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August 5, 2011

BY FAX & BY COURIER

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge St, Suite 2701
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Ms. Walli:

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

Pursuant to Procedural Order No. 1, dated June 13, 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
Case Manager

cc. Helen Newland, Fraser Milner Casgrain LLP (By email)
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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")**

August 5, 2011

**CANADIAN DDISTRIBUTED ANTENNA SYSTEMS COALITION
EB-2011-0120**

**ENERGY PROBE RESEARCH FOUNDATION
INTERROGATORIES**

Interrogatory # 1

Ref: Application, [3.1] at p.4

Issue: CCTA Order - Distribution system assets

It appears that THESL is a regulated municipal electric distribution utility that is wholly owned by Toronto Hydro Corporation. It also appears that THESI is a wholly-owned subsidiary of Toronto Hydro Corporation but is not a regulated entity. It further appears that THESI's Street Lighting Division purchased the City of Toronto's street lighting assets in January 2006.

In its Decision of February 2011 in EB-2009-0180,0181,0182,0183, the Board found that the street lighting assets in the City of Toronto are distribution system assets and ordered their transfer to THESL under the proposed reorganization.

However, the Board determined that:

If, however, the distribution circuits are underground in a residential setting, poles in the Board's view are not distribution assets. In this situation, the poles are used almost exclusively for streetlighting as the existence of other users is extremely limited. Accordingly, it cannot be said that the functionality or intended use of the poles includes other customers. (Decision, p.8)

Having regard to the Board's Decision of August 3, 2011 in EB-2009-0180,0181,0182,0183, please confirm that all of the poles to which CANDAS seeks access in the City of Toronto are assets of a regulated electricity distribution.

Interrogatory # 2

Ref: Application, [3.1] at p.9

Issue: CCTA Order - Competition from THESL

The Application cites the portion of the CCTA Order in which the Board notes that cable companies and electricity distributors “are fast becoming competitors”.

- a. Does CANDAS contend that THESL is denying it access comparable to the access afforded to wireline providers because THESL and CANDAS are, or are prospective, competitors in some product markets in the City of Toronto?
- b. Please indicate what products or services currently and prospectively offered by THESL compete with providers deploying DAS equipment.

Interrogatory # 3

Ref: Application, [6.4] at p.16

Issue: Municipal Access Agreement, August 6, 2009

It appears that the Municipal Access Agreement is between the City of Toronto and DAScom Inc.

Is THESL bound by the agreement?

Interrogatory # 4

Ref: Application, Tab 3, at p.75
Issue: THESL Letter - Safety Issues

The THESL Letter (dated August 13, 2011) to the Board refers to safety issues on pp.3-4 thereof.

- a. Will DAS-related equipment be installed at the top of the pole for which access is sought or in the communications zone of such poles, or both?
- b. Will installing DAS-related equipment on a pole require the drilling of holes through the pole below its distribution zone?
- c. Would such drilling weaken the pole and create stress concentrations in areas where structural integrity is required?
- d. In other jurisdictions where DAS-related equipment has been installed on poles, have there been more service interruptions than in jurisdictions where DAS-related equipment has not been installed?
- e. In other jurisdictions where DAS-related equipment has been installed on poles, have there been more injuries to workers and residents than in jurisdictions where DAS-related equipment has not been installed?

Interrogatory # 5

Ref: Application, Tab 3, p.78
Issue: THESL Letter - "Scarce Resource"

The THESL Letter to the Board refers to scarce resources on pp.4-5 thereof, suggesting that pole space should not be allocated to wireless facilities that do not require it because connections to other settings such as buildings and rooftops can be effected "as necessary".

Is CANDAS aware of any test that would enable the Board to determine whether buildings and rooftops constitute good substitutes for poles? Even if connections on buildings and rooftops can be effected "as necessary", would CANADAS expect that the price for such connections be the same whether or not access to poles were available?

Interrogatory # 6

Ref: Application, Tab 3, p.78

Issue: THESL Letter - “Scarce Resource”

In competition policy matters, determining “good substitutes” is a matter of price. In market definition, for example, the “hypothetical monopolist test” is whether a small but significant price increase by a monopoly provider would cause a buyer to shift to another product or service. If not, the alternate product or service is not considered a good substitute even if it is “available”.

Assuming, hypothetically, that THESL and a CANDAS member had agreed on a pole-access price, would the imposition of a small but significant increase in that price cause the CANDAS member to move to another location such as buildings or rooftops? Alternately stated, would it take a much larger imposed price increase to cause the member to switch?

Interrogatory # 7

Ref: Exh. C, Written Evidence of Tormod Larsen, July 26, 2011

Issue: Las Vegas – DAS Nodes

It appears that the DAS equipment deployed in Las Vegas is installed on a pole adjacent to a local hydro pole providing street lighting.

Did ExteNet deploy its own poles in Las Vegas or did it use poles owned by the local electric distribution company? If the former, what were the circumstances?

Interrogatory # 8

Ref: Written Evidence of Brian O'Shaughnessy, July 26, 2011, p.8

Issue: DAS technology-sharing

It is indicated that DAS technology appeals to the large, incumbent wireless service providers such as Bell, Rogers and Telus, that it is likely that all wireless carriers will move towards a DAS-type architecture in the future, and that once the first DAS network is built, all service providers can then gain access to that same network, sharing the fibre and nodes to distribute their services.

- a. Does CANDAS contend that its DAS network, once built and operational, is an essential facility within the meaning of the CCTA order?**
- b. Have any CANDAS members or affiliates discussed the possibility of sharing CANDAS' DAS network with incumbent wireless service providers in the City of Toronto or elsewhere? If so, what interest was shown by the incumbents?**
- c. Has CANDAS considered the terms and conditions on which incumbent wireless service providers would be given access to its DAS network in the City of Toronto?**

Interrogatory # 9

Ref: Written Evidence of Brian O'Shaughnessy, July 26, 2011, p.7

Issue: DAS network in Montreal

Is Public Mobile aware of any agreements, or discussions, with other wireless service providers to provide them access to the DAS network when it is completed? If so, please provide the major terms and conditions under consideration.

Interrogatory # 10

Ref: Written Evidence of Brian O'Shaughnessy, July 26, 2011, p.7-10

Issue: Installation of Antennae and related Equipment

It appears that Public Mobile proposes that the Toronto DAS Network would establish 700-800 nodes in order to meet the needs of its customers for the first 4-5 years.

- a. Does this mean that the Toronto DAS Network would require access to only 700-800 poles, or would access to other poles be needed to connect the node-bearing poles with the fibre-optic cable?**
- b. Will each node-bearing pole have an antenna on the top and related equipment attached to the communication zone of the pole?**
- c. If there is sharing of the Toronto DAS Network with other wireless service providers, would access to more poles be necessary in the same time period?**
- d. Toronto Hydro has begun burying its hydro lines in certain Toronto neighbourhoods with the apparent goal of eventually eliminating those street poles. This presumably leaves only the streetlighting poles above ground. Please confirm whether the Toronto DAS network can operate successfully as planned with access only to the streetlighting poles that currently exist.**