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September 12, 2011

BY FAX & BY COURIER

Ms. Kirsten Walli **Board Secretary** Ontario Energy Board 2300 Yonge St, Suite 2701 Toronto ON M4P 1E4

Ms. Walli:

Board File No. EB-2011-0120 Canadian Distributed Antenna Systems Coalition Energy Probe – Interrogatories of Toronto Hydro

CLIFFORD ORWIN

Pursuant to the Board letter to Mr. Rodger, counsel to Toronto Hydro, dated September 7, 2011, attached please find the Interrogatories of Energy Probe Research Foundation (Energy Probe) in the EB-2011-0120 proceeding.

Should you require additional information, please do not hesitate to contact me.

Yours truly,

David S. MacIntosh

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Case Manager

cc. Mark Rodger, Borden Ladner Gervais LLP (By email)

Pankaj Sardana, Toronto Hydro, (By email)

Helen Newland, Fraser Milner Casgrain LLP (By email)

Michael Schafler, Fraser Milner Casgrain LLP (By email)

Lawrence Schwartz, Consultant to Energy Probe (By email)

Interested Parties (By email)

Ontario Energy Board

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

AND IN THE MATTER OF an application by Canadian Distributed Antenna Systems Coalition for certain orders under the *Ontario Energy Board Act, 1998*.

INTERROGATORIES OF ENERGY PROBE RESEARCH FOUNDATION ("ENERGY PROBE")

September 12, 2011

CANADIAN DDISTRIBUTED ANTENNA SYSTEMS COALITION EB-2011-0120

ENERGY PROBE RESEARCH FOUNDATION INTERROGATORIES

On the Evidence of Michael Starkey, Professor Adonis Yatchew and Mary Byrne and Canadian Electric Association Filed on behalf of Toronto Hydro Electric System ("THESL")

Interrogatory #1

Ref: Starkey Affidavit, p.21-22

Issue: Essential Facilities

Mr. Starkey states the "economics associated with wireless attachments like DAS attachments" differ from those of traditional cable attachments due to "barriers to entry "that exist with respect to alternatives supporting traditional wireline attachments but are absent from wireless attachments."

- a. Please confirm that Rogers Cable (or the appropriate Rogers cable television affiliate) is currently burying its overhead cables in some parts of Toronto.
- b. Does this indicate that underground cabling was and is a viable alternative to pole attachment? If not, why not?
- c. Given this viability, as long as underground cabling is more costly than pole attachment, it not the case that attaching cable television wires to hydro poles was more a matter of "convenience" than "necessity"?
- d. Does Mr. Starkey believe that high reproduction cost is the main reason not to require a cable company to install its own poles?
- e. Does Mr. Starkey believe that it is aesthetically more acceptable for a cable company to use hydro poles rather than build its own poles?
- f. Other things equal, why is it more aesthetically acceptable for a DAS to use non-pole attachments than pole attachments?

Ref: Starkey Affidavit, p.25-26

Issue: Market Definition

Mr. Starkey notes that Public Mobile used macro cells "as a complete substitute for the DAS network it intended to build utilizing attachments to power poles."

- a. Given that Public Mobile switched to macro cell development after it concluded that it would not receive access to THESL poles, does Mr. Starkey maintain that DAS and macro cell technologies are equally good technologies for a wireless service provider?
- b. Does he contend that these two technologies are good substitutes in the economic sense?

Interrogatory #3

Ref: Starkey Affidavit, Volume 2, Exhibit 4

Issue: Market Definition

Mr. Starkey presents the NGEIR decision in this exhibit.

- a. Does Mr. Starkey agree with the Board's finding that the approach of the Competition Bureau is "helpful when assessing whether the forebearance of regulation is likely to lead existing firms to exercise market power" (NGEIR, p.29)? If not, why not?
- b. Does Mr. Starkey believe that all available alternatives (e.g. femtocells) to DAS that he identifies in his report are in the same "product market" as DAS when the market is delineated using the approach of the Competition Bureau?

Ref: Yatchew Affidavit, p.10

Issue: Essential Facilities

Professor Yatchew states that cable systems "of necessity have had to construct their systems across populations of poles or networks of underground conduits".

- a. Does Professor Yatchew believe that cable and satellite television are in the same or different consumer product markets in a market power analysis? How does he know this?
- b. Does Professor Yatchew believe that underground cabling is a good alternative to pole attachments for cable television providers? Why or why not?
- c. If pole attachment is less expensive than underground cabling, does Professor Yatchew believe that pole attachment is essential for cable television providers? Why or why not?

Interrogatory #5

Ref: Yatchew Affidavit, p.11

Issue: Essential Facilities

Professor Yatchew states that "Power poles are therefore not an essential facility for the wireless industry."

- a. Is the "essential facilities doctrine" an economic or legal conception?
- b. Please confirm that the doctrine first arises from the US antitrust decision concerning competitor access train stations in "United States v. Terminal Railroad Association of St. Louis", 1912. Despite the Court's ruling that non-Association members must be given access, was it possible for an excluded railroad company to build its own terminal at non-exorbitant cost?
- c. What economic criteria determine whether a facility is essential or not?

Ref: Yatchew Affidavit, p.17

Issue: Essential Facilities

Professor Yatchew states that "Exploding demand growth for bandwidth may also entail increasing need for wireline facilities which have no alternative but to attach through poles or run through conduits".

If, as Professor Yatchew believes, pole access is essential for certain attachers such as cable and telephone, does he believe that their access needs should always be accommodated by local public utilities? If not, please explain.

Interrogatory #7

Ref: Yatchew affidavit, pp. 25-26

Issue: Market definition

Professor Yatchew states that the relevant market as the "market for siting wireless attachments".

- a. Please discuss briefly the analytical methods, research techniques and economic theory he used in arriving at this definition of the relevant product market.
- b. On what basis does he distinguish between the market for siting wireless attachments and the market for siting attachments generally?
- c. Does the fact that Public Mobile deployed macro cell towers after being denied access to THESL poles indicate to Professor Yatchew that macro cell towers and hydro poles are in the same market delineated for market power analysis?

Ref: Yatchew Affidavit, p.26
Issue: Regulated attachment rates

Professor Yatchew states that "Poles may be especially attractive if attachment rates are regulated at rates based on historic costs."

Does Professor Yatchew contend that the current wireline attachers to THESL poles are, or could be, paying too little for access to those poles?

Interrogatory #9

Ref: Yatchew Affidavit, pp.26-27

Issue Market power

Professor Yatchew believes that there is no market power in his relevant market.

- a. Having regard to the Starkey affidavit, Attachment MTSW-03 that shows the sitings of Rogers, Bell, Telus and others, does Professor Yatchew believe that no individual participant in that market (i.e. within 25 Km. of Toronto's City Centre) has any significant degree of market power?
- b. What does that information suggest to Professor Yatchew about the possibility of interdependent rather than purely competitive pricing?

Interrogatory # 10

Ref: Yatchew affidavit, p.31, line 16

Issue: Market power

Professor Yatchew states "that wherever power poles are owned by private sector companies, there is no issue of transferring a valuable asset from the public sector to the private sector. That is not the case in Ontario."

- a. Kindly elaborate on this paragraph as it is not clear how it relates to the previous paragraph in Professor Yatchew's affidavit.
- b. Is Professor Yatchew saying that problems of access would not arise if the poles were privately owned rather than publicly owned?

Ref: Byrne affidavit, p.5
Issue: Non-Distribution Assets

Does Toronto Hydro attach any of its wires to poles of other wireline services such as Bell Telephone, Rogers, etc. in Toronto?

Interrogatory # 12

Ref: LCC Report, p. 7

Issue: Emerging technologies

Please indicate the deployment of the emerging technologies discussed in this and other sections of the LCC Report (other than ODAS) in Canada and in Toronto.

Interrogatory #13

Ref: LCC Report, p.18

Issue: ODAS and utility pole attachment

- a. Please describe the membership of the Coalition of Concerned Utilities.
- b. Are any of these members government-owned local distribution companies?
- c. Has the Coalition made submissions on other topics to US regulators?

Interrogatory # 14

Ref: LCC Report, p.21

Issue: "first-mover" advantage

Please explain why a first-mover advantage to a DAS operator is more significant than a first-mover advantage to a wireline attacher to the same pole.