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APR 9 2007

April 5, 2007

ONTARIO ENERGY BOARD

Ontario Energy Board
 P.O. Box 2319, 27th Floor
 2300 Yonge Street
 Toronto, Ontario
 M4P 1E4

Attn: Ms. Kirsten Walli
 Board Secretary

Dear Ms. Walli

K Walli

EB-2007-0034

OEB BOARD SECRETARY	
File No:	Sub File: 9
Panel	CC, R, B, D
Licensing	EZ, RC
Other	
00/04	4 HC, email

**RE: Procedural Order No. 1
 Canadian Renewable Energy Corporation
 Wolfe Island Wind Plant Transmission Facilities
 OEB File No. EB-2007-0034**

In reference to Procedural Order No.1 Utilities Kingston is requesting additional information from the applicant pertaining to Section 3(a) and 3 (b) of the Application and Section 4.0 of the pre filed evidence entitled *Proposed Transmission Facilities*.

Canadian Renewable Energy Corporation is proposing a 230 kv transmission line which will lie along and intersect with City of Kingston infrastructure involving the distribution of potable water and the collection of waste water for approximately 40,000 residents. We note that the proposal to bury a line of this voltage is somewhat unique as most installations of this type involve overhead construction where impacts to underground infrastructure are minimal. While from an electrical perspective such an installation is technically feasible installations of this nature raise serious concerns regarding the proximity of buried electrical transmissions lines and existing and proposed municipal pipeline infrastructure. This matter does not appear to have been appropriately reviewed, studied or analyzed for potential negative impacts nor have any mitigating measures been identified in the evidence submitted to date.

Consequently we require information from the applicant that satisfactorily demonstrates that the proposed transmission line will not now or in the future cause premature failure of our pipeline network due to corrosion from induced current and information that satisfactorily addresses worker safety issues of our crews working on pipeline infrastructure in the vicinity of the proposed transmission line during fault conditions.

To address the foregoing we would anticipate that data collection and studies be completed and analyzed by qualified personal that demonstrate that the proposed alignment of the transmission line is appropriate relative to the concerns expressed. To this end we are requesting a *Pipeline Interference Study* be undertaken that includes:

- Power line characteristics as per Appendix C of CSA Standard CAN/CSA-C22.3 No. 6-M91 (R2003)
- Soil Resistivity Measurements adjacent to our infrastructure along the alignment of the transmission line and an interpretation of those measurements
- Detailed modeling summarizing the clearances and characteristics of the power line and pipelines within the study area.
- Load simulations – analyze the magnetic field of conductive interference generated from normal power line load conditions.
- Fault simulations – analyze the combined effect of conductive and inductive interference levels under power line fault conditions. What is the typical and worst case fault clearing time
- Mitigation design, protection scheme and recommendations.

Although precise measurements can not be determined as no survey information is available, the proposed transmission line appears to be within 9-12 meters (east) of our 900mm Hyprescon Trunk Watermain which is our main header distribution pipe from our Water Treatment Plant. Adjacent to the main header pipe (west) is local water main and sewer main pipe networks serving local residents. Finally Utilities Kingston has identified, as a result of growing demand, a need to construct a second header pipe to ensure the provision of potable water to our residents. That pipe will likely be constructed to east of the existing header pipe. This will then reduce the estimated separation between the transmission line and municipal pipe infrastructure, heightening our concerns even further. This is the section of transmission line is between Lake Ontario and Front Road.

At Bath Road the proposed transmission line will intersect with existing watermain, sanitary and storm pipe networks of varying sizes. We require information relating to how that crossing will be undertaken and what protective measures will be undertaken to safe guard the existing infrastructure including measures proposed during construction, measures to prevent premature failure and worker safety issues.

The proposed transmission line north of Bath Road as it progresses to the Gardiner TS appears to be located on top of or abutting an existing 300 mm cast iron watermain. Again we remain concerned about premature failure of the main and worker safety issues during fault conditions.

To facilitate the Pipeline Interference study Utilities Kingston will make available existing as built information related to our infrastructure upon request.

Sincerely,



Jim Miller, Manager Technical Services

Cc. Jim Keech, President and CEO
Hal Linscott, Director & City Solicitor
Rob Miller, Canadian Renewable Energy Corporation