

PROJECT SUMMARY - WINDFARM

The Applicant is proposing to construct and operate a 43 turbine, 98.9 MW wind farm (the "Talbot Windfarm") on approximately 4,000 hectares of private land, located in the Municipality of Chatham-Kent ("Chatham-Kent"). The Talbot Windfarm will comprise:

- 43 Siemens SWT-2.3-101 turbines with a nameplate capacity of 2.3 MW each;
- a buried (except where technically impossible or difficult) 34.5 kV collector system ("Collector System") connecting all of the turbines to the centrally located Talbot Windfarm Substation;
- access roads connecting municipal roads to the turbine locations; and
- a centrally located storage yard and operations and maintenance building situated next to the Talbot Windfarm Substation.

1 **PROJECT SUMMARY - TRANSMISSION FACILITIES**

2 **Transmission Line**

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

8 **Collector System**

9 The Collector System will be comprised of underground 34.5 kV electrical power lines
10 running between the turbines and routed to the Talbot Windfarm Substation
11 (aboveground lines will be used when it is technically impossible or difficult to bury the
12 lines). Generally, each row of turbines will be interconnected with underground wiring to
13 a local connection point, with each connection point then connected to the substation,
14 by an underground line running in the municipal right-of-way. The Collector System will
15 generally follow the access roads as well as the municipal roads.

16 **Substation**

17 The Talbot Windfarm Substation will step up the voltage from 34.5 kV to 230 kV and will
18 comprise a HICO equivalent, 3 phase 60 Hz 33/44/55 MVA transformer surrounded by
19 a sound-barrier wall. The substation will also house some protection and control
20 equipment as required by the Transmission System code and through the
21 interconnection process with the IESO and Hydro-One Networks Inc.

22 **Switching Station**

23 The Talbot Windfarm Switching Station will comprise: (i) one or two disconnect-type
24 switches with a continuous maximum operating voltage of 250 kV and a continuous
25 current rating of 1,200 A; and (ii) type SF6 breakers with a continuous operating voltage
26 of 150 kV, a rated three-cycle interruption time of 50 ms, a continuous current rating of
27 1,200 A and a short circuit symmetrical duty of 63 kA.

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

PROJECT SUMMARY – PROJECT SCHEDULE

Talbot Windfarm, together with the Talbot Windfarm Substation, the Talbot Windfarm Transmission Line and the Talbot Wind Farm Switching Station, are scheduled to be commissioned in November 2010. In order to meet this schedule, Talbot 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 Review Report Notice of Completion: May 1, 2009
- Release of the Statement of Completion: August 4, 2009
- Certificate of Approval (Air): August 28, 2009
- Municipal Approvals Process & Zoning: September 15, 2009
- IESO System Impact Assessment Completion: September 22, 2009
- Hydro One Customer Impact Assessment Completion: September 29, 2009
- Leave to Construct Obtained: October 13, 2009
- Generator Licence Obtained: October 27, 2009
- Construction Mobilization: May 28, 2010
- Construction Phase: May 2010-November 2010
- Talbot Windfarm Commissioning & Start-Up: November 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. It will also likely change some of the permitting milestones listed above, most notably the municipal zoning and permitting requirements.

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



RES - Talbot Wind Farm Transmission line permitting and construction

