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## **PROJECT SUMMARY - WINDFARM**

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The Applicant is proposing to construct and operate a 43-turbine, 98.9 MW wind farm (the "Greenwich Windfarm") on approximately 4,000 hectares of Crown land, located partially within the Township of Dorion and partially on unincorporated land. The Greenwich Windfarm will comprise:

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- 43 Siemens SWT-2.3-101 turbines with a nameplate capacity of 2.3 MW each;

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- a 34.5 kV collector system ("Collector System") comprising aboveground as well as buried feeder lines which connect all of the turbines to the centrally located Greenwich Windfarm Substation;

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- access roads connecting the main public road to the turbine locations; and

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- a centrally located storage yard and operations and maintenance building situated next to the Greenwich Windfarm Substation.

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1           **PROJECT SUMMARY – DISTRIBUTION AND TRANSMISSION FACILITIES**

2           **Transmission Line**

3           The Applicant proposes to construct a double circuit, overhead 230 kV transmission line  
4           that will extend approximately 10.3 km from the Greenwich Windfarm Substation to the  
5           Greenwich Windfarm Switching Station. The Greenwich Windfarm Switching Station will  
6           in turn be the point of interconnection with an existing double circuit 230 kV  
7           transmission line owned and operated by Hydro One.

8           **Collector System**

9           The Collector System will comprise underground 34.5 kV electrical power lines running  
10          among the turbines and routed to the Greenwich Windfarm Substation (aboveground  
11          lines will be used when it is technically impossible or difficult to bury the lines).  
12          Generally, each row of turbines will be interconnected with a combination of  
13          underground and aboveground wiring to a local connection point, with each connection  
14          point then connected to the substation by an aboveground line running along the main  
15          access roads. The Collector System routing will generally follow the access roads.

16          **Substation**

17          The Greenwich Windfarm Substation will step up the voltage from 34.5 kV to 246 kV  
18          and will comprise two HICO equivalent, 3 phase 60 Hz 40/50/60 MVA transformers  
19          surrounded by fencing. The substation will also house protection and control equipment  
20          as required by the *Transmission System Code* and as determined by the  
21          interconnection process with IESO and Hydro One.

22          **Switching Station**

23          The Greenwich Windfarm Switching Station will comprise two 230 kV breakers and  
24          motorized disconnect switches with protection and monitoring provided by multi-function  
25          micro-processor based relays.

26          Both the switches and the breakers will meet the technical specifications and  
27          requirements of the Independent Electricity System operator ("IESO") Market Rules and  
28          the *Transmission System Code*.

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## PROJECT SUMMARY – PROJECT SCHEDULE

Greenwich Windfarm, together with the Greenwich Windfarm Substation, the Greenwich Windfarm Transmission Line and the Greenwich Wind Farm Switching Station, are scheduled to be commissioned during the period from September-November 2010. In order to meet this schedule, Greenwich Windfarm, LP has set a number of milestone target dates and is proceeding with a detailed approvals and construction schedule.

Important Milestone Dates are as follows:

- Environmental Screening Report Notice of Completion: Completed
- Release of the Statement of Completion: August 18, 2009
- Certificate of Approval (Air): September 10, 2009
- Obtaining Final Crown Land Rights from MNR: October 1, 2009
- Municipal Approvals Process & Zoning: Completed
- IESO System Impact Assessment Completion: September 11, 2009
- Hydro One Customer Impact Assessment Completion: September 29, 2009
- Leave to Construct Obtained: November 6, 2009
- Generator Licence Obtained: October 29, 2009
- Construction Mobilization: May 14, 2010
- Construction Phase: May 14-Nov. 23, 2010
- Greenwich Windfarm Commissioning & Start-Up: Sept. 6-Nov. 23, 2010

A more detailed project schedule is included in this Tab on the next page.

The project schedule is based on the current permitting process for wind farms in Ontario. The imminent introduction of a Renewable Energy Approval ("REA") process under the *Green Energy and Green Economy Act, 2009*, will likely introduce some changes to the schedule.

The REA process is not expected to affect any of the interconnection activities for Greenwich Windfarm.

RES - Greenwich Wind Farm  
General Schedule

ID	Task Name	Start	Finish	CR 4, 2008	CR 1, 2009	CR 2, 2009	CR 3, 2009	CR 1, 2010	CR 2, 2010	CR 3, 2010	CR 1, 2011	CR 2, 2011
1	Greenwich Windfarm Permitting	Thu 11/08	Fri 8/17/10									
2	Municipal and CA Approvals	Thu 11/08	Mon 10/12/09									
3	Zoning By-law Amendment (Township of Doron)	Thu 11/08	Wed 2/4/09									
4	Conservation Authority (Lakehead) Generic Regulation Permits	Wed 8/19/09	Tue 9/29/09									
5	Consent for Lease Agreements	Tue 8/18/09	Mon 10/12/09									
6	Road User Agreement	Tue 8/18/09	Mon 10/12/09									
7	Provincial Environmental Screening & CEAA	Thu 11/08	Fri 4/2/10									
8	Release Draft ESR to MNR	Mon 5/25/09	Mon 5/25/09									
9	Public Release of Draft ESR (starts 30 day review period)	Mon 6/08/09	Fri 7/3/09									
10	Public Information Centre	Wed 6/17/09	Wed 6/17/09									
11	Notice of Study Completion	Mon 7/13/09	Mon 7/13/09									
12	30 Day Public Comment Period	Mon 7/13/09	Tue 8/11/09									
13	Statement of Completion	Tue 8/18/09	Tue 8/18/09									
14	Final Notices Consultations	Thu 11/08	Fri 10/30/09									
15	MOE Certificate of Approval	Wed 8/19/09	Tue 8/29/09									
16	Clearance under the Heritage Act	Fri 7/31/09	Thu 9/10/09									
17	Batch Permit Permits (Permit to take water and EPA C of A (air))	Wed 7/15/09	Tue 9/15/09									
18	Section 53 Ontario Water Resources Act Certificate of Approval	Mon 7/20/09	Fri 9/18/09									
19	Transportation Permits (e.g. Overweight/Overheight Permit or Special Vehicle Transport)	Tue 8/18/09	Mon 10/12/09									
20	TransCan - Aeronautical Obstruction Clearance Permit	Mon 6/1/09	Fri 7/10/09									
21	NorCan Aviation Land Use Proposal	Mon 6/1/09	Fri 7/10/09									
22	Fisheries Act Authorization for Watercourse crossings (or Letter of Intent)	Wed 7/15/09	Tue 9/15/09									
23	EcoENERGY Applications - Notice of Project Application/Technical Project I	Mon 7/13/09	Fri 4/2/10									
24	CEAA Screening	Mon 6/24/09	Thu 11/2/09									
25	MNR Land Use Approval for Crown Lands (needed permitting) TBC with	Mon 6/15/09	Thu 11/2/09									
26	Plan of Development (per P.L. 10/04)	Mon 6/15/09	Fri 7/24/09									
27	Public Lands Act Work Permits (P.L. 03/04)	Fri 8/21/09	Thu 10/1/09									
28	Utility Corridor Authorization (P.L. 10/03)	Fri 8/21/09	Thu 10/1/09									
29	Easements (Grants of)	Fri 8/21/09	Thu 10/1/09									
30	Land Disposition Application (P.L. 02/01)	Fri 8/21/09	Thu 10/1/09									
31	Roads and Trails work permit under Reg. 453/96 of the Public Lands Act	Fri 8/21/09	Thu 10/1/09									
32	Water Crossings Work Permit under Reg. 453/96 of the Lakes & Rivers Imp	Fri 8/21/09	Thu 10/1/09									
33	Work Permit for Watercourse Crossings under the Public Lands Act	Fri 8/21/09	Thu 10/1/09									
34	Forest Resource License under Section 27 of the Crown Forest Sustainable	Fri 8/21/09	Thu 10/1/09									
35	Overlapping Agreement with Sustainable Forest License holder including se	Fri 8/21/09	Thu 10/1/09									
36	Approval to commence cutting operations under Section 44 of the Crown Fo	Fri 8/21/09	Thu 10/1/09									
37	Authorization for temporary holding yard for harvested wood	Fri 8/21/09	Thu 10/1/09									
38	Authorization to haul Unloaded Crown Forest Resources	Fri 8/21/09	Thu 10/1/09									
39	Removal of Mine Surface Rights	Fri 8/21/09	Thu 10/1/09									
40	Authority for hunting closure on Crown Lands	Fri 8/21/09	Thu 10/1/09									
41	Burning Permit under Section 5 of Reg. 207/96 of the Forest Fire Prevention	Fri 8/21/09	Thu 11/2/09									
42	Aggregate Permit under Section 34(1) of the Aggregate Resources Act	Fri 8/21/09	Thu 11/2/09									
43	Interconnection	Mon 6/15/09	Fri 9/17/10									
44	IESO Process	Mon 6/15/09	Fri 9/17/10									
45	System Impact Study	Mon 6/15/09	Fri 9/17/10									
46	Submission of SIA form to IESO	Mon 6/15/09	Fri 9/17/10									
47	Preparation of initial requirements for HONI CIA (part SIA)	Mon 6/15/09	Fri 7/17/09									
48	Preparation of final SIA	Mon 6/15/09	Fri 9/4/09									
49	Notification of Conditional approval by IESO	Mon 6/15/09	Fri 9/11/09									
50	Hydro One connection process	Mon 6/15/09	Fri 9/17/10									
51	Submission of CIA form to HONI	Mon 6/15/09	Mon 6/15/09									
52	Customer impact assessment in Draft form	Mon 7/20/09	Fri 8/7/09									
53	Preparation of planning specifications	Mon 8/10/09	Fri 9/18/09									
54	Preparation and execution of Estimate agreement	Mon 8/24/09	Fri 10/2/09									
55	Customer input and final CIA	Mon 8/10/09	Fri 9/25/09									
56	Connection Estimates by HONI	Mon 10/5/09	Fri 1/22/10									
57	Preparation of CCRA draft	Mon 12/8/10	Fri 2/26/10									
58	Review and execution of CCRA by RES	Mon 3/1/10	Fri 3/26/10									
59	Connection agreement execution (30 days before connection)	Fri 3/26/10	Fri 3/26/10									
60	HONI Construction on infrastructure	Mon 3/29/10	Fri 9/17/10									
61	Backfeed	Fri 9/17/10	Fri 9/17/10									
62	Ontario Energy Board Process	Fri 7/17/09	Fri 11/6/09									
63	Submission of Generator License Application	Fri 7/17/09	Fri 7/17/09									
64	Review by Board of Generator License Application	Fri 7/17/09	Thu 10/29/09									
65	Obtain Generator license	Thu 10/29/09	Thu 10/29/09									
66	Leave to construct	Mon 8/10/09	Fri 11/6/09									
67	Submission of LCC to OEB	Mon 8/10/09	Mon 8/10/09									
68	Review of LCC by OEB and hearing	Mon 8/10/09	Fri 11/6/09									
69	Grant of LCC	Mon 8/10/09	Thu 10/29/09									
70	Transmission Line and related infrastructure	Mon 11/23/09	Fri 9/17/10									
71	Mobilization	Mon 5/3/10	Fri 5/14/10									
72	Order of substation and other major equipment	Mon 11/23/09	Mon 11/23/09									
73	Construction of substation	Mon 5/17/10	Fri 9/17/10									
74	Installation of Grid transformer in substation	Mon 8/21/10	Fri 9/17/10									
75	Substation ready for energization	Fri 9/17/10	Fri 9/17/10									
76	Construction of Switchyard	Wed 5/19/10	Fri 9/17/10									
77	Construction of overhead line	Wed 5/19/10	Fri 9/17/10									
78	Windfarm Infrastructure	Mon 4/19/10	Tue 11/8/11									
79	Site clearing	Mon 4/19/10	Fri 5/14/10									
80	Road construction	Mon 5/17/10	Fri 9/10/10									
81	Road grading and site restoration	Wed 11/10/10	Tue 11/8/11									
82	Foundation materials and construction	Mon 5/17/10	Fri 9/10/10									
83	Trailer delivery	Mon 8/16/10	Wed 10/13/10									
84	Turbine erection	Mon 8/23/10	Tue 11/9/10									
85	Turbine commissioning & start-up	Mon 9/6/10	Tue 11/23/10									