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**BY E-MAIL ONLY**

July 25, 2011

Ms. Kirsten Walli  
Board Secretary  
Ontario Energy Board  
2300 Yonge St, 27<sup>th</sup> Fl  
P.O. Box 2319  
Toronto, ON M4P 1E4

Dear Ms. Walli:

**Re: Application by Grand Renewable Wind LP  
For Leave to Construct Transmission Facilities  
Board File No. EB-2011-0063**

Please find attached Board Staff interrogatories for the above proceeding for distribution to the applicant and all parties in this proceeding.

Yours truly,

*Original signed by*

Nabih Mikhail  
Project Advisor, Electricity Facilities & Infrastructure



## **BOARD STAFF INTERROGATORIES**

**GRAND RENEWABLE WIND LP  
LEAVE TO CONSTRUCT TRANSMISSION  
FACILITIES EB-2011-0063**

**July 25, 2011**

## **Interrogatory # 1 General**

**Reference:** Exh. A/ Tab 2/Sch. 1/paragraphs 2, 3 & 4

**Preamble:**

- At the Reference in paragraph 2, it is stated in part that:

“The Applicant is a limited partnership that was formed ....The Applicant is owned by two limited partners each holding 49.99% interest, respectively, being Samsung Renewable Energy Inc. ("**SRE**") and Pattern Grand LP Holdings LP ("**Pattern LP**"), as well as its general partner, Grand Renewable Wind GP Inc., which holds a 0.02% interest. The corporate ownership structure of the Applicant can be found at Exhibit A-3-1.”
- At the Reference in paragraph 3, it is stated in part that:

“SRE and Samsung C&T Corporation are actively engaged in the renewable energy business in Ontario, including renewable energy generation development, solar cell manufacturing, wind turbine generator manufacturing, and related engineering, procurement and construction works.”
- At the Reference in paragraph 4, it is stated in part that:

“Pattern LP ...has been actively engaged in the renewable energy business in Ontario and other places in Canada, including development of wind farms, arrangement of business deals in relation to construction, operation and maintenance of wind farms.”

**Question/Request:**

- (i) What is GRW's (or that of its limited partners) experience in constructing and operating a transmission interconnection facility in Ontario, and/or another jurisdiction in Canada? If applicable, please provide examples of similar projects undertaken in the above-mentioned jurisdictions, discussing project management, construction, operation and maintenance of these transmission facilities.
- (ii) If question (i) is not applicable please discuss by enlarging the discussion to other projects in North America that display similar requirements as the transmission facilities that are the subject of this Application.
- (iii) Please indicate whether GRW intends to make use of contractors. Please identify what the capabilities of any contractors are or would be and provide a summary of the experience of each contractor.

## **Interrogatory # 2: Permits, Reports and Other Applications**

- Reference:** (a) Exh. B/Tab 5/Sch. 2  
(b) Exh. B/Tab 5/Sch. 3  
(c) Exh. B/Tab 6/Sch. 1/Paragraph 90  
(d) Exh. B/Tab 7/Sch. 1/Paragraphs 93, 94

### **Preamble:**

- At Reference (a) a draft SIA has been provided.
- At Reference (b) a draft CIA has been provided.
- Reference (c) provides a construction schedule for the transmission facilities and the Grand Renewable Energy Park (the “GREP”). At Reference (d), paragraph 94, Grand Renewable Wind LP (the “Applicant” or “GRW”) indicates that it intends to register as a market participant with the IESO.
- At Reference (d) paragraph 93, a list of permits and licences that will be required during the various phases is provided.

### **Question/Request:**

- (i) Please indicate when a final SIA and CIA are expected to be completed? please file them as soon as they are issued.
- (ii) Please update Reference (c) the “Construction and In-Service Schedule”. What is the expected in-service date for the transmission facilities?
- (iii) Please discuss the Applicant’s strategy to deal with delays for either the GREP or the proposed Facility construction. Indicate how this kind of contingency is incorporated into the construction schedule that has been submitted. Does the Applicant foresee any cost consequences for delays? How does the Applicant intend to address such cost consequences?.
- (iv) Please update the list of required permits and approvals and include the current status and the timeline for obtaining each permit and approval.
- (v) Please update the Board on the GRW’s request to obtain an OEB generator licence.
- (vi) Please update the Board on GRW’s intent to register with the IESO as a market participant.

## **Interrogatory # 3: Option Agreement and Ground Leases**

- Reference:** (a) Exh. A/Tab 2/Sch. 1/pp. 3-4/paragraph 13  
(b) Exh. B/ Tab 3/ Sch. 1/pp. 1-2/ paragraphs 41, 43

### **Question/Request:**

- (i) Please provide the status of the “option agreements” described in Reference (a), and also provide an update on the negotiation with the Ontario Realty

Corporation (“ORC”) in order to acquire rights to lands held by the Ministry of Infrastructure (to which ORC acts as land manager) to build the Collector Substation and a portion (about 5%) of the Transmission Line.

- (ii) Please provide an update on the negotiations to obtain the three Ground Leases described in paragraph 41 of Reference (b), and indicate whether any of these Ground Leases are in place.
- (iii) For the Ground Leases that are executed, please locate them by referring to Paragraph 43 of the noted Reference (a), to identify them by Landowner and Parcel.

#### **Interrogatory # 4: Land Matters – Haldimand County ROW Agreement**

- Reference:**
- (a) Exh. A/Tab 2/Sch. 1/p. 4/paragraphs 14 and 15
  - (b) Exh. B/ Tab 3/ Sch. 1/p. 4/ paragraphs 54
  - (c) Exh. B/Tab 3/Sch. 3, Form of Easement – Haldimand ROW

**Questions:**

- (i) Please indicate whether or not an Easement Agreement (the “ROW Agreement”) as indicated in Reference (b), using the form shown in Reference (c), has been executed between the Applicant and Haldimand County in regard to the Haldimand ROW.

#### **Interrogatory # 5: Land Matters- List of Crossings**

- Reference:**
- (a) Exh. B/ Tab 3/ Sch. 1/p. 1/ paragraph 37
  - (b) Exh. B/Tab 3/Sch. 1/ paragraphs 58 and 59

**Preamble:**

At Reference (a), the reason for not providing the detailed list of crossings was given as follows:

*“the routing for the Transmission Line has recently been finalized”.*

**Questions:**

- (i) As four months had already passed since the noted evidence in Reference (a) was provided, please provide a list of crossings, preferably on a map showing the location of the proposed transmission poles on County Road 20. If a list is not available, please give the reasons for the delay.
- (ii) Please clarify whether the Line Crossings identified in Reference (b), paragraph 58 constitute all the expected Transmission Line crossings referred to in Reference (a), paragraph 37.

- (iii) Please update whether Temporary crossings would be required as indicated in Reference (b), paragraph 59.
- (iv) Please identify any other existing facilities, non electrical facilities, such as water pipes, railway lines etc. in the proposed right-of-way which might affect or be affected by construction of the proposed Transmission Line. Please identify proposed approaches to avoid possible disruption for such facilities.

## **Interrogatory # 6: Land Matters – MOI Lands**

**Reference:** (a) Exh. B/ Tab 3/ Sch. 1/pp. 2-3/ paragraphs 44, 45, 46  
(b) Exh. B/Tab 3/Sch. 4

### **Preamble:**

- At Reference (a), in paragraphs 44 and 45 the Applicant indicated that the Collector Substation will be built on Ministry of Infrastructure lands (“MOI Lands”) and referred to that parcel of land as “ORC Land”. The Applicant also indicated that a licence agreement has been executed between SRE and the Ministry of Infrastructure with respect to the ORC Land and is referred to as (the “Licence Agreement”). The Applicant also indicated that the Licence Agreement provided the Applicant with an option to enter into a wind option agreement and a solar option agreement and referred to it the (each an “ORC Option Agreement”).
- At Reference (a), in paragraph 46 the Applicant indicated that the terms of the ORC Option Agreement are currently being negotiated between ORC and SRE with respect to the ORC Land. The Applicant further indicated that the ORC Option Agreement will provide the SRE with rights to design and construct a portion of the Transmission Line and the Collector Substation on the ORC Land.

### **Questions:**

- (i) Please indicate whether the wind Option Agreement has been executed? If not please provide a detailed status as to what issues are not resolved and are perhaps the reasons for the delay.
- (ii) Please verify that the wind Option Agreement includes the Portion of the Transmission Line and the Collector Substation that is built on the MOI Lands. If this is not the case, please provide a description and a map showing the location of the Transmission Line portion and the Collector Substation that is within the wind Option Agreement vis-à-vis the solar Option Agreement.

## **Interrogatory # 7: Draft Reports – REA Process**

- Reference:**
- (a) Exh. A/Tab 2/Sch. 1/p. 5/paragraph 19
  - (b) Exh. A/Tab 2/Sch. 1/p. 5/paragraph 20
  - (c) Applicant Update on the REA process, dated May 26, 2011, filed upon request of the Board.
  - (d) Exh. B/ Tab 7/ Sch. 1/paragraph 93

### **Preamble:**

- In Reference (b), the Applicant indicated that it expects to receive a decision from the Ministry of Environment regarding its REA early by September, 2011, and accordingly, the Applicant requests that the Board issue a decision in this matter at its earliest convenience.
- At Reference (c), the Applicant indicated that it has not carried out the second public meeting, and is unable to set a date for the Second Public Meeting until it has received sign off from the Ministry of Natural Resources (confirmation of natural heritage reviews) and Ministry of Tourism and Culture (review of the archaeological assessment report). The Applicant further indicated that according to the REA Regulation a Second Public Meeting can only be held once all required documentation is made public, including the two matters noted above, for at least 60 days.

### **Question/Request:**

- (i) Please provide an update on developments in regard to the Renewable Energy Approval process since the May 26, 2011 update noted in Reference (c), and also upon completion please file a copy of the REA approval with the Board.
- (ii) Please confirm that, should the RES decision result in a material alteration to the route of the transmission line as proposed in the Application to the Board, the Applicant will amend its application and file additional evidence on the revised route before commencing construction.

## **Interrogatory # 8: General – Status of Power Purchase Agreement**

**Reference:** Exh. B/Tab 1/Sch. 1/p. 1/paragraph 27

### **Question/Request:**

- (i) Please indicate whether or not the Applicant executed a Power Purchase Agreement (“PPA”) with the Ontario Power Authority. If the PPA has not been executed, please provide a description of the reasons for the delay, and a timeline when the PPA is expected to be concluded.

## **Interrogatory # 9: Application for Generation Licence and Sec. 81 of OEB Act**

**Reference:** Exh. A/Tab 2/Sch. 1/p. 2/paragraph 8

**Question/Request:**

- (i) Please indicate when the Applicant intends to apply for a generation licence and a notice of proposal to own transmission facilities pursuant to section 81 of the OEB Act.

## **Interrogatory # 10: Transmission Licence Requirement**

**Reference:** (a) Exh. A/Tab 2/Sch. 1/pp. 1-2/paragraphs 2, 6, 7, 8, and 10  
(b) Transmission System Code ("TSC"), June 10, 2010/ Section 3.05; Section 2.0.12; Section 4.1.1

**Preamble:**

**(1) Applicant's Evidence:**

- In paragraph 6 of Reference (a), it is indicated that the Grand Renewable Energy Park (the "GREP") consists of the **Wind Project**, owned by the *Applicant*, Grand Renewable Wind LP, and the **Solar Project** to owned by a yet to be formed special purpose vehicle
- In paragraph 8 of Reference (a), the Applicant stated in part that:  
*As the future owner and operator of the Wind Project, the Applicant will be deemed a generator pursuant to section 56 of the OEB Act once the Wind Project achieves commercial operation. The Applicant therefore intends to submit a notice of proposal to own transmission facilities pursuant to section 81 of the OEB Act when it applies for a generating licence from the Board. [underlining added for emphasis]*
- In paragraph 10 of Reference (a), the Applicant stated in part that:  
*While the Proposed Facility will be used to transmit the electricity generated from both the Wind Project and the Solar Project to the IESO-controlled grid..... In transmitting the electricity generated from the Solar Project, the Applicant therefore relies on section 4.0.2(1)(d) of Ontario Regulation 161/99, Definitions and Exemptions made pursuant to the OEB Act, to be exempt from the requirement to obtain a transmitter licence under section 57(b) of the OEB Act.*



It appears from the bullets that the Applicant, Grand Renewable Wind LP, who also owns the **Wind Project**, would not be the owner of the **Solar Project**, but will apply for exemption of obtaining a Transmission Licence for the proposed 230 kV transmission line.

**(2) Transmission System Code (“TSC”), June 10, 2010 Requirements**

- At Reference (b), Section 3.0.5 of the TSC states in part that:

*3.0.5 this Code applies to all licensed transmitters and to all transactions and interactions between a licensed transmitter and its customers and between a licensed transmitter and its neighbouring Ontario transmitters. .[underlining added for emphasis]*

Section 3.0.5 of the TSC, indicate that upon execution of a Connection Agreement between a licenced transmitter and a customer makes the TSC and all its obligations binding on that customer.

- At Reference (b) Section 2.0.12 of the TSC states in part that:

*2.0.12 "connection agreement" means an agreement entered into by a transmitter and a customer setting out terms and conditions pertaining to connection of the customer's facilities to the transmitter's transmission system and the provision of transmission services in relation to those customer facilities, but does not include ...."*

For the TSC requirements to be binding on the Solar Project, the Applicant would have to apply for and obtain a transmitter's licence.

**Question/Request/Clarifications:**

Given the situation presented in Preamble (2), Re the TSC set out above, please indicate whether the Applicant intends to apply for a transmission licence. If the answer is negative i.e., that the Applicant intends to apply for an exemption from obtaining a transmitter licence, please provide responses to the following:

- (i) On what basis can the Board ensure that the TSC provisions and obligations are binding on the Solar Project?
- (ii) Please provide an explanation as to the reasons the Applicant would be disadvantaged if it were obligated to obtain a transmitter's licence.
- (iii) As a privately owned line, does GRW see the possibility that there may be requests for additional connections?
- (iv) On what basis would GRW expect to address such requests and, where appropriate, facilitate such connections?

## **Interrogatory # 11: Collector Substation - Power Transformer Sizes**

**Reference:** (a) Exh. B/Tab 1/Sch. 1/p. 2/ paragraph 31 a)  
(b) Exh. B/Tab 5/Sch. 2[Draft System Impact Assessment Report ("SIA Report")/p. 7/Conclusions and Recommendations/item (3)

**Preamble:**

- At Reference (a), the Applicant indicated that the wind power transformer is rated 100/133/166 MVA while the solar power transformer is rated 65/86/108 MVA
- At Reference (b), the Draft SIA Report stated in part that:  
*"The main step up transformers (166 MVA and 108 MVA) may limit the full output for the wind and solar farms."*

**Question/Request:**

- (i) Did the Applicant initiate a dialogue with the Independent Electricity System Operator (the "IESO") to understand and quantify the extent of the limitation of evacuating the full output of the wind and solar generation with the currently proposed step up transformers? If such an exchange took place with the IESO or if the Applicant carried out such evaluation on its own, please provide a summary of the exchanges with the IESO along with the Applicant's evaluation and conclusions
- (ii) In the event that the Applicant considered increasing the capacity of the two noted transformers, please provide the revised sizes of the two transformers that were contemplated?
- (iii) In the event of a possible revision in the sizing of the noted transformers, would the manufacturer be able to meet the original delivery date?

## **Interrogatory # 12: Transmission System Specification**

**Reference:** (a) Exh. B/Tab 5/Sch. 2 -[Draft System Impact Assessment Report ("SIA Report")/p. 7/Conclusions and Recommendations/item (4)  
(b) Exh. B/Tab 5/Sch. 2 -[Draft System Impact Assessment Report ("SIA Report")/p. 14/General Requirements

**Preamble:**

- At Reference (a), the SIA report indicated that the 230 kV over-head line, underground cable and 230 kV breakers don't have required maximum continuous voltage rating of at least 250 kV.

- At Reference (b), the SIA report outlines the link between the noted requirement at Reference (a) and Appendix 4.1, reference 2 of the Market Rules which set out that requirement.

**Questions/Requests:**

- (i) Please acknowledge that you are accepting the noted requirement, and outline your proposed timeline and steps to comply with the SIA report finding.

**Interrogatory # 13: Interconnection Station and Cost  
Responsibility**

**Reference:** (a) Exh. A/ Tab 2/ Sch. 1/ p. 2/Paragraph 5 d)  
(b) Exh. A/ Tab 2/ Sch. 1/ p. 5/paragraph 21  
(c) Exh. B/Tab 5/Sch. 2 [Draft System Impact Assessment Report (“Draft SIA Report”)]/p.18/Section 3.1 and Figure 1

**Preamble:**

At Reference (a) it is indicated that the Proposed Facility include an interconnection station (the “Interconnection Station”), and in Reference (b) the Applicant indicated that it will Finance that Proposed Facility.

**Question/Request:**

- (i) Please confirm that the Applicant is responsible for the total cost of the Interconnection Station.
- (ii) Please clarify who will own that Interconnection Station, regardless of the cost responsibility for that Interconnection Station.

**Interrogatory # 14: Transmission Corridor – Environmental  
Consideration**

**Reference:** Exh. B/ Tab 3/ Sch. 1/pp. 5-6/ Paragraph 60

**Preamble:**

At the noted Reference, the Applicant states in part that:

*The electrical influences on the environment caused by high voltage power transmission lines include:*

- *The effects of electric fields;*
- *The effects of magnetic fields;*
- *Radio interference;*
- *Audible noise; and,*

- *Ground currents and corrosion effects.*

**Questions/Clarifications:**

- (i) Please confirm that the effects of the items listed above would be considered as environmental-related only to the extent that these aspects do not cause reliability or quality deterioration to the existing or near-future planned distribution system or to its distribution customers, where such deteriorations are linked to the impact of the proposed transmission system co-locating in the same ROW as the existing or near future planned distribution system.