



**Fraser Milner Casgrain LLP**  
77 King Street West, Suite 400  
Toronto-Dominion Centre  
Toronto, ON, Canada M5K 0A1

MAIN 416 863 4511  
FAX 416 863 4592

**FILED ELECTRONICALLY AND VIA COURIER**

August 22, 2011

Ms. Kirsten Walli  
Board Secretary  
Ontario Energy Board  
2300 Yonge Street  
PO Box 2319, 27th Floor  
Toronto, ON  
M4P 1E4

**Helen T Newland**  
Helen.Newland@FMC-law.com  
DIRECT 416-863-4471

Dear Ms. Walli:

**RE:           Application by Canadian Distributed  
              Antenna Systems Coalition ("CANDAS");  
              Board File No.: EB-2011-0120**

We represent CANDAS in connection with its application to the Board regarding access to the power poles of licensed electricity distributors for the purpose of attaching wireless telecommunications equipment ("**Application**").

In accordance with Procedural Order No. 1, CANDAS is filing the Responses to Interrogatories of Energy Probe.

CANDAS will file two paper copies of the above-noted evidence as soon as possible.

Yours very truly,

***(signed) H.T. Newland***

HTN/ko

cc:     Mr. George Vinyard  
          ExteNet Systems, Inc.  
          Mr. Mark Rodger  
          Borden Ladner Gervais  
          All Intervenors

**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 the **Canadian Distributed Antenna Systems Coalition** for certain orders under the *Ontario Energy Board Act, 1998*.

**RESPONSES TO INTERROGATORIES OF**  
**ENERGY PROBE RESEARCH FOUNDATION**  
**(“ENERGY PROBE”)**  
**(on the evidence of the Applicant, CANDAS)**

**August 22, 2011**

**Interrogatory #1**

**Ref: Application, [3.1] at p.4**

**Issue: CCTA Order - Distribution system assets**

**Question:**

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.

**Response:**

CANDAS expects that the Board's decision in this proceeding (EB-2011-0120) would pertain to all assets that were deemed distribution assets.

## **Interrogatory #2**

**Ref: Application, [3.1] at p.9**

**Issue: CCTA Order - Competition from THESL**

### **Questions:**

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.

### **Responses:**

- (a), (b) A distributor, such as THESL, is constrained by the OEB Act (specifically, s. 71(1)) as to the activities it can lawfully engage in. Distributors may only engage in the activity of distributing electricity, except through an affiliate. Accordingly, distributors may not, themselves, engage in the provision of telecommunication services.

Where a distributor is controlled, directly or indirectly, by a municipal corporation, that distributor’s affiliates are also constrained by the OEB Act (specifically, s. 73(1)). Such affiliates may only carry on the business activities listed in subsection 73(1) of the OEB Act, which activities include business activities whose principal purpose is to use, more effectively, the assets of the distributor or an affiliate of the distributor.

CANDAS does not know what wireless activities the telecom affiliates of licensed distributors in Ontario may or may not be engaged in. It does appear that around the time of the CCTA Proceeding or shortly thereafter, a Toronto Hydro (as it then was) affiliate, Toronto Hydro Telecom, was using Toronto Hydro poles to provide Wifi service. See response to CCC 1.

**Interrogatory #3**

**Ref: Application, [6.4] at p.16**

**Issue: Municipal Access Agreement, August 6, 2009**

**Question:**

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

Is THESL bound by the agreement?

**Response:**

This is a legal question. We note that THESL is not a party to the agreement. However, CANDAS also notes that Toronto Hydro Corporation, and hence THESL, is wholly owned by the City of Toronto. In this context, the decisions to prohibit wireless attachments on THESL poles and to refuse renewal of the THESI pole access agreement with DAScom would appear to be in conflict with the City of Toronto's policy against proliferation of poles in the public right-of-way as reflected in the Municipal Access Agreement.

#### **Interrogatory #4**

**Ref: Application, Tab 3, at p.75**

**Issue: THESL Letter - Safety Issues**

#### **Questions:**

The THESL Letter (dated August 13, 2010) 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?

#### **Responses:**

- (a) The Toronto DAS Network, as proposed, included only installations on and below the communication zone. However, CANDAS believes that there is no reason for distributors to prohibit pole top antenna attachments (see Application, Tab 22 at page 343 of 1378, where the FCC describes the US experience). Further, permitting pole top antenna attachments could reduce the total number of poles required for DAS equipment attachments and benefit the quality and competitiveness of DAS-based wireless services. See responses to Staff 6 (cell 7), 18, and 23.1; THESL 31(a); and CEA 66(b) as well as the Written Evidence of Tormod Larsen (Q. 4) and (Q.9).
- (b) See response to Staff 6.1 (cell 8).
- (c) No. Drilling holes through poles to enable attachments of all kinds is a long standing practice that can be done safely without compromising the structural integrity of the poles. However, if there were situations in which drilling holes

would not be advisable, alternative means of attachment are available. See also response to Staff 6.1 (cell 8).

- (d) Not to CANDAS' knowledge.
- (e) Not to CANDAS' knowledge.

**Interrogatory #5**

**Ref: Application, Tab 3, p.78**

**Issue: THESL Letter - "Scarce Resource"**

**Question:**

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 CANDAS expect that the price for such connections be the same whether or not access to poles were available?

**Response:**

See response to Staff 6.1 (cells 9 and 10) and 14.1.



**Interrogatory #6**

**Ref: Application, Tab 3, p.78**

**Issue: THESL Letter - "Scarce Resource"**

**Question:**

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?

**Response:**

For the reasons given in response to the Application and in responses to other interrogatories, "good substitutes" for utility poles in respect of outdoor DAS Network deployments in public rights-of-way simply do not exist. Leaving aside the technical reasons why this is so and in the hypothetical context of the question posed, the cost of accessing locations such as buildings or roof tops, or of erecting new poles in public rights-of-way, would be much greater than the cost of attaching DAS equipment to existing poles.

**Interrogatory #7**

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

**Issue: Las Vegas – DAS Nodes**

**Question:**

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?

**Response:**

ExteNet Systems deployed its own poles in Las Vegas at considerable cost in order to honour a commitment to its wireless carrier customer regarding time to market. See also Response to THESL 37(c).

## **Interrogatory #8**

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

**Issue: DAS technology-sharing**

### **Questions:**

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?

### **Responses:**

- (a) No. It is the hydro poles that are essential facilities.
- (b) The information requested by this question is not relevant to the issues raised by the Application. The interest that incumbent wireless service providers may or may not have in the DAS networks of CANDAS members in Toronto or elsewhere has no bearing on whether the CCTA Order has been breached and whether or not wireless attachers are being discriminated against.
- (c) No.

**Interrogatory #9**

**Ref: Written Evidence of Brian O'Shaughnessy, July 26, 2011, p.7**  
**Issue DAS network in Montreal**

**Question:**

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.

**Response:** No.

## **Interrogatory #10**

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

**Issue: Installation of Antennae and related Equipment**

### **Questions:**

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.

### **Responses:**

- (a) The 700-800 poles would support the DAS nodes. Access to other poles would be needed to support the fibre optic cables.
- (b) The Toronto DAS Network was designed with the DAS node antenna mounted on a side-arm affixed to the pole within the communication zone and other equipment attached on the unusable or common area below the communications zones. See Response to Staff 2.3.
- (c) At present, the Toronto DAS Network is only partially constructed (see Response to CCC 7). If and when it is completed and in service, use by additional wireless services providers would likely require access to some additional poles during the same time period, depending on the particular coverage areas and equipment configurations that are required by the additional users.

- (d) CANDAS cannot speculate with respect to the impact of removal of pole lines on any specific portion of the Toronto DAS Network, as planned. In general, DAS providers seek to take plans for undergrounding aerial utility lines into account when designing the networks. The impact of undergrounding and removal of pole lines on an existing DAS network depends on many variables, of which the availability of street light or alternative poles is only one. Other variables include the availability of fibre optic cabling or the opportunity to place cabling in existing or new underground conduits and/or the terms and conditions on which the DAS provider is permitted to participate in a coordinated project for moving all affected aerial lines below ground.