

ONTARIO ENERGY BOARD

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

AND IN THE MATTER OF an application by Canadian Renewable
Energy Corporation ("CREC"), for an Order pursuant to section 92 of the
Ontario Energy Board Act, 1998 granting leave to construct transmission
facilities that will connect CREC's planned Wolfe Island Wind Plant to
Ontario's transmission grid.

**CREC's ANSWERS TO INTERROGATORIES
FROM INVISTA (CANADA) COMPANY**

1. On Tab 2, Page 16 of 32, CREC initially proposed to build an overhead line running on the east side of Sunny Acres Road.

(i) Was a costing analysis done for this? If so, produce the costing analysis?

A detailed cost analysis was not done. A high level unit cost of \$1.2 M per kilometer was used to budget for the cost of the originally proposed aboveground high voltage 230 kV line.

(ii) Did CREC seek or obtain any input from the community on an underground line following the same initial route? If not, why not? Was a costing analysis done for this route as an underground route? Produce a costing analysis if one was done?

The east side of Sunny Acres Road borders Patterson Park. On August 10, 2004, the residents of the Sunny Acres community delivered a petition which stated, in part, "Under no circumstances should transmission lines (above or *underground be routed through Wartman/Paterson Park Public Access* areas in the vicinity of the Kingston West Water Treatment Plant" (emphasis in the original petition) (see Pre-Filed Evidence tab 10 for a copy of the petition).

CREC also understood that the City of Kingston preferred that an underground line not be located within the public road right of way for Sunny Acres Road because of all the existing utility infrastructure in that area. Utilities Kingston initially informed CREC that it opposed an underground line in that area on the basis that they did not want to constrain future expansion of the water treatment plant.

No costing analysis was done of an underground line running on the east side of Sunny Acres Road.

CREC held a Sunny Acres community meeting on January 30, 2007 between 6:00 and 8:00 pm at Portsmouth Olympic Harbour in Kingston to present a modification of the original alignment parallel to Sunny Acres Road. Invista representatives (Peter Kraus and Paul Taylor) were in attendance. A presentation was given by CREC following an open house segment and the meeting concluded with a question and answer period. The purpose of this community meeting was to inform the local residents that:

- The transmission line was going to be underground and avoid Paterson Park, and receive feedback from them.
- The transmission line was coming back to their neighbourhood (from Carruthers Point).

See page 24 of the Amended Pre-Filed Evidence for details of the meeting. Nineteen people from the community registered their attendance, and no one expressed any complaints about the proposed change to an underground transmission line that avoided Patterson Park.

(iii) Are there technical reasons that the underground line could not have followed the initial route? If so, provide those reasons and any CREC/engineering study/reports done for an underground line following this route?

Although it *may* be technically possible to put an underground line on the road allowance on the east side of Sunny Acres Road, this route was not the preferred route. This area is already congested with existing municipal infrastructure in that location, including water pipes from the water treatment plant, and Utilities Kingston had advised CREC that it intends to expand the plant and will need to install additional water pipes in that area. There is also an issue of whether CREC could install transmission lines on the road allowance in close proximity to the water pipes and still comply with the requirements of CAN/CSA-C22.3 No. 6-M91 *Principles and Practices of Electrical Coordination Between Pipelines and Electric Supply Lines*.

2. On Tab 2, Page 17 of 32, CREC states that for "technical reasons", Hydro One did not want CREC's proposed cable to cross Hydro One's cable.

(i) Please provide information as to the exact location of Hydro One's cable referred to (as it is not clear from TAB 11)?

Please see the drawings 501 rev J and 503 rev K attached at tab 1, which both show the existing Hydro One 8.3 kV distribution line to Simcoe Island.

(ii) Please advise what were the technical reasons Hydro One did not want the submarine cables to cross? Please provide any correspondence or report from Hydro One in this regard?

See the e-mail dated April 18, 2007 from Hydro One attached at tab 2.

That email was forwarded to Invista on April 19, 2007.

(iii) Did Hydro One or CREC consider any method to overcome the technical reasons? If so, produce such alternatives and any costing information for such alternatives?

CREC is not aware of any method that would overcome Hydro One's technical reasons for not wanting the two lines to cross.

(iv) If these technical reasons could be overcome, what other routes would be open to CREC for this project?

If CREC's line could cross Hydro One's line, then there would be no technical reason why CREC could not return to a route landing in the area of Sunny Acres Road (e.g. as described in the original Application for leave to construct), however there would still be the issue of Utilities Kingston's request that that area not be further encumbered. In any event, we are not aware of any method which would overcome Hydro One's concerns.

3. Tab 11 shows an "Existing Restricted Use Easement" from Lake Ontario to Front Road.

(i) Was there consideration given to using this Easement from Lake Ontario to Front Road for the underground cable? Were any technical plans/ studies prepared for this route? Was any costing analysis done for this route? If so, produce same? If not, why not?

The easement in question is over Invista lands. It was granted to DuPont by Invista. CREC considered the possibility of using the easement for the transmission line, but was advised by Dupont on January 12, 2007 that the easement was not transferable. Initially, CREC proposed to install the transmission line parallel to, and just to the east of, the easement. However, CREC abandoned the idea of using that route when it learned about the existence of Hydro One's submarine LV cable which ruled out landing in the area of the existing easement and also because of Utilities Kingston's position that future expansion of the City West Water Treatment Plant would be constrained if the transmission line was located in that area.

No technical plans/studies and no costing analysis were prepared for this route.

(ii) On Tab 2, Page 18 of 32, CREC states that this alternative route (using this Easement) was not feasible because of Utilities Kingston's possible future expansion of underground infrastructure. When was CREC advised of this information?

The premise of the question is not correct. The alternative route referred to on page 18 of the Pre-Filed evidence was not a route using the existing Dupont easement. The alternative route was to put an underground transmission line on the road allowance for Sunny Acres Rd.

CREC was advised about Utilities Kingston's possible future expansion of its underground infrastructure in a letter from Jim Miller, Manager Technical Services, Utilities Kingston to Ross Keating, President and COO CHD, dated January 10, 2007 (4th paragraph), a copy of which is attached at tab 3.

(iii) What information or documentation about the existing underground infrastructures did CREC obtain or receive from Utilities Kingston? Did CREC obtain any information or documentation about Utilities Kingston's plans to expand the underground infrastructure, including likelihood, timelines, expenses etc.?

CREC obtained some rudimentary drawings from the City of Kingston for Sunny Acres Road at a meeting held in November 2006 between City staff and Canadian Hydro (Ross Keating and Rob Miller).

Utilities Kingston subsequently provided copies of the following plan and profile drawings:

1. WP No. 132-80-00, Plate R-11, Marshal Macklin Monaghan, reference to 1988 peak hour traffic (3813.tif)
2. WP No. 132-80-02, Plate No 19-33/26-0, Survey July 86, Revised Dec. 15/87 (3630.tif)
3. Drawing 53, Owner: Ontario Water Resources Commission, April 27, 1962 (1126.tif)
4. Drawing 4, Owner: Ontario Water Resources Commission, April 27, 1962 (1077.tif)
5. Drawing 5, Owner: Ontario Water Resources Commission, April 27, 1962 (1078.tif)
6. Drawing 6 Owner: Ontario Water Resources Commission, April 27, 1962 (1079.tif)
7. Drawing 1, Project: Installation of Trunk Watermains, April 3, 1972 (003.tif)
8. Drawing 2, Project: Installation of Trunk Watermains, April 3, 1972 (002.tif)
9. Tunnel Detail (3776.tif)
10. Key Map Sunnyacres to Front Rd.pdf
11. Key Map Field 400m south of Bath Rd.pdf
12. Key Map Bath Rd to Rail Crossing.pdf
13. 230 Kv Pipeline Information.pdf

A disk containing electronic copies of these drawings is attached at tab 4.

Utilities Kingston provided some information about its plans to expand the water treatment plant in its letter of January 10, 2007, a copy of which is attached at tab 3.

In a letter dated April 5, 2007, a copy of which is also attached at tab 3, Utilities Kingston advised: "Although precise measurements can not be determined as no survey information is available, the proposed transmission line appears to be within 9-12 metres (east) of our 900mm Hyprescon Trunk Watermain which is our main header distribution pipe from our Water treatment Plant". That letter also stated: "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 the east of the existing header pipe."

CREC has nothing further in writing pertaining to this expansion, although Utilities Kingston have re-affirmed its intention to undertake the expansion during a meeting at which representatives of Invista were present.

(iv) There is reference to this alternative route (using this Easement) being opposed by the Sunny Acres Community on Tab 2, Page 18 of 32. Was the underground route using the Existing Restricted Use Easement opposed by the Community or was it only the above ground transmission route? If it was the underground route following the Existing Restricted Use Easement, produce any documentation to show that it was this underground route or any other underground route that was proposed to the Community?

The premise of the question is not correct. The alternative route referred to on page 18 of the Pre-Filed evidence was not a route using the existing Dupont easement. The alternative route was to put an underground transmission line on the road allowance for Sunny Acres Rd. However, with this route the transmission line would have come ashore in the area of Patterson Park, and, as mentioned above, the residents of the Sunny Acres community delivered a petition in 2004 which opposed any transmission line (including underground) in the vicinity of the park.

In addition, using the road allowance was also opposed by Utilities Kingston for reasons previously stated, i.e. existing infrastructure and future planned expansion.

(v) Produce copies of all documents showing routes provided to the community for their input?

Various routes have been discussed with Invista and Utilities Kingston as explained in the pre-filed evidence and in these answers to interrogatories.

With respect to the general community, CREC held Public Open Houses in July 2004 and March 2006. The routes discussed at these meetings are shown in Appendix G3 and Appendix G4 of CREC's draft Environmental Review Report (draft ERR). A disk containing the draft ERR is attached at tab 8.

CREC held a Sunny Acres community meeting on January 30, 2007 to inform the local residents that the transmission line was going to be underground and avoid Paterson Park. A copy of a letter inviting residents to the meeting was delivered to area residents. A copy of a map showing general routing options was attached. A copy of this letter and map is attached at tab 5. A map showing the then preferred route was presented at the meeting. A copy of that map is attached at tab 6.

CREC held two additional open houses on March 27 and 28, 2007. A map showing the then preferred route was presented at the meeting. A copy of that map is attached at tab 7. The route maps for the January 30, 2007 meeting and the March 2007 meetings were very similar.

CREC did not decide on the proposed amended route until mid-May 2007, after meeting with Invista and Utilities Kingston on May 24, 2007.

Notice was given to the public about the proposed amended route by way of publication of the Notice of Application for leave to construct as required by the Board's Letter of Direction.

(vi) Tab 2 Page 26 of 32 makes reference to the information (including maps) that were shown or provided to the Community. Produce all the information and documentation that was prepared for or shown to the Community?

See Chapter 2 and Appendix G to CREC's draft ERR. A disk containing the draft ERR is attached at tab 8.

4. Tab 11 shows that the underground cable comes ashore on Invista property, goes north and then west to Sunny Acres Road. Was any consideration given to the route continuing north (i.e. along the back of Invista's property) to the Dupont lands, rather than coming West to Sunny Acres Road, along Sunny Acres Road and then east along Invista's lands? Were any studies or reports (including costing or technical feasibility studies or analysis done for this route? If so produce such documents? If not, why not?

Yes, that option was discussed at a meeting attended by Invista, Utilities Kingston, and CREC on Thursday, May 24, 2007. The option suggested in the interrogatory (i.e. for the line to go straight north to Front Road to the east of the DuPont facility) was *not* Invista's preferred route because it might constrain potential future expansion of Invista's warehouses located to the east of the DuPont facility. In addition, CREC mentioned that both DuPont and Correctional Services Canada have indicated that they did not want the 230 kV line being in their road frontage because it might impact on their future development.

No detailed costing or technical feasibility studies or analysis was done for this route.

5. On Tab 2, Page 17 of 32, CREC states that the proposed route south of Front Road on Invista land is currently zoned "General Open Space".

(i) Did CREC obtain any municipal law reports or opinions on the use that Invista's land could be used for? Did CREC consider the Official Plan and Secondary Plan uses for this area?

CREC, through its planning consultant, IBI Group, was told by the City's Planning Department that the proposed transmission line "is consistent with the definition of a Public Use as defined in Section 4(117) and the General Provisions for Public Uses contained in Section 5(18) of Zoning By-Law No. 76-26". Subsequent to this CREC and their Counsel (Blakes) reviewed the City's by-law and zoning maps that are available on-line to determine that the lands in question are zoned General Open Space.

(ii) Does CREC acknowledge that the proposed route would prevent Invista's lands as a whole from being developed? If CREC's response is that only a portion of Invista's land would have to remain as open space, what portion of the land does CREC acknowledge the impact would be on the potential development of Invista's lands?

CREC's proposed 230 kV transmission line will only require a 10 meter wide easement. The impact of that easement on the potential development of Invista's lands will be minimal because of the encumbrances that are already there. Invista's lands are already encumbered with DuPont's Restrictive Use Easement, the existing Hydro One 8.3 kV distribution line and easement, Utilities Kingston's existing 900mm Hyprescon watermain, and a closed hazardous waste landfill site (see Pre-Filed Evidence, Tab 11).

6. On Tab 2, Page 20 of 32, CREC states that the proposed underground route will go west from Sunny Acres Road on Invista's land?

(i) Was any consideration given to a route that would run along the property line between Dupont and Invista rather than on Invista's lands? If not, why not? If it was, why was it rejected? Produce any technical or costing analysis for this route if it was prepared?

In fact, the proposed route does run west to (not from) Sunny Acres Rd. along the property line between Dupont and Invista (see Tab 11 of the Pre-Filed Evidence). CREC is proposing to place it on Invista's side of the property line, rather than on the Dupont side, **as requested by Invista**. At the meeting on May 24, 2007, which was attended by Peter Kraus and Paul Taylor of Invista, it was discussed that CREC would likely be paying compensation based on a per meter basis. Invista said that if there was to be an easement running along the property line, then Invista would prefer to have it on its side of the property line so it would receive the compensation.

7. On Tab 2, Page 21 of 32, CREC states there is a "closed landfill" on Invista's property,

(i) What information does CREC have on this "closed landfill" site?

Originally, Stantec Environmental, CREC's Environmental consultant, identified the closed landfill as part of the background due diligence process used as part of the Environmental Assessment.

Based on a subsequent *Freedom of Information Act* request to the Ministry of the Environment, CREC obtained a copy of the MOE's files on the closed landfill permit number A380804. A copy of the information received from the MOE is attached at tab 9.

(ii) CREC states that it met with Invista and Utilities Kingston to discuss the proposed route and "they advised CREC that this is their preferred routing...."? When did Invista provide this? Are there any documents (correspondence or notes) with respect to this meeting(s)?

CREC met with Utilities Kingston and Invista on May 24, 2007. Invista said that if the transmission line had to come ashore in Sand Bay (because of the existing Hydro One submarine line) then the route now being proposed was Invista's preferred route over the other options from Sand Bay.

Ross Keating and Robert Miller of CREC attended the meeting. A copy of Robert Miller's notes of the meeting are attached at tab 10.

Robert Miller also circulated an email, with an attached letter and route map, to Invista and Utilities Kingston summarizing the outcome of the meeting. This correspondence is attached at tab 11.

8. On Tab 2, Page 27 of 32, there is reference to a final CIA report dated March 22, 2007. Has this report been produced as the one at Tab 19 is dated November 15, 2006? If not, produce a copy? In addition, there is reference to Answers to Interrogatories that CREC filed on April 18, 2007? What were these Answers to Interrogatories in the context of? Produce a complete copy of the Interrogatories and the Answers to Interrogatories?

A copy of the final CIA was attached at tab 3 to the answers to the Interrogatories from Board Staff which were delivered on April 18, 2007. (Any party who did not receive a copy at that time can obtain a copy from CREC's counsel.)

9. On Tab 2, Page 10 of 32, CREC states it will interconnect with Hydro One's Gardiner TS.

(i) Are there other possible points of interconnection with Hydro One? Please identify these possible points and advise if they were considered? If they were considered, why were they rejected? Were technical or cost analysis done for each possible point of interconnection? Please produce any technical or cost analysis for these other points of interconnection?

There are no other practical interconnection points to connect the Wolfe Island Wind Plant with Hydro One's transmission grid, therefore there are no technical or cost analysis.

(ii) Produce a copy of the Hydro One request referred to on Tab 2, Page 23 of 32, line 13 and any subsequent correspondence on the issue.?

The request that Hydro One made was for CREC to abandon owning and operating its own "Customer Switching Station" (CSS) on lands adjacent to the Hydro One Gardiner TS as originally conceived by CREC. CREC met with Hydro One at the site of the Gardiner TS and subsequently at the Hydro One Ops Centre on Sydenham road, Kingston on March 1, 2007. A copy of the meeting notes (prepared by Hydro One) is attached at tab 12. Hydro One's "Proposed Solution" is recorded in point 2 of the notes.