.14 Summary of Out of Scope Input Received

While not part of the mandated inquiries set out under Ontario Regulation 359/0, a number of communities brought issues to NextEra's attention during discussions about Bluewater and other projects. In the interest of providing a complete report of the scope of issues raised by communities, NextEra wishes to include the following list of recurring themes raised by Aboriginal communities, although they fall outside the ambit of Ontario Regulation 359/09.

1. Will wind farm development have regional or cumulative effects, and is an Ontario Ministry considering this question?
2. What are the opportunities for Aboriginal communities to participate in wind projects that will result in economic and business benefits to them?
3. Will wind developers entertain or facilitate equity participation by Aboriginal communities, beyond the programs offered through the Ontario Finance Authority?
4. Improving educational opportunities and services in Aboriginal communities should be a priority for any benefits that flow from renewable energy projects.

Wherever possible, NextEra responds to these questions directly with Aboriginal communities, within the scope of its First Nation and Métis Relationship Policy.

5. Conclusion

NextEra has undertaken a thorough Aboriginal consultation program for the Project and this dialogue is ongoing. The steps and information distribution required under Ontario Regulation 359/09 have been completed as described in this report.

No impacts to constitutionally protected Aboriginal or treaty rights have been brought to NextEra's attention to date that required a change in the design, construction or operation of the Project as proposed. Any other issues of concern raised over potential negative environmental impacts have been, or will be addressed as described in this report or through Project mitigation and monitoring, as explained in section 1.5, above.

NextEra has sited its Project appropriately. This is shown in the results of the Project REA Table 1 Reports and claims analysis which conclude that the Project will not result in any residual environmental impacts that may affect Constitutionally protected Aboriginal or treaty rights or Aboriginal interests in potential environmental effects.

As explained in section 4, NextEra has offered to negotiate capacity arrangements with a number of communities who wish to have involvement or communications during the construction and post-construction monitoring to provide additional assurance of this conclusion.

Other issues brought to the attention of NextEra that fall outside the scope of Ontario Regulation 359/09 are explained in section 4.12, including NextEra's response.

Communication and information exchange with Aboriginal communities will continue through the construction and monitoring phase of the Project, and into operations, as explained in Section 6, "Next Steps". Using the management systems, described therein, for receiving and resolving any unexpected issues of concern, will ensure that Aboriginal interests will continue to be unaffected by the Project.

6. Next Steps

This section describes NextEra's approach to ensure ongoing communication and dialogue going forward, and its undertakings to ensure no adverse impacts to Aboriginal or treaty rights, or to environmental features of concern to Aboriginal communities will occur during construction and operation of the Project.

1. NextEra will implement the construction mitigation as required and as set out in the final Project Table 1 Reports, in particular, the Archaeology reports, Construction Plan Report, Design and Operations Report, the Decommissioning Report and the Natural Heritage Report as submitted to the Director of Renewable Energy Approvals under Ontario Regulation 359/09, including any required monitoring and follow-up.
2. NextEra will consider and implement site-specific mitigation that may be mutually agreed to with Aboriginal communities as a result of their review of the draft Project REA Table 1 Reports.
3. To provide further assurance to Aboriginal communities in regard to the conclusions reached in the Project REA Table 1 Reports that there will be no significant environmental impacts, NextEra will explore the possibility of Aboriginal environmental field monitors and/or environmental liaison committees that would be a vehicle for ongoing communication during construction and post-construction monitoring. These steps could provide additional certainty to the affected Aboriginal communities that the required mitigation is implemented and effective. This may be through the communities themselves, Aboriginal contractors, or possibly through Provincial Territorial, Tribal Council or another collective organization with an appropriate relationship to the communities for this Project. Discussions of the methodology have already begun with interested communities. The mandate of the monitors or committee would be to view and report on the implementation of mitigation set out in the Project natural heritage study report, and make suggestions

where improvements are possible. This concept will be explored further with those Aboriginal organizations and communities with an interest in the Project.

4. To provide further assurance to Aboriginal communities regarding the protection of archaeological resources, NextEra will ensure there is monitoring of construction activities that may be proximate to any Stage 3 or Stage 4 site at the Project, in addition to requiring buffer areas around them. These measures are fully described in the Construction Plan Report, Table 3-1.
5. NextEra will operate a management system approach to communicating with and to the tracking and resolving issues of concern brought to the attention of NextEra during construction and operations by Aboriginal communities. Should an Aboriginal community express an issue of concern with the Project activities, NextEra will have a formal system to receive, track and resolve such concerns as is required under Ontario Regulation 359/09, Table 1, section 4. The Design and Operations Report, section 5, (page 15) contains a complete description of the emergency response, ongoing communications plan and complaint resolution process to be implemented for this Project. Information about this system will be shared with Aboriginal communities prior to construction.
6. NextEra will maintain ongoing general communications with Aboriginal communities through the construction and operating phase of its project as one element of its ongoing community, municipal and landowner communications program. In addition to contact with leadership and/or key staff, and where practicable, local Aboriginal community newsletters, web sites or other communication vehicles will be used to convey relevant project notices and updates, as may be agreed to by the Aboriginal communities. Anticipated topics may include Project schedule updates, reports on Project activities and on the effectiveness of environmental mitigation. Details of the content of this program, frequency of updates and communication vehicles will be discussed with Aboriginal communities who express interest in receiving such information.

7. It is recognized that some Aboriginal communities have provided no specific information about project-related concerns. NextEra undertakes to implement any necessary mitigation measures identified in the final REA documents and Project Table 1 Reports. These measures will result in no significant long-term environmental impacts by the Project, and therefore, no significant long-term impacts to species, habitats or ecosystems that may be of concern to Aboriginal communities.

NextEra feels that these measures will provide additional assurance beyond the conclusions of the draft Project REA Table 1 Reports and consultation to date so that no constitutionally protected Aboriginal or treaty rights, or Aboriginal interests in the environment will be negatively impacted by the Project.



Appendix

LIST OF APPENDICES

Appendix

NextEra Energy Canada, ULC First Nations and Métis Relationship Policy	A
NextEra Energy Canada, ULC Ontario Project – Archaeological Protocol	B
Community Reference Materials Binder Index	C
List of Projects and Milestone Dates provided to Aboriginal Communities	D
NextEra Energy Canada, ULC Archaeology Communiqué, Spring 2012	E
Aboriginal Community Consultation Protocols	F
Aamjiwnaang First Nation	F.1
Walpole Island First Nation	F.2
Saugeen Ojibway Nations	F.3
Six Nations Elected Council	F.4
Tables of Concordance	G
Kettle and Stony Point First Nation	G.1
Historic Saugeen Métis	G.2
Walpole Island First Nation	G.3
Munsee-Delaware First Nation	G.4
Métis Nation of Ontario	G.5
Chronologies of Contacts with Aboriginal Communities	H
Kettle and Stony Point First Nation	H.1
Historic Saugeen Métis	H.2
Walpole Island First Nation	H.3

	Appendix
Munsee-Delaware First Nation	H.4
Métis Nation of Ontario	H.5
Chippewas of the Thames First Nation	H.6
Aamjiwnaang First Nation	H.7
Oneida Nation of the Thames	H.8.1
Oneida Council of Chiefs	H.8.2
Moravian of the Thames	H.9
Saugeen Ojibway Nations	H.10
Six Nations of the Grand River Elected Council	H.11
Haudenosaunee Confederacy Chiefs Council	H.12
Letters Evidencing Deliveries Pursuant to Ontario Regulation 359/09	I
Notice of Open House #1 and Draft Updated PDR	I.1
Draft Site Plan	I.2
Delivery of draft REA Table 1 Reports and s. 17 Request	I.3
Notice of Open House #2 and Ministry Sign-off Letters	I.4

Filed: 2012-11-16
Varna Wind, Inc.
Exhibit G
Tab 1
Schedule 3
50 Pages

FINAL PUBLIC MEETING DOCUMENTS

**Appendix A5. Final Public Meeting
– Municipalities of
Bluewater and
Huron East**



NOTICE OF PUBLIC MEETING #2
To be held by Varna Wind, Inc. regarding a
Proposal to Engage in a Renewable Energy Project

Project Names: Bluewater Wind Energy Centre

Project Location: Bluewater and Huron East, Huron County, Ontario

Dated at the Municipalities of Bluewater, Huron East and Huron County this the 13 of April, 2012

Varna Wind, Inc., (a wholly owned subsidiary of NextEra Energy Canada) is planning to engage in a renewable energy project in respect of which the issuance of a renewable energy approval is required. The proposal to engage in the project and the project itself is subject to the provisions of the *Environmental Protection Act* (Act) Part V.0.1 and Ontario Regulation 359/09 (Regulation). This notice must be distributed in accordance with section 15 of the Regulation prior to an application being submitted and assessed for completeness by the Ministry of the Environment. **The purpose of the meeting is to provide residents an opportunity to review and discuss the draft documentation related to the Project's Renewable Energy Approval.**

Public meetings will be held for the project on the following dates:

DATE: June 13, 2012
TIME: 4:00 p.m. to 7:00 p.m.
PLACE: Seaforth Community Centre
122 Duke Street, Seaforth, ON

DATE: June 14, 2012
TIME: 4:00 p.m. to 7:00 p.m.
PLACE: Stanley Complex
38594A Mill Road, Varna, ON

Please note that the meetings will be in an Open House format allowing attendees to visit any time during the event.

Project Description: Pursuant to the Act and Regulation, the facility, in respect of which this project is to be engaged in, is a Class 4 Wind Facility. If approved, this facility would have a total maximum name plate capacity of 60 MW. The Project Location is described in Figures 1 and 2.

Documents for Public Inspection:

The Draft Project Description Report titled "Project Description Report – Bluewater Wind Energy Centre" describes the project as consisting of 37 GE 1.6 MW turbines (although the Renewable Energy Approval application will include 41 turbine locations), a pad mounted transformer at each turbine, one transformer substation, underground electrical collection lines and an overhead transmission line, turbine access roads, an operations building, two meteorological towers and construction staging areas.

Varna Wind, Inc. has prepared the following supporting documents in order to comply with the requirements of the Act and Regulation: Project Description Report; Construction Plan Report; Design and Operations Report; Decommissioning Plan Report; Wind Turbine Specifications Report; Natural Heritage Assessment Report; Water Assessment and Water Body Report; Stage 1 and 2 Archaeological Assessment Reports; Heritage Assessment Report; and Noise Study Report.

Written copies of these draft supporting documents are available for public inspection on April 13, 2012 at www.NextEraEnergyCanada.com and at the Bluewater, Huron East and Huron County Municipal Offices:

Municipality of Bluewater
14 Mill Avenue, Box 250
Zurich, Ontario, N0M2T0

Municipality of Huron East
72 Main Street, Box 610
Seaforth, Ontario, N0K 1W0

Huron County
1 Courthouse Square
Goderich, Ontario, N7A 1M2

Written copies will also be available at the public open houses.

Comments received on or before June 18, 2012 will be included in our Public Consultation report to the Ministry of the Environment. Should you wish to provide comments after this date, they can be forwarded directly to the Ministry of the Environment.

Project Contact and Information: To learn more about the project proposal, public meetings, or to communicate concerns please contact:

Derek Dudek
Community Relations Consultant, NextEra Energy Canada, ULC
5500 North Service Road, Suite 205, Burlington, ON, L7L 6W6
Phone: 1-877-257-7330
Email: Bluewater.Wind@NextEraEnergy.com
Website: www.NextEraEnergyCanada.com

Welcome!

NextEra Energy Canada welcomes you to tonight's event.

We are here to:

- ✧ Present the final turbine and transmission line route layout for the Bluewater Wind Energy Centre
- ✧ Present field study findings and how we propose to address any effects
- ✧ Answer your questions
- ✧ Receive your comments
- ✧ Discuss draft reports



WIND ENERGY CENTRE - OPEN HOUSE

A Leader in Clean Energy

NextEra Energy Canada is an indirect, wholly-owned subsidiary of NextEra Energy Resources. NextEra Energy Resources, LLC is the largest generator of wind energy in North America.

NextEra Energy Canada

NextEra Energy Canada is a leading renewable energy developer in Canada focused on developing electricity derived from clean, renewable sources. Our Canadian operations are headquartered in Burlington, Ontario. We are the owner and operator of four wind energy projects and two solar energy projects in the following provinces:

- ✦ Quebec: Mount Copper and Mount Miller Wind Energy Centres
- ✦ Nova Scotia: Pubnico Point Wind Energy Centre
- ✦ Alberta: Ghost Pine Wind Energy Centre
- ✦ Ontario: Sombra and Moore Solar Energy Centres

NextEra Energy Canada is currently working toward approval of six wind energy centres in Ontario. We currently have two projects that received Renewable Energy Approval (REA).

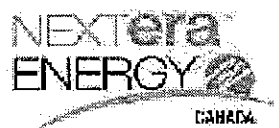
NextEra Energy Resources

We are:

- ✦ The operator of 90 wind projects in 18 states and three provinces with nearly 9,000 wind turbines providing over 8,700 megawatts of generation
- ✦ The second largest global generator of renewable energy
- ✦ The largest generator of both wind and solar power in North America operating wind energy facilities for over 21 years

Did you know that NextEra Energy Resources...

- ✦ Began developing renewable energy projects in 1989?
- ✦ Has approximately 4,500 employees in North America?
- ✦ Generates approximately 95% of its electricity from clean or renewable sources?

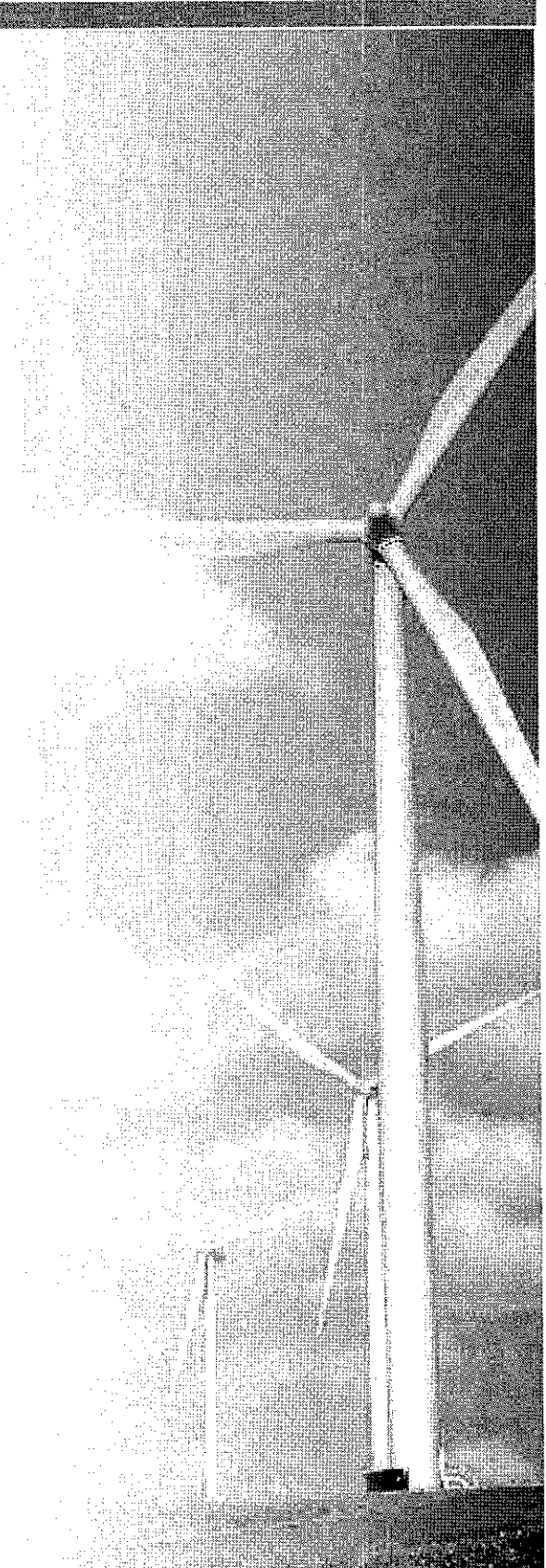


WIND ENERGY CENTRE - OPEN HOUSE

Why is Southwestern Ontario considered a great choice for wind energy?

Wind developers favour Southwestern Ontario for two main reasons:

1. Strong and consistent wind levels, particularly around the Great Lakes
2. Available and adjacent electricity transmission
 - ⌘ Wind data has been collected in the Project Study Area since 2007 measuring wind speeds at heights of 40 metres (131 feet), 50 metres (164 feet) and 60 metres (197 feet)
 - ⌘ Wind speeds are viable for commercial wind energy generation
 - ⌘ The region is well served by existing and planned transmission lines (such as Hydro One's Bruce to Milton line) that have available capacity to receive the electricity generated by the project



WIND ENERGY CENTRE - OPEN HOUSE

Benefits of Wind Power

Environmental Compatibility

- ⌘ Creates no air or water pollution
- ⌘ Minimal greenhouse gas emissions
- ⌘ Efficient and reliable
- ⌘ Allows land to remain in agricultural use
- ⌘ Does not use water in power generation
- ⌘ Low environmental impact
- ⌘ Free, renewable energy source

Local Economic Benefits

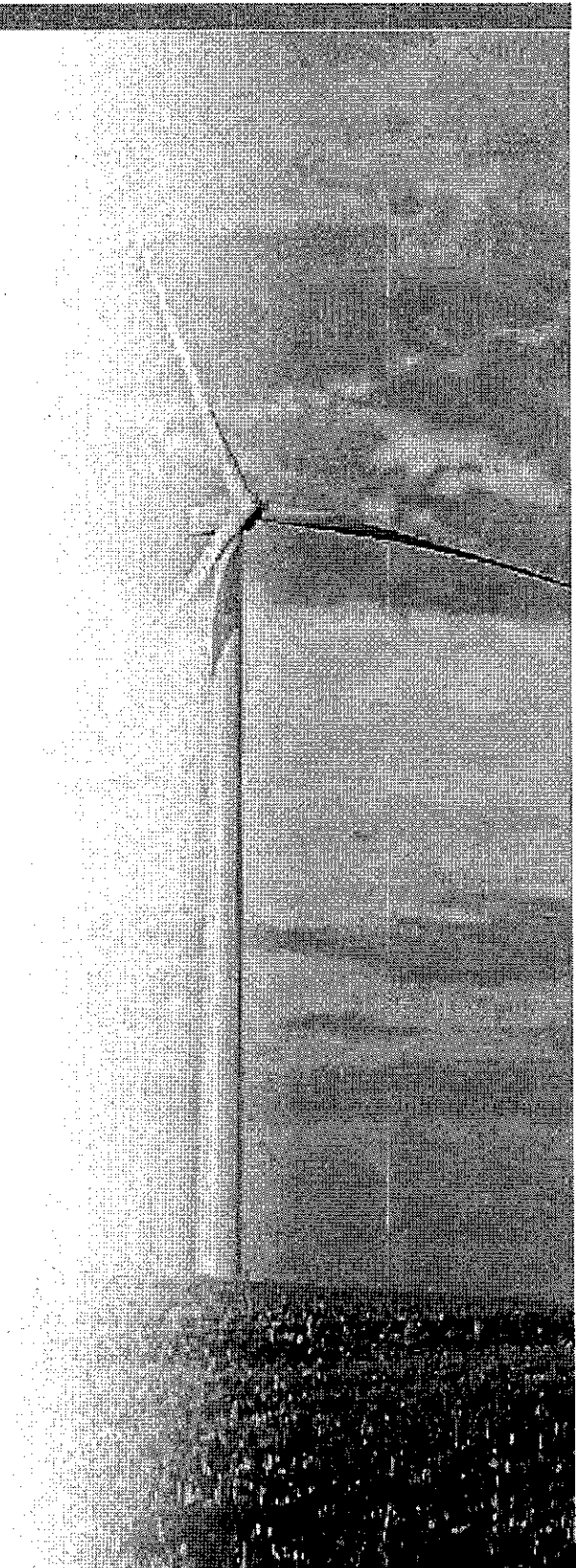
- ⌘ Provides new employment opportunities
- ⌘ Adds tax base to the local municipalities
- ⌘ Supports the economy through purchases of regional goods and services
- ⌘ 8-10 full time jobs
- ⌘ 200-300 construction jobs
- ⌘ Delivers landowner lease payments
- ⌘ Community Vibrancy Funds to support local initiatives

Over the next 20 years, we estimate the project will contribute:

- ⌘ \$166 million in corporate income tax
- ⌘ \$10 million in property tax revenue to Huron County
- ⌘ \$21 million in landowner payments

Price Stability

- ⌘ Decentralizes power production
- ⌘ No fuel cost
- ⌘ Helps stabilize the cost of power
- ⌘ Electricity produced domestically



WIND ENERGY CENTRE - OPEN HOUSE

Ontario's Renewable Energy Approval Process

- The Renewable Energy Approval (REA) process, outlined in Ontario Regulation 359/09, is a requirement for large wind power projects under Ontario's Green Energy Act
- NextEra Energy Canada will submit a Renewable Energy Approval application to the Ontario Ministry of the Environment (MOE) for each project
- The MOE will assess the application for completeness and then undertake a technical review to determine whether to issue an approval
- Other agencies, including the Ministry of Natural Resources (MNR), the Ministry of Transportation (MTO), the Ministry of Tourism, Culture and Sport (MTCS) and local conservation authorities and municipalities will provide input

Reports included in application:

- ✧ **Project Description Report** – to provide an overview of the project and a summary of all the required REA reports
- ✧ **Archaeology and Cultural Heritage Assessment Reports** – to identify potential effects on archaeological or cultural heritage resources
- ✧ **Natural Heritage Assessment Report** – to identify potential effects on birds, bats, other wildlife, woodlands, wetlands, areas of natural and scientific interest, etc.
- ✧ **Noise Study Report** – to ensure the project is in compliance with noise regulations
- ✧ **Water Body and Water Assessment Report** – to identify potential effects on streams, seepage areas and lakes
- ✧ **Construction Plan, Design and Operation, Decommissioning Reports** – to describe these activities and identify any potential effects resulting from the various project phases
- ✧ **Consultation Report** – to demonstrate how NextEra Energy Canada engaged local and Aboriginal governments, as well as the public, during the project
- ✧ **Wind Turbine Specifications** – to describe the turbine technology selected for the project

WIND ENERGY CENTRE - OPEN HOUSE

Renewable Energy in Ontario

The Green Energy and Green Economy Act

- Developed to stimulate the “green” economy in Ontario and create up to 50,000 jobs

Key Components:

- Provincial obligation to purchase green energy
- Priority grid access for renewable energy projects
- Long-term fixed-price power contracts
- Coordinated regulatory and approvals process



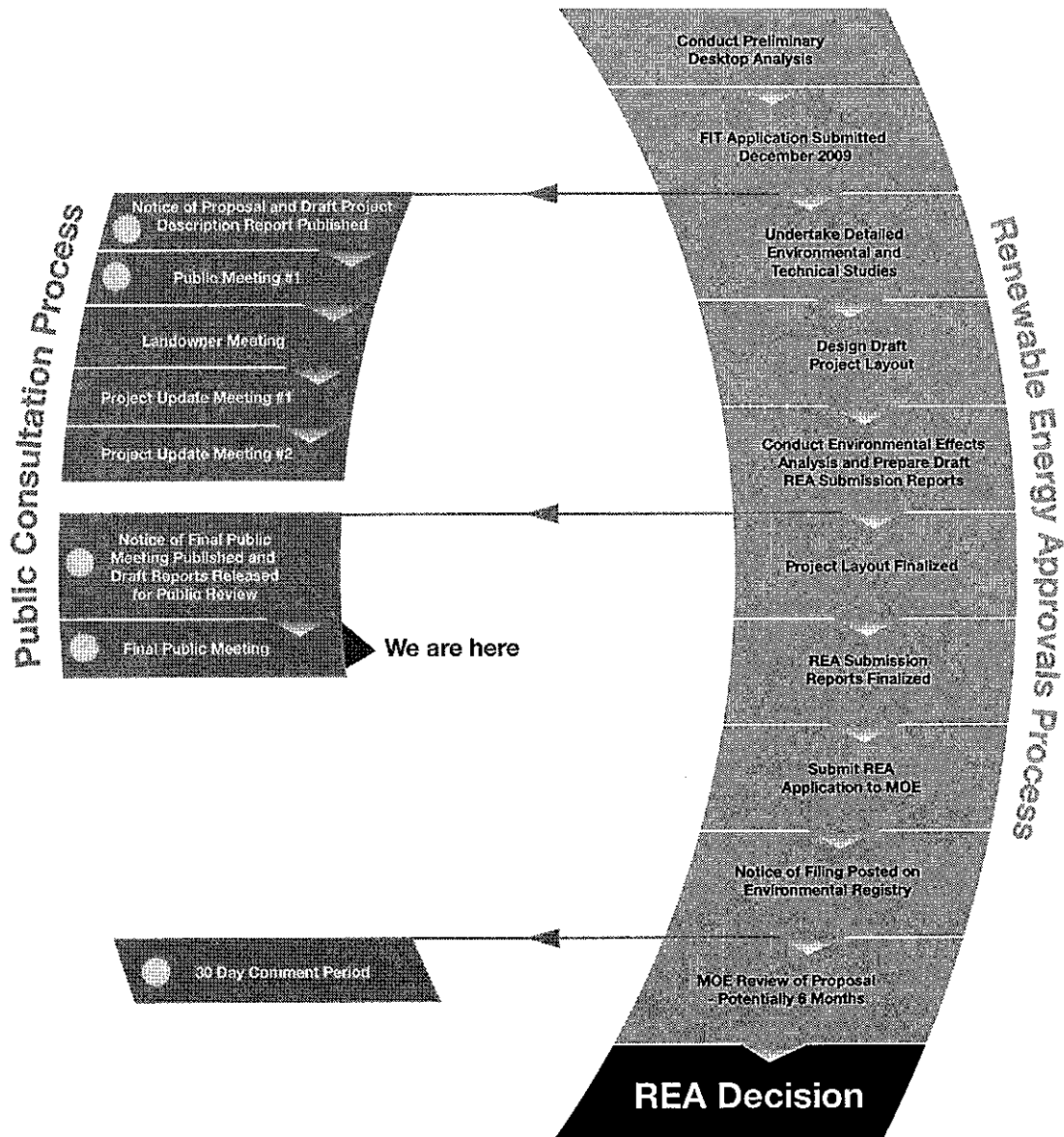
Provincial Green Energy Initiatives and the Feed-in-Tariff Program:

- Feed-in-Tariff (FIT) Program, launched by the Ontario Power Authority, is North America's first comprehensive guaranteed pricing structure for renewable electricity production
- The FIT Program offers stable prices and long-term contracts to green energy projects that encourage investment in renewable energy and economic development across the Province
- NextEra Energy Canada had six projects that were awarded FIT contracts on July 4, 2011:
 - ▲ Adelaide Wind Energy Centre
 - ▲ Bluewater Wind Energy Centre
 - ▲ Bornish Wind Energy Centre
 - ▲ East Durham Wind Energy Centre
 - ▲ Goshen Wind Energy Centre
 - ▲ Jericho Wind Energy Centre

We have two additional projects (Conestogo and Summerhaven Wind Energy Centres) which have been awarded a FIT contract by the Ontario Power Authority and have received the Renewable Energy Approval.

WIND ENERGY CENTRE - OPEN HOUSE

Renewable Energy Approval Process



 **Mandatory Consultation Activity**

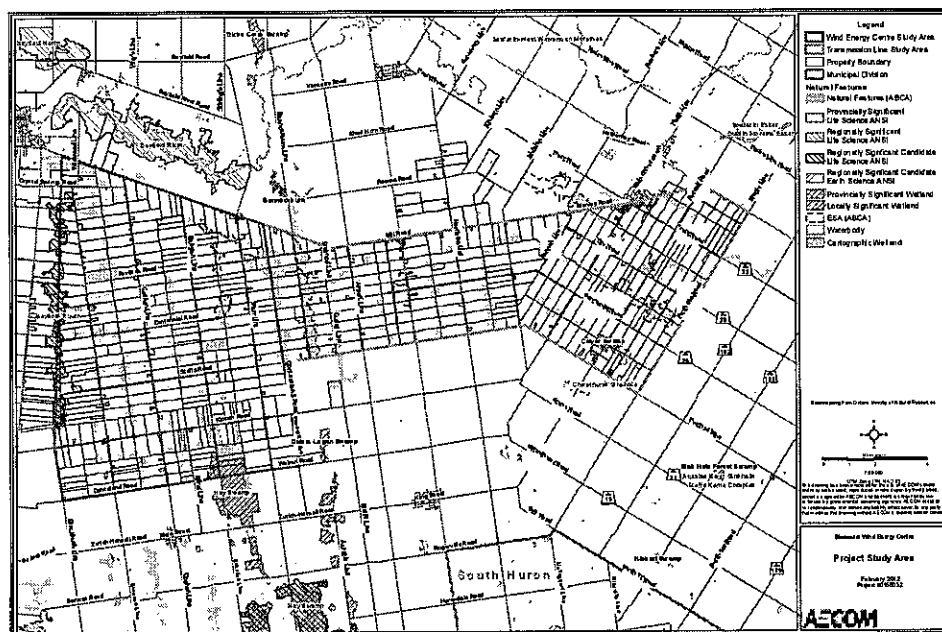
WIND ENERGY CENTRE - OPEN HOUSE

The Bluewater Project

- The proposed Bluewater Wind Energy Centre project is located within the municipalities of Bluewater and Huron East in Huron County, Ontario.
- The project will be able to generate up to 60-megawatts of electricity, enough energy for nearly 15,000 homes in Ontario
- Up to 37 1.6-megawatt turbines will be constructed; however, up to 41 turbines will be permitted through the Renewable Energy Approvals process

Facility components for the Bluewater Wind Energy Centre will include:

- ⌘ Laydown and storage areas (including temporary staging areas) for construction equipment and supplies
- ⌘ Underground electrical collection lines (on private property and in the municipal right-of-way) to connect the turbines to the transformer substation
- ⌘ A transformer substation to feed the electricity generated by the project into a new 115 kV transmission line that will connect to the existing Hydro One Seaforth Transformer Station
- ⌘ Access roads for construction and maintenance
- ⌘ Permanent meteorological towers to measure wind speeds, wind direction, temperature and humidity during operation
- ⌘ An operations and maintenance building



WIND ENERGY CENTRE - OPEN HOUSE

Your Concerns... Our Response

Q: How much noise will there be from turbines?

A: Wind projects must show that they meet the sound limit requirements prescribed by the Ministry of Environment. For non-participating residences (those that are not a part of the project) the sound limit is 40 decibels (dBA). This is quieter than many sources of sound within a home (i.e., 40 dBA is about halfway between a whisper and a normal conversation between two people less than a metre apart). Sound from a wind turbine diminishes over distance, as such; NextEra meets or exceeds the 550 metre minimum setback distance required by the Province between wind turbines and dwellings.

Q: What effects will there be on wildlife? (e.g. birds, bats etc)

A: When properly sited, wind turbines present less of a danger to wildlife than other structures such as buildings and roads. Turbines will be located as carefully as possible to minimize any effects on wildlife. NextEra Energy Canada will work closely with the relevant experts to assess any potential effects on wildlife, including birds and bats.

Q: What risks are there to my health from turbines?

A: There is little credible evidence to support any links between wind turbines and adverse effects on human health either related to noise or shadow flicker. NextEra will have a Complaint Resolution Process in place to address any concerns related to the project that may arise.

Q: What risks are there to my health from transmission lines?

A: It is very unlikely that electro-magnetic fields (EMF) from high voltage power lines will have any effect on health. The EMF from power lines and transformer boxes are much weaker than those from normal household appliances.

WIND ENERGY CENTRE - OPEN HOUSE

Your Concerns... Our Response

Q: I am concerned about the effect on the value of my property.

A: Based on available research, we are not aware of any credible evidence to indicate a decline in property values from the siting of a wind farm. Independent studies have been conducted by Ontario municipalities, leading universities, and other entities which have concluded that the construction of a wind facility does not detract from property values.

Q: What will it cost to decommission the turbines?

A: The decommissioning costs will be established through the Renewable Energy Approval process which will specify the requirements for a decommissioning plan and incorporate them in the permit under O.Reg. 359/09. The public will have an opportunity to provide input and comment on the plan that will be apart of the application filed with the Ministry of the Environment. The project owner will be responsible for the cost of the decommissioning.

Q: I have concerns about the impact on the landscape from the turbines.

A: The visual impact of any development is highly subjective. Through our consultation we will present visualizations of our proposed development for public comment and feedback that may result in changes that would make the development more visually appealing.

Q: I am concerned that wind turbines may prove distracting to motorists.

A: NextEra is unaware of any issues regarding our wind turbines causing distractions to drivers. We will ensure that we adhere to the guidelines put in place by the Ministry of Environment regarding setbacks from the road.

For a complete list of comments and questions from the public, please visit the Frequently Asked Questions sections on our website. We will also publish concerns and inquiries

REA documents and posted on our website.



Aboriginal Consultation

- Canada's Constitution Act, 1982, recognizes the rights of Aboriginal peoples (First Nation, Inuit and Métis)
- Ontario Regulation 359/09 has specific requirements for Aboriginal consultation
- Ontario Power Authority's Feed in Tariff program reinforces the importance of Aboriginal consultation
- Project proponents are delegated the "procedural aspects" of Aboriginal consultation
- Aboriginal consultation may include environmental, archaeological, cultural and spiritual issues
- NextEra Energy Canada is working closely with Aboriginal communities and leadership as required by law and good practice to:
 - Offer meaningful information about its projects
 - Seek information that helps ensure good planning to avoid or minimize impacts
 - Openly discuss issues, interests and concerns
 - Seek workable and mutually acceptable solutions
 - Foster relationships of mutual respect

WIND ENERGY CENTRE - OPEN HOUSE

Turbine Siting Process

Developing a Site Plan

The following steps outline the process of developing a project site plan:

1. Identify a sufficient wind resource and study the wind regime for several consecutive years
2. Work with local landowners to option land for wind turbines and ancillary facilities (i.e. collection lines and access roads)
3. Identify technical and environmental constraints based on input from project engineers, ecologists and aquatic biologists, cultural experts, local landowners, Aboriginal groups, and government agencies
4. Identify locations to site project infrastructure by balancing these technical and environmental constraints while adhering to the setback distances prescribed by the Province (i.e., Ontario Regulation 359/09) as identified in **Table 1** below. Project components can be sited within the setbacks for some terrestrial features provided that an Environmental Impact Study is completed and mitigation measures identified.

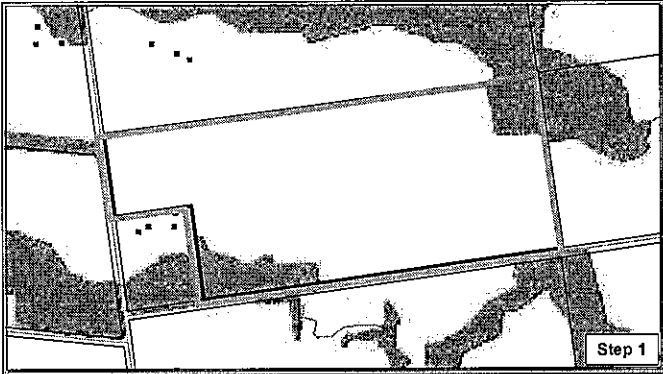
Table 1. Turbine Siting Process Constraint Categories

Terrestrial Features	<ul style="list-style-type: none"> • Area of Natural and Scientific Interest (ANSI) Earth Science: 50m • ANSI Life Science: 120m • Significant Wildlife Habitat: 120m • Significant Woodlands and Valleylands: 120m • Provincially Significant Wetland: 120m
Aquatic Features	<ul style="list-style-type: none"> • Streams and Waterbodies: 30m
Local Infrastructure	<ul style="list-style-type: none"> • Petroleum Resource Facilities: 75m • Road Right-of-Way: 60m • Railway Right-of-Way: 60m
Socio-Economic	<ul style="list-style-type: none"> • Property Line: 60m • Residents and other uses sensitive to noise: 550m

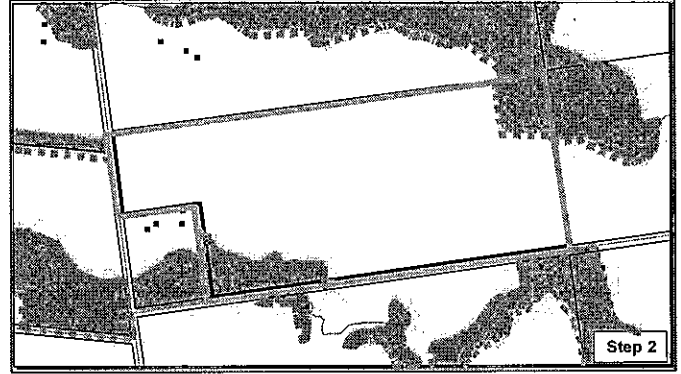
* Note that other setback requirements may be applicable to the projects (e.g. aerodromes, pipelines, and Ministry of Transportation setbacks, etc.)

WIND ENERGY CENTRE - OPEN HOUSE

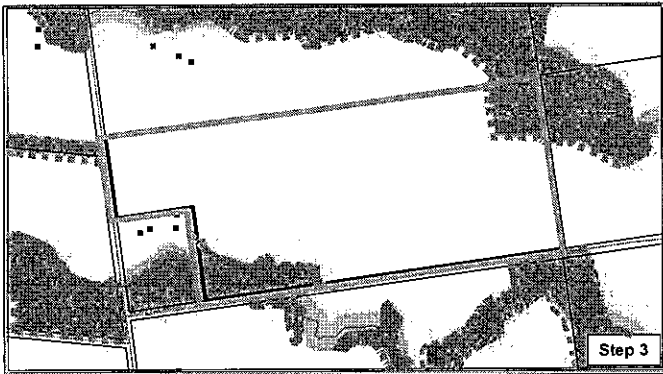
Turbine Siting Process



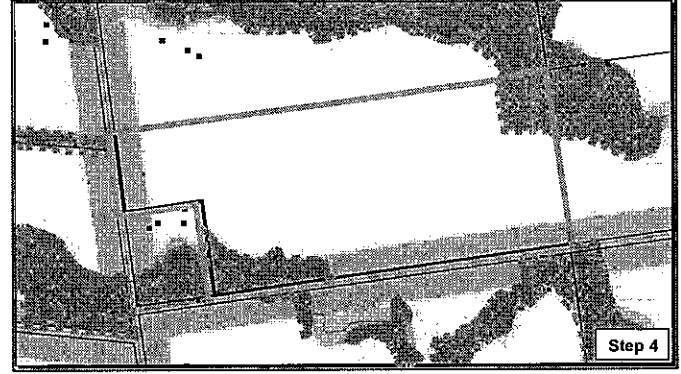
Step 1: Work with local landowners to option land



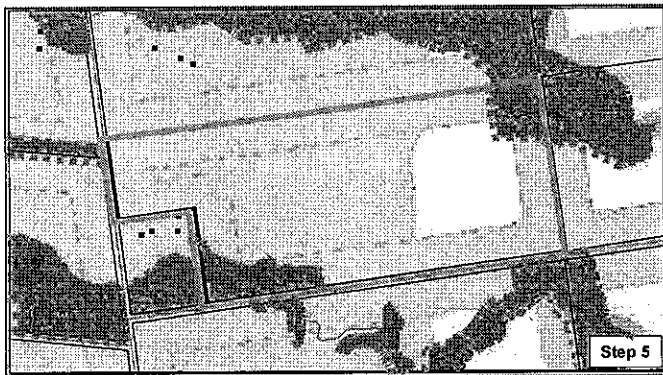
Step 2: Identify terrestrial constraints



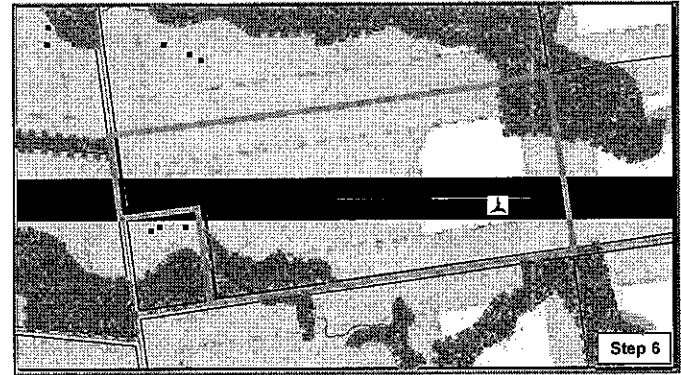
Step 3: Identify aquatic constraints



Step 4: Identify local infrastructure constraints







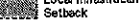
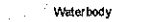
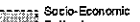


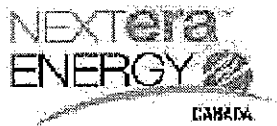
Step 5: Identify socio-economic constraints



Step 6: Site turbine within remaining land available

Legend

 Turbine Location	Socio-Economic	Setback
Terrestrial Features	 Noise Receptor	 Terrestrial Setback
 Woodlots	Local Infrastructure	 Aquatic Setback
Aquatic Features	 Major Road	 Local Infrastructure Setback
 Waterbody		 Socio-Economic Setback



WIND ENERGY CENTRE - OPEN HOUSE

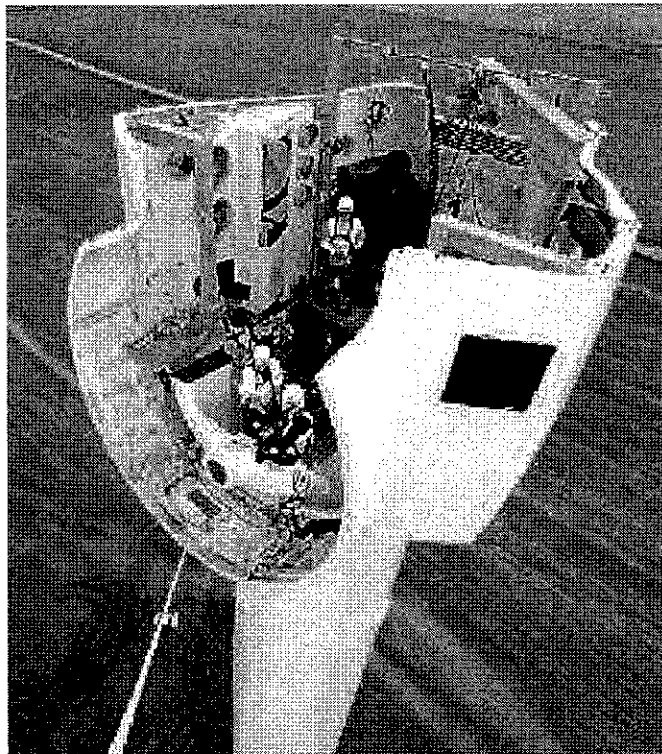
Construction Plan

Turbine siting and surveys

- ⌘ Site preparation will include final turbine siting and surveys
- ⌘ During these surveys, boundaries of turbine sites will be staked and existing buried infrastructure will be located and marked

Access roads

- ⌘ Municipal and Provincial roads will be used to transport equipment to the construction sites
- ⌘ Minor modifications may be required to some of the existing roads (e.g. widening the turning radius) to transport equipment
- ⌘ New access roads will typically be 10 m (34 feet) wide during the construction phase
- ⌘ No permanent paved roads will need to be constructed for the turbines
- ⌘ Equipment will be delivered by truck and trailer as needed throughout the construction phase and stored at temporary laydown sites surrounding each turbine



WIND ENERGY CENTRE - OPEN HOUSE

Construction Plan

Electrical Collector System:

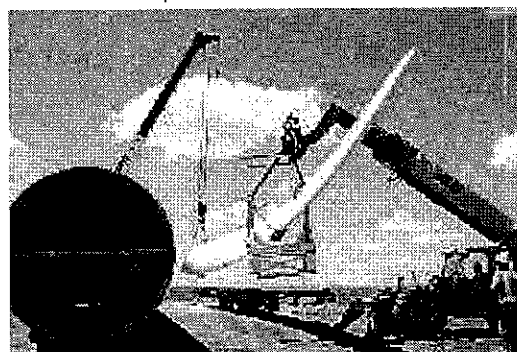
- ⌘ This system consists of a mixture of underground cables, pad mounted transformers and a substation
- ⌘ Ploughing and trenching will be used to install the underground cables
- ⌘ The cabling will be buried at a depth that will not interfere with normal agricultural practices and maps of cable locations will be provided to landowners

Wind Turbines:

- ⌘ Foundations will be made of poured concrete, reinforced with steel rebar to provide strength
- ⌘ Each foundation will require an excavation of approximately 3 metres (10 feet) deep, and 20 metres (66 feet) by 20 metres (66 feet) square
- ⌘ Only the tower base portion of the foundation will be left above ground
- ⌘ The turbine will then be anchored to the foundation by large bolts set in the concrete foundation
- ⌘ Turbine assembly and installation will typically require 4 - 5 days per turbine
- ⌘ Following commissioning, the area surrounding the turbine will be returned to its pre-construction state

Operations and Maintenance Building:

- ⌘ This building will be used to monitor the day-to-day operations of the wind farm and maintenance effort; Preferably, an existing building will be obtained for this purpose; otherwise, a new building will be constructed on privately held lands
- ⌘ Potable water will be supplied by a well or through the municipal water system and if required, a septic bed will be constructed for the disposal of sewage
- ⌘ These elements will be constructed in accordance with applicable municipal and provincial standards

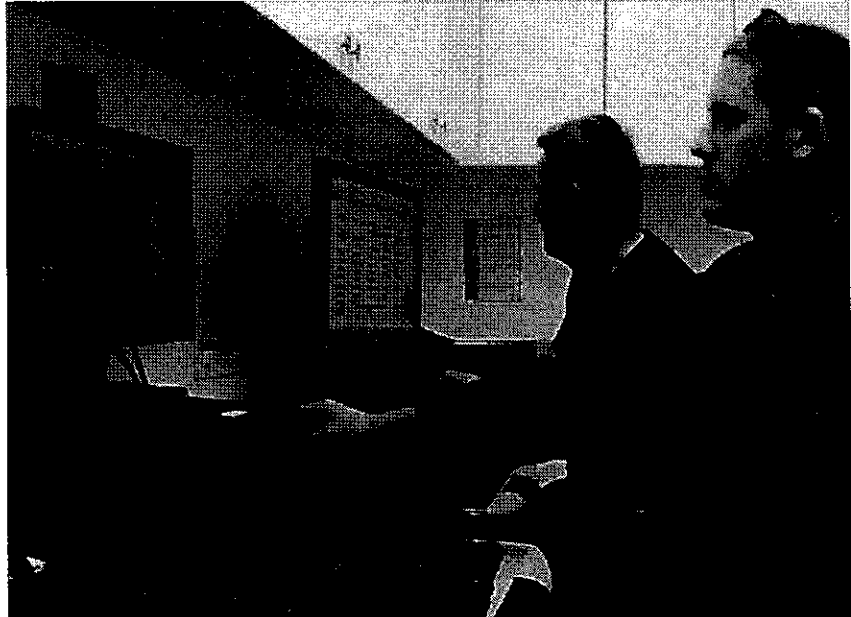


WIND ENERGY CENTRE - OPEN HOUSE

Operations and Maintenance

NextEra Energy believes in “prevention” versus “event response” through component condition and performance assessment

- ⌘ Experienced operations and maintenance managers on site
- ⌘ On-going training and mentoring programs to maintain safe and efficient operation
- ⌘ Site staff supported by centralized maintenance and environmental staff
- ⌘ Supported by 24/7 Fleet Performance and Diagnostic Centre
- ⌘ Local operations team available to answer questions and address concerns



WIND ENERGY CENTRE - OPEN HOUSE

Health and Wind Turbines

- Public health and safety will be considered during all stages of the Project.
- Many studies have been conducted world-wide to examine the relationship between wind turbines and possible human health effects.
- In Ontario *“Ontario doctors, nurses, and other health professionals support energy conservation combined with wind and solar power – to help us move away from coal”*

Ontario College of Family Physicians, Registered Nurses Association of Ontario, Canadian Association of Physicians for the Environment, Physicians for Global Survival, the Asthma Society of Canada, and the Lung Association

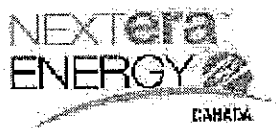
- In “The Potential Health Impact of Wind Turbines” (May 2010), Ontario’s Chief Medical Officer of Health examined the scientific literature related to wind turbines and public health, considering potential effects, such as dizziness, headaches, and sleep disturbance. The report concluded that:

“...the scientific evidence available to date does not demonstrate a direct causal link between wind turbine noise and adverse health effects. The sound level from wind turbines at common residential setbacks is not sufficient to cause hearing impairment or other direct health effects, although some people may find it annoying.”

The report also concluded that low frequency sound and infrasound from current generation upwind model turbines are well below the pressure sound levels at which known health effects occur. Further, the report states that there is no scientific evidence to date that vibration from low frequency wind turbine noise causes adverse health effects.

- Overall, health and medical agencies agree that sound from wind turbines is not loud enough to cause hearing impairment and is not causally related to adverse effects.*
- Scientists and medical experts around the world continue to publish research in this area. Through our health consultants, NextEra is committed to staying informed on this issue.

*e.g., Chatham-Kent Public Health Unit, 2008; Minnesota Department of Health, 2009; Australian Government, National Health and Medical Research Council, 2010; Australian Government, 2011, Massachusetts Department of Environmental Protection (MassDEP) and Massachusetts Department of Public Health (MDPH), 2012



www.NextEraEnergyCanada.com



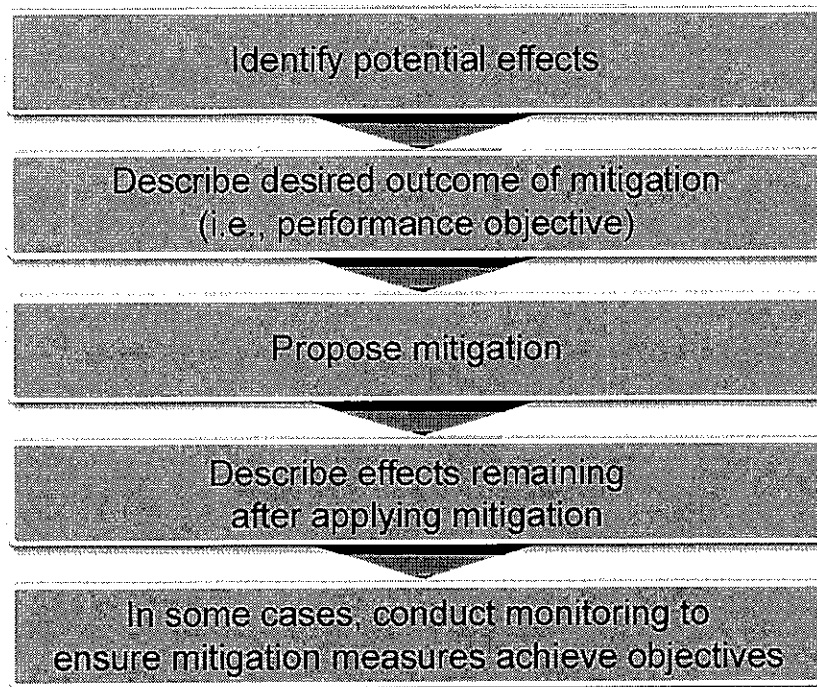
WIND ENERGY CENTRE - OPEN HOUSE

Effects Assessment

Potential effects were assessed based on the following:

- ⌘ Archaeological sites;
- ⌘ Natural Heritage (e.g. birds, bats, wetlands etc.);
- ⌘ Water Bodies;
- ⌘ Cultural Heritage features;
- ⌘ Noise; and
- ⌘ Shadow flicker.

The diagram below shows the process followed for the effects assessment:



WIND ENERGY CENTRE - OPEN HOUSE

Archaeological Studies - Bluewater Project

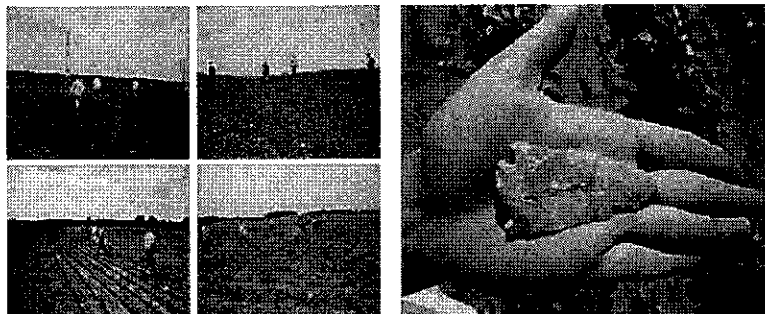
A Stage 1 Archaeological Assessment was conducted to establish if any known archaeological sites exist in or near the Project Location. Where the Stage 1 findings showed that there is archaeological potential a Stage 2 Archaeological Assessment was completed to identify any archaeological resources and confirm if further studies are required. A Stage 3 Archaeological Assessment is conducted if a location has cultural heritage value or interest that needs further study or additional mitigation measures to protect the resource.

Stage 1 Key Findings:

- The potential for discovering Aboriginal and Euro-Canadian archaeological resources was deemed to be moderate to high;
- Important features included: drinking water sources, areas of flat landscape, soils for agricultural purposes, known archaeological sites and Euro-Canadian historic documents; and
- Evidence exists for both Aboriginal and Euro-Canadian use of the area over time.

Stage 2 Key Findings:

- 25 archaeological sites were identified, including: 18 pre contact Aboriginal sites and / historic Euro-Canadian sites;
- Stage 3 Archaeological Assessment was recommended for 4 of the historic Euro-Canadian sites, meaning that the locations have cultural heritage value or interest that requires further investigation; That work is underway.
- No further investigation was deemed necessary at any of the other sites.



WIND ENERGY CENTRE - OPEN HOUSE

Cultural Heritage – Bluewater Project

- A Cultural Heritage Assessment was conducted using historic research, mapping, field surveys and consultation with local historians;
- No protected properties or protected cultural heritage landscapes were found in the Project Location;
- 76 structures (45 houses and 31 barns) older than 40 years were identified within the Project Location. These structures were identified as contributing to the character of the rural area. Of these structures 47 of them (20 houses and 27 barns) were deemed to have cultural heritage value or interest but no further work was recommended since there are no anticipated direct or indirect impacts on these structures.



WIND ENERGY CENTRE - OPEN HOUSE

Water – Bluewater Project

- A Water Assessment was conducted to identify water bodies within 120m of the Project Location. A water body includes a lake, permanent stream, intermittent stream and seepage area, defined under O.Reg. 359/09.
- 69 water bodies were identified within 120m of the Project Location through desktop research and field investigations.
- Key Findings
 - ⌘ 15 water bodies are located within 120m of turbines;
 - ⌘ Seven water bodies will require a watercourse crossing through installation of a culvert;
 - ⌘ 17 water bodies are located within 120m of an access road;
 - ⌘ Five water bodies are located within 120m of collection lines;
 - ⌘ The transmission line will span 11 water bodies; and
 - ⌘ One water body is located within 120m of the substation and laydown area.

Potential Effects and Mitigation

The table below presents a summary of the potential effects on water bodies and proposed mitigation measures:

Project Phase	Potential Effects	Mitigation Measures
Construction/ decommissioning	Erosion and sedimentation from clearing vegetation	Erosion blankets, erosion control fencing and straw bales will be used to control erosion and prevent soil from entering watercourse.
	Degradation of fish habitat from access roads crossing water courses	Culverts will be designed and installed in a way to prevent barriers to fish movement.
	Soil compaction which could increase water runoff into watercourses	Changes in land contours and natural drainage will be minimized and temporary storage basins installed to allow water infiltration, or permanent stormwater management facilities used as necessary.
Operations	Water contamination from accidental spills associated with maintenance activity (unlikely to occur).	Spill response plan will be developed and an emergency spill kit kept on site. Any spills will be reported to the Ministry of the Environment and local municipalities.

WIND ENERGY CENTRE - OPEN HOUSE

Natural Heritage - Bluewater Project

- Information was gathered to identify and investigate natural features such as provincial parks, wetlands, woodlands or wildlife (e.g. bird or bat) habitats within 120m of the Project Location. Features were evaluated for significance, according to provincial criteria. Where significance was established an Environmental Impact Study (EIS) was conducted.
- The EIS identified negative effects on the environment, proposed mitigation measures, identified residual effects and their significance, and described how the environmental effects monitoring plan, and construction plan address any negative environmental effects.
- The following features were identified as significant:
 - ^ 9 wetlands;
 - ^ 31 woodlands;
 - ^ 1 valleyland; and
 - ^ 11 types of significant wildlife habitat (e.g. amphibian breeding habitats, rare forest types, bat maternity colonies, waterfowl nesting habitat, woodland raptor nesting habitat.)
- For each natural heritage feature identified as significant, potential effects were assessed and mitigation measures/monitoring commitments proposed depending on the type of project infrastructure affecting the feature. The table below presents a summary of the potential effects and mitigation.

Potential Effects and Mitigation

Project Phase	Potential Effect	Mitigation Measures
Construction/ Decommissioning	Increased erosion, sedimentation and turbidity from clearing vegetation for access roads, crane paths etc.	Erosion control fencing will be kept in place until disturbed areas are stable. All stockpiled materials will be kept away from the features and periodic monitoring will take place during construction to ensure compliance.
	Damage to vegetation	Protective fencing installed to ensure work is kept within identified zones. Periodic monitoring will take place during construction to ensure compliance.
	Soil and water contamination from accidental spills or oil, gasoline or grease.	A spill response plan will be developed to outline the steps to be taken in the event of a spill. An Emergency Response and Communications Plan has been included in the Design and Operations Report.
Operations	Disturbance or mortality to wildlife (e.g. birds and bats) from turbine collisions.	Operational mitigation techniques including periodic shut down of turbines when the chances for bird or bat collisions are increased. Monitoring will include three year post-construction mortality surveys for birds and bats which will be submitted to the MNR.

WIND ENERGY CENTRE - OPEN HOUSE

Noise Studies - Bluewater Project

Noise studies were conducted to help determine the final turbine layout. The noise studies comprise the following steps:

- **Step 1:** Identify points of reception – dwellings (typically houses) that are within 2km of the wind turbines
- **Step 2:** Obtain wind turbine specifications and noise emission ratings from the manufacturer
- **Step 3:** Using an initial wind turbine layout, predict the noise levels generated at points of reception using a noise prediction model to ensure allowable limits are not exceeded. The noise model is designed in accordance with standards set by the Ministry of the Environment (MOE)
- **Step 4:** Using the noise model results, revise the turbine layout as necessary to ensure that the final turbine layout meets all applicable noise guidelines

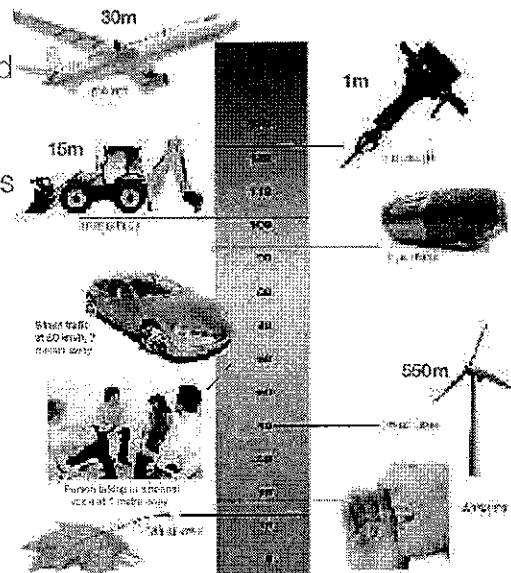
Noise requirements under Renewable Energy Approval Regulation (O.Reg. 359/09)

- Wind turbines will be set back from dwelling units that are not part of the project by at least 550m (1804ft) and must be at or below 40dBA.
- Noise from turbines must meet provincial noise limits as outlined in MOE publication 4709e "Noise Guidelines for Wind Farms"

Noise Assessment results

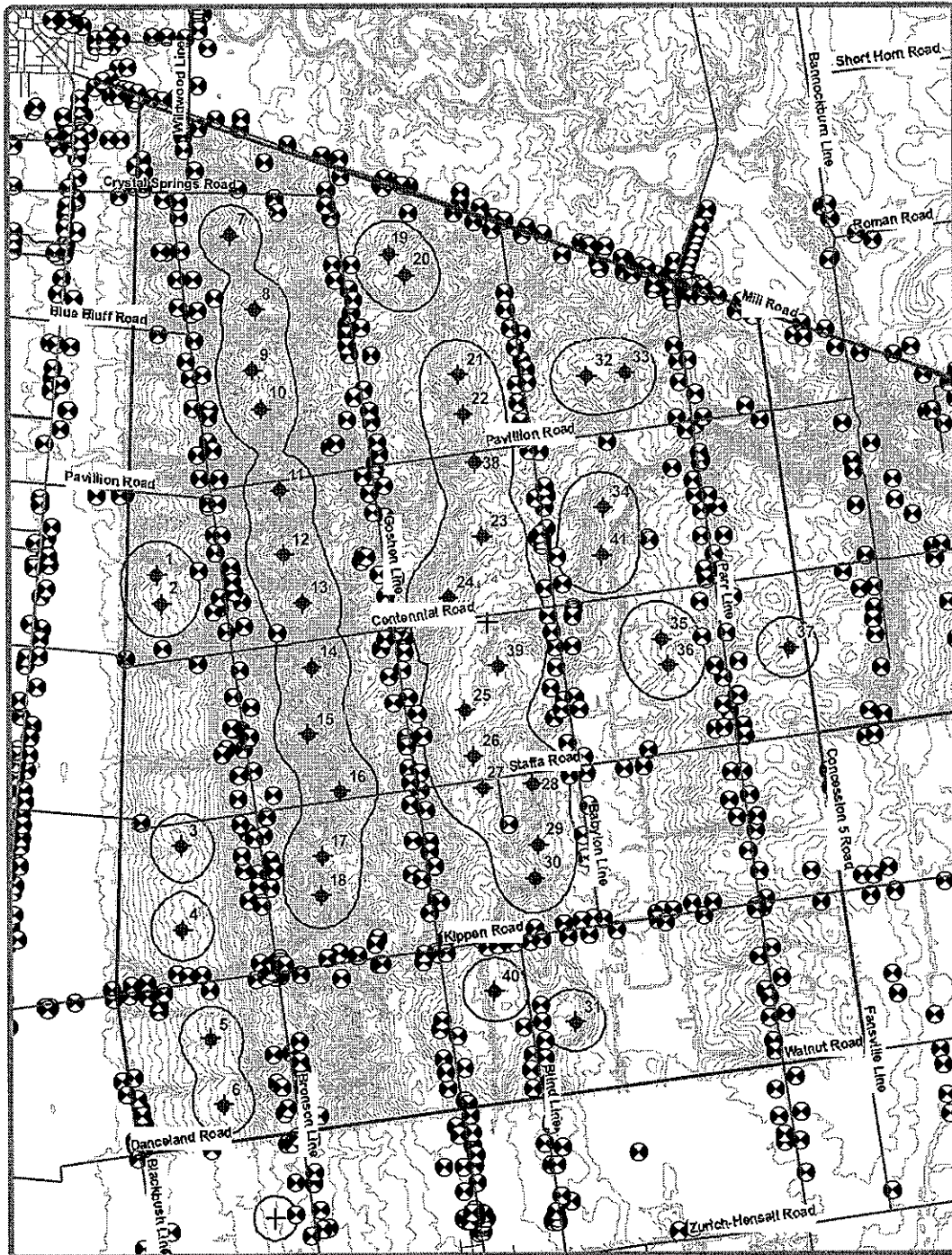
- Modelling of predicted noise levels from the proposed turbines, transformer station and the existing Zurich wind turbine was undertaken. The results were as follows:

- ⌘ All non-participating residences (vacant or occupied) comply with MOE guidelines for wind turbines – they are below the 40 dBA noise threshold and are greater than 550m from the nearest wind turbine;
- ⌘ A 5m high noise barrier will ensure that the transformer substation is in compliance with MOE noise limits.





WIND ENERGY CENTRE - OPEN HOUSE

Noise Studies - Bluewater Project



Wind speed of 6 m/s

 ≥ 40.0 dBA

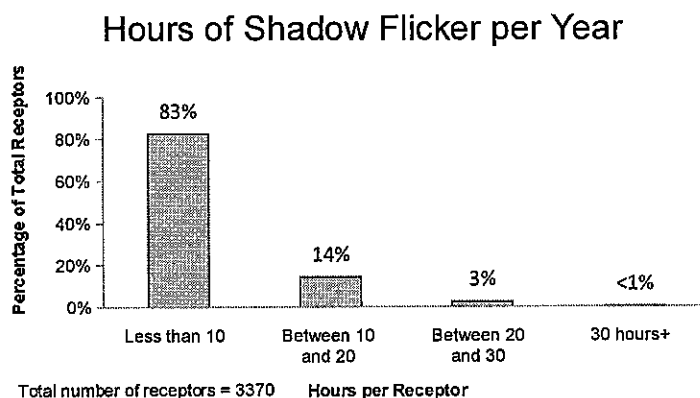
 Noise Receptor

Shadow Flicker - Bluewater Project

- Shadow flicker is a temporary condition resulting from the sun casting intermittent shadows from the rotating blades of a wind turbine onto a sensitive receptor such as a window in a building. For shadow flicker to occur, the following criteria must be met:
 1. The sun must be shining and not obscured by any cloud cover.
 2. The wind turbine must be between the sun and the shadow receptor.
 3. The wind turbine must be facing directly towards (or away from) the sun.
 4. The line of sight between the turbine and the shadow receptor must be clear. Obstacles, such as trees, buildings or other structures, will prevent or reduce shadow flicker from occurring at the receptor.
 5. The receptor has to be close enough to the turbine to be in the shadow.
 6. The turbine is operational and not stationary due to a lack of wind or maintenance activities.

Shadow Flicker Assessment and Results

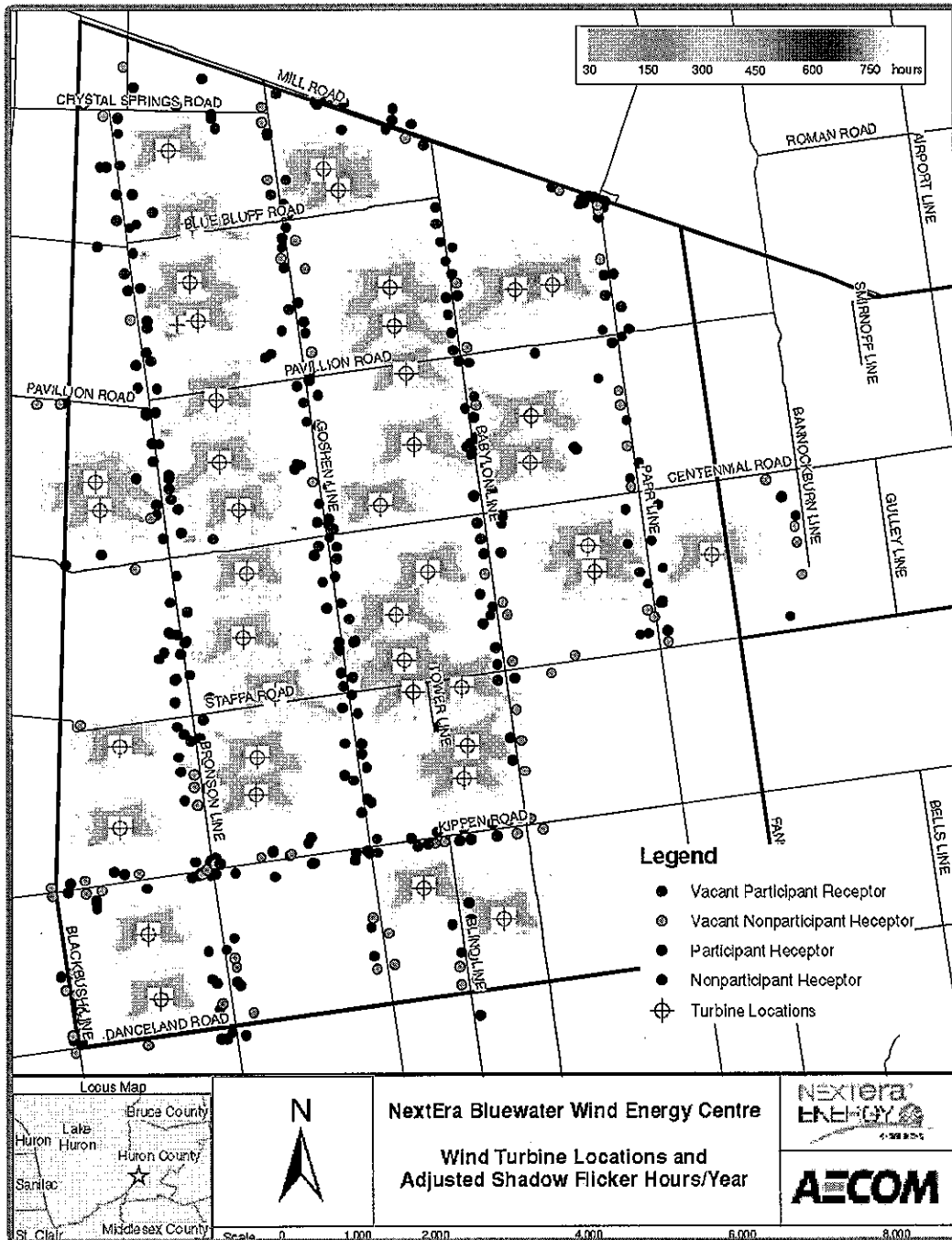
- To assess the effects of shadow flicker, hourly meteorological data, terrain features, receptor, and turbine locations were considered to show the predicted amount of hours when shadow flicker will occur.
- The worst case maximum shadow flicker per day is 1 hour and the worst case maximum shadow flicker per year is 35 hours.



- This is a conservative analysis that does not account for maintenance time, winds less than 3 m/s when the turbines will not operate, or that the turbine will rarely be directly facing the sun which will shorten the shadow from the turbine blades.

WIND ENERGY CENTRE - OPEN HOUSE

Shadow Flicker Contour Map - Bluewater Project



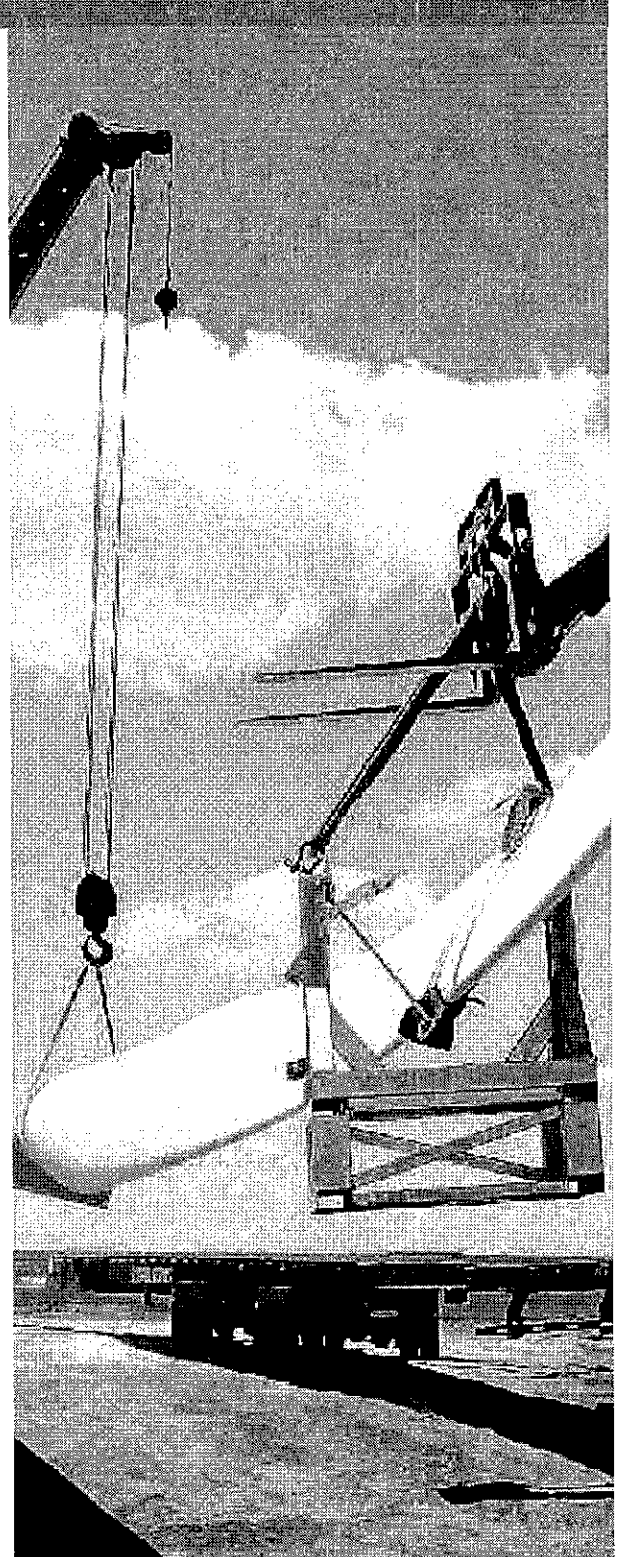
WIND ENERGY CENTRE - OPEN HOUSE

Decommissioning

- The anticipated life of the project is approximately 30 years. Decommissioning of the turbines will occur following the operations phase. A plan has been developed to dismantle or decommission the Project and to restore the land and manage excess water or waste.
- Decommissioning will be done in accordance with the Ontario Health and Safety Act and any applicable municipal, provincial and federal regulations and standards.
- The following components will be removed during dismantling:
 1. Turbines;
 2. Overhead lines and poles; and
 3. Transformer substations.

Restoration of land and water

- All areas, including the access roads, transformer pads and crane pads will be restored as much as practical to their original condition with native soils and seeding.
- There is the option for turbines to be "re-powered", meaning that components could be replaced to extend the life of the Project and delay decommissioning. This is optional, and turbines may still be decommissioned.

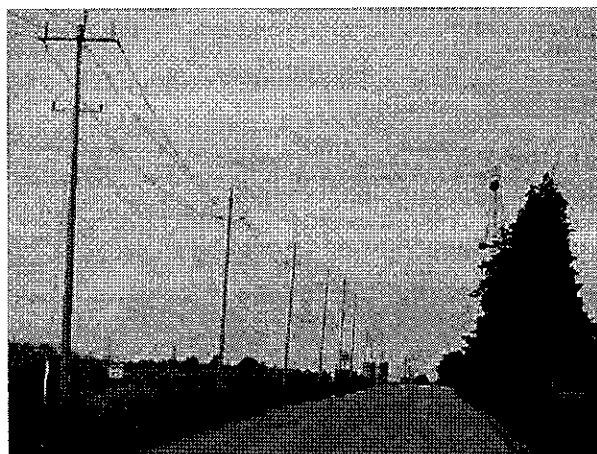
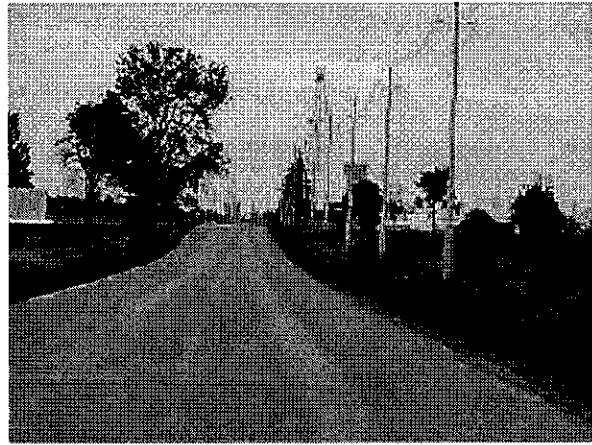
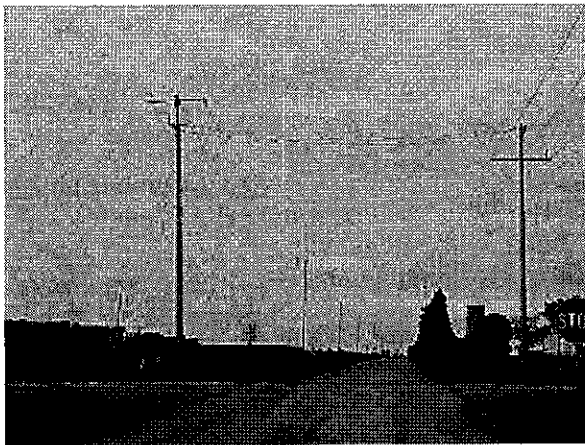


WIND ENERGY CENTRE - OPEN HOUSE

Transmission Line

Transmission line - Why is it needed?

- Deliver clean energy to the Ontario system operator to reduce the use of fossil fuel generated electricity by Ontarians.
- System studies indicate there is ample capacity at this point of interconnection without significant network upgrades.
- Investment in transmission infrastructure is needed in Ontario. The plan places no additional burden on our aging infrastructure or Ontario ratepayers.



WIND ENERGY CENTRE - OPEN HOUSE

Transmission Route Overview

- NextEra Energy Canada will build a 115 kV electrical transmission line from the step-up transformer station to the connection point with the Provincial electricity grid.
- The transmission line will be located on private property or within existing road rights-of-way.
- The electricity collected via the 34.5 kV underground collection lines will converge at the transformer substation where the electricity will be “stepped-up” to 115 kV for transmission and then routed to a breaker switch station.
- The breaker switch station will occupy less than 5 acres of land and is the point of interconnect with the existing Hydro One transmission line.

Selecting a Transmission Route

- Distance between the transmission line and existing structures is considered when selecting a route.
- Easement widths located on private property will vary between 33 - 200 feet (10 - 60 metres). Widths vary due to special features on a particular parcel.
- Existing land uses and the location of environmentally sensitive features are considered when choosing a route.

Land Owners and Easement Agreements

- NextEra Energy Canada is committed to working with landowners within the transmission corridor to find a mutually acceptable route for the transmission line.
- Landowners will be paid a fair market value for the property subject to an easement.
- Compensation will be made for property damage caused during construction and operation of the transmission line (including crops).

WIND ENERGY CENTRE - OPEN HOUSE

Construction of a Transmission System

The construction of the transmission system is being considered on municipal rights of way, private lands or a combination of both within the transmission study area.

- Transmission structures will typically be single poles made of metal, wood, or concrete.
- Poles will be approximately 18 – 27 metres (60 - 90 feet) in height. The transmission line will be mounted on existing or new hydro poles.
- A typical span between poles will be 91 – 182 metres (300 - 600 feet).
- Wherever practical, transmission and distribution will be co-located on a single pole.
- Transmission lines must be constructed to standards outlined by the Province and/or electrical codes.

Transmission Approvals Process

- Transmission lines (lines with voltages higher than 50 kV) that are longer than 2km require a Leave to Construct from the Ontario Energy Board.
- This process examines the need for the line and the proposed routing to ensure that the priorities given to the Ontario Energy Board by the government are met.
- The line is also permitted as part of the Renewable Energy Approval (REA) process.
- Natural heritage and archaeological studies are being conducted along proposed routes within the transmission study area including:
 - ^ Vegetation studies
 - ^ Aquatic habitat assessments; and
 - ^ Birds, bat and wildlife studies
- Any additional studies that may be required as a result of route selection will be conducted prior to construction.

WIND ENERGY CENTRE - OPEN HOUSE

Construction Plan

- A construction plan has been developed to detail all the activities that are part of the Project's construction phase. This plan includes details of any potential effects, the appropriate mitigation measures and ongoing monitoring commitments.
- The schedule below shows the anticipated construction schedule for the Project. Construction is expected to start in May 2013 and last for 6 months.

(Activity)	M0	M1	M2	M3	M4	M5	M6
Surveying (prior to construction)							
Geotechnical Sampling (prior to construction)							
Land Clearing and Construction of Access Roads							
Temporary Crane Paths							
Installation of Culverts							
Construction of Laydown Area							
Turbine Site and Crane Pad Construction							
Delivery of Equipment							
Construction of Turbine Foundations							
Wind Turbine Assembly and Installation							
Construction of Electrical Collector System							
Construction of Transformer Substation							
Construction of Operations Building							
Land clean up and Reclamation							
Turbine Commissioning							

WIND ENERGY CENTRE - OPEN HOUSE

Next Steps - Bluewater Project

REA Process

- The final REA reports will be submitted following the public open houses which will initiate the Ministry of the Environment's review.
- Final reports will be available online at www.NextEraEnergyCanada.com for comment by the public and by stakeholders.

Other Approvals Required Before Construction

- In addition to the REA, permits and certificates of approval may be required from approval agencies before construction can begin. These may include:
 - ⌘ Archaeological Clearance from the Ontario Ministry of Tourism, Culture and Sport (MTCS);
 - ⌘ Fisheries Act Authorizations from the Federal Department of Fisheries and Oceans (DFO);
 - ⌘ Aeronautical Obstruction Clearance from Transport Canada;
 - ⌘ Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Permit from the Ausable Bayfield Conservation Authority (ABCA); and
 - ⌘ Other permits or authorizations from the Ontario Ministry of Natural Resources (MNR) and Huron County.

***Please visit www.NextEraEnergyCanada.com
for more details on the progress of the project***

WIND ENERGY CENTRE - OPEN HOUSE

Thank you for Attending!

- Thank you for attending this evening's Event
- Your input is important to us: please fill out an exit questionnaire and either leave it with us tonight or mail it to us using the contact information below
- Should you have any further questions or comments, please do not hesitate to contact us:

E-mail:

✉ Bluewater.Wind@NextEraEnergy.com

Phone: 1-877-257-7330

Mail: Derek Dudek
Community Relations Consultant
NextEra Energy Canada
5550 North Service Road, Suite 205
Burlington, ON, L7L 6W6



Our environmental consultants:

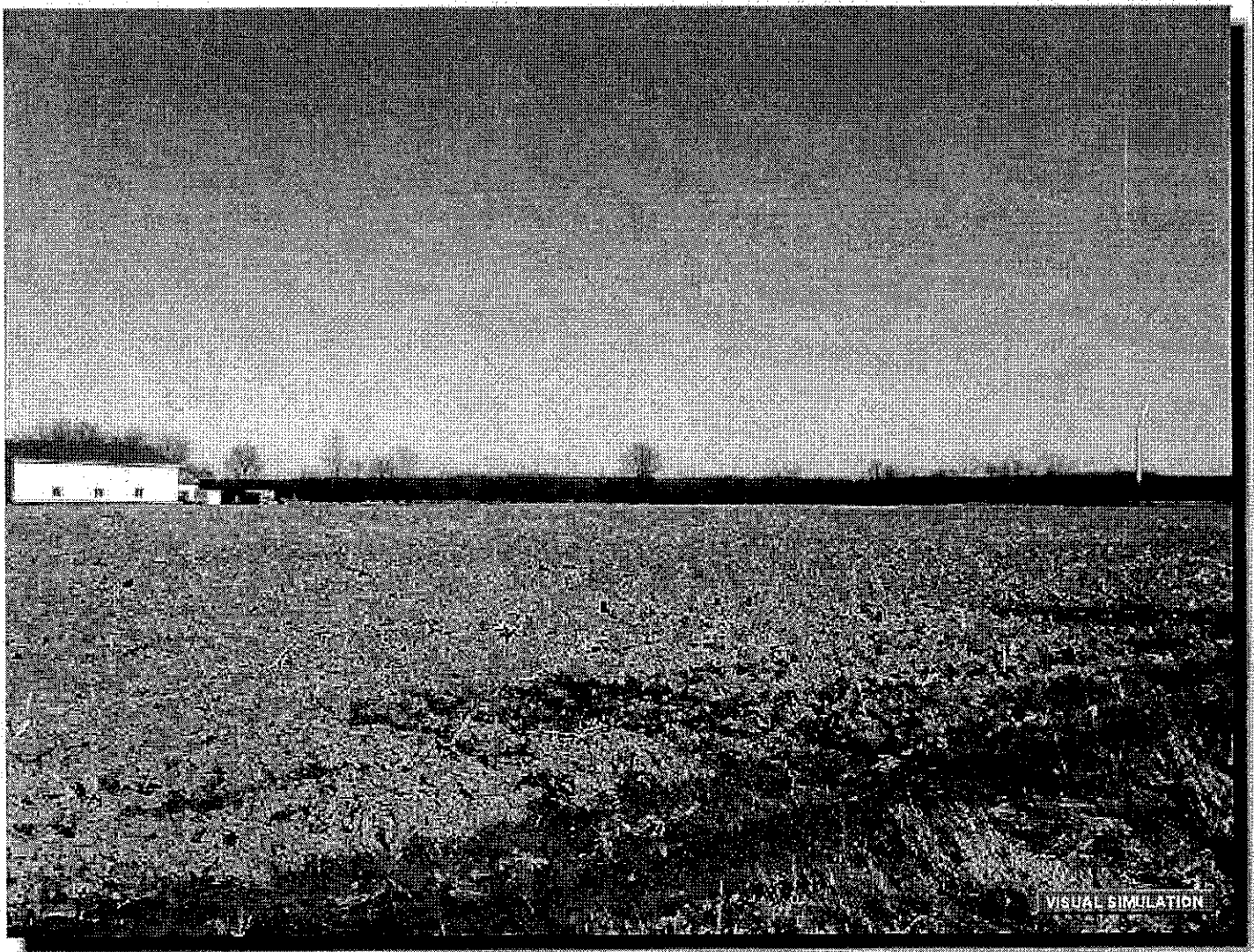
Bluewater Wind Energy Project

AECOM

Marc Rose, Project Manager

905-477-8400, Ext. 388

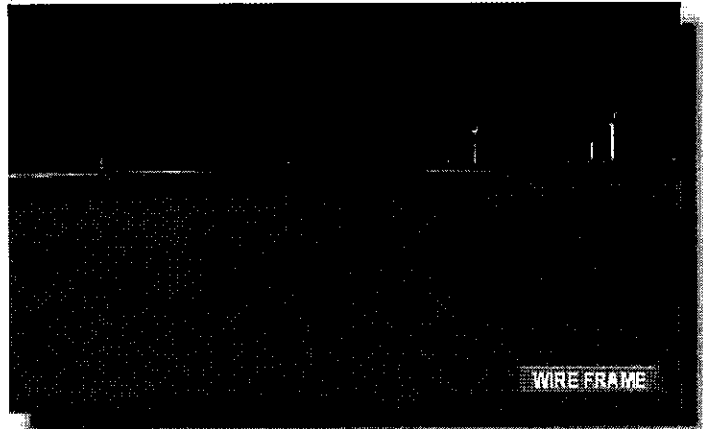
Marc.Rose@aecom.com



VISUAL SIMULATION



ORIGINAL PHOTO



WIRE FRAME

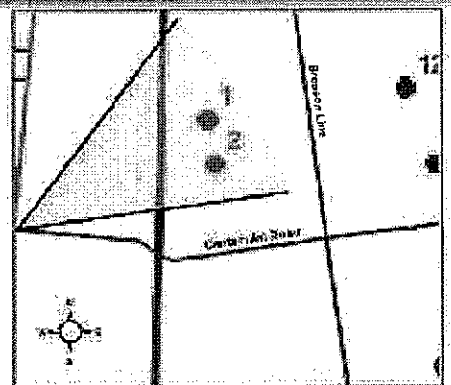
Prepared for:

NEXTERA™
ENERGY

Bluewater Wind Farm

VISUAL SIMULATION
as viewed from
Centennial Road

AECOM

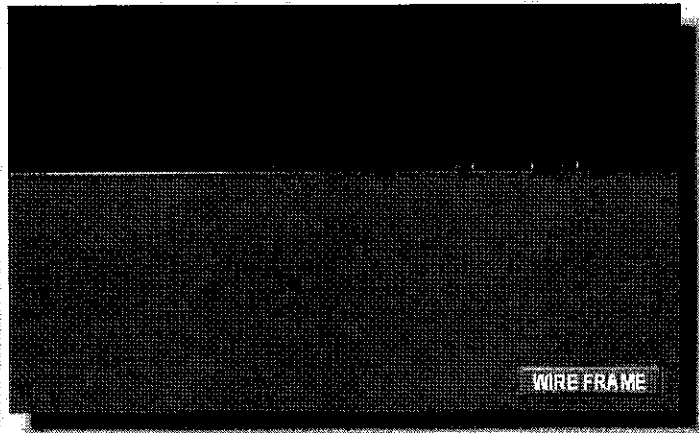




VISUAL SIMULATION

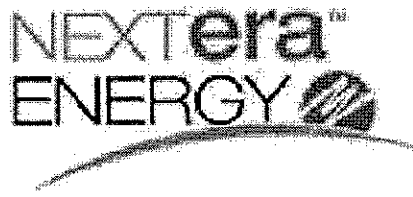


ORIGINAL PHOTO



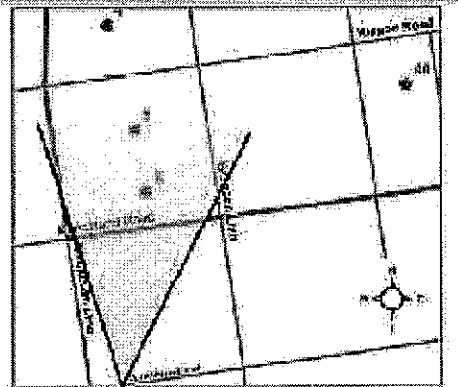
WIRE FRAME

Prepared for:



Bluewater Wind Farm

VISUAL SIMULATION
as viewed from
Zurich Road

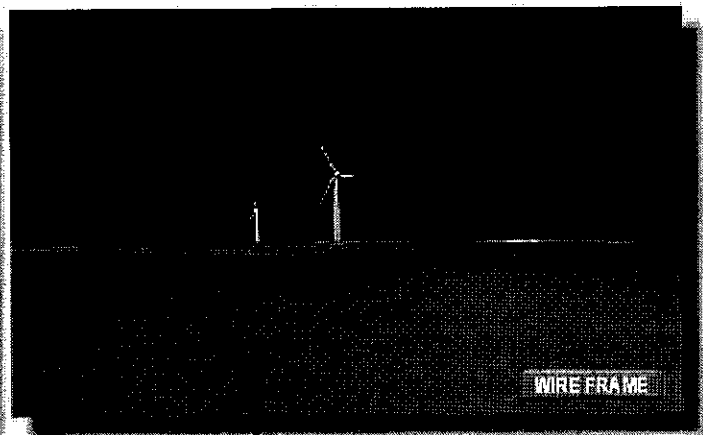




VISUAL SIMULATION



ORIGINAL PHOTO



WIRE FRAME

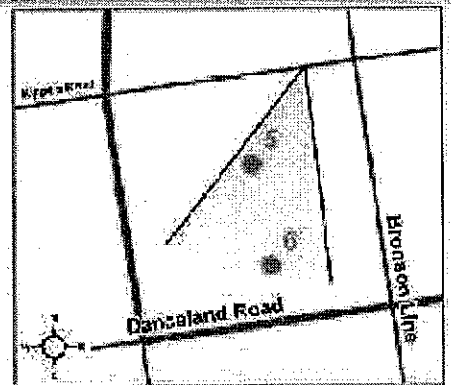
Prepared for:

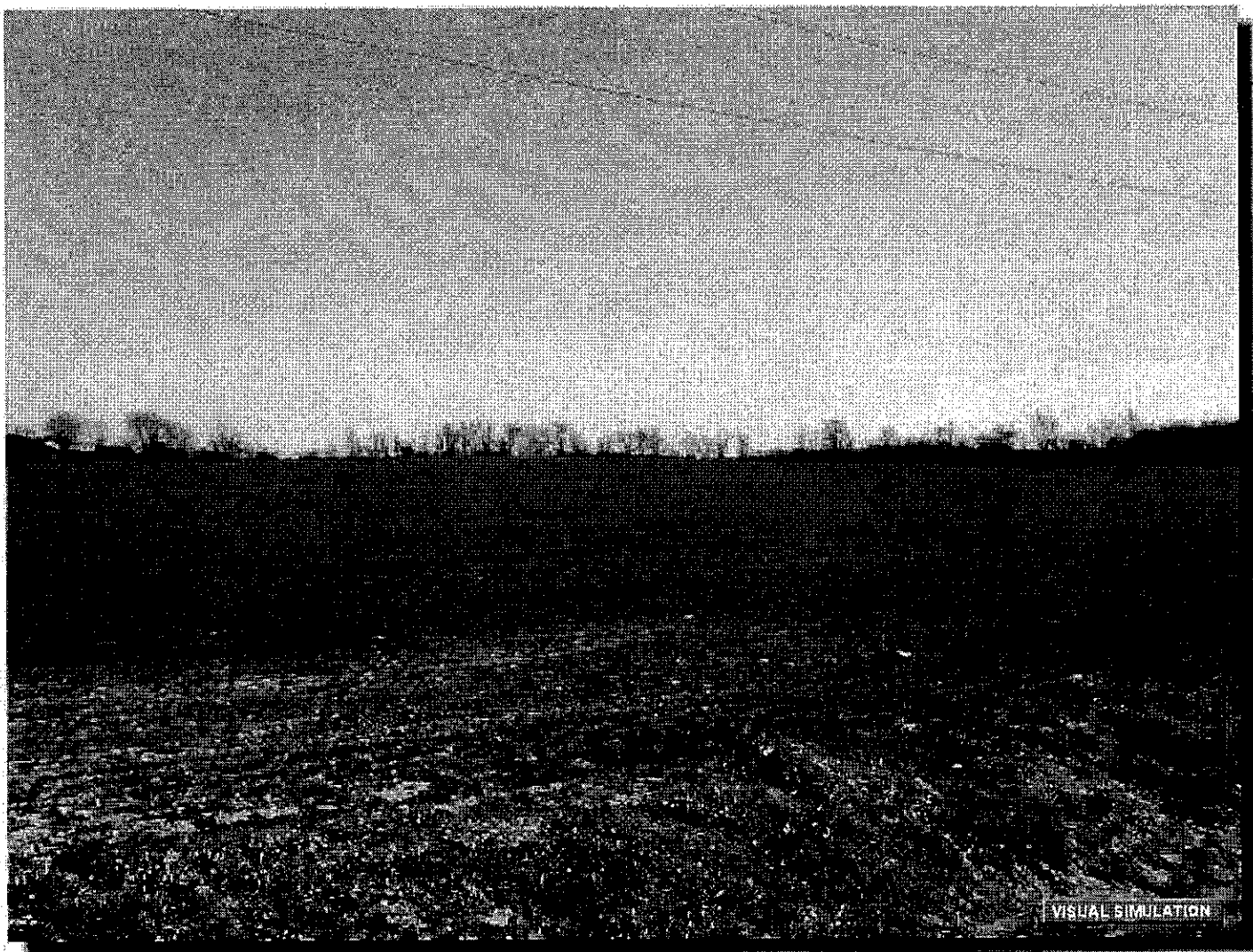
NEXteraTM
ENERGY

Bluewater Wind Farm

VISUAL SIMULATION
as viewed from
Kippen Road

AECOM

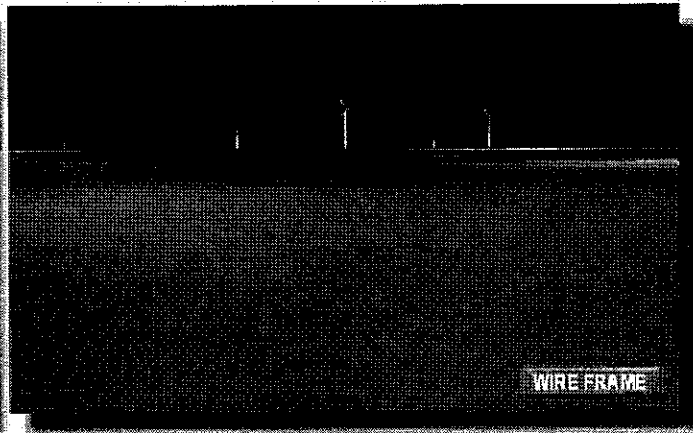




VISUAL SIMULATION



ORIGINAL PHOTO



WIRE FRAME

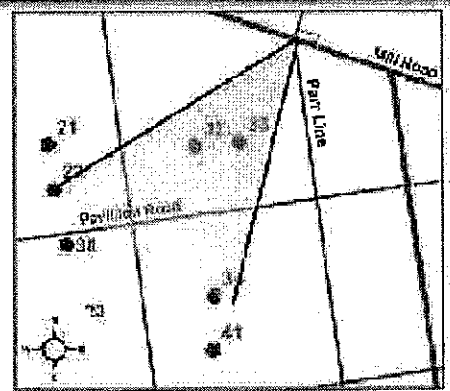
Prepared for:

NEXtera™
ENERGY

Bluewater Wind Farm

VISUAL SIMULATION
as viewed from
Parr Line

AECOM



Your comments will be considered. We are collecting this information to help us understand and address your concerns about the Project. Comments will become part of the public record with the exception of personal information.

1. Did the information at the meeting meet your expectations?

- Yes
- Somewhat
- No

Please explain: _____

2. If you asked questions during the meeting did you get a satisfactory response?

- Yes
- Didn't speak to anyone
- Somewhat
- No

Please explain: _____

3. After attending the meeting, how do you feel about the Project?

- Supportive
- Undecided
- Undecided and would like more information
- Non supportive

Please explain and let us know what other information you would like to receive: _____

4. What topics would you like to learn more about? (check all that apply)

- | | |
|---|---|
| <input type="checkbox"/> Aboriginal interests | <input type="checkbox"/> Community Partnerships |
| <input type="checkbox"/> Socio-economic | <input type="checkbox"/> Transmission |
| <input type="checkbox"/> Environment | <input type="checkbox"/> Project Details |
| <input type="checkbox"/> Human Health | <input type="checkbox"/> Other (Specify) _____ |

Bluewater Wind Energy Centre



5. Please provide your comments or questions in the space provided below:

Do not think it is a good idea to desecrate the whole country side.

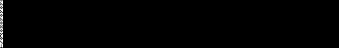
Make wind farm in one area (or solar farm)

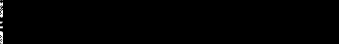
Put them along the hydro line which is already an eye sore. Or built on the highest ridge in area.

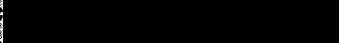
If they were all in one place you would drive by it it would leave country side as is.


I sincerely disapprove

If you would like to be kept informed about the status of the Bluewater Wind Energy Project, please provide your contact information below.

Name: 

Street Address: 

City/Province: 

Postal Code:  Email: _____

To learn more about the Project, or to send your completed comment form to us, please contact:

Derek Dudek
Community Relations Consultant
NextEra Energy Canada, ULC
5500 North Service Road, Suite 205
Burlington, Ontario L7L 6W6

Toll Free: 1-877-257-7330
Email: Bluewater.Wind@NextEraEnergy.com
Website: www.NextEraEnergyCanada.com

Your comments will be considered. We are collecting this information to help us understand and address your concerns about the Project. Comments will become part of the public record with the exception of personal information.

1. Did the information at the meeting meet your expectations?

- Yes
- Somewhat
- No

Please explain: _____

2. If you asked questions during the meeting did you get a satisfactory response?

- Yes
- Didn't speak to anyone
- Somewhat
- No

Please explain: _____

3. After attending the meeting, how do you feel about the Project?

- Supportive
- Undecided
- Undecided and would like more information
- Non supportive

Please explain and let us know what other information you would like to receive: _____

4. What topics would you like to learn more about? (check all that apply)

- | | |
|---|---|
| <input type="checkbox"/> Aboriginal interests | <input type="checkbox"/> Community Partnerships |
| <input type="checkbox"/> Socio-economic | <input type="checkbox"/> Transmission |
| <input type="checkbox"/> Environment | <input type="checkbox"/> Project Details |
| <input type="checkbox"/> Human Health | <input type="checkbox"/> Other (Specify) |

*How you people
will get out of Ontario.*

Bluewater Wind Energy Centre



COMMENT FORM • JUNE 13-14, 2012

Your comments will be considered. We are collecting this information to help us understand and address your concerns about the Project. Comments will become part of the public record with the exception of personal information.

1. Did the information at the meeting meet your expectations?

- Yes
- Somewhat
- No

Please explain: _____

2. If you asked questions during the meeting did you get a satisfactory response?

- Yes
- Didn't speak to anyone
- Somewhat
- No

Please explain: _____

3. After attending the meeting, how do you feel about the Project?

- Supportive
- Undecided
- Undecided and would like more information
- Non supportive

Please explain and let us know what other information you would like to receive: _____

4. What topics would you like to learn more about? (check all that apply)

- | | |
|---|---|
| <input type="checkbox"/> Aboriginal Interests | <input type="checkbox"/> Community Partnerships |
| <input type="checkbox"/> Socio-economic | <input type="checkbox"/> Transmission |
| <input type="checkbox"/> Environment | <input type="checkbox"/> Project Details |
| <input type="checkbox"/> Human Health | <input type="checkbox"/> Other (Specify) _____ |

372
268
529
1169.

Bluewater Wind Energy Centre



COMMENT FORM • JUNE 13-14, 2012

Your comments will be considered. We are collecting this information to help us understand and address your concerns about the Project. Comments will become part of the public record with the exception of personal information.

1. Did the information at the meeting meet your expectations?

- Yes
- Somewhat
- No

Please explain: did not like answers.

2. If you asked questions during the meeting did you get a satisfactory response?

- Yes
- Didn't speak to anyone
- Somewhat
- No

Please explain: Not all the knowlege available available.

3. After attending the meeting, how do you feel about the Project?

- Supportive
- Undecided
- Undecided and would like more information
- Non supportive

Please explain and let us know what other information you would like to receive:

Do not want them in my front & back yard.
noise, bird enjoyment property values

4. What topics would you like to learn more about? (check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Aboriginal interests | <input type="checkbox"/> Community Partnerships |
| <input type="checkbox"/> Socio-economic | <input type="checkbox"/> Transmission |
| <input checked="" type="checkbox"/> Environment | <input checked="" type="checkbox"/> Project Details |
| <input checked="" type="checkbox"/> Human Health | <input type="checkbox"/> Other (Specify) _____ |

Large pond. next to us. large number of ^{nesting} eagles, Turkey
Canadian Geese, Trumpeter swans, vultures nesting, turtles bats - all close to one
my property.

Bluewater Wind Energy Centre



5. Please provide your comments or questions in the space provided below:

DOCK DUEY

If you would like to be kept informed about the status of the Bluewater Wind Energy Project, please provide your contact information below.

Name:	<input type="text"/>
Street Address:	<input type="text"/>
City/Province:	<input type="text"/>
Postal Code:	<input type="text"/>

To learn more about the Project, or to send your completed comment form to us, please contact:

Derek Dudek
Community Relations Consultant
NextEra Energy Canada, ULC
5500 North Service Road, Suite 205
Burlington, Ontario L7L 6W6

Toll Free: 1-877-257-7330
Email: Bluewater.Wind@NextEraEnergy.com
Website: www.NextEraEnergyCanada.com

Your comments will be considered. We are collecting this information to help us understand and address your concerns about the Project. Comments will become part of the public record with the exception of personal information.

1. Did the information at the meeting meet your expectations?

- Yes
- Somewhat
- No

Please explain:

Do not want them period.

2. If you asked questions during the meeting did you get a satisfactory response?

- Yes
- Didn't speak to anyone
- Somewhat
- No

Please explain:

people just bullshit me
think I am stupid

3. After attending the meeting, how do you feel about the Project?

- Supportive
- Undecided
- Undecided and would like more information
- Non supportive

Please explain and let us know what other information you would like to receive:

Do not
want them

4. What topics would you like to learn more about? (check all that apply)

- | | |
|---|---|
| <input type="checkbox"/> Aboriginal interests | <input type="checkbox"/> Community Partnerships |
| <input type="checkbox"/> Socio-economic | <input type="checkbox"/> Transmission |
| <input type="checkbox"/> Environment | <input type="checkbox"/> Project Details |
| <input type="checkbox"/> Human Health | <input type="checkbox"/> Other (Specify) _____ |

about not having them

FINAL CONSULTATION REPORT

NextEra Energy Canada, ULC

Transmission Line Consultation Report – Bluewater Wind Energy Centre

Prepared by:

AECOM

300 – 300 Town Centre Boulevard 905 477 8400 tel
Markham, ON, Canada L3R 5Z6 905 477 1456 fax
www.aecom.com

Project Number:

60155032

Date:

September, 2012

Table of Contents

	Page
1. Introduction.....	1
1.1 Project Study Area	1
1.2 Facility Components.....	1
2. Summary of Consultation Activities.....	4
3. Public Consultation	5
3.1 First Public Meeting – Municipality of Huron East (Transmission Line Corridor)	5
3.2 First Public Meeting – Municipality of Huron East (Transmission Line Corridor)	5
3.3 Individual stakeholder meetings within the Transmission Line Corridor.....	5
3.4 Summary of Public Comments	6
4. Municipal Consultation	8

List of Figures

Figure 1-1 Project Study Area.....	2
Figure 1-2 Project Location.....	3

List of Tables

Table 2-1 Summary of Consultation Activities.....	4
Table 3-1 Summary of Public Comments Received.....	7
Table 4-1 Summary of Key Municipal Correspondence.....	8

Appendices

Appendix A. Bluewater Wind Energy Centre – Final Consultation Report

Appendix B. Public Meeting – Municipality of Huron East – Materials

- Appendix B1. Public Meeting Notice
- Appendix B2. Display Panels
- Appendix B3. Handouts
- Appendix B4. Comment Cards
- Appendix B5. Response Letter

Appendix C. Individual Transmission Line Consultation Initiatives

- Appendix C1. Record of Consultation
- Appendix C2. Transmission Line Information Package

Appendix D. Public Correspondence

Appendix E. Municipal Correspondence

Glossary of Terms

EMF	electric and magnetic fields
kV	kilovolt
MW	Megawatts
NextEra	NextEra Energy Canada
O.Reg. 359/09	Ontario Regulation 359/09
REA	Renewable Energy Approval
The Project	Bluewater Wind Energy Centre
ULC	Unlimited Liability Corporation

1. Introduction

Varna Wind, Inc., a wholly owned subsidiary of NextEra Energy Canada, ULC (NextEra) is proposing to construct a wind energy project in the Municipalities of Bluewater and Huron East in Huron County, Ontario (Figure 1-1). The project will be referred to as the Bluewater Wind Energy Centre (the “Project”) and will be located primarily on private lands east of Highway 21 in the vicinity of the shoreline of Lake Huron. The wind turbine technology proposed for the Project is the 1.6 megawatt (MW) GE model wind turbine. With a total nameplate capacity of 60 MW, the Project is categorized as a Class 4 facility. Although NextEra is seeking a Renewable Energy Approval (REA) for 41 wind turbines, up to a total of 37 turbines are proposed to be constructed for the Project.

The following sections outline the consultation initiatives undertaken with stakeholders in the vicinity of the proposed 115 kilovolt (kV) transmission line from October 2011 to present day. NextEra’s consultation efforts and stakeholder input received are summarized below in addition to the associated appendices. Note that this report is focused on the consultation work specific to the proposed transmission line. The overall consultation program for the entire Bluewater Wind Energy Project is presented in the Final Consultation Report – Bluewater Wind Energy Centre provided in Appendix A. NextEra has maintained continuous communication with stakeholders through the planning process and will continue this dialogue throughout the lifecycle of the Project.

1.1 Project Study Area

The Project Study Area consists of the areas being studied for the wind farm components (Wind Energy Centre Study Area), as well as for the interconnection route (i.e., the area being studied for transmission lines to connect the Project to the electrical grid) (Transmission Line Study Area). The Wind Energy Centre Study Area is generally bounded by Blackbush Line/Bronson Line to the west, Mill Road to the north, Concession 5 Road to the east, and Danceland Road/Staffa Road to the south, in the Municipality of Bluewater. The Transmission Line Study Area is located to the east of the Wind Energy Centre Study Area, and is generally bounded by Concession 5 Road to the west, Mill Road to the north, Huron Road and Perth 183 Road to the east, and Staffa Road to the south, extending into the Municipality of Huron East.

1.2 Facility Components

As shown in Figure 1-2, the major components of the Project are proposed to be:

- Up to 41 1.6 MW GE model wind turbine generator locations and pad mounted step-up transformers are proposed for permitting (a maximum of 37 turbines will ultimately be constructed);
- Laydown and storage areas (including temporary staging areas, crane pads and turnaround areas surrounding each wind turbine);
- Approximately 52 km of 34.5 kV underground electrical collection lines to connect the turbines to the proposed transformer substation;
- Approximately 24 km of 115 kV transmission line proposed along Centennial Road and Hensall Road from the proposed transformer substation to the existing Hydro One Seaforth Transformer Station;
- Approximately 40 km of turbine access roads; and
- An operations and maintenance building.

Figure 1-1 Project Study Area



Figure 1-2 Project Location

2. Summary of Consultation Activities

NextEra carried out a robust consultation program for the Bluewater Wind Energy Project which meets and exceeds the requirements outlined in Ontario Regulation 359/09 (O. Reg. 359/09), the regulation governing renewable energy projects in Ontario. Table 2-1 provides a list of all consultation initiatives undertaken for the project and indicates the corresponding report section, below, where the activity pertains to the proposed transmission line. These activities include a public meeting within the municipality where the transmission line is proposed and individual meetings with stakeholders within the transmission line corridor.

Comments received from members of the public and the municipalities with regard to the proposed transmission line through the other consultation means listed in Table 2-1 are summarized in Section 3.0 and Section 4.0 and copies of correspondence are provided in Appendix D and E, respectively.

Table 2-1 Summary of Consultation Activities

Consultation Requirement	Date Completed	Required as per O.Reg 359/09	Corresponding Transmission Line Consultation Report Section
Notice of Proposal Sent to Identified Aboriginal Communities	May 26, 2010	Required	Appendix A
Notice of Proposal to Engage in a Project and of First Public Meeting – Municipality of Bluewater	May 26, 2010	Required	Appendix A
First Public Meeting – Municipality of Bluewater	June 28, 2010	Required	Appendix A
Draft Project Description Report (PDR) made Available to the Public*	June 28, 2010	Required	Appendix A
Landowner Workshop	February 16, 2011	Additional	Appendix A
Project Newsletter #1	May, 2011	Additional	Appendix A
Round Table Meeting	July 19, 2011	Additional	Appendix A
Project Newsletter #2	October, 2011	Additional	Appendix A
Consultation Form and Draft PDR to Municipalities*	October 21, 2011	Required	Appendix A
Notice of Drop-in Information Session	November 25, 2011	Additional	Appendix A
Drop-in Information Session	December 6, 2011	Additional	Appendix A
Notice of First Public Meeting – Municipality of Huron East (Transmission Line Corridor)	November 2, 2011	Required	Section 3.1
First Public Meeting – Municipality of Huron East (Transmission Line Corridor)	December 7, 2011	Required	Section 3.2
Notice of Draft Site Plan /Draft Site Plan Release	December 21, 2011	Additional	Appendix A
Distribution of Draft Documents for Review - Municipal	February 14, 2012	Required	Appendix A
Project Newsletter #3	May, 2012	Additional	Appendix A
Telephone Town Hall	April 11, 2012	Additional	Appendix A
Distribution of Draft Documents for Review - Public	April 13, 2012	Required	Appendix A
Distribution of Draft Documents for Review - Aboriginal	March 15, 2012 and updated reports provided on April 11, 2012	Required	Appendix A
Notice of Final Meeting – Municipalities of Bluewater and Huron East	April 13, 2012	Required	Appendix A
Final Public Meeting – Municipalities of Bluewater and Huron East	June 13 and June 14, 2012	Required	Appendix A
Individual stakeholder meetings within the Transmission Line Corridor	October 2011 to present day	Additional	Section 3.3

3. Public Consultation

3.1 First Public Meeting – Municipality of Huron East (Transmission Line Corridor)

A community update meeting/first public meeting in the Municipality of Huron East (i.e. the location of the proposed transmission line corridor) was held on December 7, 2011 at the Seaforth Community Centre, in Seaforth, Ontario, between 4:00 p.m. and 7:00 p.m. The meeting Notice was distributed to every assessed owner of land within 550 metres of the Project Location and every assessed owner of land abutting a parcel of land on which the Project is located in addition to interested Aboriginal Communities. Furthermore, the Notice was published in the Exeter Times Advocate, Lakeshore Advance, Turtle Island News, Seaforth Huron Expositor, Clinton News Record and the Goderich Signal-Star (on November 2, 2011 and November 30, 2011). Finally, the Notice was also posted on the Project's website on November 2, 2011.

3.2 First Public Meeting – Municipality of Huron East (Transmission Line Corridor)

The general purpose of the meeting was to provide an update on the progress of the Project, including studies conducted to date and to present a preliminary turbine and transmission line layout. Consistent with the format of the first public meeting, display panels were set up along the periphery of the room and Project team members were available to discuss the proposed Project and answer questions with stakeholders. Sixty-six individuals registered their attendance at the meeting and five comment cards were submitted. Materials presented at the public meeting, including display panels and handouts, in addition to sign-in sheets, comment cards and the response letter are provided in Appendix B.

The topics associated with stakeholder questions and comments regarding the transmission line include:

- health effects; and,
- stray voltage and potential effects on livestock/humans.

3.3 Individual stakeholder meetings within the Transmission Line Corridor

NextEra initiated individual meetings with landowners along the proposed transmission line route from October 2011 to present day to discuss plans for the 115 kV transmission line. NextEra met with approximately 46 landowners to share information about the proposed transmission line, answer questions and discuss siting the transmission line on private property. A record of these meetings is provided in Appendix C1. The topics associated with the landowners questions and comments were consistent with those received at public meetings throughout the planning process, these included:

- property values,
- visual effects,
- health effects,
- stray voltage,
- electric and magnetic fields fields,
- potential "build out" of the transmission line,
- the location of the transmission line in proximity to homes, and,
- renewable energy development opposition and approval requirements.

In July 2012, NextEra delivered information packages in person or via mail where a meeting could not be arranged to each landowner along the proposed transmission line route. The information packages included studies on stray voltage and electromagnetic fields. Copies of the studies provided in the packages can be reviewed in Appendix C2. NextEra continues to meet with landowners to maintain open communication and to answer any questions as they arise.

3.4 Summary of Public Comments

Table 3-1 presents a summary of comments received over the course of the Project regarding the proposed transmission line and NextEra's responses. Copies of the correspondence pertaining to the proposed transmission line are available in Appendix D.

Table 3-1 Summary of Public Comments Received

Theme	Topic	Response
Transmission Lines	Transmission Line Siting	<p>The transmission line location was presented at the Final Public Meeting and is shown in the Final REA Reports.</p> <ul style="list-style-type: none"> The 115 kV electrical transmission line that will be built from the transformer substation to the connection point at the Hydro One Seaforth Transformer Station is proposed to be located within the existing road right-of-ways along Centennial Road and Hensall Road in the Municipalities of Bluewater and Huron East. It is anticipated that the transmission line will be mounted on new hydro poles. The interconnection plan for any wind energy centre is subject to study, design and engineering by the Integrated Electricity System Operator which manages the province's electricity grid, Hydro One which owns the transmission lines, the local distribution company and the Ontario Energy Board, which regulates the industry through the Transmission System Code and the Distribution System Code.
	Health Concerns Related to Transmission Lines	<ul style="list-style-type: none"> Most common concerns in regards to transmission lines and health are centered around electric and magnetic fields (EMF). EMF is produced by the transmission of electricity and comes from any type of electrical equipment, such as televisions, household appliances and transmission lines. Health Canada (2010) has stated that "When you are indoors at home, the magnetic fields from high voltage power lines and transformer boxes are weaker than those from household electrical appliances". In a recent paper, Israel et al. (2011), measured EMF from a wind farm in Bulgaria and concluded that "Electromagnetic fields are not emitted on the operation of wind turbines or they are so small that they are insignificant compared to the values to be found in other measurements in residential areas and homes. The measured values are much below the national exposure limits, and of the European Council recommendations." The type of transmission line proposed for the Bluewater Wind Energy Centre is 115 kV. It is anticipated that the transmission line will be mounted on new hydro poles. The poles for the 115 kV line are proposed to be constructed of wood, concrete or steel and will be between 18 and 30 m tall. It is important to note that the proposed transmission line is much smaller than the existing 500 kV steel lattice-tower transmission line which runs north-south through the study area between Goshen Line and Babylon Line.
	Stray Voltage and its Potential Effects on Livestock	<p>Stray voltage is addressed in the <i>Project Description Report</i> and the <i>Design and Operations Report</i>.</p> <ul style="list-style-type: none"> NextEra will ensure that the Project is built and maintained according to the standards in place as prescribed by the Distribution System Code and the Electrical Safety Authority. The Project is not proposing to connect to the local distribution system that serves barns and houses in the area, so it will not directly impact that service. However, NextEra will continue to work closely with Hydro One to mitigate any potential impact on local distribution customers should a situation arise. Hydro One, as required in the interconnection process, has completed a Customer Impact Analysis and no issues were identified. Most cases of stray voltage occur when there is either: <ul style="list-style-type: none"> Improper grounding of on-site equipment (in which case it is an issue with on-site wiring); or, A change in current patterns on the distribution line, from generation or load that exposes a pre-existing condition (in which case it is an issue with the distribution utility, not with the generator or load). It is important to understand that stray voltage is not a consequence of wind energy, but rather of any project that changes the use pattern of the existing system. The turbines are therefore not the root of the problem, but like any change to the system, may expose faults in that system. All types of generation (electricity generation using wind turbines included) must fully comply with utility requirements to ensure that the electricity they supply is compliant with grid and electrical code standards. Stray voltage problems require on-site inspection for grounding problems, or examination of power quality issues with the distribution utility. For additional information on the potential effects of stray voltage on livestock, see the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) website: www.omafra.gov.on.ca/english/livestock/dairy/facts/strayvol.htm
Effects on the Socio-economic Environment	Property Values	<ul style="list-style-type: none"> Numerous studies have been conducted that indicate that wind farms do not have a negative impact on property values. For links to these studies, please see: www.NextEraEnergyCanada.com

Table 3-1 Summary of Public Comments Received

Theme	Topic	Response
	Visual effects	<ul style="list-style-type: none"> Visual effects are ultimately dependent on the perception of residents and visitors to the presence of turbines.

4. Municipal Consultation

Table 4-1 details consultation efforts with the Municipalities of Bluewater, Huron East and Huron County with regard to the proposed transmission line. Copies of correspondence and presentation materials are provided in Appendix E.

Table 4-1 Summary of Key Municipal Correspondence

Date	Municipality	Description of Consultation	Follow up/Response
February 16, 2011	Bluewater	<ul style="list-style-type: none"> NextEra held a meeting with Mayor and staff members. Discussion topics included: <ul style="list-style-type: none"> Brief background of Project; Clarification of Feed-in-Tariff contract timing; Upcoming archaeological work; Ownership of transmission line; Future municipal road work on Goshen Line and any potential effects or conflicts from the Project construction; and, Opportunities to assist with solar projects at municipal sites. 	<ul style="list-style-type: none"> NextEra will continue discussions with the Municipality of Bluewater as more information becomes available.
May 19, 2011	Bluewater	<ul style="list-style-type: none"> NextEra held a meeting with the Mayor and Chief Administrative Officer to provide an update on the Project. Discussion topics included: <ul style="list-style-type: none"> The possibility of scheduling a workshop to discuss the Project with Council. 	<ul style="list-style-type: none"> Council determined they would prefer to continue communication through meetings rather than a workshop.
July 19, 2011	Huron East	<ul style="list-style-type: none"> NextEra held a meeting with Huron East staff to introduce NextEra and the Project. Discussion topics included: <ul style="list-style-type: none"> Brief background of Project; Decommissioning costs; Rationale as to why the transmission line cannot be buried; Municipality would like NextEra to provide a letter to Huron East with project/company background information and offer to appear as delegation at a future meeting. 	<ul style="list-style-type: none"> NextEra provided meeting minutes from the July 19, 2011 meeting for review and sent a letter on September 16, 2011 with information on the Project and an offer to appear as a delegation to provide more detail.
November 1, 2011	Huron East	<ul style="list-style-type: none"> NextEra appeared as a delegation at Huron East Council to introduce NextEra and the Project and to provide an update on the Project. Discussion topics included: <ul style="list-style-type: none"> Damage to poles / responsibility; Economic development contributions; and, Separation distances from high voltage lines. 	<ul style="list-style-type: none"> N/A – all questions were answered at meeting.

November 9, 2011	Huron County	<ul style="list-style-type: none"> • NextEra held a meeting with Huron County Council to introduce NextEra and the Project and to provide an update on the Project. Discussion topics included: <ul style="list-style-type: none"> ▪ Municipal property taxes; and, ▪ Health effects associated with existing NextEra facilities (NextEra has found no credible, scientifically peer-reviewed study that demonstrates a causal link between wind turbines and negative health effects.) 	<ul style="list-style-type: none"> • N/A - all questions were answered at meeting.
November 28, 2011	Huron East	<ul style="list-style-type: none"> • November 28 letter/email from CAO/Clerk-Administrator Brad Knight. 	<ul style="list-style-type: none"> • NextEra responded with a letter providing answers and clarification on a number of issues. These included: transmission line layout and length, substation locations, financial compensation to the municipality from transmission lines, property owner compensation, transmission lines on private property and right-of-way agreements.

<p>January 27, 2012</p>	<p>Huron East</p>	<ul style="list-style-type: none"> • NextEra held a meeting with Huron East Staff to discuss the Community Vibrancy Fund and the transmission line extending into the municipality. Discussion topics included: <ul style="list-style-type: none"> ▪ Confirmation of Community Vibrancy Fund payments; ▪ Differences with St. Columban project interconnection lines and NextEra's; and, ▪ Examples of transmission line poles; and, % of agreements along the proposed transmission line route executed. 	<ul style="list-style-type: none"> • NextEra responded with information as follows: <ul style="list-style-type: none"> ▪ \$5,000/km of overhead transmission lines will be offered as part of the Community Vibrancy Funds; ▪ To the best of NextEra's knowledge, the St Columban project is connected to the distribution system, not the transmission system, as is NextEra's plan. The details are technical and engineering related; ▪ With respect to the % of easements executed along the preferred transmission line path, this is not required before submission of REA application as it is a separate process from the REA, NextEra will continue to work with the municipalities to locate the transmission line on the public right of way. ▪ Once the route is finalised, it will be shared with municipal staff.
<p>March 20, 2012</p>	<p>Huron County</p>	<ul style="list-style-type: none"> • NextEra held a meeting with Huron County Staff to discuss the MCF and the Draft Site Plans. Discussion topics included: <ul style="list-style-type: none"> ▪ Providing a draft road user agreement for NextEra to review ▪ Setbacks, requested by the County, from County roads of total turbine height + 10 m (140 m) ▪ Technical issues of burying transmission lines (NextEra will follow up with a response letter); and ▪ Vacant Lot Receptor siting: County confirmed minimum lot area of 1400 sq. m. could support receptor 	<ul style="list-style-type: none"> • County provided draft Road User Agreement to NextEra on April 26, 2012; • Closest turbine was located over 700 metres from a County Road (T36) • NextEra is currently drafting a letter to address the technical issues with the burial of high voltage transmission lines over long distances.
<p>May 15, 2012</p>	<p>Huron East</p>	<ul style="list-style-type: none"> • NextEra appeared as a delegation to Huron East Council to provide an update on the Project. Discussion topics included: <ul style="list-style-type: none"> ▪ Stray voltage; ▪ Effects to livestock from transmission lines; ▪ Decommissioning plans; ▪ The process for selecting transmission line route; and, ▪ The number of jobs associated with the Project. 	<ul style="list-style-type: none"> • N/A – all questions were answered at meeting. • NextEra is currently preparing a letter to all municipalities, as well as landowners along the proposed transmission line route regarding what NextEra's requirements and commitments are regarding stray voltage and livestock effects.

<p>May 30, 2012</p>	<p>Huron East</p>	<ul style="list-style-type: none"> • NextEra held a meeting with Huron East Staff to discuss Project construction, engineering and operations, in addition to answer questions. Discussion topics included: <ul style="list-style-type: none"> ▪ County concerns with road crossings and burying of transmission lines; ▪ Timing of detailed engineering / legal surveys for transmission line; and, ▪ Width of easements either side of right of way. 	<ul style="list-style-type: none"> • NextEra clarified that a letter to the County regarding underground transmission line burials is forthcoming and will copy Huron East on the matter. • Timing of detailed design was not yet available and NextEra will follow up by email to the CAO at his request to keep the Municipality apprised of such matters. • Width of easements was confirmed to be 33'
<p>June 14, 2012</p>	<p>Bluewater</p>	<ul style="list-style-type: none"> • NextEra held an informal meeting with Bluewater Staff to discuss Project engineering, operations, the MCF and to answer questions. Discussion topics included: <ul style="list-style-type: none"> ▪ Issues from municipal heritage committee; ▪ Underground gas storage pools in the area; ▪ Tundra swan studies, which the municipality thought were insufficient; ▪ Building permit fees; ▪ Buried transmission lines; and, ▪ Decommissioning plan. 	<ul style="list-style-type: none"> • Many of the matters to be addressed were from the May 17, 2012 Council delegation and will be addressed in that letter to Council which is currently being drafted by NextEra. • The matter of buried transmission lines is being addressed in a letter to the County from a meeting of March 20, 2012, which will be sent to the Municipality.

SYSTEM IMPACT ASSESSMENT

56. The final System Impact Assessment ("**SIA**") for the Applicant was issued by the IESO on December 23, 2011, a copy of which is attached at Exhibit H, Tab 1, Schedule 2.
57. The SIA concluded that the BWEC and the Facility do not have a material adverse impact on the reliability of the IESO-controlled grid, nor will they cause new violations of existing circuit breaker interrupting capabilities on the IESO-controlled grid. The Applicant will construct the Facility according to the recommendations and conditions outlined in the SIA.

SYSTEM IMPACT ASSESSMENT



Power to Ontario.
On Demand.

System Impact Assessment Report

CONNECTION ASSESSMENT & APPROVAL PROCESS

Final Report

CAA ID: 2011-440
Project: Bluewater Wind Energy Centre
Applicant: Varna Wind, Inc

Market Facilitation Department
Independent Electricity System Operator

Date: December 23, 2011

REPORT

Document ID	IESO_REP_0759
Document Name	System Impact Assessment Report
Issue	Final Report
Reason for Issue	Final Issue
Effective Date	December 23, 2011

System Impact Assessment Report

Acknowledgement

The IESO wishes to acknowledge the assistance of Hydro One in completing this assessment.

Disclaimers

IESO

This report has been prepared solely for the purpose of assessing whether the connection applicant's proposed connection with the IESO-controlled grid would have an adverse impact on the reliability of the integrated power system and whether the IESO should issue a notice of conditional approval or disapproval of the proposed connection under Chapter 4, section 6 of the Market Rules.

Conditional approval of the proposed connection is based on information provided to the IESO by the connection applicant and Hydro One at the time the assessment was carried out. The IESO assumes no responsibility for the accuracy or completeness of such information, including the results of studies carried out by Hydro One at the request of the IESO. Furthermore, the conditional approval is subject to further consideration due to changes to this information, or to additional information that may become available after the conditional approval has been granted.

If the connection applicant has engaged a consultant to perform connection assessment studies, the connection applicant acknowledges that the IESO will be relying on such studies in conducting its assessment and that the IESO assumes no responsibility for the accuracy or completeness of such studies including, without limitation, any changes to IESO base case models made by the consultant. The IESO reserves the right to repeat any or all connection studies performed by the consultant if necessary to meet IESO requirements.

Conditional approval of the proposed connection means that there are no significant reliability issues or concerns that would prevent connection of the project to the IESO-controlled grid. However, the conditional approval does not ensure that a project will meet all connection requirements. In addition, further issues or concerns may be identified by the transmitter(s) during the detailed design phase that may require changes to equipment characteristics and/or configuration to ensure compliance with physical or equipment limitations, or with the Transmission System Code, before connection can be made.

This report has not been prepared for any other purpose and should not be used or relied upon by any person for another purpose. This report has been prepared solely for use by the connection applicant and the IESO in accordance with Chapter 4, section 6 of the Market Rules. The IESO assumes no responsibility to any third party for any use, which it makes of this report. Any liability which the IESO may have to the connection applicant in respect of this report is governed by Chapter 1, section 13 of the Market Rules. In the event that the IESO provides a draft of this report to the connection applicant, the connection applicant must be aware that the IESO may revise drafts of this report at any time in its sole discretion without notice to the connection applicant. Although the IESO will use its best efforts to advise you of any such changes, it is the responsibility of the connection applicant to ensure that the most recent version of this report is being used.

Hydro One

The results reported in this report are based on the information available to Hydro One, at the time of the study, suitable for a System Impact Assessment of this connection proposal.

The short circuit and thermal loading levels have been computed based on the information available at the time of the study. These levels may be higher or lower if the connection information changes as a result of, but not limited to, subsequent design modifications or when more accurate test measurement data is available.

This study does not assess the short circuit or thermal loading impact of the proposed facilities on load and generation customers.

In this report, short circuit adequacy is assessed only for Hydro One circuit breakers. The short circuit results are only for the purpose of assessing the capabilities of existing Hydro One circuit breakers and identifying upgrades required to incorporate the proposed facilities. These results should not be used in the design and engineering of any new or existing facilities. The necessary data will be provided by Hydro One and discussed with any connection applicant upon request.

The ampacity ratings of Hydro One facilities are established based on assumptions used in Hydro One for power system planning studies. The actual ampacity ratings during operations may be determined in real-time and are based on actual system conditions, including ambient temperature, wind speed and facility loading, and may be higher or lower than those stated in this study.

The additional facilities or upgrades which are required to incorporate the proposed facilities have been identified to the extent permitted by a System Impact Assessment under the current IESO Connection Assessment and Approval process. Additional facility studies may be necessary to confirm constructability and the time required for construction. Further studies at more advanced stages of the project development may identify additional facilities that need to be provided or that require upgrading.

Table of Contents

Table of Contents	i
Table of Figures.....	iii
Table of Tables	iv
Executive Summary	1
Project Description.....	1
Findings	1
IESO Requirements for Connection	2
Notification of Conditional Approval	4
1. Project Description.....	6
2. General Requirements	7
2.1 Frequency/Speed Control.....	7
2.2 Reactive Power/Voltage Regulation	7
2.3 Voltage Ride Through Capability	8
2.4 Voltage.....	8
2.5 Connection Equipment Design	8
2.6 Disturbance Recording	8
2.7 Fault Level.....	9
2.8 Breaker Interrupting Time.....	9
2.9 Protection System	9
2.10 Telemetry	10
2.11 Revenue Metering	10
2.12 Reliability Standards.....	10
2.13 Restoration Participant	11
2.14 Facility Registration/Market Entry	11
2.15 Other Connection Requirements	11
3. Data Verification	12
3.1 Connection Arrangement.....	12
3.2 GE 1.6 MW WTG	12
3.3 Main Step-Up Transformers	13
3.4 Collector System	13
3.5 Connection Equipment	13

3.6	Wind Farm Control System.....	14
4.	Short Circuit Assessment.....	16
5.	Protection Impact Assessment	19
6.	System Impact Studies	20
6.1	Existing System.....	20
6.2	Historical Data.....	20
6.3	Study Assumptions.....	21
6.4	Special Protection System (SPS)	22
6.5	Reactive Power Compensation	23
6.6	Wind Farm Voltage Control System.....	24
6.7	Thermal Analysis.....	25
6.8	Voltage Analysis.....	29
6.9	Transient Stability Performance.....	31
6.10	Voltage Ride-Through Capability.....	31
6.11	Steady-State Voltage Stability	32
	Appendix A: Figures	33
	Appendix B: PIA Report.....	43

Table of Figures

Figure 1: Bluewater Wind Energy Centre proposed connection arrangement	33
Figure 2: Transmission system in the vicinity of the project.....	34
Figure 3: Seaforth 115 kV bus voltage duration curve.....	34
Figure 4: Seaforth 230 kV transformer T5 flow.....	35
Figure 5: Seaforth 230 kV transformer T6 flow.....	35
Figure 6: Major generator angle response due to a LLG fault on circuits B560V+B561M.....	36
Figure 7: Voltage response due to a LLG fault on circuits B560V+B561M	36
Figure 8: Major generator angle response due to a 3 phase fault on Seaforth K-bus + BKF	37
Figure 9: Voltage response due to a to a 3 phase fault on Seaforth K-bus + BKF	37
Figure 10: Major generator angle response due to a 3-phase fault on circuit B22D @ Bruce-A TS.....	38
Figure 11: Voltage response due to a 3-phase fault on circuit B22D @ Bruce-A TS	38
Figure 12: Major generator angle response due to a 3-phase fault on circuit B22D @ Detweiler TS.....	39
Figure 13: Voltage response due to a 3-phase fault on circuit B22D @ Detweiler TS	39
Figure 14: Major generator angle response due to a 3 phase fault on circuits B4V+B5V near Bruce TS.....	40
Figure 15: Voltage response due to a 3 phase fault on circuits B4V+B5V near Bruce TS	40
Figure 16: Major generator angle response due to an un-cleared 3 phase fault	41
Figure 17: Voltage response due to an un-cleared 3 phase fault inside Bluewater WEC.....	41
Figure 18: GE 1.6 MW WTG terminal voltages for studied contingencies.....	42
Figure 19: Voltage Responses at Claireville 500kV vs. FABC Transfer.....	42

Table of Tables

Table 1: Specifications of GE 1.6 MW WTG.....	12
Table 2: WTG voltage ride-through capability	12
Table 3: Main step-up transformer data	13
Table 4: Equivalent impedance of collectors	13
Table 5: Specifications of 115 kV switches.....	13
Table 6: Specifications for 115 kV circuit breakers	14
Table 7: Parameters of tap line	14
Table 8: Fault levels at facilities near the project.....	18
Table 9: Historical Flows	20
Table 10: Historical Voltages.....	21
Table 11: System demand and primary interface flows for basecases (MW).....	22
Table 12: Pre-contingency thermal results with S2S close-loop under shoulder load conditions	25
Table 13: Thermal results of limiting circuit in central area under peak-load conditions.....	26
Table 14: Thermal results of limiting transformers in central area under peak-load conditions ..	26
Table 15: Thermal assessment results-230 kV circuits.....	28
Table 16: Thermal assessment results-115 kV circuits.....	28
Table 17: Thermal assessment results-transformer loadings	28
Table 18: Voltage assessment results.....	30
Table 19: Voltage assessment results- loss of Bluewater WEC	30
Table 20: Simulated contingencies for transient stability	31

Executive Summary

Project Description

Varna Wind, Inc (the “connection applicant”) is developing a new 60 MW wind power generation farm, Bluewater Wind Energy Centre (the “project”), in Zurich, Huron County, Ontario. The project will be connected to Seaforth 115 kV bus. The project has been awarded a Power Purchase Agreement under the Feed-In Tariff (FIT) program with the Ontario Power Authority. The scheduled commercial in-service date is April 1, 2013.

Findings

1. The proposed connection arrangement and equipment for the project are acceptable to the IESO.
2. The asymmetrical fault current at Bruce A 230 kV switchyard before and after the incorporation of the project will exceed the interrupting capability of the existing breakers. Hydro One has planned to replace the Bruce 230 kV breakers to improve fault current interrupting capability in the long term. Before the circuit breakers are replaced, temporary operational mitigation measures have been developed by Hydro One in collaboration with the IESO as discussed in Section 4 of this report.
3. The projects are connecting in the Bruce Area where connected generation projects participate in the Bruce Special Protection Scheme (BSPS) as discussed in Section 6.4 of this report.
4. The reactive power capability of the project based on the data provided by the connection applicant is adequate as discussed in Section 6.5 of this report.
5. The functions of the proposed wind farm control system meet the requirements in the Market Rules as discussed in Section 3.6 of this report.
6. The voltage performance with the proposed the project is expected to be acceptable under both pre-contingency and post-contingency operating conditions.
7. Circuit S2S will be required to operate open-loop under certain conditions after the integration of the committed generation in the Bruce Area to prevent thermal overloading.
8. The Wind Turbine Generators (WTGs) of the project and the power system are expected to be transiently stable following recognized fault conditions.
9. The proposed WTGs are expected to remain connected to the grid for recognized system contingencies that do not remove the project by configuration.
10. Protection adjustments to accommodate the project have no adverse impact on the reliability of IESO-controlled grid.
11. In the event of high flows eastward towards Toronto, there is a low probability of congestion that may require the connection applicant to curtail its output as discussed in Section 6.7 of this report.

IESO Requirements for Connection

Transmitter Requirements

The following requirements are applicable for Hydro One (the “transmitter”) for the incorporation of the project:

- (1) The transmitter shall modify the existing BSPS to incorporate the project.
- (2) The transmitter shall modify the existing 115 kV Seaforth TS protection arrangement to incorporate the project.
- (3) The transmitter is required to review the relay settings of the 230 kV lines B22D, B23D and any other circuits/transformers affected by the project, as per solutions identified in the PIA.

Modifications to protection relays after this SIA is finalized must be submitted to IESO as soon as possible or at least six (6) months before any modifications are to be implemented. If those modifications result in adverse reliability impacts, the connection applicant and the transmitter must develop mitigation solutions.

Applicant Requirements

Specific Requirements: The following *specific* requirements are applicable for the incorporation of the project. Specific requirements pertain to the level of reactive compensation needed, operation restrictions, special protection system, upgrading of equipment and any project specific items not covered in the *general* requirements.

- (1) Special protection system facilities must be installed at the project to accept a single pair (A & B) of G/R signals from the BSPS, and disconnect the project from the system with no intentional time delay when armed for G/R following a triggering contingency. These special protection system facilities must also comply with the NPCC Reliability Reference Directory #7 for Type 1 special protection systems. In particular, if the SPS is designed to have ‘A’ and ‘B’ protection at a single location for redundancy, they must be on different non-adjacent vertical mounting assemblies or enclosures. Two independent trip coils are required on the breakers selected for G/R. The applicant must provide two dedicated communication channels, separated physically and geographically diverse, between the project and the Bruce NGS.

To disconnect the project from the system for G/R, simultaneous tripping of the 115 kV breakers CB5 and CB6 at Seaforth TS and the 115 kV breaker at Bluewater Collector station shall be initiated with no accompany breaker failure response. After being tripped by the BSPS, the closing of the breakers is not permitted until approval is obtained from the IESO. Alternative solutions to disconnect the project from the system for G/R may be acceptable upon the approval of the IESO.

- (2) The wind farm voltage control system shall be designed as per the philosophy described in Section 6.6 of this report.
- (3) The connection applicant is required to provide a finalized copy of the functional description of the wind farm control system for the IESO’s approval before the project is allowed to connect.

General Requirements: The connection applicant shall satisfy the applicable requirements and standards specified in the Market Rules and the Transmission System Code. The following requirements summarize some of the general requirements that are applicable to the proposed project, and presented in detail in section 2 of this report.

- (1) The connection applicant shall ensure that the project has the capability to operate continuously between 59.4Hz and 60.6Hz and for a limited period of time in the region above straight lines on a log-linear scale defined by the points (0.0s, 57.0Hz), (3.3s, 57.0Hz), and (300s, 59.0Hz).

The project shall respond to frequency increase by reducing the active power with an average droop based on maximum active power adjustable between 3% and 7% and set at 4%. Regulation deadband shall not be wider than $\pm 0.06\%$. The project shall respond to system frequency decline by temporarily boosting its active power output for some time (i.e. 10 s) by recovering energy from the rotating blades, if this technology is available.
- (2) The connection applicant shall ensure that the project has the capability to supply continuously all levels of active power output for 5% deviations in terminal voltage.

The project shall inject or withdraw reactive power continuously (i.e. dynamically) at a connection point up to 33% of its rated active power at all levels of active power output except where a lesser continually available capability is permitted by the IESO.

The project shall have the capability to regulate automatically voltage within $\pm 0.5\%$ of any set point within $\pm 5\%$ of rated voltage at a point whose impedance (based on rated apparent power and rated voltage) is not more than 13% from the highest voltage terminal. If the AVR target voltage is a function of reactive output, the slope $\Delta V/\Delta Q_{\max}$ shall be adjustable to 0.5%. The response of the project for voltage changes shall be similar or better than that of a generation facility with a synchronous generation unit and an excitation system that meets the requirements of Appendix 4.2.
- (3) The project shall have the capability to ride through routine switching events and design criteria contingencies assuming standard fault detection, auxiliary relaying, communication, and rated breaker interrupting times unless disconnected by configuration.
- (4) The connection applicant shall ensure that the 115 kV equipment is capable of continuously operating between 113 kV and 127 kV. Protective relaying must be set to ensure that transmission equipment remains in-service for voltages between 94% of the minimum continuous value and 105% of the maximum continuous value specified in Appendix 4.1 of the Market Rules.
- (5) The connection applicant shall ensure that the connection equipment is designed to be fully operational in all reasonably foreseeable ambient temperature conditions. The connection equipment must also be designed so that the adverse effects of its failure on the IESO-controlled grid are mitigated. This includes ensuring that all circuit breakers fail in the open position.
- (6) The connection applicant shall install at the project a disturbance recording device with clock synchronization that meets the technical specifications provided by the transmitter.
- (7) The connection applicant shall ensure that the new equipment at the project be designed to sustain the fault levels in the area. If any future system changes result in an increased fault level higher than the equipment's capability, the connection applicant is required to replace the equipment with higher rated equipment capable of sustaining the increased fault level, up to maximum fault level specified in Appendix 2 of the Transmission System Code.

Fault interrupting devices must be able to interrupt fault currents at the maximum continuous voltage of 127 kV.
- (8) Appendix 2 of the Transmission System Code states that the maximum rated interrupting time for the 115 kV breakers must be 5 cycles or less. Thus, the connection applicant shall ensure that the installed breakers meet the required interrupting time specified in the Transmission System Code.
- (9) The connection applicant shall ensure that the new protection systems at the project are designed to satisfy all the requirements of the Transmission System Code and any additional requirements identified by the transmitter.

As currently assessed by the IESO, the project is not part of the Bulk Power System (BPS) and, therefore it is not designated as essential to the power system.

The protection systems within the project must only trip the appropriate equipment required to isolate the fault.

The autoreclosure of the high voltage breakers at the connection point must be blocked. Upon its opening for a contingency, the high voltage breaker must be closed only after the IESO approval is granted.

Any modifications made to protection relays after this SIA is finalized must be submitted to the IESO as soon as possible or at least six (6) months before any modifications are to be implemented on the existing protection systems.

- (10) The connection applicant shall ensure that the telemetry requirements are satisfied as per the applicable Market Rules requirements. The determination of telemetry quantities and telemetry testing will be conducted during the IESO Facility Registration/Market Entry process.
- (11) If revenue metering equipment is being installed as part of this project, the connection applicant should be aware that revenue metering installations must comply with Chapter 6 of the IESO Market Rules. For more details the connection applicant is encouraged to seek advice from their Metering Service Provider (MSP) or from the IESO metering group.
- (12) The project must be compliant with applicable reliability standards set by the North American Electric Reliability Corporation (NERC) and the North East Power Coordinating Council (NPCC) that are in effect in Ontario as mapped in the following link:
<http://www.ieso.ca/imoweb/ircp/orcp.asp>.
- (13) The connection applicant will be required to be a restoration participant. Details regarding restoration participant requirements will be finalized at the Facility Registration/Market Entry Stage.
- (14) The connection applicant must complete the IESO Facility Registration/Market Entry process in a timely manner before IESO final approval for connection is granted.

Models and data, including any controls that would be operational, must be provided to the IESO at least seven months before energization to the IESO-controlled grid. This includes both PSS/E and DSA software compatible mathematical models. The models and data may be shared with other reliability entities in North America as needed to fulfill the IESO's obligations under the Market Rules, NPCC and NERC rules.

The connection applicant must also provide evidence to the IESO confirming that the equipment installed meets the Market Rules requirements and matches or exceeds the performance predicted in this assessment. This evidence shall be either type tests done in a controlled environment or commissioning tests done on-site. The evidence must be supplied to the IESO within 30 days after completion of commissioning tests. If the submitted models and data differ materially from the ones used in this assessment, then further analysis of the project will need to be done by the IESO.

- (15) The Market Rules governing the connection of renewable generation facilities in Ontario are currently being reviewed through the SE-91 stakeholder initiative and, therefore, new connection requirements (in addition to those outlined in the SIA), may be imposed in the future. The connection applicant is encouraged to follow developments and updates through the following link:
http://www.ieso.ca/imoweb/consult/consult_se91.asp.

Notification of Conditional Approval

The proposed connection of the project, operating up to 60 MW, subject to the requirements specified in this report, is expected to have no material adverse impact on the reliability of the integrated power system.

It is recommended that a *Notification of Conditional Approval for Connection* be issued for the project subject to the implementation of the requirements outlined in this report.

– End of Section –

1. Project Description

Varna Wind, Inc has proposed to develop a 60 MW wind farm located in Zurich, Huron County ON, known as Bluewater Wind Energy Centre which has been awarded a Power Purchase Agreement for FIT program with Ontario Power Authority. It is expected that commercial operation of the project will start on April 1, 2013.

The project will consist of a total of 37 GE1.6 MW Wind Turbine Generators (WTGs) rated 1.62 MW each. Each WTG will be connected to a 34.5 kV collector feeder through a 690 V/34.5 kV pad-mounted transformer. There are totally 3 collector feeders: two with 12 WTGs and one with 13 WTGs. Each feeder will be connected to the 34.5 kV bus via a circuit breaker at the 115 kV interconnection substation of the project.

At the interconnection substation, the 34.5 kV bus will be connected to a 34.5/115 kV step-up transformer through a circuit breaker. A motor operated disconnect switch and a circuit breaker will be installed at the high voltage side of the step-up transformer and connect the transformer to the 115 kV tap line.

The 23 km overhead tap line will be connected to the Hydro One's 115 kV bus at Seaforth TS. After the consultation with the transmitter, since there is not a vacant position in the existing 115 kV ring bus at Seaforth TS, a new diameter of two breakers will be added for the connection of this project.

The new bus arrangement at Seaforth TS and the single line diagram of the project is shown in Figure 1, Appendix A.

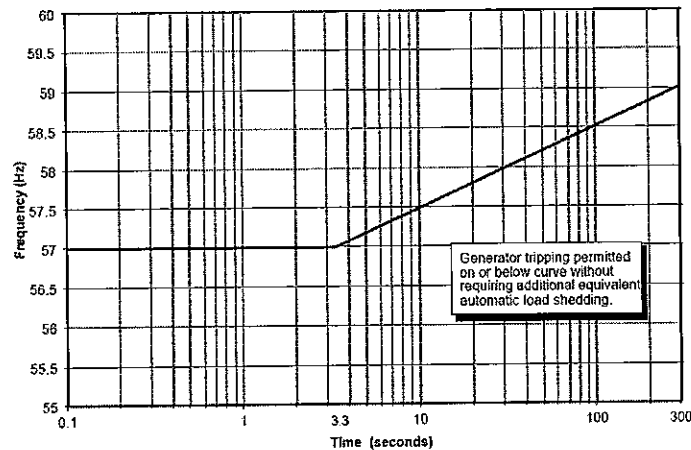
– End of Section –

2. General Requirements

The connection applicant shall satisfy all applicable requirements and standards specified in the Market Rules and the Transmission System Code. The following sections highlight some of the general requirements that are applicable to the proposed project.

2.1 Frequency/Speed Control

As per Appendix 4.2 of the Market Rules, the connection applicant shall ensure that the project has the capability to operate continuously between 59.4 Hz and 60.6 Hz and for a limited period of time in the region above straight lines on a log-linear scale defined by the points (0.0 s, 57.0 Hz), (3.3 s, 57.0 Hz), and (300 s, 59.0 Hz), as shown in the following figure.



The project shall respond to frequency increase by reducing the active power with an average droop based on maximum active power adjustable between 3% and 7% and set at 4%. Regulation deadband shall not be wider than $\pm 0.06\%$. The project shall respond to system frequency decline by temporarily boosting its active power output for some time (i.e. 10 s) by recovering energy from the rotating blades. This usually refers to “inertia emulation control” function within the wind farm control system. It is not required for wind facilities to provide a sustained response to system frequency decline. The connection applicant will need to indicate to the IESO whether the function of inertia emulation control is commercially available for the proposed type of wind turbine generator at the time when the wind farm comes into service. If this function is available, the connection applicant is required to implement it before the project can be placed in-service. If this function is commercially unavailable, the IESO reserves the right to ask the connection applicant to install this function in the future, once it is commercially available for the proposed type of wind turbine generator.

2.2 Reactive Power/Voltage Regulation

The project is directly connected to the IESO-controlled grid, and thus, the connection applicant shall ensure that the project has the capability to:

- supply continuously all levels of active power output for 5% deviations in terminal voltage. Rated active power is the smaller output at either rated ambient conditions (e.g. temperature, head, wind

- speed, solar radiation) or 90% of rated apparent power. To satisfy steady-state reactive power requirements, active power reductions to rated active power are permitted;
- inject or withdraw reactive power continuously (i.e. dynamically) at a connection point up to 33% of its rated active power at all levels of active power output except where a lesser continually available capability is permitted by the IESO. If necessary, shunt capacitors must be installed to offset the reactive power losses within the project in excess of the maximum allowable losses. If generators do not have dynamic reactive power capabilities, dynamic reactive compensation devices must be installed to make up the deficient reactive power;
 - regulate automatically voltage within $\pm 0.5\%$ of any set point within $\pm 5\%$ of rated voltage at a point whose impedance (based on rated apparent power and rated voltage) is not more than 13% from the highest voltage terminal. If the AVR target voltage is a function of reactive output, the slope $\Delta V/\Delta Q_{\max}$ shall be adjustable to 0.5%. The response of the project for voltage changes shall be similar to or better than the response of a generation facility with a synchronous generation unit and an excitation system that meets the requirements of Appendix 4.2.

2.3 Voltage Ride Through Capability

The project shall have the capability to ride through routine switching events and design criteria contingencies assuming standard fault detection, auxiliary relaying, communication, and rated breaker interrupting times unless disconnected by configuration.

2.4 Voltage

Appendix 4.1 of the Market Rules states that under normal operating conditions, the voltages in the 115 kV system in southern Ontario are maintained within the range of 113 kV to 127 kV. Thus, the IESO requires that the 115 kV equipment in southern Ontario must have a maximum continuous voltage rating of at least 127 kV.

Protective relaying must be set to ensure that transmission equipment remains in-service for voltages between 94% of the minimum continuous value and 105% of the maximum continuous value specified in Appendix 4.1 of the Market Rules.

2.5 Connection Equipment Design

The connection applicant shall ensure that the connection equipment is designed to be fully operational in all reasonably foreseeable ambient temperature conditions. The connection equipment must also be designed so that the adverse effects of its failure on the IESO-controlled grid are mitigated. This includes ensuring that all circuit breakers fail in the open position.

2.6 Disturbance Recording

The connection applicant is required to install at the project a disturbance recording device with clock synchronization that meets the technical specifications provided by the transmitter. The device will be used to monitor and record the response of the project to disturbances on the 115 kV system in order to verify the dynamic response of generators. The quantities to be recorded, the sampling rate and the trigger settings will be provided by the transmitter.

2.7 Fault Level

The Transmission System Code requires the new equipment to be designed to sustain the fault levels in the area where the equipment is installed. Thus, the connection applicant shall ensure that the new equipment at the project is designed to sustain the fault levels in the area. If any future system changes result in an increased fault level higher than the equipment's capability, the connection applicant is required to replace the equipment with higher rated equipment capable of sustaining the increased fault level, up to maximum fault level specified in the Transmission System Code. Appendix 2 of the Transmission System Code establishes the maximum fault levels for the transmission system. For the 115 kV system, the maximum 3 phase and single line to ground symmetrical fault levels are 50 kA.

Fault interrupting devices must be able to interrupt fault currents at the maximum continuous voltage of 127 kV.

2.8 Breaker Interrupting Time

Appendix 2 of the Transmission System Code states that the maximum rated interrupting time for the 115 kV breakers must be 5 cycles or less. Thus, the connection applicant shall ensure that the installed breakers meet the required interrupting time specified in the Transmission System Code.

2.9 Protection System

The connection applicant shall ensure that the protection systems are designed to satisfy all the requirements of the Transmission System Code as specified in Schedules E, F and G of Appendix 1 and any additional requirements identified by the transmitter. New protection systems must be coordinated with the existing protection systems.

Facilities that are essential to the power system must be protected by two redundant protection systems according to section 8.2.1a of the Transmission System Code. These redundant protection systems must satisfy all requirements of the Transmission System Code, and in particular, they must not use common components, common battery banks or common secondary CT or PT windings. As currently assessed by the IESO, this project is not on the current Bulk Power System list, and therefore, is not considered essential to the power system. In the future, as the electrical system evolves, this project may be placed on the BPS list.

The protection systems within the project must only trip the appropriate equipment required to isolate the fault. After the project begins commercial operation, if an improper trip of the 230 kV circuits B22D/B23D occurs due to events within the project, the project may be required to be disconnected from the IESO-controlled grid until the problem is resolved.

The autoreclosure of the high voltage breakers at the connection point must be blocked. Upon its opening for a contingency, the high voltage breaker must be closed only after the IESO approval is granted.

Any modifications made to protection relays after this SIA is finalized must be submitted to the IESO as soon as possible or at least six (6) months before any modifications are to be implemented on the existing protection systems. If those modifications result in adverse impacts, the connection applicant and the transmitter must develop mitigation solutions

2.10 Telemetry

If applicable according to Section 7.3 of Chapter 4 of the Market Rules, the connection applicant shall provide to the IESO the applicable telemetry data listed in Appendix 4.15 of the Market Rules on a continual basis. The data shall be provided in accordance with the performance standards set forth in Appendix 4.19, subject to Section 7.6A of Chapter 4 of the Market Rules. The data is to consist of certain equipment status and operating quantities which will be identified during the IESO Facility Registration/Market Entry Process.

To provide the required data, the connection applicant must install at this project monitoring equipment that meets the requirements set forth in Appendix 2.2 of Chapter 2 of the Market rules. As part of the IESO Facility Registration/Market Entry process, the connection applicant must also complete end to end testing of all necessary telemetry points with the IESO to ensure that standards are met and that sign conventions are understood. All found anomalies must be corrected before IESO final approval to connect any phase of the project is granted.

2.11 Revenue Metering

If revenue metering equipment is being installed as part of this project, the connection applicant should be aware that revenue metering installations must comply with Chapter 6 of the IESO Market Rules. For more details the connection applicant is encouraged to seek advice from their Metering Service Provider (MSP) or from the IESO metering group.

2.12 Reliability Standards

Prior to connecting to the IESO controlled grid, the project must be compliant with the applicable reliability standards established by the North American Electric Reliability Corporation (NERC) and reliability criteria established by the Northeast Power Coordinating Council (NPCC) that are in effect in Ontario. A mapping of applicable standards, based on the proponent's/connection applicant's market role/OEB license can be found here: <http://www.ieso.ca/imoweb/ircp/orcp.asp>

This mapping is updated periodically after new or revised standards become effective in Ontario.

The current versions of these NERC standards and NPCC criteria can be found at the following websites:
<http://www.nerc.com/page.php?cid=2|20>
<http://www.npcc.org/documents/regStandards/Directories.aspx>

The IESO monitors and assesses market participant compliance with a selection of applicable reliability standards each year as part of the Ontario Reliability Compliance Program. To find out more about this program, write to orcp@ieso.ca or visit the following webpage: <http://www.ieso.ca/imoweb/ircp/orcp.asp>

Also, to obtain a better understanding of the applicable reliability compliance obligations and engage in the standards development process, we recommend that the connection applicant join the IESO's Reliability Standards Standing Committee (RSSC) or at least subscribe to their mailing list by contacting rssc@ieso.ca. The RSSC webpage is located at:

http://www.ieso.ca/imoweb/consult/consult_rssc.asp.

2.13 Restoration Participant

According to the Market Manual 7.8 which states restoration participant criteria and obligations, the connection applicant will be required to be a restoration participant. Details regarding restoration participant requirements will be finalized at the Facility Registration/Market Entry Stage.

2.14 Facility Registration/Market Entry

The connection applicant must complete the IESO Facility Registration/Market Entry process in a timely manner before IESO final approval for connection is granted.

Models and data, including any controls that would be operational, must be provided to the IESO. This includes both PSS/E and DSA software compatible mathematical models representing the new equipment for further IESO, NPCC and NERC analytical studies. The models and data may be shared with other reliability entities in North America as needed to fulfill the IESO's obligations under the Market Rules, NPCC and NERC rules. The connection applicant may need to contact the software manufacturers directly, in order to have the models included in their packages. This information should be submitted at least seven months before energization to the IESO-controlled grid, to allow the IESO to incorporate this project into IESO work systems and to perform any additional reliability studies.

As part of the IESO Facility Registration/Market Entry process, the connection applicant must provide evidence to the IESO confirming that the equipment installed meets the Market Rules requirements and matches or exceeds the performance predicted in this assessment. This evidence shall be either type tests done in a controlled environment or commissioning tests done on-site. In either case, the testing must be done not only in accordance with widely recognized standards, but also to the satisfaction of the IESO. Until this evidence is provided and found acceptable to the IESO, the Facility Registration/Market Entry process will not be considered complete and the connection applicant must accept any restrictions the IESO may impose upon this project's participation in the IESO-administered markets or connection to the IESO-controlled grid. The evidence must be supplied to the IESO within 30 days after completion of commissioning tests. Failure to provide evidence may result in disconnection from the IESO-controlled grid.

If the submitted models and data differ materially from the ones used in this assessment, then further analysis of the project will need to be done by the IESO.

2.15 Other Connection Requirements

The Market Rules governing the connection of renewable generation facilities in Ontario are currently being reviewed through the SE-91 stakeholder initiative and, therefore, new connection requirements (in addition to those outlined in the SIA), may be imposed in the future. The connection applicant is encouraged to follow developments and updates through the following link:
http://www.ieso.ca/imoweb/consult/consult_se91.asp

-End of Section-

3. Data Verification

3.1 Connection Arrangement

The connection arrangement of the project shown in

Figure 1 will not reduce the level of reliability of the integrated power system and is, therefore, acceptable to the IESO.

3.2 GE 1.6 MW WTG

The GE 1.6 MW WTG is a three bladed, variable pitch, variable speed, and partial conversion wind turbine doubly-fed induction generator system. Its specifications are shown in Table 1.

Table 1: Specifications of GE 1.6 MW WTG

Type	Rated Voltage	Rated MVA	Rated MW	Transformer			Q_{max} (Mvar)	Q_{min} (Mvar)	X_d' (pu)
				MVA	R	X			
GE 1.6 MW	690 V	1.8	1.62	1.8	0.76%	5.7%	0.784	-0.784	0.33

Voltage Ride-Through Capability

The GE 1.6 MW wind turbine provides a voltage ride-through option ZVRT. During a voltage drop/raise, the minimum time for a WTG to remain online is shown in Table 2. The proposed turbines will use this option.

Table 2: WTG voltage ride-through capability

Voltage Range (% of base voltage)	Minimum time for WTGs to Remain Online (s)
V<15	0.2
15<V<30	0.7
30<V<50	1.2
50<V<75	1.9
110 < V < 115	1.0
V>115	0.1

The low voltage ride-through (LVRT) capability of the proposed WTGs was verified by performing transient stability studies as detailed in Section 6.10.

Frequency Ride-Through Capability

The GE 1.6 MW WTG is able to operate continuously for a frequency range of $\pm 5\%$ (57 to 63 Hz).

The Market Rules state that the generation facility directly connecting to the IESO-controlled grid shall operate continuously between 59.4Hz and 60.6Hz and for a limited period of time in the region above straight lines on a log-linear scale defined by the points (0.0s, 57.0Hz), (3.3s, 57.0Hz), and (300s, 59.0Hz).

Therefore, the frequency ride-through capability of the proposed WTGs meets the Market Rules' requirements.

3.3 Main Step-Up Transformers

Table 3: Main step-up transformer data

Unit	Rating (MVA) (ONAN/ONAF/ONAF)	Positive Sequence Impedance (pu) $S_B=51$ MVA	Configuration		Zero Sequence Impedance (pu) $S_B=51$ MVA	Tap
			HV	LV		
T2	51/68/85MVA	0.0023+j0.0799	Y	Δ	0.00207+j0.0719	OLTC@HV: 5 steps, 2.5% of 121 kV each step

3.4 Collector System

Table 4: Equivalent impedance of collectors

Circuit	Unit#	MW	Positive-Sequence Impedance (pu, $S_B=100$ MVA)			Zero-Sequence Impedance* (pu, $S_B=100$ MVA)		
			R	X	B	R	X	B
BW1	G1	19.44	0.057	0.056	0.013	-	-	-
BW2	G2	19.44	0.06	0.057	0.013	-	-	-
BW3	G3	21.06	0.031	0.02	0.01	-	-	-

(*) Zero-sequence impedance has not been provided. Typical data was assumed during the SIA. The applicant needs to provide these data during the IESO Market Entry process.

3.5 Connection Equipment

3.5.1 115 kV Switches

Table 5: Specifications of 115 kV switches

Identifier	Voltage Rating	Continuous Current Rating	Short Circuit Symmetrical Rating
-	145 kV	2000 A	40 kA

All switches meet the maximum continuous voltage rating requirement of 127 kV.

3.5.2 115 kV Circuit Breakers

Table 6: Specifications for 115 kV circuit breakers

Identifier	Voltage Rating	Interrupting time	Continuous Current Rating	Short Circuit Symmetrical Rating
-	145 kV	3 cycles (50 ms)	2000 A	40 kA

All circuit breakers meet the maximum continuous voltage rating requirement of 127 kV.

3.5.3 Tap Line

The tap line from the project to the connection point consists of an overhead circuit about 23 km long. The parameters of the line are shown in Table 7.

Table 7: Parameters of tap line

Circuit	Conductor	Positive-Sequence Impedance (pu, $S_B=100\text{MVA}$)			Zero-Sequence Impedance (pu, $S_B=100\text{MVA}$)		
		R	X	B	R	X	B
B1S	ACSR 1272 kcmil 54/19	0.007857	0.07181	0.010913	0.06613	0.17505	0.00698

3.6 Wind Farm Control System

The project will be equipped with the GE WindCONTROL System. This control system is designed to interface with each WTG in the wind farm for regulating system voltage, system power factor and real and actual power for the entire wind farm. It has also the capability to coordinate and control fixed reactor and capacitor banks when the total reactive requirements for the farm cannot be supplied by the reactive capability of the WTGs.

Voltage Control

The WindCONTROL System has the following functions related to the voltage control:

- Voltage, VAR and Power Factor Control

The WindCONTROL System has a voltage or power factor closed loop regulator controlling voltage at the connection point or reactive power injected by the wind farm at the connection point by regulating the reactive output of the WTGs.

- Fixed Reactor and Cap Bank Control and Coordination

The WindCONTROL System is able to control and coordinate the insertion of up to 4 fixed capacitor or reactor banks. These banks may be operated automatically in conjunction with the voltage or power factor regulator.

- Line Drop Compensation / Voltage Droop Compensation

The voltage regulator and the power factor regulator can implement line drop-compensating logic to correct for voltage drops and VAR losses on the line. The voltage regulator can be configured with

voltage droop compensation, which allows tightly coupled adjacent voltage regulators to share in the voltage regulation of a point that is common to all the adjacent regulators.

The voltage control functions enable the proposed wind farm to operate in voltage control mode and control voltage at a point whose impedance (based on rated apparent power and voltage of the project) is not more than 13% from the connection point. Thus, it is acceptable to the IESO.

The function of voltage control meets the requirements of the Market Rules.

Frequency Control

The WindCONTROL System has a function of frequency droop control which controls the wind farm power output based upon the grid frequency. This function is similar to governor droop control for a conventional rotating generator.

The WindINERTIA feature enables the GE 1.6 MW WTG to provide inertial response to help stabilize grid frequency. This feature supports the grid during under frequency events by providing a temporary increase in power production for a short duration, contributing towards frequency recovery.

This is achieved by tapping into the stored kinetic energy in the rotor mass. The response is equivalent to that of a synchronous generator with an inertia constant of 3.5 sec.

The function of frequency control meets the requirements of the Market Rules.

-End of Section-

4. Short Circuit Assessment

Fault level studies were completed by the transmitter to examine the effects of the project on fault levels at existing facilities in the surrounding area. Studies were performed to analyze the fault levels with and without the project and other recently committed generation projects in the system.

The short circuit study was carried out with the following primary system assumptions:

(1) Generation Facilities In-Service

East

Lennox	G1-G4	Chenau	G1-G8
Kingston Cogen	G1-G2	Mountain Chute	G1-G2
Wolf Island	300 MW	Stewartville	G1-G5
Arnprior	G1-G2	Brockville	G1
Barrett Chute	G1-G4	Havelock	G1
Chats Falls	G2-G9	Saunders	G1-G16
Cardinal Power	G1, G2		

Toronto

Pickering units	G1, G4-G8	Sithe Goreway	G11-13, G15
Darlington	G1-G4	TransAlta Douglas	G1-G3
Portlands GS	G1-G3	GTAA	G1-G3
Algonquin Power	G1, G2	Brock west	G1
Whitby Cogen	G1		

Niagara

Thorold GS	GTG1, STG2	Beck 2	G11-G26
Beck 1	G3-G10	Beck 2 PGS	G1-G6
Decew	G1, G2, ND1		

South West

Nanticoke	G1, G2, G5-G8	Kingsbridge WGS	39.6 MW
Halton Hills GS	G1-G3	Amaranth WGS	199.5 MW

Bruce

Bruce A	G1-G4	Ripley WGS	76 MW
Bruce B	G5-G8	Underwood WGS	198 MW
Bruce A Standby	SG1		

West

Lambton units	G3-G4	Imperial Oil	G1
Brighton Beach	G1, G1A, G1B	Kruger Port Alma WGS	101.2 MW
Greenfield Energy Centre	G1-G4	Gosfield Wind Project	50.6 MW
St. Clair Energy Centre	CTG3, STG3, CTG4, STG4	Kruger Energy Chatham WF	101 MW
East Windsor Cogen	G1-G2	Raleigh WEC	78 MW
TransAlta Sarnia	G861, G871, G881, G891	Talbot Wind Farm	98.9 MW
Ford Windsor CTS	STG5	Port Burwell WGS	99 MW
TransAlta Windsor	G1, G2	Fort Chicago London Cogen	23 MVA
West Windsor Power	G1, G2	Great Northern Tri-Gen Cogen	15 MVA
Dow Chemicals	G1, G2, G5		

(2) Previously Committed Generation Facilities

- Bruce G1, G2
- Big Eddy GS and Half Mile Rapids GS
- White Pines Wind Farm
- Amherst Island
- York Energy Centre
- Conestogo Wind Energy Centre 1
- Dufferin Wind Farm
- Summerhaven Wind Farm
- Port Dover and Nanticoke
- Grand Renewable Energy Park
- Greenfield South
- Comber East C24Z
- Comber West C23Z
- Pointe-Aux-Roches Wind
- South Kent Wind Farm

(3) Recently Committed Generation Facilities

- Bluewater Wind Energy Centre
- Jericho Wind Energy Centre
- Bornish Wind Energy Centre
- Goshen Wind Energy Centre
- Cedar Point Wind Power Project Phase II
- Adelaide Wind Energy Centre
- Grand Bend Wind Farms
- Grand Valley Wind Farms (Phase 3)
- Erieau Wind
- East Lake St. Clair Wind
- Adelaide Wind Power Project
- Gunn's Hill Wind Farm
- Silvercreek Solar Park
- K2 wind
- Armow
- 300 MW wind at Orangeville
- 100 MW wind at S2S

(4) Existing and Committed Embedded Generation

- Essa area: 264 MW
- Ottawa area: 90 MW
- East area: 580 MW
- Toronto area: 168 MW
- Niagara area: 52 MW
- Southwest area: 348
- Bruce area: 26 MW
- West area: 585 MW

(5) Transmission System Upgrades

- Leaside - Bridgman reinforcement: Leaside TS to Birch JCT: new 115 kV circuit (CAA2006-238);
- St. Catherines 115 kV circuit upgrade: circuits D9HS, D10S and Q11S (CAA2007-257);
- Tilbury West DS second connection point for DESN arrangement using K2Z and K6Z (CAA2008-332);
- Second 500kV Bruce-Milton double-circuit line (CAA2006-250);
- Woodstock Area transmission reinforcement (CAA2006-253);
 - Karn TS in service and connected to M31W & M32W at Ingersol TS
 - W7W/W12W terminated at LFarge CTS
 - Woodstock TS connected to Karn TS
- Rodney (Duart) TS DESN connected to W44LC and W45LS 230 kV circuits (CAA2007-260)

(6) System Operation Conditions

- Lambton TS 230 kV operated *open*
- Claireville TS 230 kV operated *open*
- Leaside TS 230 kV operated *open*
- Leaside TS 115 kV operated *open*
- Middleport TS 230 kV bus operated *open*
- Hearn SS 115 kV bus operated *open*
- Cherrywood TS north & south 230kV buses operated *open*
- Richview TS 230 kV bus operated *open*
- All tie-lines in service and phase shifters on neutral taps
- Maximum voltages on the buses

Table 8 summarizes the projected fault levels at facilities near the project with and without the project and other recently committed generation projects.

Table 8: Fault levels at facilities near the project

Bus	Before the Project		After the Project and Other Committed Projects		Lowest Rating of Circuit Breakers (kA)
	3-Phase	L-G	3-Phase	L-G	
<i>Symmetrical (kA)*</i>					
Bluewater 115 kV	-	-	5.429	5.774	40
Goshen 115 kV	-	-	6.733	5.838	40
Seaforth 115 kV	11.563	13.635	13.725	16.339	30.9
Majestic CTS	18.111	16.083	19.050	16.585	63
Detweiler 230 kV	22.876	19.782	23.721	20.291	40
Detweiler 115 kV	24.235	27.101	24.673	27.503	34.7
Bruce A 230 kV	42.966	54.361	44.634	56.152	60***
<i>Asymmetrical (kA)*</i>					
Bluewater 115 kV	-	-	6.012	6.705	(unknown)****
Goshen 115 kV	-	-	7.013	5.991	(unknown)****
Seaforth 115 kV	12.886	16.026	15.599	19.574	35.8
Majestic CTS	21.762	18.200	22.962	18.748	66.3
Detweiler 230 kV	26.808	25.255	27.815	25.932	42.1
Detweiler 115 kV	28.082	33.348	28.659	33.934	39.8
Bruce A 230 kV	57.645	78.446**	59.730	80.815**	72.6***

* Based on a pre-fault voltage level of 550 kV for 500 kV buses, 250 kV for 230 kV buses, and 127 kV for 115 kV buses.

**The asymmetrical fault level is based on a breaker contact parting time of 44 ms.

***Three lower rated Bruce A 230 kV breakers (D1L81, K1L82 and L23T25) are scheduled to be replaced by December 2012 (see CAA ID#2010-EX511). The listed lowest rated circuit breaker value for Bruce A 230 kV assumes these breakers being replaced.

****The connection applicant must provide the asymmetrical rating of the 115 kV circuit breakers during the IESO Market Entry process.

Table 8 shows that fault levels increase by a small amount due to the addition of the project and other recently committed generation projects. The interrupting capability of circuit breaker at the project is adequate for the anticipated fault levels.

The results also show that the line-to-ground asymmetrical fault current at Bruce A 230 kV before and after the incorporation of the project and other committed projects will exceed the interrupting capability of the existing breakers. This issue has been investigated in the 2nd SIA addendum for the project of Bruce G1 and G2 restart (CAA ID 2004-163), where the IESO has identified a requirement to replace all the Bruce 230 kV breakers with higher fault current interrupting capability and assessed potential mitigation measures for this issue until these circuit breakers are replaced. Hydro One has planned to replace the Bruce 230 kV breakers.

With the exception of Bruce A 230 kV, the interrupting capability of the lowest rated circuit breakers near the project will not be exceeded after the incorporation of the project.

-End of Section-

5. Protection Impact Assessment

A Protection Impact Assessment (PIA) was completed by the transmitter to examine the impact of the project on existing transmission system protections.

New protection equipments will be installed for incorporating the project as per the PIA report presented in Appendix B. These include:

- IED 'A' and 'B' groups of breaker protection will be installed to protect the new breakers CB5 and CB6.
- New IED type 'A' and 'B' line protections will be installed for connection of the project. Zone 1 distance element in Seaforth TS will cover entire line length plus 25% of the transformer impedance at the wind farm. Zone 2 will not be required.
- New communication links ('A' and 'B' redundant) will be required between the wind farm and Seaforth TS for tele-protection. Direct transfer trip will be sent to the wind farm collector station upon tripping of the new line protection.

The changes to the existing transmission protection systems for incorporating the project have been proposed in the PIA report (Appendix B). These changes were included in the system impact studies.

- Modification to the existing protections of transformer T5 and T6 and lines B22D/B23D to trip the new breakers CB5 and CB6 at Seaforth TS.
- The tripping of the new breakers CB5 and CB6 will be added to the existing transfer trip schemes of line B22D and B23D, respectively.
- Breaker protection of KT1L7, KT1L18, DT1L7, and DT2L18 will be modified according to the new bus configuration.
- The protection for bus K and D at Seaforth TS will be modified to cover the new breakers CB5 and CB6.

The PIA concluded that it is feasible for the connection applicant to connect the project at the proposed location as long as the proposed changes to the transmission configuration, protection hardware, protection settings, and telecommunications are made.

-End of Section-

6. System Impact Studies

The technical studies focused on identifying the impact of the project on the reliability of the IESO-controlled grid. It includes thermal loading assessment of transmission lines, system voltage performance assessment of local buses, transient stability assessment of the proposed and major surrounding generation units, ride-through capability of the project. The section also investigates the performance of the proposed control system and identifies the impact of the project on existing SPS schemes. In addition, the reactive power capability of the project is assessed and compared to the Market Rules requirements.

6.1 Existing System

The 115 kV system in the vicinity of the project consists of Seaforth TS, and radial lines L7S and M18 originating from Seaforth TS. A 39.6 MW Kingsbridge wind farm is embedded at Goodrich TS which is connected to the 115 kV radial line M18. Under normal operating condition, Seaforth and Detweiler stations are not paralleled via L7S/D8S circuits. The normal open point is the 115 kV switch 9A1-2 at St. Mary TS. The load on transformer T2 at St. Mary's TS is supplied from Seaforth TS, while transformer T1 at St. Mary's TS is supplied from Detweiler TS. The low voltage tie breaker at St. Mary TS is normally closed.

Under emergency conditions, the 115 kV in-line switch L7S-61M18 can be closed and the load on circuit M18 can be supplied by circuit L7S, or vice versa. Circuit D8S from Detweiler TS can also supply St. Mary TS and the load on circuit L7S by closing switch 9A1-2 at St. Mary TS and opening switch L7S-21 which is close to Seaforth TS.

There are two 230/115 kV three-winding power transformers at Seaforth TS, T5 and T6. Seaforth TS is connected to the 230 kV circuits B22D and B23D between Bruce A TS and Detweiler TS.

Figure 2 provides an overview of the transmission system in the vicinity of the project.

6.2 Historical Data

Historical data, consisting of hourly average samples for the last two years, were obtained from IESO real-time telemetry for the following quantities:

- 115 kV voltages at Seaforth TS;
- Active power flow (MW) on 230 kV Transformers T5 and T6 at Seaforth TS.

Plots for these quantities are presented in Figure 3 to Figure 5. Figure 3 shows that the 115 kV voltage at Seaforth TS stays above 124 kV for more than 80 percent of the time. The flows on Seaforth Transformer T5 and T6 are from the 230 kV system to the 115 kV system as shown in Figure 4 and Figure 5.

Table 9 to Table 10 summarizes the historical flows on the lines and transformers and bus voltages in the vicinity of the project.

Table 9: Historical Flows

Element	Range (MW)	Average (MW)
Flow of circuit L7S out of Seaforth TS	30-110	54
Flow of Seaforth T5 from 230 kV to 115 kV	40-140	53
Flow of Seaforth T6 from 230 kV to 115 kV	30-125	50

Table 10: Historical Voltages

Bus	Range (kV)	Average (kV)
Seaforth 115 kV	116-130	125

6.3 Study Assumptions

In this assessment, the 2014 summer base cases were used with the following assumptions:

- (1) **Transmission facilities:** All existing and committed major transmission facilities with 2014 in-service dates or earlier were assumed in service. The committed facilities primarily include:

- Second 500 kV Bruce-Milton double-circuit line (CAA2006-250);
- Buchanan TS: one 250 MVar shunt capacitor;
- Nanticoke and Detweiler SVCs;
- Series capacitors at Nobel SS in each of the 500 kV circuits X503E & X504E;

- (2) **Generation facilities:** All existing and committed major generation facilities with 2013 in-service dates or earlier were assumed in service. The committed facilities primarily include:

Previously Committed Generation Facilities

- Bruce G1, G2
- Big Eddy GS and Half Mile Rapids GS
- White Pines Wind Farm
- Amherst Island
- York Energy Centre
- Conestogo Wind Energy Centre 1
- Dufferin Wind Farm
- Summerhaven Wind Farm
- Port Dover and Nanticoke
- Grand Renewable Energy
- Greenfield South
- Comber East C24Z
- Comber West C23Z
- Pointe-Aux-Roches Wind
- South Kent Wind Farm

Recently Committed Generation Facilities

- Bluewater Wind Energy Centre
- Jericho Wind Energy Centre
- Bornish Wind Energy Centre
- Goshen Wind Energy Centre
- Cedar Point Wind Power Project Phase II
- Adelaide Wind Energy Centre
- Grand Bend Wind Farms
- Grand Valley Wind Farms (Phase 3)
- Erieau Wind
- East Lake St. Clair Wind
- Adelaide Wind Power Project
- Gunn's Hill Wind Farm
- Silvercreek Solar Park
- K2 wind
- Armow
- 300 MW wind at Orangeville
- 100 MW wind at S2S

Existing and Committed Embedded Generation

- Essa area: 264 MW
- Ottawa area: 90 MW
- East area: 580 MW
- Toronto area: 168 MW
- Niagara area: 52 MW
- Southwest area: 348 MW
- Bruce area: 26 MW
- West area: 585 MW

- (3) **Basecases:** Three basecases in terms of load level were used in this SIA studies: peak load, shoulder load, and light load. The generation dispatch philosophies for the three cases are as follows:

Peak load basecase

- All committed and existing generation in the Southwest and Bruce areas were maximized, including 8 units at Bruce;
- Gas generation, in conjunction with maximum wind generation, in the West area was dispatched to achieve a NBLIP transfer of approximately 2000MW;
- Generation in the North areas was dispatched to achieve a Flow South transfer of approximately 1250MW;
- Generation in the Greater Toronto Area included two Pickering units, four Darlington units and four Sthe Goreway units;
- Used for thermal analysis of overall system, voltage decline, and transient stability.

Shoulder load basecase

- All committed and existing generation in the Bruce area was maximized;
- Renewable and minimum level gas generation in the West was dispatched to achieve an NBLIP transfer of approximately 986MW;
- Generation in the North areas was dispatched to achieve a Flow North transfer of approximately 500MW;
- Generation in the Greater Toronto Area included two Pickering units and four Darlington units;
- Generation in the Southwest area was then dispatched to balance the load;
- Used for thermal analysis of the local 230 kV transmission system.

Light load basecase

- All dispatchable gas units out of service;
- Minimum hydraulic generation;
- Nuclear generation limited to three Pickering units, two Darlington units and five Bruce units;
- Existing Southwest, West and Bruce area wind generation in service;
- Incorporation of Bluewater and Goshen WECs into the system;
- Used for thermal analysis of the local 115 kV transmission system and voltage decline.

The system demand and the primary interface flows after the incorporation of the proposed project are listed in Table 11.

Table 11: System demand and primary interface flows for basecases (MW)

Base case	System Demand	NBLIP	FABC	FETT	OFW	FS	FIO
Peak Load	26880	2023	6412	6913	1146	1250	1585
Shoulder Load	20716	986	6404	6707	1055	-488	1309
Light Load	11621	643	3845	906	34	-1048	746

6.4 Special Protection System (SPS)

The BSPS is a collection of special protection systems installed at the Bruce B switching station (SS) and other stations which perform pre-defined control actions, including generation rejection, load rejection and reactor switching. These control actions are initiated by recognized contingencies by monitoring the electrical connection between nodes in southern Ontario. The primary purpose of the BSPS is to allow increased pre-contingency transfers on the existing transmission facilities emanating from the Bruce nuclear generation station (NGS).

The BSPS is classified as a “Type 1 Special Protection System”, and conforms to criteria and guidelines specified in the Northeast Power Coordinating Council (NPCC) Reliability Reference Directory #7.

The IESO has identified a requirement that wind generation stations connecting near the Bruce NGS must connect to and participate in the BSPS, as detailed in the SIA report and addendum for Hydro One BSPS modifications (CAA ID 2005-EX222), the incorporation of wind generation rejection (G/R) to the BSPS is considered a new BSPS control action. This new control action will provide the IESO with increased operating flexibility during transmission outage conditions.

Special protection system facilities must be installed at the project to accept a single pair (A & B) of G/R signals from the BSPS, and disconnect the project from the system with no intentional time delay when armed for G/R following a triggering contingency. These special protection system facilities must also comply with the NPCC Reliability Reference Directory #7 for Type 1 special protection systems. In particular, if the SPS is designed to have ‘A’ and ‘B’ protection at a single location for redundancy, they must be on different non-adjacent vertical mounting assemblies or enclosures. Two independent trip coils are required on the breakers selected for G/R. The applicant must provide two dedicated communication channels, separated physically and geographically diverse, between the project and the Bruce NGS.

To disconnect the project from the system for G/R, simultaneous tripping of the 115 kV breakers CB5 and CB6 at Seaforth TS and the 115 kV breaker at Bluewater Collector station shall be initiated with no accompanying breaker failure response. After being tripped by the BSPS, the closing of the breakers is not permitted until approval is obtained from the IESO.

Alternative solutions to disconnect the project from the system for G/R may be acceptable upon the approval of the IESO.

6.5 Reactive Power Compensation

The Market Rules (MR) require that generators inject or withdraw reactive power continuously (i.e. dynamically) at a connection point up to 33% of its rated active power at all levels of active power output except where a lesser continually available capability is permitted by the IESO. A generating unit with a power factor range of 0.90 lagging and 0.95 leading at rated active power connected via impedance between the generator and the connection point not greater than 13% based on rated apparent power provides the required range of dynamic reactive capability at the connection point.

Dynamic reactive compensation (e.g. D-VAR or SVC) is required for a generating facility which cannot provide a reactive power range of 0.90 lagging power factor and 0.95 leading power factor at rated active power. For a wind farm with impedance between the generator and the connection point greater than 13% based on rated apparent power, provided the WTGs have the capability to provide a reactive power range of 0.90 lagging power factor and 0.95 leading power factor at rated active power, the IESO accepts that the wind farm compensates for excessive reactive losses in the collector system of the project with static shunts (e.g. capacitors and reactors).

The connection applicant shall be able to confirm this capability during the commission tests.

Dynamic Reactive Power Capability

The GE 1.6 MW turbine has an option for power factor of 0.9 inductive to 0.9 capacitive. The turbines for this project will use this option. Thus, the dynamic reactive capability of the project meets the MR requirements.

Static Reactive Power Capability

In addition to the dynamic reactive power requirement identified above, the project has to fulfill the reactive power requirement of the project to ensure that it has the capability to inject or withdraw reactive power up to 33% of its rated active power at the connection point.

Load flow studies were performed to calculate the static reactive compensation, based on the equivalent parameters provided by the connection applicant for the wind farm.

The reactive power capability in lagging power factor of the generation was assessed under the following assumptions:

- A voltage of 123.75 kV at the connection point;
- maximum active power output from the equivalent WTG;
- maximum reactive power output (lagging power factor) from the equivalent WTG, unless limited by the maximum acceptable WTG terminal voltage;
- maximum acceptable WTG voltage of 1.1 pu, as per WTG voltage capability;
- OLTC at the main step-up transformer set to a tap position of 124.025 kV.

The reactive power capability in leading power factor of the project was assessed under the following assumptions:

- A voltage of 126.25 kV at the connection point;
- minimum (zero) active power output from the equivalent WTG;
- maximum reactive power consumption (leading power factor) from the equivalent WTG, unless limited by the minimum acceptable WTG terminal voltage;
- minimum acceptable WTG voltage is 0.9 pu, as per WTG voltage capability;
- OLTC at the main step-up transformer set to a tap position of 124.025 kV.

The IESO's reactive power calculation used the equivalent electrical model for the WTG and collector feeders as provided by the connection applicant. It is very important that the wind farm has a proper internal design to ensure that the WTG are not limited in their capability to produce active and reactive power due to terminal voltage limits or other internal limitations of the project. For example, it is expected that the transformation ratio of the WTG step up transformers will be set in such a way that it will offset the voltage profile along the collector, and all the WTG would be able to contribute to the reactive power production of the WF in a shared amount.

Based on the equivalent parameters for the wind farm provided by the connection applicant, no static reactive compensation is required for the project.

6.6 Wind Farm Voltage Control System

As per the Market Rules' requirements, the wind farm shall operate in voltage control mode by using all voltage control methods available within the project. The overall automatic voltage regulation philosophy for the project is summarized as follow:

- (1) All WTGs control the voltage at a point whose impedance (based on rated apparent power and voltage of the project) is not more than 13% from the connection point. Appropriate control slope is adopted for reactive power sharing among the WTGs as well as with adjacent generators. The reference voltage will be specified by the IESO during operation.
- (2) The main transformer ULTC is adjusted to regulate the collector bus voltage such that it is within normal range and close to about 1 pu. The IESO recommends the automatic control for this ULTC. Appropriate dead band shall be adopted to avoid voltage hunting.

In the event that the wind farm voltage control is not available, the IESO requires that each WTG control the power factor at its own terminal to unity. Depending on system conditions, further action such as curtailing the output of the project may be required for reliability purposes.

6.7 Thermal Analysis

The *Ontario Resource and Transmission Assessment Criteria* requires that all line and equipment loads be within their continuous ratings with all elements in service, and within their long-term emergency ratings with any element out of service. Immediately following contingencies, lines may be loaded up to their short-term emergency ratings where control actions such as re-dispatch, switching, etc. are available to reduce the loading to the long-term emergency ratings.

In the thermal analysis, the continuous ratings for the conductors were calculated at the lowest of the sag temperature or 93°C operating temperature, with a 35°C ambient temperature and 4 km/h wind speed. The long term emergency ratings (LTE) for the conductors were calculated at the lowest of the sag temperature or 127°C operating temperature, with a 35°C ambient temperature and 4 km/h wind speed. The short-term emergency ratings (STE) for the conductors were calculated at the sag temperature, with a 35°C ambient temperature, 4 km/h wind speed and 100% continuous preload.

System Overview

The return of Bruce G1 and G2 combined with the addition of new Bruce and Southwest Ontario generation results in a higher flow eastward from Bruce. This naturally increases the flow along the 115 kV path of circuit S2S from Owen Sound TS to Stayner TS when circuit S2S is operated close-loop. Table 12 shows the pre-contingency thermal results with S2S operated close-loop under the defined shoulder load condition. It indicates the overloading of both circuit S2S from Meaford TS to Stayner TS and Stayner T1. To prevent the thermal overloading, circuit S2S will be required to operate open-loop under certain conditions after the integration of the committed generation projects in the area of Bruce and Southwest Ontario. Hydro One has investigated this operation scenario and did not identified any limitation with it.

Table 12: Pre-contingency thermal results with S2S close-loop under shoulder load conditions

Circuit	Pre-Contingency Flow	Summer Continuous Rating	Loading (%)
S2S (Meaford-Stayner)	650 A	590 A*	110
Stayner T1	136 MVA	125 MVA	109

* Circuit continuous ratings are obtained based on 35°C ambient temperature at 4 km/hr wind velocity, with 93°C maximum operating temperature or individual sag temperature if lower.

Due to the fact that the opening of S2S results in increased flows on the parallel 230 kV and 500 kV circuits emanating from Bruce, circuit S2S was assumed open-loop at Owen Sound for the rest of the SIA study.

The impact of the projects on the overall system, in conjunction with other committed projects, was examined to identify if any system congestion issues exist in Central and Southwest Ontario due to 230 kV circuit or 500 kV auto-transformer thermal constraints. The studies concluded that under exceptionally high power transfers towards Toronto, generating stations in Bruce and Southwest Ontario may be required to curtail their outputs to relieve congestion. However, the flow into Toronto at the levels examined is not expected to materialize for the next several years. Future planning assessments for the west Greater Toronto Area (GTA) are currently being undertaken by the agencies.

With the addition of new committed generation projects in Bruce and Southwest Ontario, flows east into Toronto were maximized to reach 6913 MW under the defined peak load basecase, representing a high stress case for the west of GTA equipment. Under this high flow scenario, the additional new generation projects contributed to overloading some limiting elements in the central area. Table 13 and Table 14 show the thermal results of limiting circuits and transformers in Central area under peak load conditions after the integration of new committed generation projects. It shows both pre-contingency and post-contingency overloading of the limiting elements. Additional simulation results based on the defined

shoulder load basecase show post-contingency overloading on circuits E8V/E9V for the loss of the companion circuit. If flows were to reach these high levels, the generating plants in the Bruce and Southwest Ontario may be required to curtail their outputs.

Table 13: Thermal results of limiting circuit in central area under peak-load conditions

Circuit	Contingency	Pre-Cont. Flow (A)	Continuous Rating (A)*	Pre-Cont. Loading (%)	Post-Cont. Flow (A)	LTE Rating (MVA)**	Post-Cont. Loading (%)
R14T (Trafalgar-Erindale)	R17T	1059	1110	95	1577	1460	108
R17T (Trafalgar-Erindale)	R14T	1063	1110	96	1576	1460	108
R19TH (Erindale-Hanlan)	R14T+R17T	792	840	94	1131	1090	107

Table 14: Thermal results of limiting transformers in central area under peak-load conditions

Transformer	Pre-Cont. Flow (MVA)	Summer Continuous Rating (MVA)	Pre-Cont. Loading (%)	LTE Rating (MVA)	Loss of Trafalgar T15	
					Post-Cont. Flow (MVA)	Post-Cont. Loading (%)
Trafalgar T14	858.84	750	114.51	1004	1078.02	107.37
Trafalgar T15	830.20	750	110.69	1132	0.00	0.00
Claireville T13	782.34	750	104.31	988	846.71	85.70
Claireville T14	796.55	750	106.21	995	861.85	86.62
Claireville T15	789.09	750	105.21	995	853.96	85.83

Local 230 kV Transmission Circuits

For thermal analysis of the local 230 kV transmission system of the project, the shoulder load basecase was used as the resulting flow eastward on the Bruce to Detweiler circuits were higher due to the lower load levels on those circuits. The contingencies considered for this study were:

1. Loss of 230 kV circuit B22D;
2. Loss of 230 kV circuit B23D;
3. Loss of 230 kV circuits B4V+B5V ;
4. Loss of 500 kV circuits B560V+B561M.

Table 15 shows the pre-contingency flows and post-contingency flows for various circuits in the local area after the connection of the project. The pre-contingency results of the circuits include flow in ampere and loading in percentage of continuous rating. The post-contingency results include flow in ampere and loading in percentage of LTE rating.

The results show that after the connection of the project, the flow on the monitored 230 kV circuits in the area is within their continuous ratings with all elements in service. For the studied contingencies, the loadings of circuits in the area are within their LTE ratings.

Local 115 kV Circuits and Transformer T5 and T6 at Seaforth TS

For thermal analysis of the local 115 kV circuits of the project and transformers T5 and T6 at Seaforth TS, the light load basecase was used as the project as well as Goshen WF results in reverse flow in these

elements and the flow on these elements will be higher for the lower load levels behind Seaforth TS. The 115 kV circuits L7S and D8S were examined for thermal impact of the project since the LV tie-breaker at St. Mary TS is normally closed. The contingencies considered for this study were:

1. Loss of 230 kV circuit B22D/transformer T5;
2. Loss of 230 kV circuit B23D/transformer T6;

Table 16 and Table 17 show the flow of 115 kV circuits and transformers, respectively. Note that the flow direction of the transformers is from 115 kV to 230 kV. The results show that both pre-contingency and post-contingency flow of these elements is with the circuit ratings after the connection of the project.

Table 15: Thermal assessment results-230 kV circuits

CIRCUIT	FROM	TO	Cont	LTE	Pre-contingency		loss of B22D/T5		loss of B23D/T5		loss of B4V+B5V		Loss of B560V+B561M	
			Rating	Rating	LOAD	LOADING (%)	LOADING	LOADING (%)	LOADING	LOADING (%)	LOADING	LOADING (%)	LOADING	LOADING (%)
			(A)	(A)	(A)	Cont	(A)	LTE	(A)	LTE	(A)	LTE	(A)	LTE
B22D	Bruce A TS	Majestic Junc	1060	1400	87.2	8.2%	0.0	0.0%	128.0	9.1%	23.8	1.7%	109.0	7.8%
B22D	Majestic Junc	Armow WF JCT	1060	1400	23.4	2.2%	0.0	0.0%	55.7	4.0%	91.5	6.5%	165.4	11.8%
B22D	Armow WF JCT	Wingham Junc	1060	1400	426.5	40.2%	0.0	0.0%	482.0	34.4%	516.4	36.9%	574.3	41.0%
B22D	Wingham Junc	Seaforth TS	1060	1400	397.1	37.5%	0.0	0.0%	422.3	30.2%	487.1	34.8%	545.1	38.9%
B22D	Seaforth TS	Stratford Junc	920	1210	595.7	64.7%	0.0	0.0%	702.9	58.1%	681.0	56.3%	735.7	60.8%
B22D	Stratford Junc	Detweiler TS	920	1160	496.1	53.9%	0.0	0.0%	512.3	44.2%	581.2	50.1%	636.0	54.8%
B23D	Bruce A TS	Majestic Junc	1060	1400	255.3	24.1%	197.2	14.1%	0.0	0.0%	343.7	24.5%	402.4	28.7%
B23D	Majestic Junc	Wingham Junc	1060	1400	343.1	32.4%	336.5	24.0%	0.0	0.0%	432.0	30.9%	490.2	35.0%
B23D	Wingham Junc	Seaforth TS	1060	1400	313.3	29.6%	273.2	19.5%	0.0	0.0%	402.2	28.7%	460.5	32.9%
B23D	Seaforth TS	Grand Bend	920	1210	405.3	44.1%	546.9	45.2%	0.0	0.0%	492.1	40.7%	548.2	45.3%
B23D	Grand Bend	Stratford Junc	920	1210	657.1	71.4%	798.7	66.0%	0.0	0.0%	742.0	61.3%	796.6	65.8%
B23D	Stratford Junc	Detweiler TS	920	1160	553.9	60.2%	607.2	52.3%	0.0	0.0%	637.6	55.0%	691.7	59.6%

Table 16: Thermal assessment results-115 kV circuits

CIRCUIT	FROM	TO	Cont	LTE	Pre-contingency		loss of B22D/T5		loss of B23D/T6	
			Rating	Rating	LOADING	LOADING (%)	LOADING	LOADING (%)	LOADING	LOADING (%)
			(A)	(A)	(A)	Cont	(A)	LTE	(A)	LTE
L7S	Seaforth TS	Goshen_WEC	530	530	304.7	57.5%	265.5	50.1%	295.7	55.8%
L7S	Goshen WEC	Kirkton Junc	530	530	209.6	39.5%	224.6	42.4%	218.3	41.2%
L7S	Kirkton Junc	Devizes Junc	590	610	93.9	15.9%	110.5	18.1%	103.2	16.9%
L7S	Devizes Junc	Portland Junc	300	300	93.9	31.3%	110.5	35.8%	103.2	34.4%
L7S	Portland Junc	St_Marys TS	300	300	86.3	28.8%	102.9	34.3%	95.6	31.9%
D8S	St Marys	Leong Junc	480	620	63.1	13.2%	79.5	12.8%	72.5	11.7%

Table 17: Thermal assessment results-transformer loadings

STATION NAME	TRANSFORMER ID	Cont	LTE	Pre-Contingency		Loss of B22D/T5		Loss of B23D/T6	
		Rating (MVA)	Rating (MVA)	LOAD	LOADING (%)	LOAD	LOADING (%)	LOAD	LOADING (%)
				Cont		LTE		LTE	
SEAFORTH	T5	250	280.6	91.1	36.4	0.0	0.0	120.3	42.9
SEAFORTH	T6	250	307.5	44.5	17.8	115.5	37.6	0.0	0.0

6.8 Voltage Analysis

The *Ontario Resource and Transmission Assessment Criteria* states that with all facilities in service pre-contingency, the following criteria shall be satisfied:

- The pre-contingency voltage on 230 kV buses must not be less than 220 kV and voltages on 115kV buses cannot be less than 113 kV;
- The post-contingency voltage on 230 kV buses must not be less than 207 kV and voltages on 115V buses cannot be less than 108 kV; and
- The voltage drop following a contingency must not exceed 10% pre-ULTC and 10% post-ULTC.

The voltage performance of the IESO-controlled grid was evaluated by examining if pre- and post-contingency voltages and post-contingency voltage declines remain within criteria at various facilities.

The contingencies considered for this study are listed below. Contingencies were simulated under both peak and light load conditions; however only results for the peak load case are provided as simulation results exhibited that peak load is a worse condition for voltage performance for the first four contingencies. The results for the last contingency were provided for both peak and light load conditions. To obtain potential highest voltage change, the studies for loss of Bluewater WEC were performed with the project absorbing reactive power at its full capability for the light load case and injecting reactive power at its full capability for the peak load condition.

1. Loss of 230 kV circuit B22D;
2. Loss of 230 kV circuit B23D;
3. Loss of 230 kV circuits B4V+B5V;
4. Loss of 500 kV circuits B560V+B561M;
5. Loss of Bluewater WEC;

Table 18 to Table 19 show the pre-contingency voltages, post contingency voltages before and after tap action, and voltage changes at the buses in the vicinity of the project. The study results show that the project tends to improve the system voltage performance. It also indicates that system voltages after the integration of the project are within the criteria under both pre- and post-contingency conditions; and both declines of pre-ULTC and post-ULTC values are within the criteria of 10%.

Table 18: Voltage assessment results

Bus Name	Pre-Contingency	loss of B22D circuit				loss of B23D circuit				loss of 84V&85V circuits				Loss of 8560V & 8561M			
		Pre-ULTC		Post-ULTC		Pre-ULTC		Post-ULTC		Pre-ULTC		Post-ULTC		Pre-ULTC		Post-ULTC	
		Voltage (kV)	Change (%)	Voltage (kV)	Change (%)	Voltage (kV)	Change (%)	Voltage (kV)	Change (%)	Voltage (kV)	Change (%)	Voltage (kV)	Change (%)	Voltage (kV)	Change (%)	Voltage (kV)	Change (%)
Bluewater PCC 115 kV	124.0	125.3	1.1%	125.3	1.1%	124.8	0.7%	125.0	0.8%	124.7	0.6%	124.6	0.5%	125.0	0.8%	125.0	0.8%
Bluewater Collector 34.5 kV	34.7	36.3	4.8%	36.3	4.8%	36.2	4.4%	36.2	4.6%	35.4	2.0%	35.2	1.6%	35.6	2.8%	35.6	2.8%
SEAFORTH TS 115 kV	123.6	123.0	-0.5%	123.0	-0.5%	122.5	-0.9%	122.7	-0.8%	123.6	0.0%	123.6	0.0%	123.6	0.0%	123.6	0.0%
DETWEILER TS 230 kV	244.5	244.9	0.2%	245.2	0.3%	244.7	0.1%	245.1	0.2%	243.6	-0.4%	244.2	-0.1%	244.2	-0.1%	244.2	-0.1%

Table 19: Voltage assessment results- loss of Bluewater WEC

Basecase	Bus Name	Pre-Contingency	Loss of Bluewater WEC			
			Pre-ULTC		Post-ULTC	
		Voltage (kV)	Voltage (kV)	Change (%)	Voltage (kV)	Change (%)
Peak Load	SEAFORTH TS 115 kV	120.7	119.7	-0.8%	119.7	-0.8%
Light Load	SEAFORTH TS 115 kV	124.0	125.0	0.8%	125.0	0.8%

6.9 Transient Stability Performance

Transient stability simulations were completed to determine if the power system will be transiently stable with the incorporation of the project for recognized fault conditions. In particular, rotor angles of generators at Bruce GS, Greenfield GS, Sithe Goreway GS, and Saunders GS were monitored.

Transient stability analyses were performed considering recognized faults in Southwest area. The contingencies that were simulated are shown in Table 20. The protection changes proposed in the PIA were part of the assumptions for this analysis.

Table 20: Simulated contingencies for transient stability

ID	Contingency	Location	Fault Type	Fault Clearing Time (ms)		SPS action(s) (ms)		Re-closure Time (s)
				Local	Remote	LRSS*	G/R	
SC1	B560V+B561M	Willow Creek Junction	LLG	66	91	124	-	10
SC2	B22D+T5	Seaforth 115 kV K bus	3 phase**+ BKF	227	123	-	-	-
SC3	B22D	Bruce-A TS	3 phase	83	108	-	-	10
SC4	B22D	Detweiler TS	3 phase	83	108	-	-	10
SC5	B4V+B5V	Bruce A TS	3 phase**	83	108	-	-	10
SC6	LV side of main step-up transformer	Bluewater WEC	3 phase	Un-cleared		-	-	-

*LRSS denotes Longwood Reactor Switching Scheme.

** 3-phase fault was simulated instead LG or LLG fault as required by the ORTAC, as the system is stable under the fault which is more conservative.

Figure 6 to Figure 17, Appendix A shows the transient responses of the rotor angles and bus voltages. The transient responses show that the generators remain synchronized to the power system and the oscillations are sufficiently damped following all simulated contingencies. It can be concluded that, with the project on-line, none of the simulated contingencies caused transient instability or un-damped oscillations.

It can also be concluded that the protection adjustments proposed in the PIA report have no material adverse impact on the IESO-controlled grid in terms of transient stability.

6.10 Voltage Ride-Through Capability

The IESO requires that the wind turbine generators and associated equipment at the project be able to withstand transient voltages and remain connected to the IESO-controlled grid following a recognized contingency unless the generators are removed from service by configuration. This requirement is commonly referred to as the voltage ride-through (VRT) capability.

The GE 1.6 MW WTGs to be installed will be equipped with the GE ZVRT option. The ZVRT capability of wind turbines is shown in Table 2.

The VRT capability of the WTGs was assessed based on the terminal voltages of the WTGs under simulated contingencies SC1-SC5 in Table 20.

Figure 18, Appendix A shows the terminal voltages of the WTG at collector BW1 under simulated contingencies. It shows that the terminal voltages of the WTGs remain below 0.3 pu for about 70 ms, and recover to 0.5 pu in less than 300 ms after the fault inception. As compared with the VRT capability of

the GE 1.6 MW, the proposed WTGs are able to remain connected to the grid for recognized system contingencies that do not remove the project by configuration.

However, when the project is incorporated into the IESO-controlled grid, if actual operation shows that the WTGs trip for contingencies for which they are not removed by configuration, the IESO will require the VRT capability be enhanced by the applicant to prevent such tripping.

The VRT capability must also be demonstrated during commissioning by monitoring several variables under a set of IESO specified field tests and the results should be verifiable using the PSS/E model.

6.11 Steady-State Voltage Stability

The ORTAC states that the maximum acceptable pre-contingency power transfer must be 10% lower than the voltage instability point of the pre-contingency P-V curve, and 5% lower than the voltage instability point of the post-contingency P-V curve.

The voltage performance of the IESO-controlled grid was evaluated by examining if the FABC transfer after the incorporation of the project meets the above requirement based on pre- and post-contingency and post-contingency P-V curves under peak load conditions. The contingency of simultaneous loss of B560V+561M was selected for studying the post-contingency steady-state voltage stability as it is the worst-case contingency in terms of system voltage stability. For this recognized contingency, two post-contingency scenarios, either tripping the reactors at Bruce and Longwood or no tripping of these reactors are investigated. Only the voltage responses at Claireville 500kV were recorded as it is the most critical point in the system in terms of system voltage stability performance.

Figure 19 shows the steady-state voltage responses at Claireville 500kV as the FABC transfer increases under the pre-contingency scenario and two post-contingency scenarios. It indicates that the maximum FABC transfer under the pre-contingency scenario, post-contingency reactor tripping scenario, and post-contingency no reactor tripping scenario are 8748 MW, 7256 MW, and 6766 MW, respectively. The pre-contingency FABC transfer is 6412 MW. Thus, the pre-contingency FABC transfer is 10% lower than the voltage instability point of the pre-contingency P-V curve, and 5% lower than the voltage instability point of the post-contingency P-V curve, under either reactor tripping or no reactor tripping scenario. It can be concluded that the steady-state voltage stability of the system after the incorporation of the project conforms to the Market Rules' requirement.

-End of Section-

Appendix A: Figures

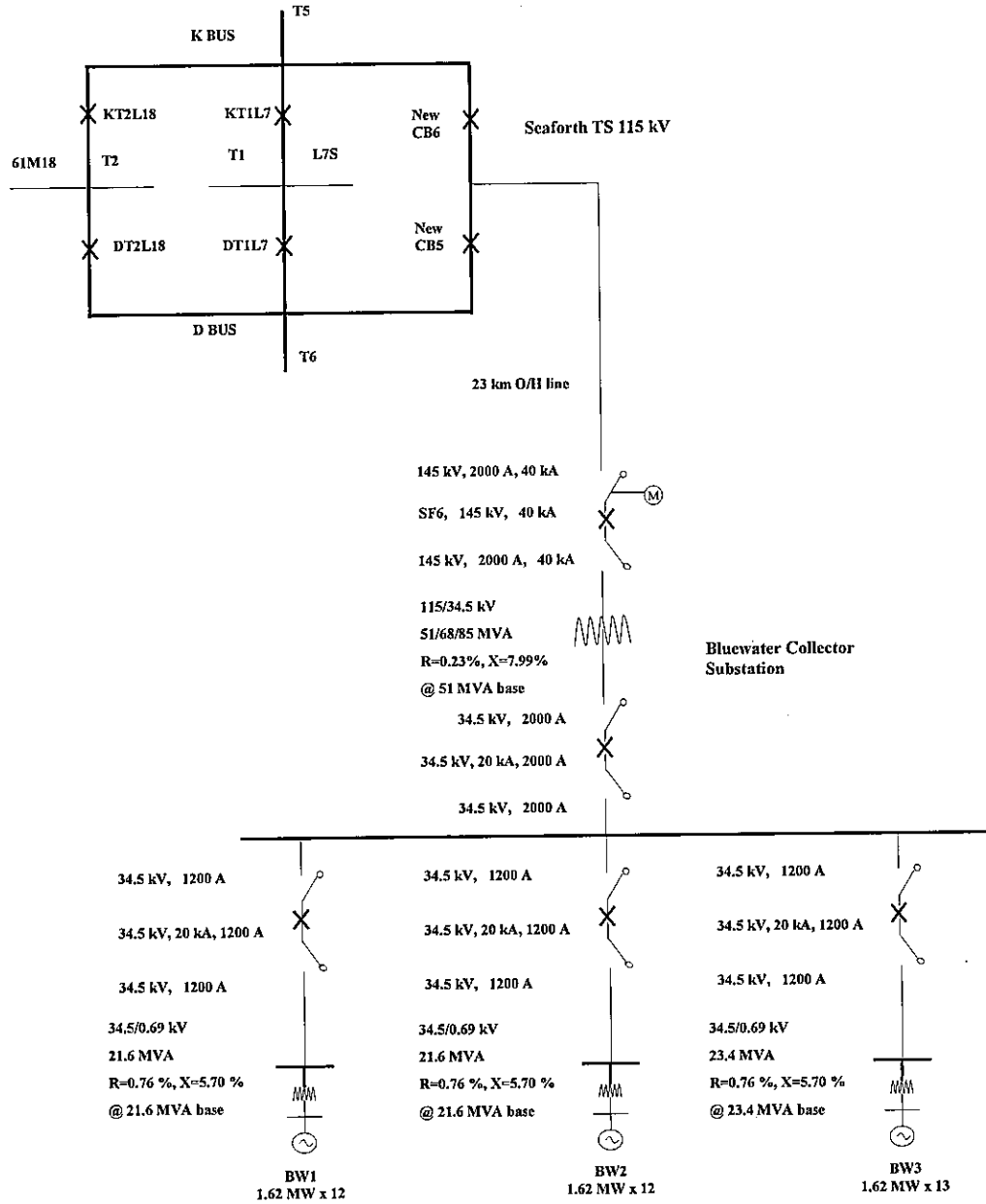


Figure 1: Bluewater Wind Energy Centre proposed connection arrangement

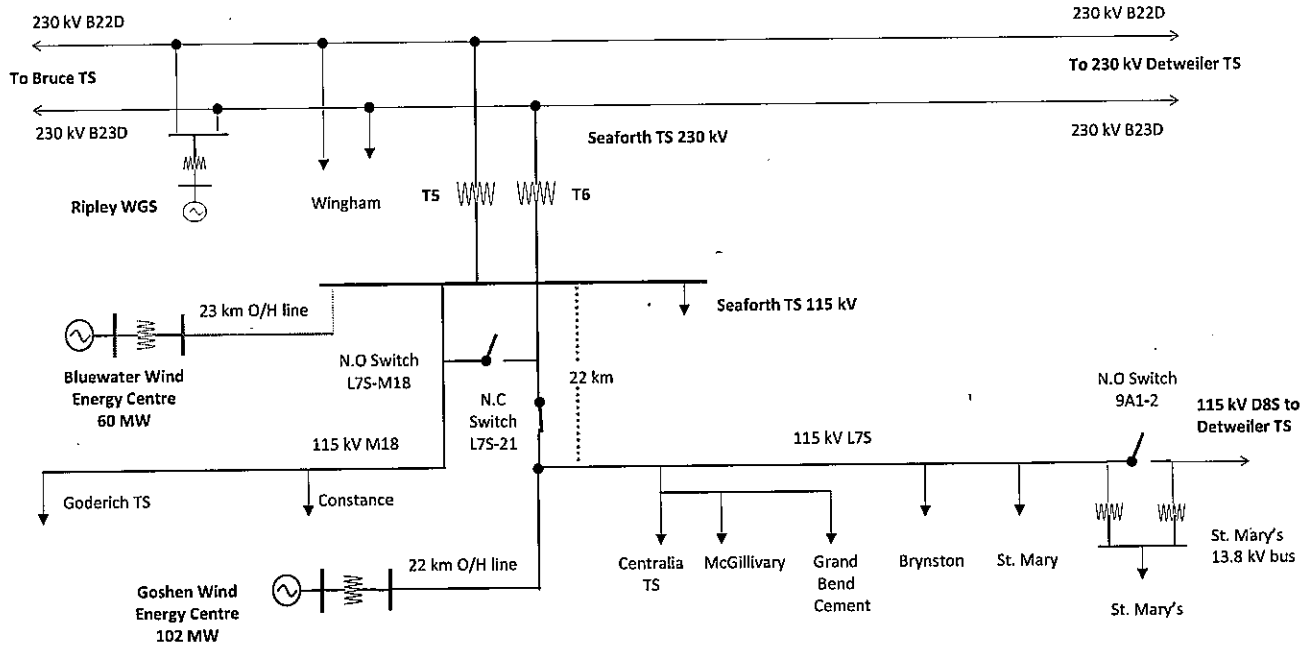


Figure 2: Transmission system in the vicinity of the project

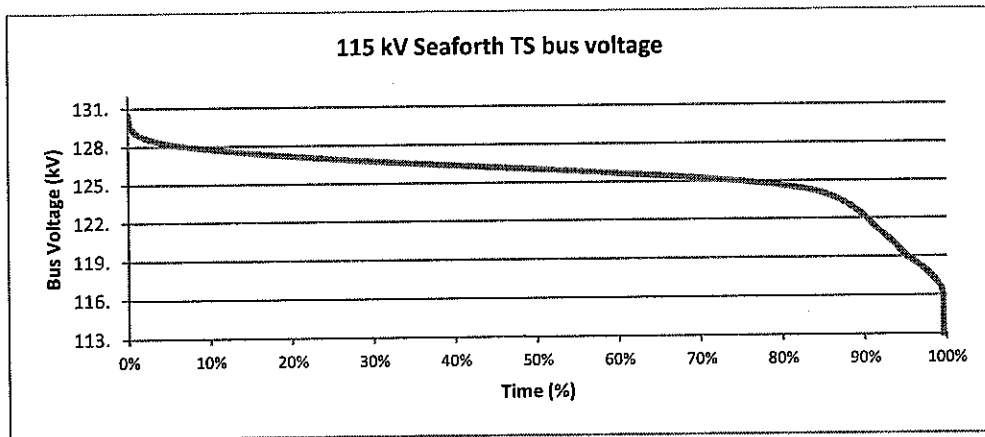


Figure 3: Seaforth 115 kV bus voltage duration curve

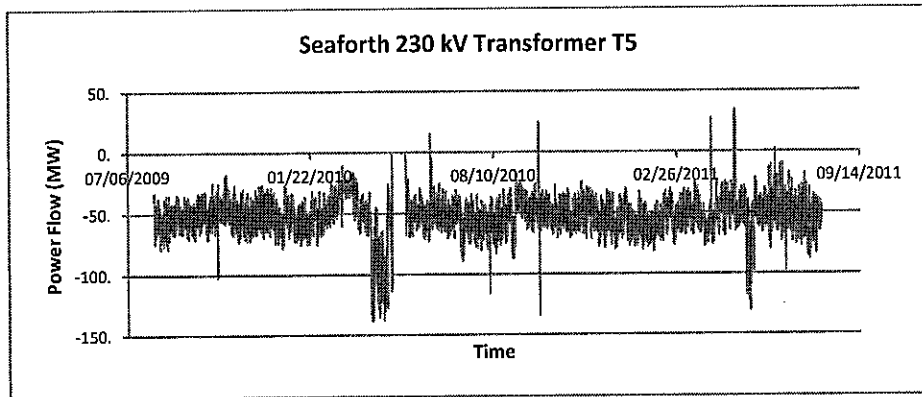


Figure 4: Seaforth 230 kV transformer T5 flow
Note: Positive flow is from 115 kV to the 230 kV system

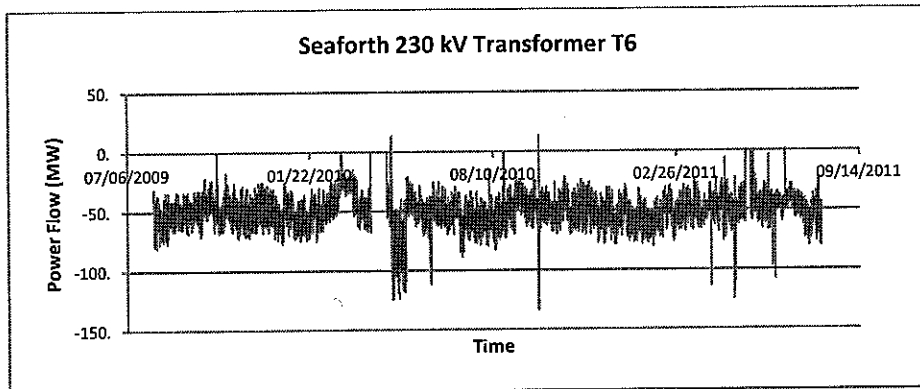


Figure 5: Seaforth 230 kV transformer T6 flow
Note: Positive flow is from 115 kV to the 230 kV system

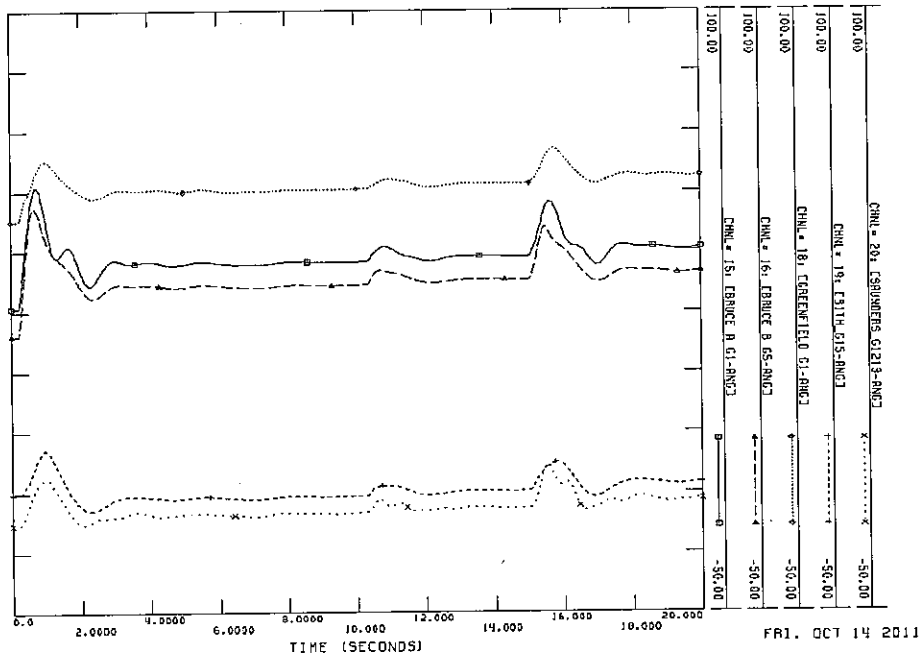


Figure 6: Major generator angle response due to a LLG fault on circuits B560V+B561M at Willow Creek Junction- with re-closure

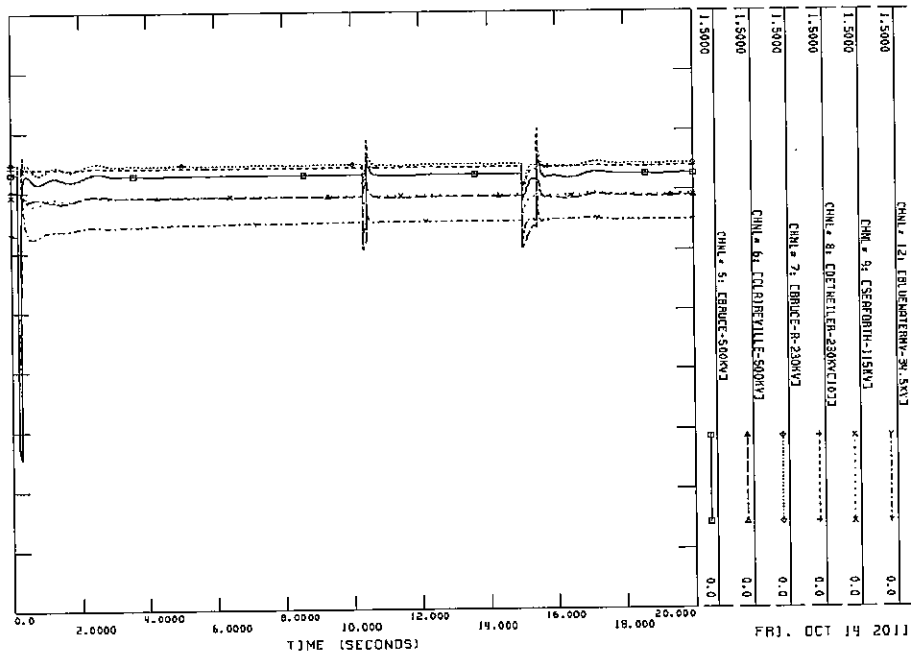


Figure 7: Voltage response due to a LLG fault on circuits B560V+B561M at Willow Creek Junction- with re-closure

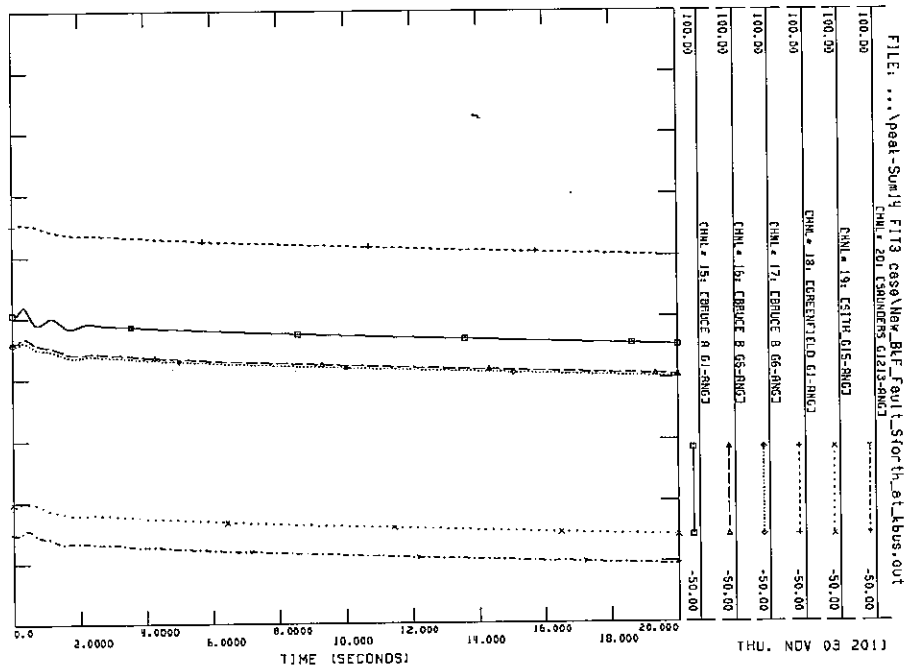


Figure 8: Major generator angle response due to a 3 phase fault on Seaforth K-bus + BKF at Seaforth TS

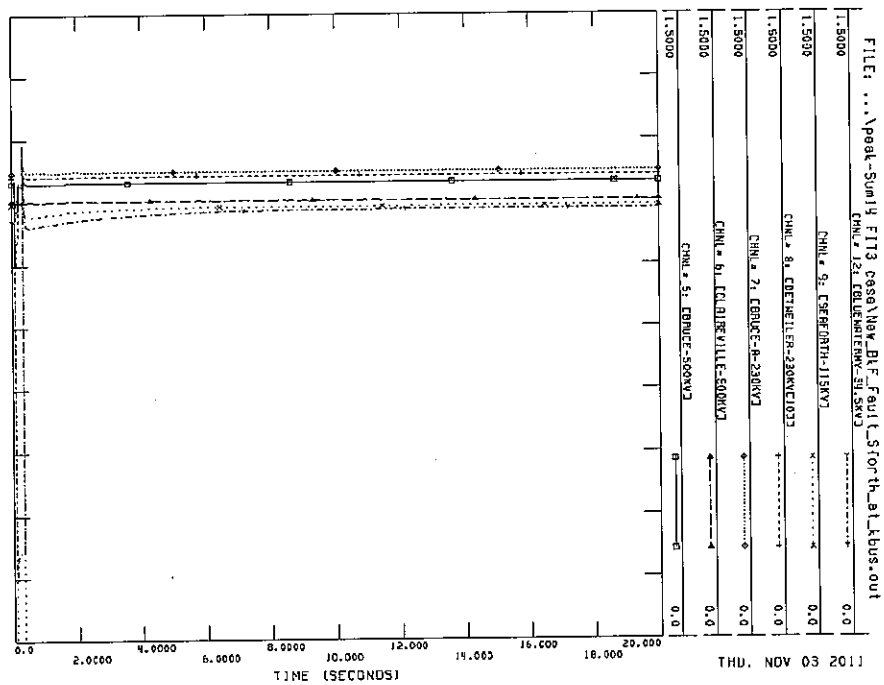


Figure 9: Voltage response due to a to a 3 phase fault on Seaforth K-bus + BKF at Seaforth TS

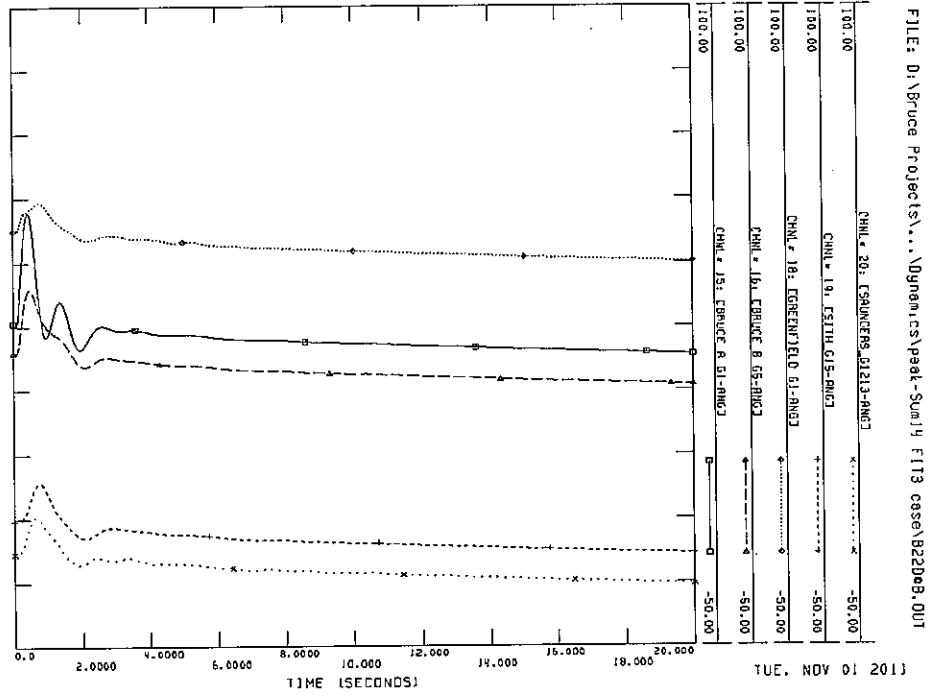


Figure 10: Major generator angle response due to a 3-phase fault on circuit B22D @ Bruce-A TS – with re-closure

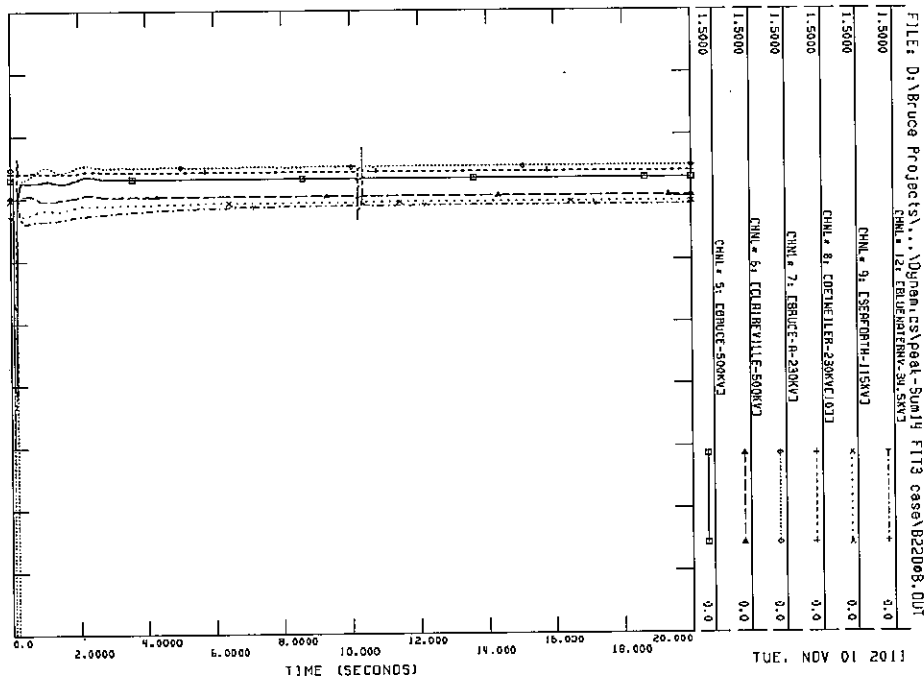


Figure 11: Voltage response due to a 3-phase fault on circuit B22D @ Bruce-A TS – with re-closure

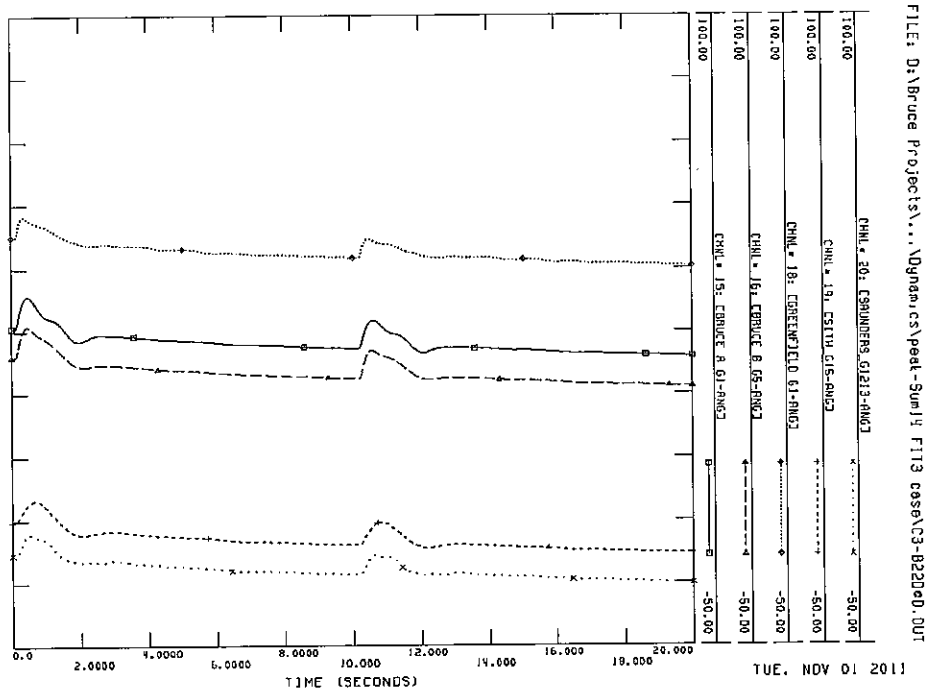


Figure 12: Major generator angle response due to a 3-phase fault on circuit B22D @ Detweiler TS - with re-closure

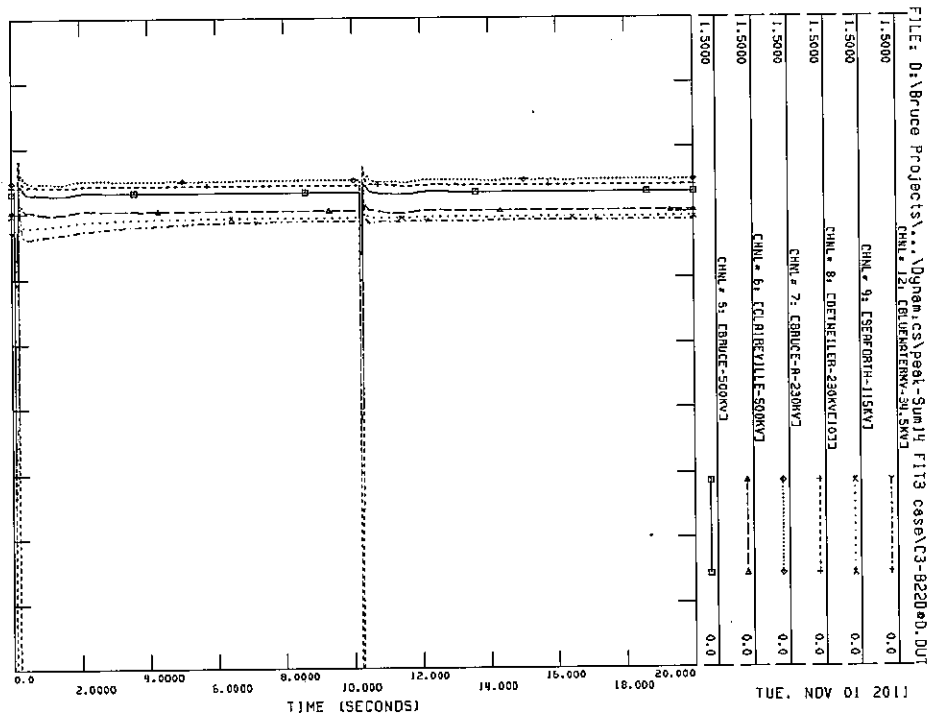


Figure 13: Voltage response due to a 3-phase fault on circuit B22D @ Detweiler TS - with re-closure

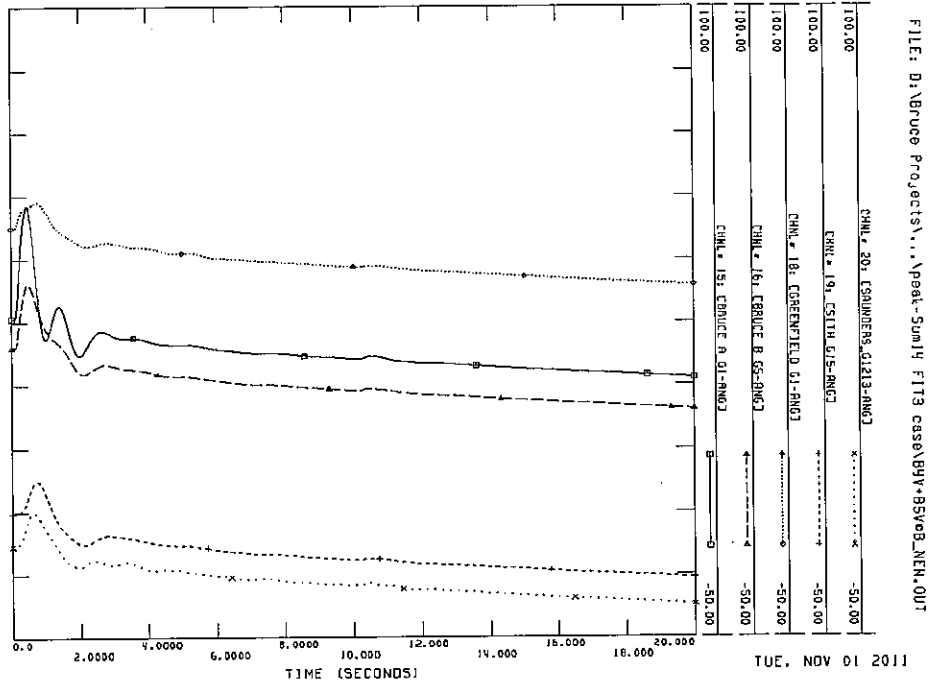


Figure 14: Major generator angle response due to a 3 phase fault on circuits B4V+B5V near Bruce TS
 – with re-closure

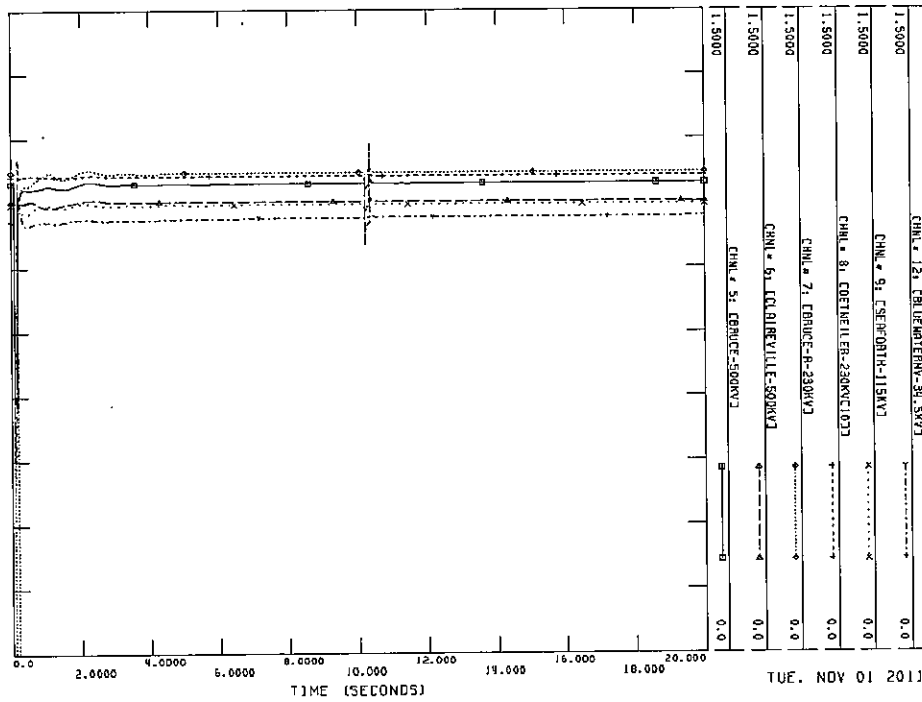


Figure 15: Voltage response due to a 3 phase fault on circuits B4V+B5V near Bruce TS
 – with re-closure

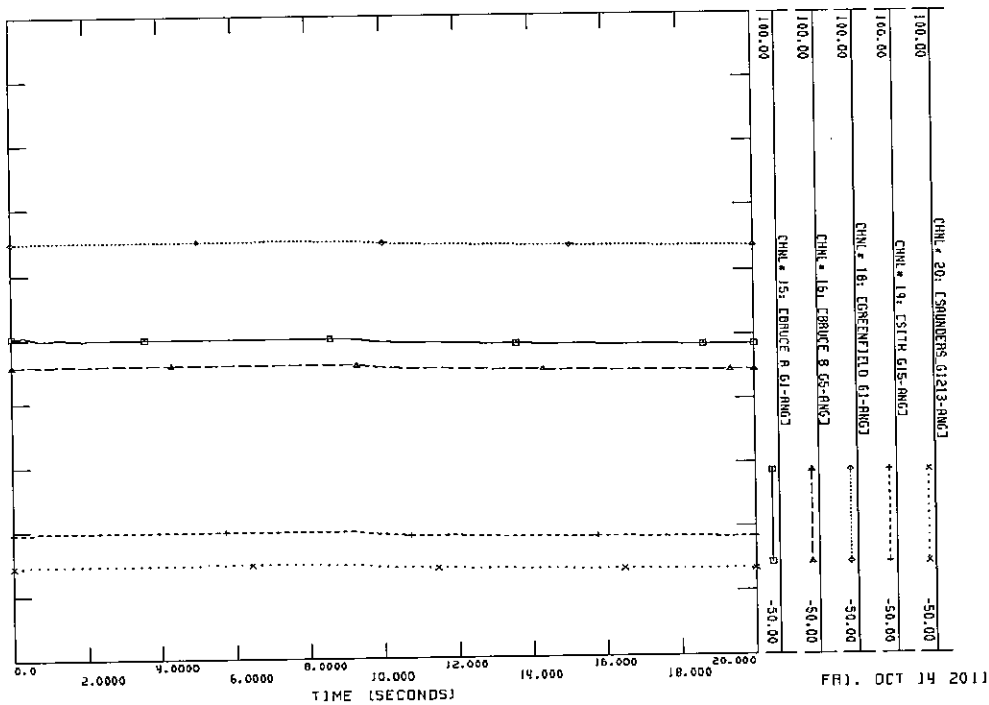


Figure 16: Major generator angle response due to an un-cleared 3 phase fault inside the Bluewater WEC

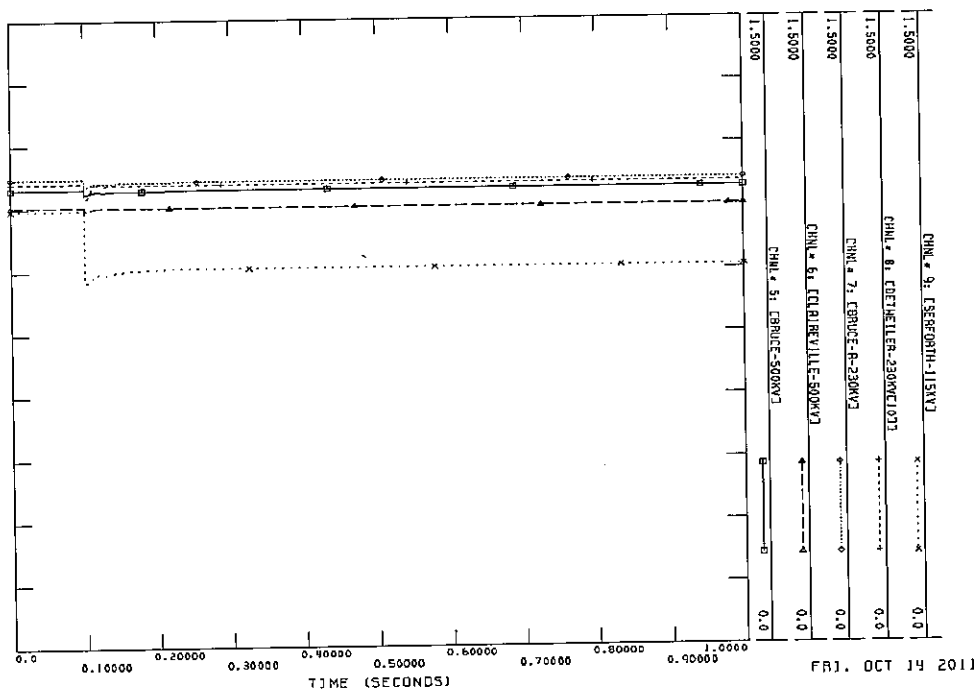


Figure 17: Voltage response due to an un-cleared 3 phase fault inside Bluewater WEC

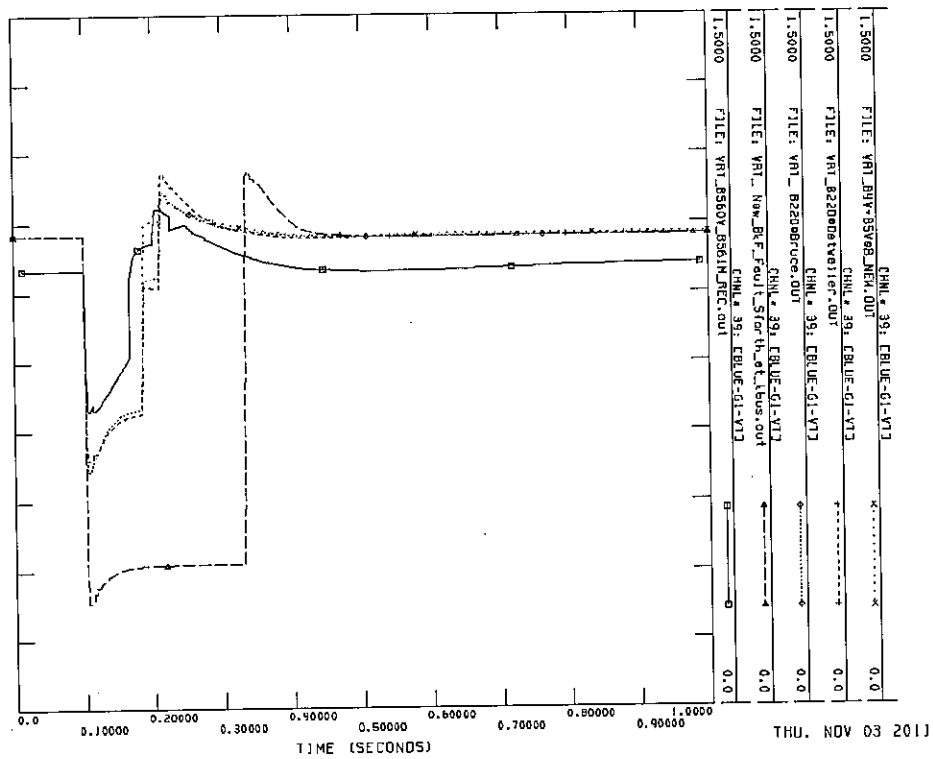


Figure 18: GE 1.6 MW WTG terminal voltages for studied contingencies

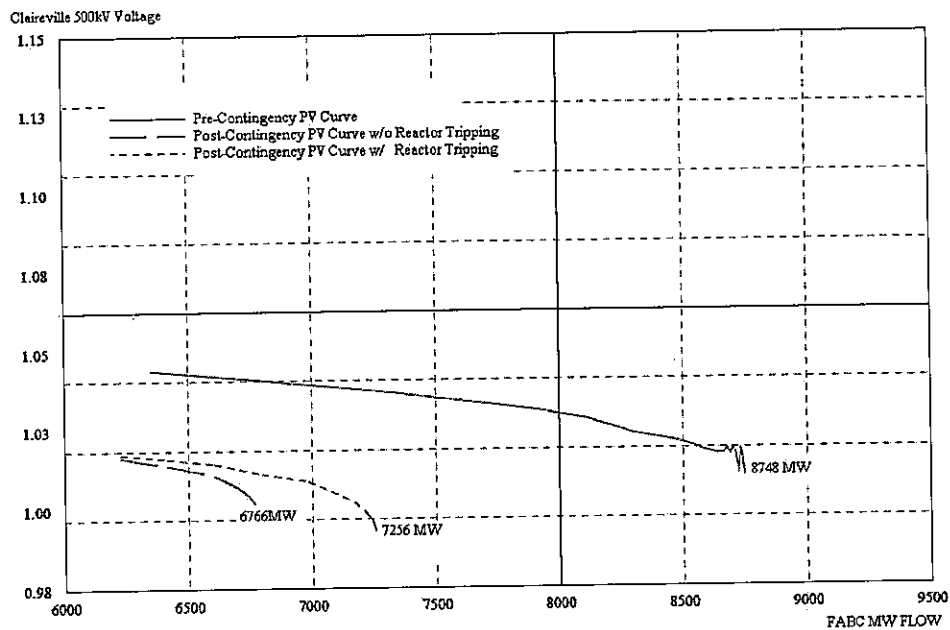


Figure 19: Voltage Responses at Claireville 500kV vs. FABC Transfer under Defined Scenarios

Appendix B: PIA Report

Hydro One Networks Inc.
483 Bay Street
Toronto, Ontario
M5G 2P5



PROTECTION IMPACT ASSESSMENT
BLUEWATER WEC - SEAFORTH TS - FIT-FJI7S7X

Date: September 7, 2011
P&C Planning Group Project #: PCT-290-PIA

Prepared by:

Fenghai Sui
Network Management Engineer

Transmission Project Development
Hydro One Networks Inc.

Reviewed by:

Miroslav Kostic
P&C Planning Manager,
Transmission

Transmission Project Development
Hydro One Networks Inc.

Disclaimer

This Protection Impact Assessment has been prepared solely for the IESO for the purpose of assisting the IESO in preparing the System Impact Assessment for the proposed connection of the proposed generation facility to the IESO-controlled grid. This report has not been prepared for any other purpose and should not be used or relied upon by any person, including the connection applicant, for any other purpose.

This Protection Impact Assessment was prepared based on information provided to the IESO and Hydro One by the connection applicant in the application to request a connection assessment at the time the assessment was carried out. It is intended to highlight significant impacts, if any, to affected transmission protections early in the project development process. The results of this Protection Impact Assessment are also subject to change to accommodate the requirements of the IESO and other regulatory or legal requirements. In addition, further issues or concerns may be identified by Hydro One during the detailed design phase that may require changes to equipment characteristics and/or configuration to ensure compliance with the Transmission System Code legal requirements, and any applicable reliability standards, or to accommodate any changes to the IESO-controlled grid that may have occurred in the meantime.

Hydro One shall not be liable to any third party, including the connection applicant, which uses the results of the Protection Impact Assessment under any circumstances, whether any of the said liability, loss or damages arises in contract, tort or otherwise.

1.0 REVISION HISTORY

Revision	Date	Change
R0	September 7 th ,2011	

**PROTECTION IMPACT ASSESSMENT
BLUEWATER WEC - SEAFORTH TS - FIT-FJI7S7X PROJECTS**

1.0 INTRODUCTION

1.1 Protection Impact Assessment

This PIA study is prepared for the IESO to assess the potential impact of the proposed 60MW Bluewater WEC WF project with FIT reference # FIT-FJI7S7X and Contract #F-002171-WIN-130-601 on the existing transmission protection. The primary focus of this study is on protecting Hydro One system equipment while meeting IESO System Reliability Criteria.

1.2 Description of Proposed Connection to the Grid

Varna Wind, Inc is proposing to develop the Bluewater Wind Energy Centre, a 60MW wind farm, interconnecting to the HONI Seaforth TS 115kV bus. For this purpose, the existing Seaforth TS 115kV ring bus should be re-configured to connect the new generation. Two new breaker positions will be added to the existing ring bus configuration. The protection and control at Seaforth TS including communication circuits and SCADA points will be modified or upgraded.

The 60MW wind farm will be located in Huron County, Ontario. The proposed Wind Farm will consist of 37 GE 1.6MW wind turbine generators (WTGs). Each WTG shall connect to a 34.5kV collector feeder through 1800kVA, 690V/34.5kV step-up padmounted transformers. The collector station will have a step-up transformer rated at 51/68/85MVA, 34.5kV/115kV, which will be connected to HONI Seaforth TS 115kV bus via a 23km overhead line as shown in Figure 1.

2.0 PROTECTION

2.1 General

Since there is not a vacant position in existing 115kV ring bus in Seaforth TS, new diameter of breakers must be added for the connection of 60MW WF generation. The new bus arrangement and simplified single line diagram with the 60MW Bluewater WF is shown in Figure 1. Breakers' designations may be modified later.

The new generation connection impacts both existing 115kV line protections and breaker protections at Seaforth TS.

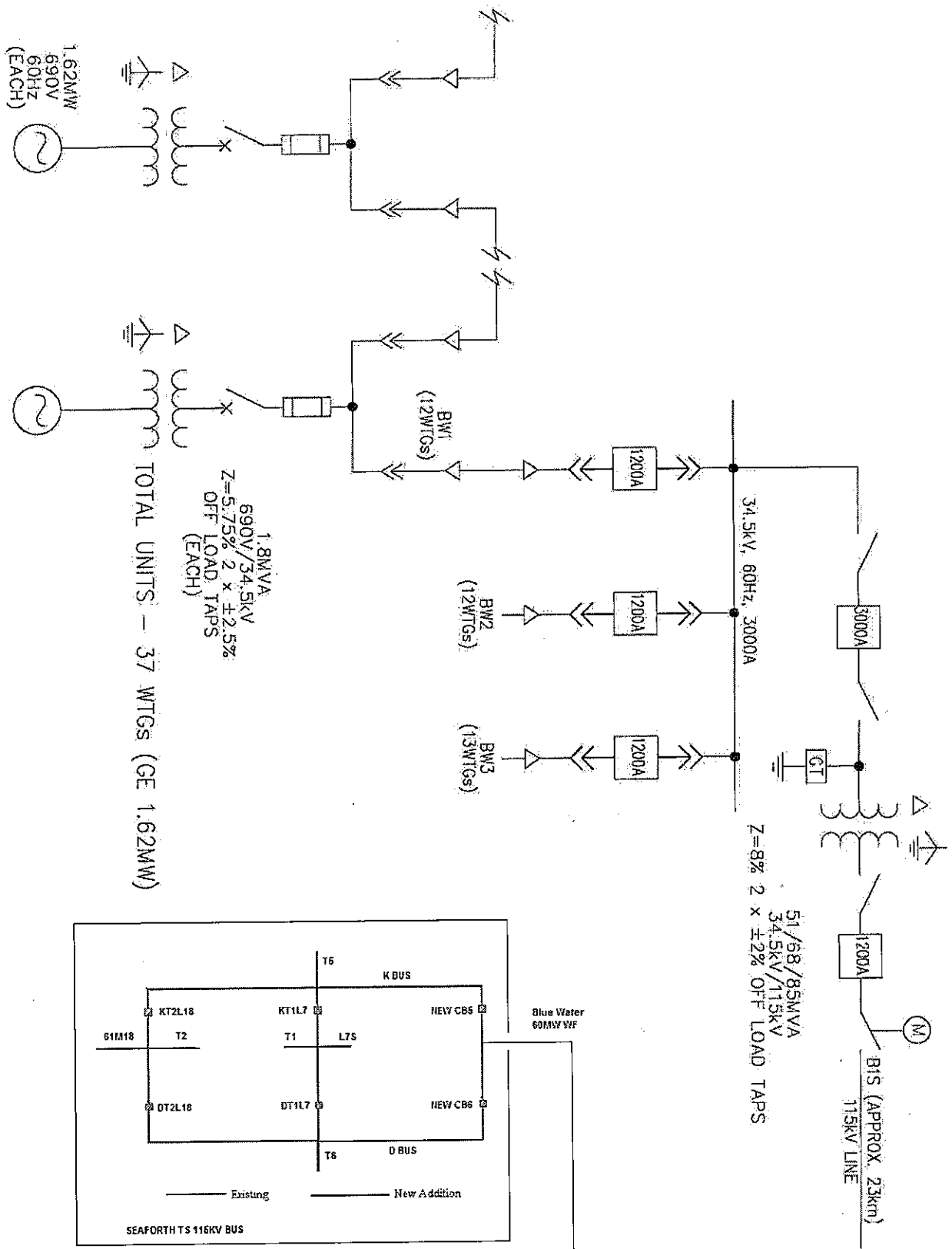


Figure 1 Single Line Diagram of 60MW WF Generation Connection

2.2 Specific Protection Requirements

2.2.1 New Installations

New breakers CB5 and CB6 will be installed to facilitate the connection of the new line. They will also cover T5, B22D and T6, B23D respectively.

IED 'A' and 'B' groups of breaker protections shall be installed to protect the newly added breakers.

New IED type 'A' and 'B' line protections will be installed for the new 60MW generation connection. It is recommended that distance relays are used as main protection. Zone 1 distance element in Seaforth TS will cover entire line length plus 25% of the transformer impedance at WF. Zone 2 is not required.

The customer must establish communication links ('A' & 'B' redundant) between the WF collector station and Seaforth TS for the teleprotection scheme.

2.2.2 Modifications

2.2.2.1 The Existing Transformer and Line Protections

The protections of existing transformers T5 and T6 and lines B22D / B23D need to be modified to trip new breakers as required.

Tripping of new breakers CB5 and CB6 should be added to the existing transfer trip schemes of line B22D and B23D respectively.

2.2.2.2 Breaker Protections

Breaker protection of KT1L7, KT1L18, DT1L7 and DT2L18 should be modified according to new bus configuration.

2.2.2.3 Bus Protections

K and D bus protections should be modified to cover new breakers CB5 and CB6.

2.3 Tele-Protection

Direct Transfer Trip will be sent to the WF collector station upon tripping of new line protection.

3.0 SCADA/RTU

It is beyond the scope of the PIA.

4.0 POWER SYSTEM MONITORING

It is beyond the scope of the PIA.

5.0 REVENUE METERING

It is beyond the scope of the PIA.

6.0 CYBER SECURITY

NERC's standards CIP-002 thru CIP-009 may apply.

7.0 STATION REQUIREMENTS

It is beyond the scope of the PIA.

8.0 UPDATE DATABASES AND DOCUMENTATION

It is beyond the scope of the PIA.

CUSTOMER IMPACT ASSESSMENT

58. The final Customer Impact Assessment ("**CIA**") for the Applicant was issued by the IESO on December 23, 2011, a copy of which is attached at Exhibit I, Tab 1, Schedule 2.
59. The CIA found that the BWEC and the Facility do not have a material adverse impact on other customers. The Applicant will construct the Facility according to the recommendations and conditions outlined in the CIA.

CUSTOMER IMPACT ASSESSMENT



Hydro One Networks Inc.
483 Bay Street
Toronto, Ontario
M5G 2P5

CUSTOMER IMPACT ASSESSMENT
Proposed 60 MW Generation Project
Bluewater Wind Energy Centre
OPA Ref. # FIT – FJI7S7X

Revision: 0

Date: December 23, 2011

Issued by: Transmission Planning Department
System Development Division
Hydro One Networks Inc.

Prepared by:

Sacha Constantinescu
Assistant Network Engineer.
Transmission System Development
Hydro One Networks Inc.

Approved by:

John Sabiston, P. Eng
Manager Transmission Planning
Transmission System Development
Hydro One Networks Inc.

Disclaimer

This Customer Impact Assessment was prepared based on preliminary information available about the connection of the proposed generation on the Seaforth TS 115 kV bus in Huron County, Ontario. It is intended to highlight significant impacts, if any, to affected transmission customers early in the project development process and thus allow an opportunity for these parties to bring forward any concerns that they may have including those needed for the review of the connection and for any possible application for leave to construct. Subsequent changes to the required modifications or the implementation plan may affect the impacts of the proposed connection identified in this Customer Impact Assessment. The results of this Customer Impact Assessment and the estimate of the outage requirements are also subject to change to accommodate the requirements of the IESO and other regulatory or municipal authority requirements.

Hydro One Networks shall not be liable to any third party which uses the results of the Customer Impact Assessment under any circumstances whatsoever, for any indirect or consequential damages, loss of profit or revenues, business interruption losses, loss of contract or loss of goodwill, special damages, punitive or exemplary damages, whether any of the said liability, loss or damages, arises in contract, tort or otherwise.

TABLE OF CONTENTS

1.0	Introduction	4
1.1	<i>Scope of the Study</i>	4
1.2	<i>Background</i>	4
1.3	<i>Customers Connected</i>	5
2.0	Load Flow Results	5
2.1	<i>Supply Capacity and Reliability</i>	6
2.2	<i>Voltage Performance</i>	6
2.3	<i>Short Circuit Study</i>	6
2.4	<i>Preliminary Outage Impact Assessment</i>	7
3.0	Conclusions and Recommendations	7
	Appendix A – Voltage and Flow Study	11
	Appendix B – Short circuit analysis results	20

CUSTOMER IMPACT ASSESSMENT

PROPOSED 60 MW WIND GENERATION BLUEWATER WIND ENERGY CENTRE PROJECT IN HURON COUNTY, ONTARIO.

1.0 INTRODUCTION

1.1 Scope of the Study

This Customer Impact Assessment (CIA) study assesses the potential impacts of the proposed Bluewater Wind Energy Centre on the load customers and generators in the local vicinity. This study is intended to supplement the System Impact Assessment “CAA ID 2011-440” issued by the IESO.

This study covers the impact of the addition of the Bluewater Wind Energy Centre (WEC) on the Hydro One Networks Inc. (HONI) system in the area. The primary focus of this study is to identify the impact on the transmission customer connected facilities by assessing the voltage and fault level variations due to the connection of Bluewater WEC.

This study does not evaluate the overall impact of the Bluewater WEC on the bulk system. The impact of the new generator on the bulk system is the subject of the System Impact Assessment (SIA) which is issued by the Independent Electricity System Operator (IESO).

On November 23, 2011, a draft of this report was given to potentially impacted customers for their review, as required by the Transmission System Code. Any comments received by those customers have been incorporated.

1.2 Background

Under the Ontario Power Authority’s Feed-In Tariff (FIT) program, Varna Wind Inc., a subsidiary of NextEra Energy Canada, is proposing to connect a 60 MW wind farm in Huron County located in southwestern Ontario. The new generation facility will consist of 37 wind turbines which will connect to HONI’s Seaforth TS 115 kV bus. Figure 1 on page 8 shows the geographical location of the proposed wind farm.

Bluewater WEC will consist of 37 General Electric 1.6 MW Series wind turbine generators (WTGs). Each WTG shall connect to a 34.5 kV collector feeder through 1800 kVA, 34.5 kV/690 V pad-mounted transformers. The collector station will have a total of three 34.5 kV collector feeders – one feeder with 13 WTGs and two with 12 WTGs. The collector station will have a

step-up transformer rated at 51/68/85 MVA, 115 kV/34.5 kV. Figure 2 on page 9 shows the single-line diagram with the connection of the proposed wind farm.

The 115 kV Bluewater collector substation will be connected via a 115 kV line, 23 km long, 1272 54/19 ACSR Pheasant single conductor to HONI’s existing Seaforth TS. The 115 kV buses at Seaforth TS will be extended to allow for an additional diameter to which the Bluewater WEC will connect. Figure 3 on page 10 shows the proposed connection into Seaforth TS.

1.3 Customers Connected

The focus of this study is on transmission customers supplied by stations directly connected to circuit L7S and those connected close to Seaforth TS on the 230 kV circuits, B22D and B23D. The affected customers are shown below in Table 1.

Station	Customer
Seaforth TS	Hydro One Networks Inc. (HONI)
Centralia TS	HONI
Grand Bend East DS	HONI
Grand Bend CTS	Lake Huron WTP
McGillivray CTS	McGillivray R&BP
Constance DS	HONI
Goderich TS	West Coast Huron Energy Inc., CP Kingsbridge N. WF, HONI
Enbridge Bryanston CTS	Enbridge Bryanston
St. Mary’s Cement CTS	St. Mary’s Cement
St. Mary’s TS	Festival Hydro, HONI
Wingham TS	HONI
Stratford TS	Festival Hydro, HONI

Table 1. Transmission customers connected to L7S, B22D and B23D.

The following potential impacts at the connection points of existing customers were conducted for this CIA:

- Supply Capacity
- Supply Reliability
- Voltage Performance
- Short-Circuit Analysis
- Preliminary Outage Impact Assessment

2.0 **LOAD FLOW RESULTS**

The proposed Bluewater WEC will, under some operating conditions, increase the supply available in Huron county. It will provide generation in the area as well as the possibility of voltage support in the Huron region. It is not expected to adversely impact the transmission customers in the area. The findings of this Customer Impact Assessment are summarized below:

2.1 Supply Capacity and Reliability

Load flow studies were carried out for the incorporation of Bluewater Wind Energy Centre. The generating station is connected to a transformer station with enough capacity to allow the plant to deliver its full power. The addition of the generating station also may provide support to the area, depending on the operating conditions of the wind farm, when one Seaforth TS auto-transformer is out of service and thereby may improve customer reliability under contingency conditions. The heaviest L7S thermal loading results are shown in Table A1 in Appendix A. Please refer to the IESO's system impact assessment on this project - IESO Report - CAA ID 2010-440¹.

2.2 Voltage Performance

The voltage performance was assessed for the conditions listed in Appendix A. Voltage performance was improved with the Bluewater WEC in-service. Following a contingency and before the ULTC action, all the HV and LV buses were within the 10% voltage change allowed by the TSC. Following the ULTC response, the HV buses were within the 10 % voltage change allowed by the TSC, and all the LV buses were within the 5 % voltage change allowed. In addition, the steady state voltages at LV station loads were within 6% of the nominal voltage. Results are shown in Tables A2 to A8 in Appendix A.

2.3 Short Circuit Study

Short-circuit studies were carried out to assess the fault level (with Bluewater WEC in service) of the transmission stations in Huron County. The system conditions assumed are summarized in Appendix B.

Tables B1, B2 and B3 show the contribution of all transmission connected Feed-In-Tariff (FIT) project approved by the Ontario Power Authority (OPA), up to and including Bluewater WEC, to the short circuit increase in the area by comparing the fault levels obtained with and without Bluewater WEC for the 2011 base case, respectively.

Table B4 compares fault levels at stations with the station equipment rating. Table B5 shows line-to-ground fault levels at the same stations. All fault levels are within the limits specified in Appendix 2 of the *Transmission System Code* (TSC). The TSC limits are summarized below for reference:

<i>Nominal Voltage (kV)</i>	<i>Max. 3-Phase Fault (kA)</i>	<i>Max. SLG Fault (kA)</i>
230	63	80 ⁽¹⁾
115	50	50
44	20 ⁽²⁾	19 ⁽²⁾
27.6	17 ⁽²⁾	12 ⁽²⁾

Notes:

(1) – Usually limited to 63 kA

(2) – Effective September 1, 2010, Hydro One requires a 5 % margin on the acceptable TSC limits at voltage levels of <50kV to account for other sources of fault current on the distribution system such as unmodelled synchronous motors and data inaccuracies.

¹ CAA ID 2010-440 please see – IESO Status of Committed Generation Project Queue page http://www.ieso.ca/imoweb/connAssess/caa_StatusSummary-Committed-Generation.asp

2.4 Preliminary Outage Impact Assessment

With appropriate construction and outage planning, it is expected that the connection of Bluewater WEC can be performed with minimal supply impact to the existing transmission customers.

3.0 CONCLUSIONS AND RECOMMENDATIONS

This CIA study has reviewed the impact of the Bluewater Wind Energy Centre on the existing transmission customers connected to the L7S and Seaforth area circuits. The new plant will provide up to 60 MW of power in Huron County and has no negative effect on the voltage in the area.

Fault levels at low voltage and high voltage buses are in accordance with the Transmission System Code Requirement.

All customers are required to check to ensure that the equipment and grounding system at their stations meet the expected increase in fault level.

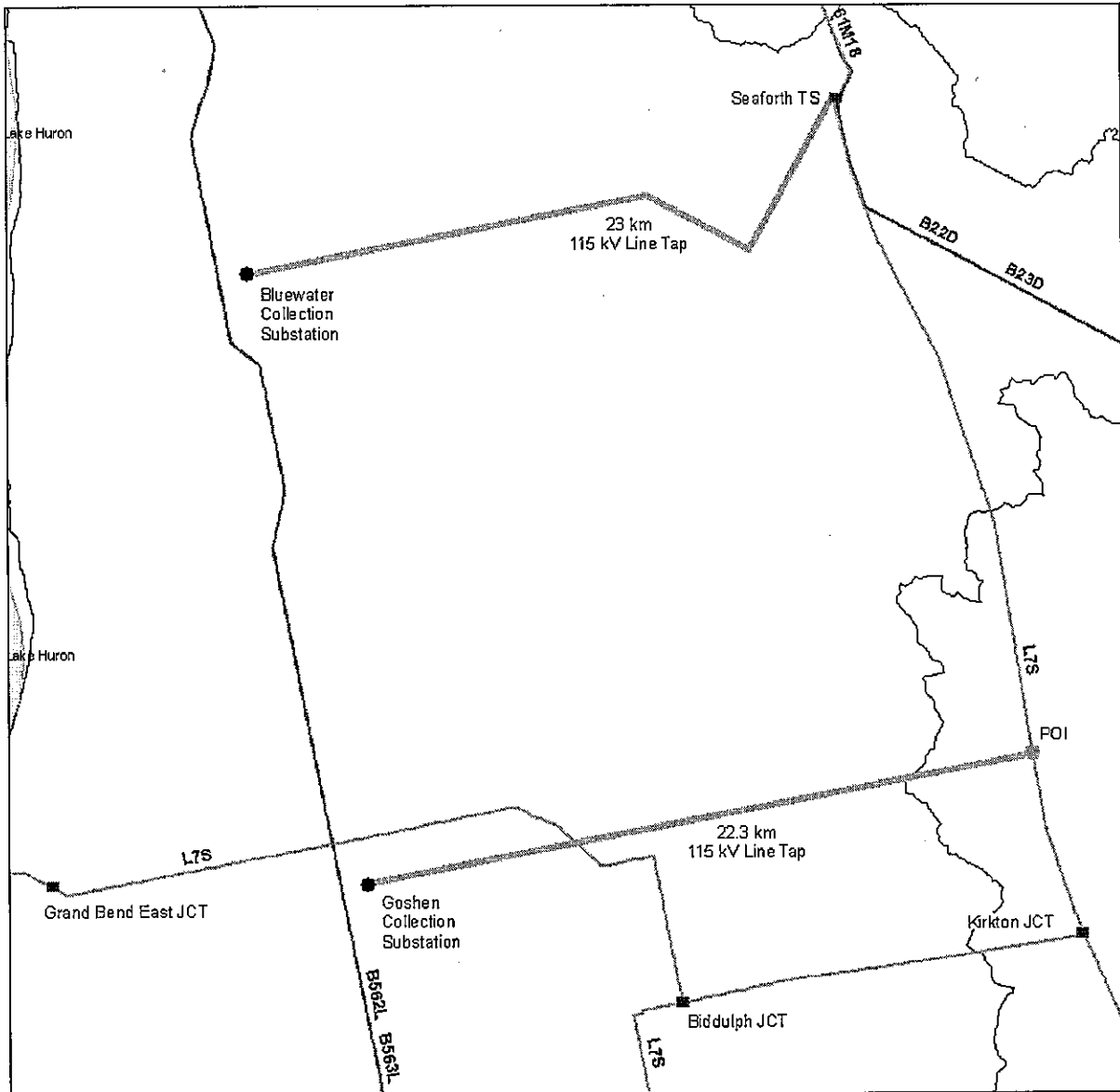


Figure 1. Geographical map of the local area where the Bluewater project is to connect.

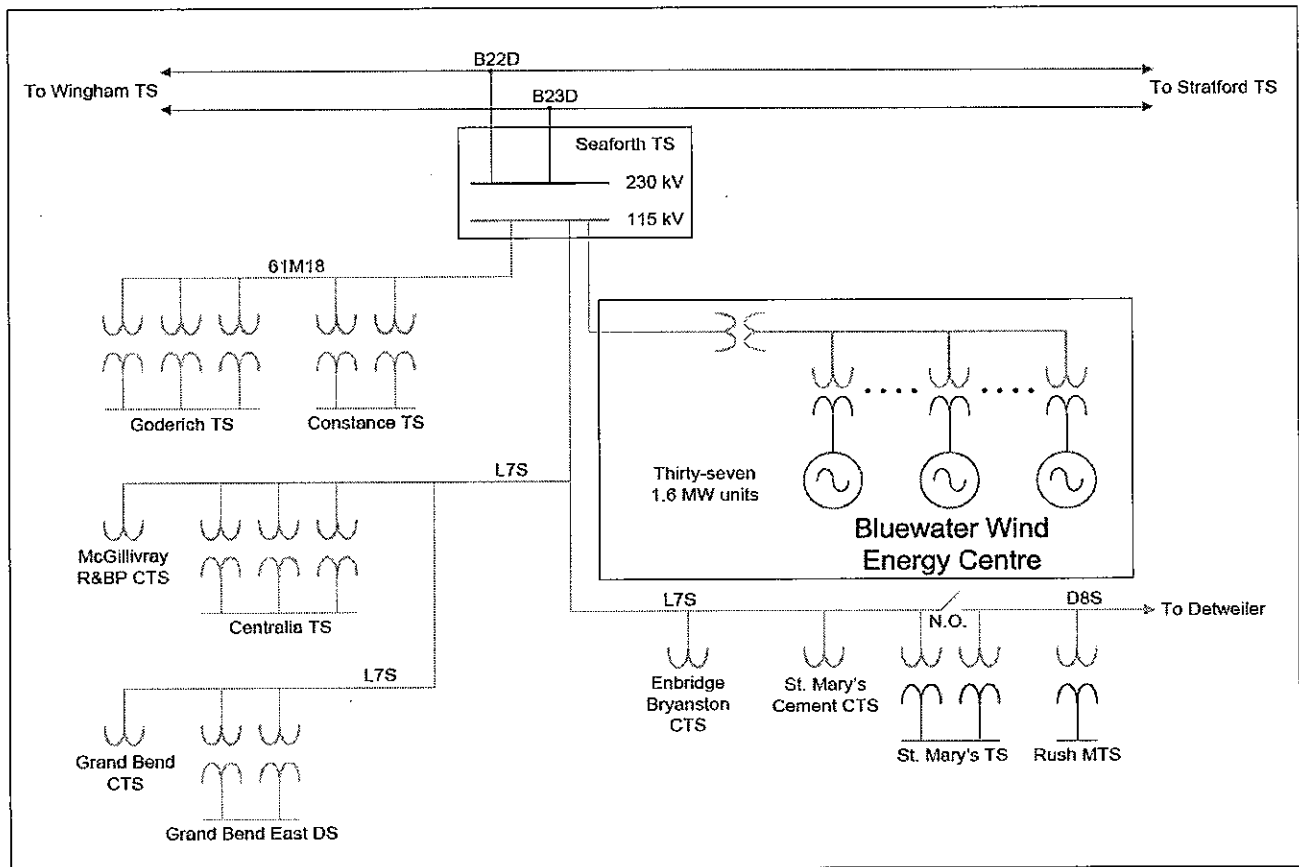


Figure 2. Single line diagram of the area considered for this customer impact assessment.

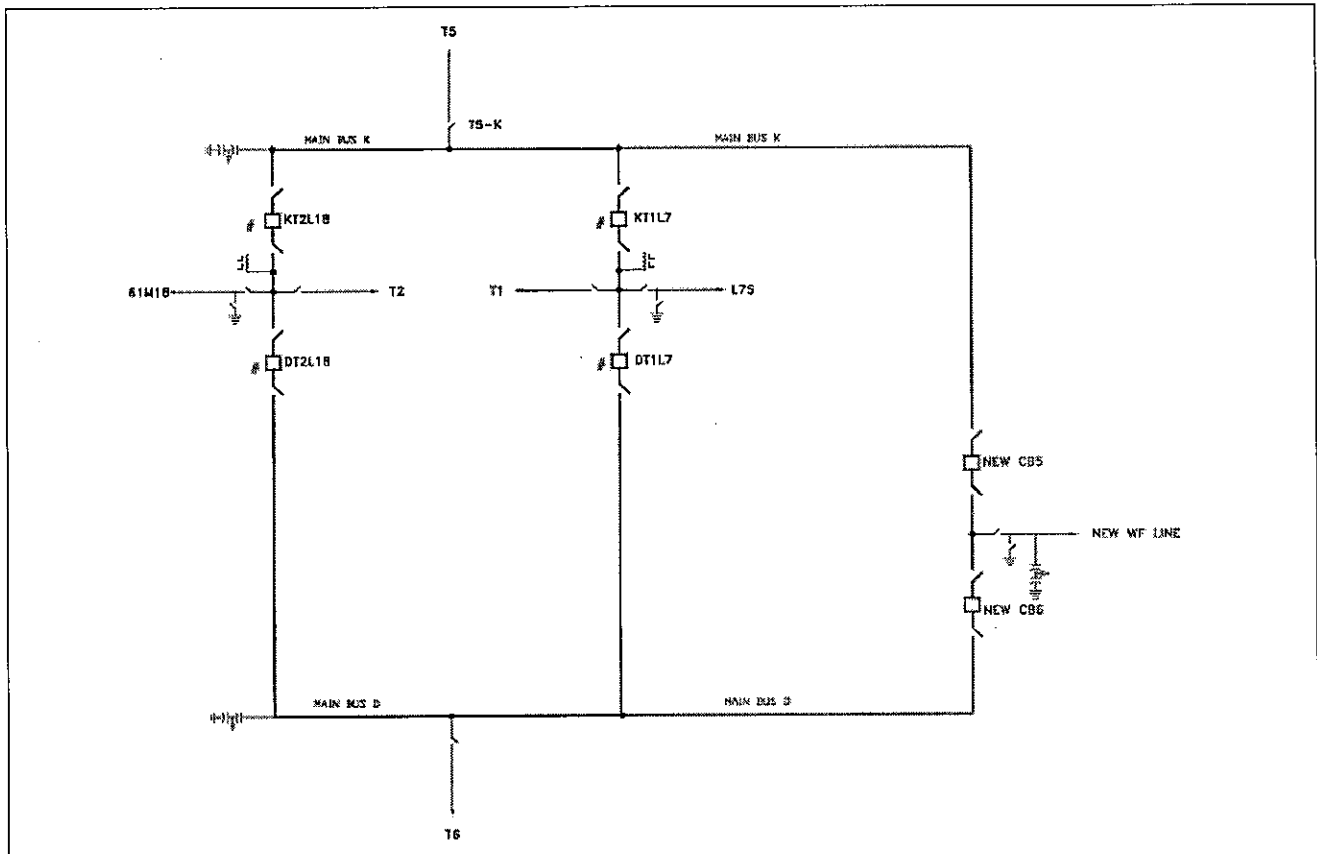


Figure 3. Single-line diagram showing connection of Bluewater Wind Energy Centre into Seaforth TS.

APPENDIX A – VOLTAGE AND FLOW STUDY

This appendix summarizes the result of the impact of the proposed Bluewater WEC on the system voltage performance. The load flow studies were carried out using the 2011 System base case and the 115kV-Seaforth/L7S load was assumed to be 155 MW.

To assess the impact of the proposed generation, the contingency of losing circuit B22D along with the T5 auto-transformer was studied for the following cases:

Case	Kingsbridge WF	Goshen WEC	Bluewater WEC
1	In-Service	Out-of-Service	Out-of-Service
2	In-Service	In-Service	Out-of-Service
3	In-Service	Out-of-Service	In-Service
4	In-Service	In-Service	In-Service
5	Out-of-Service	In-Service	Out-of-Service
6	Out-of-Service	Out-of-Service	In-Service
7	Out-of-Service	In-Service	In-Service

Thermal Loading

Loading on all sections of L7S and on all station transformers fed by L7S were assessed following the contingency noted above. All loading on transformers was below 50% of their continuous ratings. All loading on the circuits was below 50% of their continuous ratings except for the section of L7S between the Goshen WEC point of interconnection (POI) and Kirkton Junction. The post-contingency loading on this section of L7S is shown in Table A1 for each case listed above. The loadings shown in Table A1 are acceptable based on HONI's maximum thermal loading criteria.

Voltage Change

The post-contingency voltage deviations for all buses in the Seaforth/L7S area are shown in tables A2 to A8 for the seven different cases listed above.

Table A1. Thermal loading on L7S between the Goshen WEC POI and Kirkton Junction, continuous rating of 108.1 MVA.

Case 1		Case 2		Case 3		Case 4		Case 5		Case 6		Case 7	
MVA Load	% of Cont-Rating	MVA Load	% of Cont-Rating	MVA Load	% of Cont-Rating	MVA Load	% of Cont-Rating	MVA Load	% of Cont-Rating	MVA Load	% of Cont-Rating	MVA Load	% of Cont-Rating
72.0	66.6%	80.3	74.3%	74.9	69.3%	82.9	76.7%	78.5	72.6%	73.1	67.6%	81.1	75.0%

Table A2. Voltage deviations due to loss of B22D and Seaforth T5 with Kingsbridge WF I/S, Goshen WEC O/S, and Bluewater WEC O/S.

BUS #	BUS NAME	BASE V	W/O TAPS	%Delta	W/ TAPS	%Delta
7111	SEAFORTH_B23	242.83	235.98	-2.82	236.96	-2.42
7306	SEAFORTH_TS	126.52	121.73	-3.79	122.55	-3.13
7310	SEAFORTH_JL7	126.51	121.72	-3.79	122.55	-3.13
7311	SEAF_LSO_61M	126.50	121.71	-3.79	122.54	-3.14
7722	SEAFORTH_TS	29.10	27.96	-3.93	29.23	0.44
6556	WINGHAM_JB23	243.99	238.11	-2.41	238.77	-2.14
7191	STRATFD_JB23	243.14	238.87	-1.75	239.46	-1.51
2	GOSHEN_TAP	125.25	120.35	-3.91	121.31	-3.15
7334	CONSTANCE_DS	124.92	119.74	-4.14	120.91	-3.21
7628	CONSTANCE_B2	29.10	27.85	-4.32	29.30	0.70
7630	CONSTANCE_B1	29.10	27.85	-4.32	29.30	0.70
7350	GODERICH_TS	123.79	118.19	-4.52	119.75	-3.26
7652	GODERICH_TS	28.95	27.25	-5.89	29.35	1.37
7372	KIRKTON_J	124.70	119.78	-3.94	120.77	-3.15
7325	BIDDULPH_J	123.77	118.68	-4.11	119.76	-3.24
7465	GRD_BEND_E_J	120.99	115.75	-4.33	116.86	-3.41
7349	GRD_BEND_EAS	120.98	115.75	-4.33	116.85	-3.41
7651	GRD_BEND_EB1	29.11	27.80	-4.52	29.21	0.34
7682	GRD_BEND_EB2	29.11	27.80	-4.52	29.21	0.34
7351	GR_BEND	120.92	115.68	-4.33	116.79	-3.42
7650	GR_BEND	4.24	4.05	-4.51	4.09	-3.56
7332	CENTRALIA_TS	123.76	118.66	-4.12	119.75	-3.24
7624	CENTRALIA_TS	29.29	28.02	-4.32	29.09	-0.66
7375	MCGILLIVRAY	123.66	118.55	-4.13	119.64	-3.25
7701	MCGILLIVRAY	4.44	4.26	-4.19	4.29	-3.30
7339	DEVIZES_J	124.03	119.24	-3.86	120.22	-3.08
7356	EN_BRYANSTON	124.01	119.22	-3.86	120.19	-3.08
7666	EN_BRYANSTON	4.47	4.29	-3.90	4.33	-3.11
7379	PORTLAND_J	122.94	118.35	-3.73	119.29	-2.96
7384	ST_MARYS_L7S	122.86	118.30	-3.71	119.24	-2.94
7733	ST_MARYS_BY	14.57	14.20	-2.52	14.45	-0.78
7383	ST_MARYS_CEM	122.86	118.26	-3.74	119.21	-2.97
7732	ST_MARYS_CEM	4.44	4.27	-3.83	4.30	-3.04
7385	ST_MARYS_D8S	121.77	119.89	-1.54	120.19	-1.30
5600	WAT_RUSH_D8S	122.84	121.71	-0.91	121.88	-0.78
6206	WAT_RUSH_MTS	14.47	14.34	-0.95	14.54	0.47
5404	DETWEILER_TS	123.19	122.10	-0.89	122.26	-0.76

Table A3. Voltage deviations due to loss of B22D and Seaforth T5 with Kingsbridge WF I/S, Goshen WEC I/S, and Bluewater WEC O/S.

BUS #	BUS NAME	BASE V	W/O TAPS	%Delta	W/ TAPS	%Delta
7111	SEAFORTH_B23	243.57	239.28	-1.76	239.82	-1.54
7306	SEAFORTH_TS	126.87	123.93	-2.31	124.39	-1.95
7310	SEAFORTH_JL7	126.86	123.93	-2.31	124.38	-1.95
7311	SEAF_LSO_61M	126.86	123.92	-2.31	124.38	-1.95
7722	SEAFORTH_TS	29.25	28.55	-2.40	29.04	-0.72
6556	WINGHAM_JB23	244.66	240.66	-1.64	241.04	-1.48
7191	STRATFD_JB23	243.50	240.66	-1.17	240.99	-1.03
2	GOSHEN_TAP	124.95	122.68	-1.82	123.06	-1.51
7334	CONSTANCE_DS	126.20	123.03	-2.52	123.74	-1.95
7628	CONSTANCE_B2	29.17	28.40	-2.62	29.06	-0.37
7630	CONSTANCE_B1	29.17	28.40	-2.62	29.06	-0.37
7350	GODERICH_TS	126.18	122.75	-2.72	123.75	-1.93
7652	GODERICH_TS	28.91	27.91	-3.46	29.13	0.76
7372	KIRKTON_J	124.34	122.05	-1.84	122.45	-1.52
7325	BIDDULPH_J	123.39	121.03	-1.92	121.47	-1.56
7465	GRD_BEND_E_J	120.60	118.17	-2.02	118.61	-1.66
7349	GRD_BEND_EAS	120.60	118.17	-2.02	118.61	-1.66
7651	GRD_BEND_EB1	29.25	28.64	-2.10	29.20	-0.18
7682	GRD_BEND_EB2	29.25	28.64	-2.10	29.20	-0.18
7351	GR_BEND	120.54	118.10	-2.02	118.54	-1.66
7650	GR_BEND	4.23	4.14	-2.10	4.15	-1.73
7332	CENTRALIA_TS	123.39	121.02	-1.92	121.47	-1.56
7624	CENTRALIA_TS	29.20	28.61	-2.02	29.13	-0.24
7375	MCGILLIVRAY	123.29	120.91	-1.93	121.36	-1.56
7701	MCGILLIVRAY	4.43	4.34	-1.95	4.36	-1.59
7339	DEVIZES_J	123.56	121.32	-1.82	121.71	-1.50
7356	EN_BRYANSTON	123.54	121.30	-1.82	121.69	-1.50
7666	EN_BRYANSTON	4.45	4.37	-1.84	4.38	-1.51
7379	PORTLAND_J	122.22	120.03	-1.79	120.42	-1.48
7384	ST_MARYS_L7S	122.12	119.93	-1.79	120.32	-1.47
7733	ST_MARYS_BY	14.74	14.55	-1.27	14.58	-1.07
7383	ST_MARYS_CEM	122.14	119.95	-1.80	120.33	-1.48
7732	ST_MARYS_CEM	4.41	4.33	-1.84	4.35	-1.51
7385	ST_MARYS_D8S	122.19	121.15	-0.85	121.29	-0.74
5600	WAT_RUSH_D8S	122.96	122.18	-0.63	122.27	-0.56
6206	WAT_RUSH_MTS	14.49	14.39	-0.66	14.59	0.70
5404	DETWEILER_TS	123.31	122.54	-0.62	122.63	-0.55

Table A4. Voltage deviations due to loss of B22D and Seaforth T5 with Kingsbridge WF I/S, Goshen WEC O/S, and Bluewater WEC I/S.

BUS #	BUS NAME	BASE V	W/O TAPS	%Delta	W/ TAPS	%Delta
7111	SEAFORTH_B23	243.09	238.46	-1.91	238.92	-1.71
7306	SEAFORTH_TS	126.56	123.44	-2.46	123.83	-2.16
7310	SEAFORTH_JL7	126.55	123.44	-2.46	123.82	-2.16
7311	SEAF_LSO_61M	126.55	123.43	-2.46	123.82	-2.16
7722	SEAFORTH_TS	29.11	28.37	-2.56	29.18	0.26
6556	WINGHAM_JB23	244.28	239.98	-1.76	240.31	-1.63
7191	STRATFD_JB23	243.24	240.24	-1.24	240.53	-1.12
2	GOSHEN_TAP	125.25	122.05	-2.56	122.50	-2.20
7334	CONSTANCE_DS	125.91	122.62	-2.62	123.22	-2.14
7628	CONSTANCE_B2	29.10	28.30	-2.72	29.17	0.25
7630	CONSTANCE_B1	29.10	28.30	-2.72	29.17	0.25
7350	GODERICH_TS	125.91	122.43	-2.76	123.29	-2.08
7652	GODERICH_TS	29.24	28.28	-3.29	29.43	0.65
7372	KIRKTON_J	124.69	121.47	-2.58	121.94	-2.21
7325	BIDDULPH_J	123.76	120.43	-2.69	120.94	-2.28
7465	GRD_BEND_E_J	120.98	117.55	-2.83	118.08	-2.40
7349	GRD_BEND_EAS	120.98	117.55	-2.83	118.08	-2.40
7651	GRD_BEND_EB1	29.11	28.25	-2.95	29.30	0.65
7682	GRD_BEND_EB2	29.11	28.25	-2.95	29.30	0.65
7351	GR_BEND	120.91	117.49	-2.83	118.01	-2.40
7650	GR_BEND	4.24	4.12	-2.95	4.13	-2.50
7332	CENTRALIA_TS	123.75	120.42	-2.70	120.93	-2.28
7624	CENTRALIA_TS	29.29	28.46	-2.83	28.99	-1.01
7375	MCGILLIVRAY	123.65	120.31	-2.70	120.83	-2.28
7701	MCGILLIVRAY	4.44	4.32	-2.74	4.34	-2.32
7339	DEVIZES_J	124.00	120.86	-2.53	121.32	-2.16
7356	EN_BRYANSTON	123.98	120.84	-2.53	121.30	-2.16
7666	EN_BRYANSTON	4.47	4.35	-2.56	4.37	-2.18
7379	PORTLAND_J	122.86	119.83	-2.47	120.28	-2.10
7384	ST_MARYS_L7S	122.78	119.77	-2.45	120.21	-2.09
7733	ST_MARYS_BY	14.57	14.33	-1.67	14.55	-0.15
7383	ST_MARYS_CEM	122.78	119.75	-2.47	120.20	-2.10
7732	ST_MARYS_CEM	4.44	4.32	-2.53	4.34	-2.15
7385	ST_MARYS_D8S	121.89	120.62	-1.04	120.78	-0.91
5600	WAT_RUSH_D8S	122.88	122.05	-0.67	122.14	-0.60
6206	WAT_RUSH_MTS	14.48	14.38	-0.70	14.57	0.66
5404	DETWEILER_TS	123.23	122.43	-0.65	122.51	-0.59

Table A5. Voltage deviations due to loss of B22D and Seaforth T5 with Kingsbridge WF I/S, Goshen WEC I/S, and Bluewater WEC I/S.

BUS #	BUS NAME	BASE V	W/O TAPS	%Delta	W/ TAPS	%Delta
7111	SEAFORTH_B23	243.10	239.37	-1.53	239.66	-1.42
7306	SEAFORTH_TS	126.33	123.73	-2.06	123.97	-1.87
7310	SEAFORTH_JL7	126.32	123.73	-2.06	123.96	-1.87
7311	SEAF_LSO_61M	126.33	123.73	-2.06	123.97	-1.87
7722	SEAFORTH_TS	29.12	28.50	-2.13	28.94	-0.63
6556	WINGHAM_JB23	244.47	240.96	-1.43	241.18	-1.34
7191	STRATFD_JB23	243.13	240.58	-1.05	240.77	-0.97
2	GOSHEN_TAP	124.50	122.44	-1.65	122.67	-1.47
7334	CONSTANCE_DS	126.07	123.28	-2.21	123.65	-1.92
7628	CONSTANCE_B2	29.13	28.46	-2.30	29.28	0.49
7630	CONSTANCE_B1	29.13	28.46	-2.30	29.28	0.49
7350	GODERICH_TS	126.52	123.53	-2.36	124.06	-1.94
7652	GODERICH_TS	29.35	28.51	-2.87	29.14	-0.73
7372	KIRKTON_J	123.87	121.79	-1.68	122.03	-1.48
7325	BIDDULPH_J	122.91	120.76	-1.75	121.04	-1.52
7465	GRD_BEND_E_J	120.10	117.90	-1.84	118.18	-1.60
7349	GRD_BEND_EAS	120.10	117.89	-1.84	118.18	-1.60
7651	GRD_BEND_EB1	29.36	28.80	-1.92	29.10	-0.88
7682	GRD_BEND_EB2	29.36	28.80	-1.92	29.10	-0.88
7351	GR_BEND	120.04	117.83	-1.84	118.11	-1.60
7650	GR_BEND	4.21	4.13	-1.91	4.14	-1.67
7332	CENTRALIA_TS	122.90	120.75	-1.75	121.03	-1.52
7624	CENTRALIA_TS	29.07	28.54	-1.84	29.02	-0.20
7375	MCGILLIVRAY	122.80	120.64	-1.75	120.93	-1.52
7701	MCGILLIVRAY	4.41	4.33	-1.78	4.34	-1.55
7339	DEVIZES_J	123.07	121.00	-1.68	121.24	-1.49
7356	EN_BRYANSTON	123.05	120.98	-1.68	121.22	-1.49
7666	EN_BRYANSTON	4.43	4.36	-1.70	4.37	-1.50
7379	PORTLAND_J	121.68	119.61	-1.70	119.84	-1.51
7384	ST_MARYS_L7S	121.57	119.50	-1.70	119.72	-1.52
7733	ST_MARYS_BY	14.70	14.53	-1.18	14.54	-1.06
7383	ST_MARYS_CEM	121.60	119.53	-1.70	119.75	-1.52
7732	ST_MARYS_CEM	4.39	4.32	-1.74	4.32	-1.55
7385	ST_MARYS_D8S	122.08	121.22	-0.71	121.30	-0.64
5600	WAT_RUSH_D8S	122.85	122.18	-0.55	122.24	-0.50
6206	WAT_RUSH_MTS	14.47	14.39	-0.57	14.59	0.77
5404	DETWEILER_TS	123.20	122.54	-0.54	122.60	-0.49

Table A6. Voltage deviations due to loss of B22D and Seaforth T5 with Kingsbridge WF O/S, Goshen WEC I/S, and Bluewater WEC O/S.

BUS #	BUS NAME	BASE V	W/O TAPS	%Delta	W/ TAPS	%Delta
7111	SEAFORTH_B23	243.36	239.07	-1.76	239.21	-1.70
7306	SEAFORTH_TS	126.79	123.99	-2.21	124.11	-2.12
7310	SEAFORTH_JL7	126.78	123.99	-2.20	124.10	-2.11
7311	SEAF_LSO_61M	126.78	123.98	-2.21	124.09	-2.12
7722	SEAFORTH_TS	29.23	28.56	-2.29	28.97	-0.89
6556	WINGHAM_JB23	244.45	240.36	-1.68	240.47	-1.63
7191	STRATFD_JB23	243.42	240.61	-1.15	240.70	-1.12
2	GOSHEN_TAP	124.91	122.77	-1.72	122.89	-1.62
7334	CONSTANCE_DS	125.63	122.74	-2.30	122.88	-2.19
7628	CONSTANCE_B2	29.27	28.57	-2.39	29.09	-0.64
7630	CONSTANCE_B1	29.27	28.57	-2.39	29.09	-0.64
7350	GODERICH_TS	125.07	122.11	-2.37	122.28	-2.23
7652	GODERICH_TS	29.52	28.77	-2.54	29.21	-1.06
7372	KIRKTON_J	124.31	122.16	-1.73	122.30	-1.62
7325	BIDDULPH_J	123.36	121.14	-1.80	121.31	-1.66
7465	GRD_BEND_E_J	120.57	118.29	-1.90	118.46	-1.75
7349	GRD_BEND_EAS	120.57	118.28	-1.90	118.46	-1.75
7651	GRD_BEND_EB1	29.48	28.90	-1.98	29.17	-1.05
7682	GRD_BEND_EB2	29.48	28.90	-1.98	29.17	-1.05
7351	GR_BEND	120.51	118.22	-1.90	118.40	-1.75
7650	GR_BEND	4.23	4.14	-1.98	4.15	-1.83
7332	CENTRALIA_TS	123.36	121.13	-1.81	121.31	-1.66
7624	CENTRALIA_TS	29.19	28.63	-1.90	29.08	-0.36
7375	MCGILLIVRAY	123.26	121.02	-1.81	121.20	-1.67
7701	MCGILLIVRAY	4.43	4.35	-1.84	4.35	-1.69
7339	DEVIZES_J	123.55	121.46	-1.70	121.59	-1.59
7356	EN_BRYANSTON	123.53	121.44	-1.70	121.57	-1.59
7666	EN_BRYANSTON	4.45	4.37	-1.71	4.38	-1.60
7379	PORTLAND_J	122.25	120.24	-1.64	120.37	-1.54
7384	ST_MARYS_L7S	122.15	120.15	-1.63	120.28	-1.53
7733	ST_MARYS_BY	14.74	14.56	-1.20	14.57	-1.14
7383	ST_MARYS_CEM	122.17	120.16	-1.64	120.29	-1.54
7732	ST_MARYS_CEM	4.41	4.34	-1.68	4.34	-1.57
7385	ST_MARYS_D8S	122.12	121.07	-0.86	121.11	-0.83
5600	WAT_RUSH_D8S	122.93	122.16	-0.63	122.19	-0.60
6206	WAT_RUSH_MTS	14.48	14.39	-0.65	14.58	0.65
5404	DETWEILER_TS	123.28	122.52	-0.61	122.55	-0.59

Table A7. Voltage deviations due to loss of B22D and Seaforth T5 with Kingsbridge WF O/S, Goshen WEC O/S, and Bluewater WEC I/S.

BUS #	BUS NAME	BASE V	W/O TAPS	%Delta	W/ TAPS	%Delta
7111	SEAFORTH_B23	242.79	237.93	-2.00	238.17	-1.91
7306	SEAFORTH_TS	126.43	123.28	-2.49	123.46	-2.35
7310	SEAFORTH_JL7	126.42	123.27	-2.49	123.45	-2.35
7311	SEAF_LSO_61M	126.41	123.27	-2.49	123.44	-2.35
7722	SEAFORTH_TS	29.08	28.33	-2.59	29.09	0.05
6556	WINGHAM_JB23	244.00	239.45	-1.87	239.64	-1.79
7191	STRATFD_JB23	243.09	239.98	-1.28	240.14	-1.21
2	GOSHEN_TAP	125.14	121.94	-2.56	122.22	-2.33
7334	CONSTANCE_DS	125.25	122.01	-2.59	122.21	-2.43
7628	CONSTANCE_B2	29.18	28.40	-2.70	29.16	-0.08
7630	CONSTANCE_B1	29.18	28.39	-2.70	29.16	-0.08
7350	GODERICH_TS	124.69	121.35	-2.68	121.59	-2.48
7652	GODERICH_TS	29.42	28.58	-2.88	29.03	-1.33
7372	KIRKTON_J	124.59	121.37	-2.58	121.69	-2.33
7325	BIDDULPH_J	123.65	120.32	-2.69	120.71	-2.37
7465	GRD_BEND_E_J	120.87	117.45	-2.83	117.85	-2.50
7349	GRD_BEND_EAS	120.87	117.45	-2.83	117.85	-2.50
7651	GRD_BEND_EB1	29.32	28.45	-2.95	29.24	-0.26
7682	GRD_BEND_EB2	29.32	28.45	-2.95	29.24	-0.26
7351	GR_BEND	120.80	117.38	-2.83	117.78	-2.50
7650	GR_BEND	4.24	4.11	-2.95	4.13	-2.61
7332	CENTRALIA_TS	123.65	120.32	-2.69	120.71	-2.37
7624	CENTRALIA_TS	29.26	28.43	-2.83	29.34	0.27
7375	MCGILLIVRAY	123.54	120.21	-2.70	120.60	-2.38
7701	MCGILLIVRAY	4.44	4.32	-2.74	4.33	-2.42
7339	DEVIZES_J	123.92	120.80	-2.52	121.10	-2.27
7356	EN_BRYANSTON	123.90	120.77	-2.52	121.08	-2.28
7666	EN_BRYANSTON	4.46	4.35	-2.55	4.36	-2.30
7379	PORTLAND_J	122.82	119.83	-2.43	120.13	-2.19
7384	ST_MARYS_L7S	122.74	119.77	-2.41	120.07	-2.17
7733	ST_MARYS_BY	14.75	14.50	-1.71	14.52	-1.56
7383	ST_MARYS_CEM	122.73	119.75	-2.43	120.05	-2.19
7732	ST_MARYS_CEM	4.43	4.32	-2.49	4.33	-2.24
7385	ST_MARYS_D8S	121.79	120.44	-1.11	120.53	-1.04
5600	WAT_RUSH_D8S	122.83	121.98	-0.69	122.04	-0.64
6206	WAT_RUSH_MTS	14.47	14.37	-0.72	14.56	0.62
5404	DETWEILER_TS	123.18	122.36	-0.67	122.41	-0.62

Table A8. Voltage deviations due to loss of B22D and Seaforth T5 with Kingsbridge WF O/S, Goshen WEC I/S, and Bluewater WEC I/S.

BUS #	BUS NAME	BASE V	W/O TAPS	%Delta	W/ TAPS	%Delta
7111	SEAFORTH_B23	242.58	238.76	-1.57	238.95	-1.50
7306	SEAFORTH_TS	125.98	123.36	-2.07	123.50	-1.96
7310	SEAFORTH_JL7	125.97	123.36	-2.07	123.50	-1.96
7311	SEAF_LSO_61M	125.96	123.35	-2.07	123.49	-1.96
7722	SEAFORTH_TS	29.04	28.41	-2.15	29.21	0.58
6556	WINGHAM_JB23	244.05	240.43	-1.49	240.58	-1.42
7191	STRATFD_JB23	242.85	240.32	-1.04	240.46	-0.98
2	GOSHEN_TAP	124.24	122.21	-1.64	122.36	-1.52
7334	CONSTANCE_DS	124.76	122.10	-2.14	122.26	-2.01
7628	CONSTANCE_B2	29.06	28.42	-2.23	29.17	0.38
7630	CONSTANCE_B1	29.06	28.42	-2.23	29.17	0.38
7350	GODERICH_TS	124.16	121.44	-2.18	121.64	-2.02
7652	GODERICH_TS	29.25	28.60	-2.23	29.05	-0.70
7372	KIRKTON_J	123.62	121.57	-1.66	121.74	-1.53
7325	BIDDULPH_J	122.65	120.53	-1.73	120.73	-1.57
7465	GRD_BEND_E_J	119.84	117.66	-1.82	117.87	-1.65
7349	GRD_BEND_EAS	119.84	117.66	-1.82	117.87	-1.65
7651	GRD_BEND_EB1	29.29	28.74	-1.90	29.25	-0.15
7682	GRD_BEND_EB2	29.29	28.74	-1.90	29.25	-0.15
7351	GR_BEND	119.78	117.59	-1.82	117.80	-1.65
7650	GR_BEND	4.20	4.12	-1.90	4.13	-1.72
7332	CENTRALIA_TS	122.65	120.52	-1.73	120.73	-1.57
7624	CENTRALIA_TS	29.01	28.48	-1.82	28.94	-0.25
7375	MCGILLIVRAY	122.54	120.42	-1.74	120.62	-1.57
7701	MCGILLIVRAY	4.40	4.32	-1.76	4.33	-1.59
7339	DEVIZES_J	122.85	120.83	-1.65	120.99	-1.51
7356	EN_BRYANSTON	122.83	120.81	-1.65	120.97	-1.52
7666	EN_BRYANSTON	4.42	4.35	-1.66	4.36	-1.53
7379	PORTLAND_J	121.50	119.52	-1.63	119.67	-1.51
7384	ST_MARYS_L7S	121.39	119.41	-1.63	119.57	-1.50
7733	ST_MARYS_BY	14.68	14.52	-1.13	14.53	-1.04
7383	ST_MARYS_CEM	121.42	119.43	-1.64	119.59	-1.51
7732	ST_MARYS_CEM	4.39	4.31	-1.68	4.32	-1.54
7385	ST_MARYS_D8S	121.93	121.06	-0.72	121.13	-0.66
5600	WAT_RUSH_D8S	122.77	122.12	-0.53	122.17	-0.49
6206	WAT_RUSH_MTS	14.46	14.38	-0.55	14.58	0.78
5404	DETWEILER_TS	123.12	122.47	-0.52	122.52	-0.48

APPENDIX B – SHORT CIRCUIT ANALYSIS RESULTS

The short circuit levels at the customers interface point as well as the major buses in the Seaforth/L7S area are shown in Table B1, B2 and B3. Table B4 shows the short circuit level compare to the breaker ratings.

The short circuit study was carried out with the following facilities and system assumptions:

Scenario 1: EXISTING SYSTEM (results in Table B1)

Existing Generation Facilities:

South West			
Name	Units/Capacity	Name	Units/Capacity
Nanticoke	G1, G2, G5-G8	Kingsbridge WGS	39.6 MW
Halton Hills GS	G1-G3	Amaranth WGS	199.5 MW
Bruce			
Name	Units/Capacity	Name	Units/Capacity
Bruce A	G1-G4	Ripley WGS	76 MW
Bruce B	G5-G8	Underwood WGS	198 MW
Bruce A Standby	SG1		
West			
Name	Units/Capacity	Name	Units/Capacity
Lambton units	G3-G4	Imperial Oil	G1
Brighton Beach	G1, G1A, G1B	Kruger Port Alma WGS	101.2 MW
Greenfield Energy Centre	G1-G4	Gosfield Wind Project	50.6 MW
St. Clair Energy Centre	CTG3, STG3, CTG4, STG4	Kruger Energy Chatham WF	101 MW
East Windsor Cogen	G1-G2	Raleigh Wind Energy Centre	78 MW
TransAlta Sarnia	G861, G871, G881, G891	Talbot Wind Farm	98.9 MW
Ford Windsor CTS	STG5	Dow Chemicals	G1, G2, G5
TransAlta Windsor	G1, G2	Port Burwell (Erie Shores) WGS	99 MW
West Windsor Power	G1, G2	Fort Chicago London Cogen	23 MVA aggregate
		Great Northern Tri-Gen Cogen	15 MVA aggregate
Toronto			
Name	Units/Capacity	Name	Units/Capacity
Pickering units	G1, G4-G8	Sithe Goreway	G11-13, G15
Darlington	G1-G4	TransAlta Douglas	G1-G3
Portlands GS	G1-G3	GTAA	G1-G3
Algonquin Power	G1, G2	Brock west	G1
Whitby Cogen	G1		
Niagara			
Name	Units/Capacity	Name	Units/Capacity
Thorold GS	GTG1, STG2	Beck 2	G11-G26
Beck 1	G3-G10	Beck 2 PGS	G1-G6

Committed Generation Facilities:

Zone	Project Name	CAA ID	Generation Type	Capacity
Bruce	Bruce G1, G2	2004-163	Nuclear	1670M
Essa	York Energy Centre	2008-348	Simple Cycle	408MW
Southwest	Conestogo Wind Energy Centre 1	2010-387	Wind	67.5MW
	Dufferin Wind Farm	2010-396	Wind	98.9MW
	Summerhaven Wind Farm	2010-388	Wind	125MW
	Port Dover and Nanticoke Wind Project	2010-398	Wind	104.4M
	Grand Renewable Energy Park	2010-399	Wind + Solar	254MW
Toronto	Greenfield South	2004-178	Combined Cycle	284MW
West	Comber East C24Z	2010-381	Wind	82.8MW
	Comber West C23Z	2010-382	Wind	82.8MW
	Pointe-Aux-Roches Wind	2010-383	Wind	48.6MW
	South Kent Wind Farm	2010-405	Wind	270MW

Embedded Generation

Name	EG size (kW)	Name	EG size (kW)
Essa			
ARMITAGE TS	2630	MIDHURST TS	23499
BEAVERTON TS	70500	MUSKOKA TS	25330
BROWN HILL TS	30026.52	ORILLIA TS	30010
HOLLAND TS	2100	Wallace TS	3950
LINDSAY TS	34499	WAUBAUSHENE TS	41250
Southwest			
BLOOMSBURG MTS	10200	HANOVER TS	25500
CALEDONIA TS	20915	JARVIS TS	1510
CAMBRIDGE NDUM MTS#1	1741	MEAFORD TS	28492.4
CAMPBELL TS DESN 1	4250	NEBO TS DESN 1	3200
CENTRALIA TS	1184.6	NORFOLK TS	30990
Detweiler TS	6225	ORANGEVILLE	46525
ELMIRA TS	3117	OWEN SOUND	2300
FERGUS TS	43454	PALMERSTON TS	1550.4
GALT TS	1258	SCHEIFELE MTS	1125
GODERICH TS	1060	STAYNER TS	78535
HALTON TS	1050	STRATFORD TS	1140
SEAFORTH TS	15000	WINGHAM TS	18000
Bruce			
Name	EG size (kW)	Name	EG size (kW)
DOUGLAS POINT TS	26385		
West			
Name	EG size (kW)	Name	EG size (kW)
BELLE RIVER	10000	ST.ANDREWS	20000
BELLEVILLE	52687	ST.THOMAS	10850
BUCHANAN TS	23075	STRATHROY TS	17650

EDGEWARE TS	12357	TILBURY	5000
FOREST JURA	13300	TILBURY WEST	10000
INGERSOLL TS	19935	TILLSONBURG	31145
KEITH	45000	WALKER	1143
KENT	72530	WALLACEBURG	10750
KINGSVILLE TS	19585	WANSTEAD	12400
LAMBTON	40000	WINDSOR MALDEN TS	51450
LAUZON	22290	WONDERLAND TS	1048.72
MODELAND TS	62400	WOODSTOCK TS	2390
HIGHBURY	18000		

Transmission System Upgrades

- Leaside - Bridgman reinforcement: Leaside TS to Birch JCT: build new 115 kV circuit and birch to Bayfield: replace 115 kV cables (CAA2006-238) (COD: Q1 2014);
- St. Catherines 115 kV circuit upgrade: circuits D9HS, D10S and Q11S (CAA2007-257) (COD: in-service);
- Tilbury West DS second connection point for DESN arrangement using K2Z and K6Z (CAA2008-332) (COD: indefinite);
- Second 500kV Bruce-Milton double-circuit line (CAA2006-250) (COD: Q4 2012);
- Woodstock Area transmission reinforcement (CAA2006-253);
 - Karn TS in service and connected to M31W & M32W at Ingersol TS (COD: Q4 2011)
 - W7W/W12W terminated at LFarge CTS (COD: Q4 2011)
 - Woodstock TS connected to Karn TS (COD: Q4 2011)
- Lower Mattagami expansion - H22D line extension from Harmon to Kipling (CAA2006-239) (COD: Q1 2014);
- Rodney (Duart) TS DESN connected to W44LC and W45LS 230 kV circuits (CAA2007-260) (COD: Q2 2012)

Note: The project of Windsor area transmission reinforcement (CAA2008-318) in previous scope of work has been cancelled.

System Operating Conditions

- Maximum voltages on the buses

Table B1. Max bus faults of existing system before incorporating the new FIT3 (plus Samsung) projects.

BUS#	X-- NAME	--X BASKV	MAX V	TIME	FLTMVA	THREE PHASE FAULT	SYMM I	ASYMM I	X/R FACTOR	SYMM I	ASYMM I	X/R FACTOR	PHASE	3IA0	RPOS	XPOS	RZERO	XZERO	
7350	GODERICH	118.05	1.076	0.025	723.6	3.539	3.734	4.56	1.055	2.298	2.368	3.67	1.031	3.181	1.701	0.0326	0.1487	0.1218	0.3897
7334	CONSTANC	118.05	1.076	0.025	1140.1	5.576	5.953	5.31	1.068	3.944	4.131	4.42	1.047	5.064	3.052	0.0178	0.0944	0.0550	0.2115
7306	SEAFORTH	118.05	1.076	0.025	2364.7	11.565	13.947	13.69	1.206	13.637	17.580	15.76	1.289	13.012	16.614	0.0033	0.0455	0.0007	0.0248
7110	SEAF B22	220.00	1.136	0.025	2843.7	7.463	8.721	11.43	1.169	6.883	8.807	14.98	1.280	7.209	6.387	0.0035	0.0399	0.0017	0.0500
7111	SEAF B23	220.00	1.136	0.025	2847.3	7.472	8.732	11.43	1.169	7.031	8.984	14.90	1.278	7.273	6.638	0.0035	0.0399	0.0016	0.0474
7356	EN BRYAN	118.05	1.076	0.025	597.7	2.923	3.087	4.61	1.056	1.801	1.868	3.95	1.037	2.614	1.301	0.0390	0.1800	0.1436	0.5166
7383	ST M CEM	118.05	1.076	0.025	496.5	2.428	2.636	6.40	1.086	1.438	1.501	4.28	1.044	2.164	1.021	0.0338	0.2167	0.1889	0.6645
7384	ST MARL7	118.05	1.076	0.025	508.9	2.489	2.742	7.38	1.102	1.468	1.536	4.40	1.047	2.217	1.041	0.0287	0.2115	0.1874	0.6527
7385	ST MARD8	118.05	1.076	0.025	581.8	2.845	3.109	6.84	1.093	1.526	1.615	4.91	1.058	2.519	1.043	0.0270	0.1850	0.1564	0.6644
7351	LKRR WTP	118.05	1.076	0.025	372.9	1.824	1.873	2.46	1.027	1.153	1.172	2.77	1.017	1.635	0.843	0.1171	0.2886	0.2603	0.7924
7349	G BEND E	118.05	1.076	0.025	385.6	1.886	1.938	2.52	1.028	1.194	1.214	2.80	1.017	1.690	0.873	0.1108	0.2791	0.2502	0.7646
7375	MCGILLIV	118.05	1.076	0.025	476.4	2.330	2.423	3.62	1.040	1.457	1.497	3.50	1.028	2.086	1.060	0.0624	0.2259	0.1846	0.6319
7332	CENTRL7S	118.05	1.076	0.025	606.0	2.964	3.109	4.18	1.049	1.917	1.974	3.63	1.030	2.663	1.416	0.0425	0.1775	0.1420	0.4686
5600	RUSH D8S	118.05	1.076	0.025	2826.1	13.822	15.152	7.04	1.096	11.231	12.196	6.18	1.086	12.870	9.458	0.0054	0.0381	0.0119	0.0644
5601	RUSH D10	118.05	1.076	0.025	2865.0	14.012	15.408	7.25	1.100	11.289	12.285	6.28	1.088	13.023	9.452	0.0052	0.0376	0.0119	0.0647
5404	DETWEILE	118.05	1.076	0.025	4958.3	24.250	30.579	17.68	1.261	27.114	36.242	19.72	1.337	26.026	30.745	0.0012	0.0217	0.0005	0.0148
5103	DETWEILE	220.00	1.136	0.025	8728.3	22.906	26.840	11.62	1.172	19.797	25.273	14.85	1.277	21.667	17.431	0.0011	0.0130	0.0008	0.0191
6557	WINGHB22	220.00	1.136	0.025	2708.6	7.108	8.275	11.16	1.164	5.197	5.608	5.86	1.079	6.488	4.096	0.0038	0.0419	0.0218	0.0882
6558	WINGHB23	220.00	1.136	0.025	2714.9	7.125	8.294	11.16	1.164	5.246	5.656	5.82	1.078	6.510	4.152	0.0038	0.0418	0.0218	0.0868
7192	STRTFB22	220.00	1.136	0.025	3131.5	8.218	9.322	9.35	1.134	6.108	6.686	6.57	1.095	7.520	4.860	0.0039	0.0363	0.0145	0.0739
7193	STRTFB23	220.00	1.136	0.025	3149.4	8.265	9.395	9.50	1.137	6.148	6.731	6.59	1.095	7.565	4.894	0.0038	0.0361	0.0145	0.0733
7652	GODERICH	27.600	1.051	0.067	322.4	6.745	6.745	6.96	1.000	6.963	6.963	9.15	1.000	6.860	7.195	0.0469	0.3260	0.0098	0.2954
7630	CONST B1	27.600	1.051	0.067	136.6	2.858	2.858	14.56	1.000	3.098	3.140	15.88	1.014	2.998	3.381	0.0528	0.7691	0.0284	0.5909
7628	CONST B2	27.600	1.051	0.067	136.5	2.856	2.856	14.68	1.000	3.095	3.140	16.03	1.015	2.995	3.377	0.0524	0.7699	0.0281	0.5915
7722	SEAFORTH	27.600	1.051	0.067	576.8	12.067	12.067	18.95	1.000	9.997	10.632	22.70	1.064	11.287	8.533	0.0096	0.1822	0.0098	0.2954
7666	EN BRYAN	4.1600	1.000	0.067	82.8	11.485	11.485	13.13	1.000	12.490	12.490	0.02	1.000	12.073	13.687	0.0921	1.2084	*****	0.9168
7732	ST M CEM	4.1600	1.000	0.067	176.2	24.459	24.459	10.69	1.000	28.993	28.993	0.03	1.000	27.665	35.591	0.0531	0.5674	53.0263	0.3012
7733	ST MARYS	13.8000	1.029	0.067	277.6	11.614	11.614	15.36	1.000	5.610	6.198	28.35	1.105	10.226	3.698	0.0241	0.3707	0.0329	1.5608
7650	LKRR WTP	4.1600	1.000	0.067	92.6	12.856	12.856	6.13	1.000	0.000	0.000	1.00	1.000	11.133	0.000	0.1762	1.0796	*****	*****
7651	G BD EB1	27.600	1.051	0.067	107.3	2.244	2.244	5.80	1.000	2.595	2.595	6.85	1.000	2.479	3.077	0.1690	0.9796	0.0330	0.5820
7682	G BD EB2	27.600	1.051	0.067	107.3	2.244	2.244	5.80	1.000	2.595	2.595	6.85	1.000	2.479	3.077	0.1690	0.9796	0.0330	0.5820
7701	MCGILLIV	4.1600	1.000	0.067	111.5	15.469	15.469	7.98	1.000	0.000	0.000	1.00	1.000	13.397	0.000	0.1124	0.8972	*****	*****
7624	CENTRALI	27.600	1.051	0.067	256.7	5.370	5.370	7.14	1.000	5.920	5.920	8.95	1.000	5.701	6.595	0.0573	0.4094	0.0098	0.2954
6206	RUSH	13.8000	1.029	0.067	421.7	17.645	17.645	19.39	1.000	19.050	19.958	20.52	1.048	18.455	20.698	0.0126	0.2440	0.0079	0.1900
6008	DETWEIBY	27.600	1.051	0.067	696.1	14.561	14.561	18.88	1.000	6.808	7.088	19.64	1.041	12.804	4.443	0.0080	0.1510	0.0333	0.6668
6795	WINGHAM	44.000	1.045	0.067	729.5	9.572	9.820	27.19	1.026	10.325	11.583	30.68	1.122	10.006	11.206	0.0053	0.1433	0.0024	0.1119
7737	STRATFOR	27.600	1.051	0.067	680.3	14.231	14.400	24.38	1.012	10.642	12.092	32.65	1.136	13.036	8.498	0.0063	0.1545	0.0063	0.3108

Scenario 2: All new FIT3 plus Samsung Projects (results in Table B2)

Generation:

Tx Connected – FIT3

Zone	Project Name	CAA ID	Generation Type	Capacity (KW)
Bruce	Bluewater Wind Energy Centre	2011-440	Wind	60,000
	Jericho Wind Energy Centre	2011-441	Wind	150,000
	Bornish Wind Energy Centre	2011-443	Wind	73,500
	Goshen Wind Energy Centre	2011-444	Wind	102,000
	Cedar Point Wind Power Project Phase II	2011-445	Wind	100,000
	Adelaide Wind Energy Centre	2011-446	Wind	60,000
	Grand Bend Wind Farms	2011-447	Wind	100,000
	Grand Valley Wind Farms (Phase 3)	2011-448	Wind	40,000
	K2 wind	2011-452	Wind	270,000
West of London	Erieau Wind	2011-438	Wind	99,000
	East Lake St. Clair Wind	2011-439	Wind	99,000
	Adelaide Wind Power Project	2011-442	Wind	40,000
	Gunn's Hill Wind Farm	2011-449	Wind	25,000
	Silvercreek Solar Park	2011-450	Solar	10,000

Tx Connected - Samsung

Zone	Project Name	Proposed Size	Connection Point	Gen Type
Bruce	Armow	180	B22D/B23D (2 km east of Majestic Junction)	Siemens WTG
East	Kingston	100	X4H (27 km from Lennox)	Solar

Dx Connected – FIT3

Zone	Project Name	Station	Generation Type	Capacity (KW)
Bruce	East Durham Wind Energy Centre	Hanover TS	Wind	23,000
	St. Columban 2 Wind Energy Project	Seaforth TS	Wind	15,000
	St. Columban 1 Wind Energy Project	Wingham TS	Wind	18,000
	Majestic Wind Farm	Douglas Point	Wind	2,000
	Meyer Wind Farm	Douglas Point	Wind	4,000
	Q1WEC	Douglas Point	Wind	2,500
West of London	RE Adelaide 1	Strathroy TS	Solar	4,000
	RE Sunningdale 1	Highbury TS	Solar	7,000
	RE Adelaide 1a	Strathroy TS	Solar	2,500
	RE Adelaide 1b	Strathroy TS	Solar	2,000
	Napier Wind Farm	Strathroy TS	Wind	5,400
	Ruby Farms Solar One	Strathroy TS	Solar	2,000

- Same as scenario 1

System Operating Conditions

Maximum voltages on the buses

Table B2. Max bus faults after incorporating all new FIT3 (plus Samsung) projects.

BUS#	X--	NAME	--X	BASKV	MAX	V	TIME	FLTMVA	SYMM I	ASYMM I	X/R FACTOR	SYMM I	ASYMM I	X/R FACTOR	PHASE	3IAG	RPOS	XPOS	RZERO	XZERO	
7350		GODERICH		118.05	1.076	0.025	754.8	3.691	3.889	4.46	1.054	2.360	2.429	3.60	1.029	3.312	1.734	0.0320	0.1426	0.1218	0.3839
7334		CONSTANC		118.05	1.076	0.025	1227.1	6.001	6.393	5.17	1.065	4.142	4.326	4.29	1.044	5.433	3.163	0.0170	0.0877	0.0549	0.2057
7306		SEAFORTH		118.05	1.076	0.025	2806.9	13.728	16.966	15.67	1.236	16.342	21.385	17.38	1.309	15.595	20.184	0.0024	0.0383	0.0007	0.0199
7110		SEAF B22		220.00	1.136	0.025	3071.3	8.060	9.681	13.40	1.201	7.543	9.797	16.56	1.299	7.828	7.089	0.0028	0.0370	0.0016	0.0446
7111		SEAF B23		220.00	1.136	0.025	3194.2	8.383	10.085	13.52	1.203	8.372	10.812	15.96	1.292	8.377	8.360	0.0026	0.0356	0.0014	0.0357
7356		EN BRYAN		118.05	1.076	0.025	656.6	3.211	3.392	4.61	1.056	2.090	2.166	3.92	1.036	2.887	1.549	0.0355	0.1639	0.1216	0.4277
7383		ST M CEM		118.05	1.076	0.025	533.4	2.609	2.823	6.20	1.082	1.612	1.681	4.22	1.043	2.333	1.167	0.0326	0.2017	0.1668	0.5757
7384		ST MARL7		118.05	1.076	0.025	547.2	2.676	2.937	7.13	1.098	1.649	1.724	4.34	1.046	2.393	1.192	0.0276	0.1966	0.1653	0.5639
7385		ST MARDB		118.05	1.076	0.025	584.2	2.857	3.125	6.89	1.094	1.529	1.618	4.92	1.058	2.529	1.044	0.0267	0.1842	0.1564	0.6643
7351		LKHR WTP		118.05	1.076	0.025	396.4	1.939	1.990	2.42	1.027	1.267	1.286	2.69	1.015	1.744	0.941	0.1124	0.2714	0.2382	0.7036
7349		G BEND E		118.05	1.076	0.025	410.8	2.009	2.064	2.47	1.027	1.316	1.337	2.72	1.016	1.807	0.978	0.1061	0.2619	0.2281	0.6758
7375		MC GILLIV		118.05	1.076	0.025	515.5	2.521	2.621	3.62	1.040	1.644	1.688	3.46	1.027	2.267	1.219	0.0577	0.2087	0.1626	0.5431
7332		CENTRL7S		118.05	1.076	0.025	670.8	3.280	3.445	4.24	1.050	2.253	2.318	3.58	1.029	2.968	1.716	0.0378	0.1604	0.1200	0.3798
5600		RUSH D8S		118.05	1.076	0.025	2856.3	13.969	15.309	7.02	1.096	11.302	12.269	6.16	1.086	12.995	9.490	0.0054	0.0377	0.0119	0.0643
5601		RUSH D10		118.05	1.076	0.025	2894.4	14.156	15.560	7.23	1.099	11.358	12.355	6.26	1.088	13.144	9.483	0.0051	0.0372	0.0119	0.0646
5404		DETWEILE		118.05	1.076	0.025	5049.4	24.695	31.213	17.91	1.264	27.521	36.859	19.94	1.339	26.436	31.077	0.0012	0.0213	0.0005	0.0147
5103		DETWEILE		220.00	1.136	0.025	9056.4	23.767	27.858	11.65	1.172	20.312	25.950	14.89	1.278	22.411	17.734	0.0011	0.0125	0.0008	0.0189
6557		WINGHB22		220.00	1.136	0.025	2831.8	7.432	8.748	11.95	1.177	5.366	5.787	5.84	1.078	6.770	4.199	0.0034	0.0401	0.0218	0.0864
6558		WINGHB23		220.00	1.136	0.025	2857.5	7.499	8.822	11.90	1.176	5.505	5.922	5.72	1.076	6.849	4.349	0.0033	0.0398	0.0217	0.0830
7192		STRFB22		220.00	1.136	0.025	3237.8	8.497	9.673	9.60	1.138	6.283	6.871	6.52	1.094	7.769	4.985	0.0037	0.0351	0.0145	0.0722
7193		STRFB23		220.00	1.136	0.025	3290.7	8.636	9.848	9.72	1.140	6.436	7.030	6.47	1.092	7.906	5.130	0.0036	0.0345	0.0144	0.0699
73060		BLUEWTAP		118.05	1.076	0.025	1110.2	5.430	6.518	13.35	1.200	5.774	7.395	15.06	1.281	5.623	6.165	0.0073	0.0969	0.0036	0.0796
73101		GOSHENTHV		118.05	1.076	0.025	909.9	4.450	5.098	10.03	1.146	5.021	6.113	12.16	1.217	4.811	5.761	0.0118	0.1183	0.0023	0.0779
7652		GODERICH		27.600	1.051	0.067	327.3	6.848	6.848	6.95	1.000	7.035	7.035	9.17	1.000	6.946	7.234	0.0462	0.3211	0.0098	0.2954
7630		CONST B1		27.600	1.051	0.067	138.1	2.888	2.888	14.67	1.000	3.121	3.166	15.99	1.015	3.023	3.395	0.0519	0.7612	0.0284	0.5909
7628		CONST B2		27.600	1.051	0.067	137.9	2.886	2.886	14.80	1.000	3.118	3.167	16.14	1.016	3.020	3.391	0.0515	0.7619	0.0281	0.5915
7722		SEAFORTH		27.600	1.051	0.067	666.4	13.939	13.994	22.78	1.004	10.798	11.728	25.78	1.086	12.851	8.813	0.0069	0.1577	0.0098	0.2954
7666		EN BRYAN		4.1600	1.000	0.067	83.9	11.649	11.649	13.48	1.000	12.619	12.619	0.02	1.000	12.213	13.764	0.0884	1.1914	*****	0.9168
7732		ST M CEM		4.1600	1.000	0.067	181.4	25.172	25.172	10.66	1.000	29.657	29.657	0.03	1.000	28.298	36.087	0.0517	0.5514	53.0263	0.3012
7733		ST MARYS		13.800	1.029	0.067	279.9	11.709	11.709	15.56	1.000	5.625	6.226	28.63	1.107	10.307	3.701	0.0236	0.3677	0.0329	1.5608
7650		LKHR WTP		4.1600	1.000	0.067	94.2	13.069	13.069	6.20	1.000	0.000	0.000	1.00	1.000	11.318	0.000	0.1713	1.0619	*****	*****
7651		G BD EB1		27.600	1.051	0.067	109.6	2.292	2.292	5.87	1.000	2.638	2.638	6.95	1.000	2.521	3.107	0.1634	0.9592	0.0330	0.5820
7682		G BD EB2		27.600	1.051	0.067	109.6	2.292	2.292	5.87	1.000	2.638	2.638	6.95	1.000	2.521	3.107	0.1634	0.9592	0.0330	0.5820
7701		MC GILLIV		4.1600	1.000	0.067	113.7	15.787	15.787	8.18	1.000	0.000	0.000	1.00	1.000	13.672	0.000	0.1075	0.8791	*****	*****
7624		CENTRALI		27.600	1.051	0.067	268.2	5.611	5.611	7.48	1.000	6.112	6.112	9.41	1.000	5.906	6.713	0.0524	0.3918	0.0098	0.2954
6206		RUSH		13.800	1.029	0.067	422.5	17.676	17.676	19.41	1.000	19.074	19.987	20.55	1.048	18.482	20.713	0.0125	0.2436	0.0079	0.1900
6008		DETWEIBY		27.600	1.051	0.067	697.8	14.597	14.597	18.92	1.000	6.813	7.095	19.65	1.041	12.835	4.444	0.0080	0.1506	0.0333	0.6668
6795		WINGHAM		44.000	1.045	0.067	819.5	10.753	11.199	30.29	1.041	11.210	12.829	33.76	1.144	11.000	11.708	0.0042	0.1275	0.0024	0.1119
7737		STRATFOR		27.600	1.051	0.067	686.4	14.359	14.583	25.12	1.016	10.689	12.202	33.36	1.141	13.143	8.514	0.0061	0.1531	0.0063	0.3108
73061		BLUEWT		34.500	1.000	0.067	531.4	8.893	8.893	21.39	1.000	0.002	0.002	1.00	1.000	7.701	0.001	0.0088	0.1882	*****	*****
73102		GOSHENTLV		34.500	1.000	0.067	631.6	10.569	10.569	12.91	1.000	0.002	0.002	1.00	1.000	9.153	0.001	0.0123	0.1583	*****	*****

Scenario 3: Incorporate Bluewater WEC only (Results in Table B3)

Built off of scenario #1.

Generation:

Tx Connected

<u>Zone</u>	<u>Project Name</u>	<u>CAA ID</u>	<u>Generation Type</u>	<u>Capacity (KW)</u>
Bruce	Bluewater Wind Energy Centre	2011-440	Wind	60,000

Transmission System Upgrades

- Same as scenario 1

System Operating Conditions

Maximum voltages on the buses

Table B3. Max bus faults after incorporating Bluewater WEC only.

BUS#	X--	NAME	--X	BASKV	MAX	V	TIME	FLTMVA	BRKER	X-----	THREE	PHASE	FAULT	-----X	X--	LINE	TO	GROUND	FAULT	--X	X-	LLG	SYMM	I	-X			
											SYMM	I	ASYMM	I	X/R	FACTOR	SYMM	I	ASYMM	I	X/R	FACTOR	PHASE	3IAC	RPOS	XPOS	RZERO	XZERO
7350		GODERICH		118.05	1.076	0.025	734.2	3.591			3.787	4.52	1.055	2.319	2.389	3.65	1.030	3.225	1.713	0.0324	0.1466	0.1218	0.3876					
7334		CONSTANC		118.05	1.076	0.025	1168.9	5.717			6.099	5.27	1.067	4.012	4.198	4.38	1.046	5.186	3.091	0.0175	0.0921	0.0550	0.2094					
7306		SEAFORTH		118.05	1.076	0.025	2501.4	12.234			14.879	14.32	1.216	14.490	18.766	16.26	1.295	13.826	17.767	0.0030	0.0430	0.0007	0.0229					
7110		SEAF B22		220.00	1.136	0.025	2909.6	7.636			9.003	12.07	1.179	7.076	9.101	15.51	1.286	7.389	6.592	0.0032	0.0390	0.0017	0.0483					
7111		SEAF B23		220.00	1.136	0.025	2913.3	7.646			9.015	12.07	1.179	7.224	9.287	15.45	1.285	7.454	6.847	0.0032	0.0390	0.0015	0.0458					
7356		EN BRYAN		118.05	1.076	0.025	604.6	2.957			3.121	4.58	1.056	1.813	1.879	3.93	1.037	2.643	1.307	0.0389	0.1780	0.1436	0.5149					
7383		ST M CEM		118.05	1.076	0.025	500.9	2.450			2.658	6.36	1.085	1.445	1.508	4.26	1.044	2.183	1.025	0.0338	0.2148	0.1889	0.6628					
7384		ST MARL7		118.05	1.076	0.025	513.4	2.511			2.764	7.32	1.101	1.475	1.544	4.38	1.046	2.237	1.044	0.0286	0.2096	0.1874	0.6510					
7385		ST MARD8		118.05	1.076	0.025	582.2	2.847			3.112	6.84	1.093	1.527	1.616	4.91	1.058	2.520	1.043	0.0270	0.1848	0.1564	0.6644					
7351		LKRR WTP		118.05	1.076	0.025	375.7	1.838			1.887	2.45	1.027	1.158	1.177	2.76	1.016	1.647	0.845	0.1169	0.2864	0.2603	0.7907					
7349		G BEND E		118.05	1.076	0.025	388.6	1.901			1.953	2.50	1.028	1.199	1.219	2.79	1.017	1.703	0.876	0.1107	0.2769	0.2502	0.7629					
7375		MCGILLIV		118.05	1.076	0.025	481.0	2.352			2.445	3.60	1.040	1.465	1.505	3.49	1.027	2.106	1.064	0.0622	0.2237	0.1846	0.6302					
7332		CENTRL7S		118.05	1.076	0.025	613.5	3.001			3.146	4.14	1.048	1.931	1.988	3.61	1.029	2.694	1.423	0.0423	0.1754	0.1420	0.4669					
5600		RUSH D8S		118.05	1.076	0.025	2830.7	13.844			15.176	7.04	1.096	11.241	12.206	6.18	1.086	12.889	9.462	0.0054	0.0380	0.0119	0.0644					
5601		RUSH D10		118.05	1.076	0.025	2869.4	14.034			15.432	7.25	1.100	11.299	12.295	6.28	1.088	13.041	9.456	0.0052	0.0375	0.0119	0.0647					
5404		DETWEILE		118.05	1.076	0.025	4971.9	24.316			30.680	17.74	1.262	27.173	36.338	19.78	1.337	26.086	30.790	0.0012	0.0216	0.0005	0.0148					
5103		DETWEILE		220.00	1.136	0.025	8776.1	23.031			26.995	11.64	1.172	19.868	25.376	14.87	1.277	21.774	17.469	0.0011	0.0129	0.0008	0.0191					
6557		WINGHB22		220.00	1.136	0.025	2732.4	7.171			8.367	11.32	1.167	5.237	5.649	5.85	1.079	6.543	4.124	0.0037	0.0416	0.0218	0.0876					
6558		WINGHB23		220.00	1.136	0.025	2738.8	7.188			8.386	11.32	1.167	5.285	5.697	5.81	1.078	6.566	4.179	0.0037	0.0415	0.0218	0.0863					
7192		STRFB22		220.00	1.136	0.025	3158.3	8.288			9.414	9.45	1.136	6.151	6.732	6.57	1.095	7.583	4.890	0.0038	0.0360	0.0145	0.0735					
7193		STRFB23		220.00	1.136	0.025	3176.3	8.336			9.488	9.59	1.138	6.190	6.777	6.58	1.095	7.627	4.923	0.0037	0.0358	0.0145	0.0730					
73060		BLUEWTAP		118.05	1.076	0.025	1067.6	5.222			6.264	13.31	1.200	5.604	7.173	15.00	1.280	5.440	6.048	0.0076	0.1008	0.0036	0.0801					
7652		GODERICH		27.600	1.051	0.067	324.1	6.780			6.780	6.96	1.000	6.988	6.988	9.16	1.000	6.890	7.208	0.0466	0.3243	0.0098	0.2954					
7630		CONST B1		27.600	1.051	0.067	137.1	2.869			2.869	14.61	1.000	3.106	3.149	15.92	1.014	3.006	3.386	0.0525	0.7664	0.0284	0.5909					
7628		CONST B2		27.600	1.051	0.067	137.0	2.866			2.866	14.73	1.000	3.103	3.150	16.07	1.015	3.003	3.382	0.0521	0.7671	0.0281	0.5915					
7722		SEAFORTH		27.600	1.051	0.067	584.3	12.223			12.223	19.24	1.000	10.068	10.727	22.95	1.065	11.418	8.559	0.0093	0.1799	0.0098	0.2954					
7666		EN BRYAN		4.1600	1.000	0.067	82.9	11.506			11.506	13.12	1.000	12.506	12.506	0.02	1.000	12.091	13.697	0.0919	1.2062	*****	0.9168					
7732		ST M CEM		4.1600	1.000	0.067	176.9	24.547			24.547	10.66	1.000	29.076	29.076	0.03	1.000	27.744	35.653	0.0530	0.5654	53.0263	0.3012					
7733		ST MARYS		13.8000	1.029	0.067	277.9	11.627			11.627	15.36	1.000	5.612	6.201	28.36	1.105	10.238	3.699	0.0241	0.3703	0.0329	1.5608					
7650		LKRR WTP		4.1600	1.000	0.067	92.8	12.882			12.882	6.12	1.000	0.000	0.000	1.00	1.000	11.156	0.000	0.1760	1.0773	*****	*****					
7651		G BD EB1		27.600	1.051	0.067	107.6	2.250			2.250	5.79	1.000	2.601	2.601	6.84	1.000	2.484	3.081	0.1688	0.9770	0.0330	0.5820					
7682		G BD EB2		27.600	1.051	0.067	107.6	2.250			2.250	5.79	1.000	2.601	2.601	6.84	1.000	2.484	3.081	0.1688	0.9770	0.0330	0.5820					
7701		MCGILLIV		4.1600	1.000	0.067	111.7	15.509			15.509	7.97	1.000	0.000	0.000	1.00	1.000	13.431	0.000	0.1122	0.8949	*****	*****					
7624		CENTRALI		27.600	1.051	0.067	258.1	5.399			5.399	7.13	1.000	5.943	5.943	8.94	1.000	5.726	6.609	0.0571	0.4072	0.0098	0.2954					
6206		RUSH		13.800	1.029	0.067	421.9	17.649			17.649	19.39	1.000	19.054	19.963	20.53	1.048	18.459	20.701	0.0126	0.2439	0.0079	0.1900					
6008		DETWEIBY		27.600	1.051	0.067	696.3	14.566			14.566	18.89	1.000	6.809	7.089	19.64	1.041	12.809	4.443	0.0080	0.1509	0.0333	0.6668					
6795		WINGHAM		44.000	1.045	0.067	731.0	9.592			9.855	27.49	1.027	10.340	11.622	30.96	1.124	10.022	11.215	0.0052	0.1430	0.0024	0.1119					
7737		STRATFOR		27.600	1.051	0.067	681.7	14.260			14.445	24.61	1.013	10.652	12.121	32.87	1.138	13.060	8.502	0.0063	0.1542	0.0063	0.3108					
73061		BLUEWT		34.500	1.000	0.067	524.3	8.774			8.774	21.15	1.000	0.002	0.002	1.00	1.000	7.598	0.001	0.0090	0.1907	*****	*****					

Table B4. Short circuit levels (3-phase fault) compared with breaker ratings.

BUS#	NAME	kV	Bluewater WEC O/S		Bluewater WEC I/S		Circuit Breaker Lowest Ratings	
			3-Phase Fault Type (kA)				Symmetrical	Asymmetrical
			Symmetrical	Asymmetrical	Symmetrical	Asymmetrical		
7652	Goderich TS BY	27.6	6.7	6.7	6.8	6.8	8.1	8.4
7306	Seaforth TS	115	11.6	13.9	13.7	17.0	30.9	35.8
7383	St. Mary's Cement CTS	115	2.4	2.6	2.6	2.8	21.0	28.7
7733	St. Mary's TS BY	13.8	11.6	11.6	11.7	11.7	15.9	16.7
7651/7682	Grand Bend East DS	27.6	2.2	2.2	2.3	2.3	12.0	12.1
7624	Centralia TS	27.6	5.4	5.4	5.6	5.6	8.1	8.4
7722	Seaforth TS BQ	27.6	12.1	12.1	13.9	14.0	15.9	16.7
5404	Detweiler TS	115	24.3	30.6	24.7	31.2	34.7	39.8
6008	Detweiler TS BY	27.6	14.6	14.6	14.6	14.6	22.0	22.3
6795	Wingham TS BY	44	9.6	9.8	10.8	11.2	12.5	13.3
7737	Stratford TS BY	27.6	14.2	14.4	14.4	14.6	15.9	16.7
6206	Rush MTS	13.8	17.6	17.6	17.7	17.7	18.0	18.2

Note: Bluewater WEC O/S is the 2011 Base Case with no FIT generation
 Bluewater WEC I/S includes all transmission connected FIT project that was approved by OPA including Bluewater WEC.

Table B5. Short circuit levels (line-to-ground fault).

BUS#	NAME	kV	Bluewater WEC O/S		Bluewater WEC I/S	
			L-G Fault Type (kA)			
			Symmetrical	Asymmetrical	Symmetrical	Asymmetrical
7652	Goderich TS BY	27.6	7.0	7.0	7.0	7.0
7306	Seaforth TS	115	13.6	17.6	16.3	21.4
7383	St. Mary's Cement CTS	115	1.4	1.5	1.6	1.7
7733	St. Mary's TS BY	13.8	5.6	6.2	5.6	6.2
7651/7682	Grand Bend East DS	27.6	2.6	2.6	2.6	2.6
7624	Centralia TS	27.6	5.9	5.9	6.1	6.1
7722	Seaforth TS BQ	27.6	10.0	10.6	10.8	11.7
5404	Detweiler TS	115	27.1	36.2	27.5	36.9
6008	Detweiler TS BY	27.6	6.8	7.1	6.8	7.1
6795	Wingham TS BY	44	10.3	11.6	11.2	12.8
7737	Stratford TS BY	27.6	10.6	12.1	10.7	12.2
6206	Rush MTS	13.8	19.1	20.0	19.1	20.0

Note: Bluewater WEC O/S is the 2011 Base Case with no FIT generation
 Bluewater WEC I/S includes all transmission connected FIT project that was approved by OPA including Bluewater WEC.

CONNECTION PROJECT IMPACTS ON TRANSMISSION SYSTEM

60. No network reinforcements are required for the Facility. The Applicant does not attribute any market efficiency benefits to the Facility and therefore has not included any quantification of these benefits.