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November 3, 2011

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street
PO Box 2319, 27th Floor
Toronto, ON
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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**").

Please find enclosed CANDAS' motion for an order compelling THESL to provide proper answers to certain IRs.

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

Yours very truly,

(signed) Michael D. Schafler

MDS/ag
cc: Mr. George Vinyard
Helen Newland
All Intervenors

EB-2011-0120

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

MOTION RECORD OF THE CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION

November 3, 2011

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Board Secretary

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AND TO: **All other Intervenors**

INDEX TO MOTION RECORD

TAB 1

EB-2011-0120

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

NOTICE OF MOTION

THE CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION ("**CANDAS**") will make a motion on a date and at a time to be fixed by the Ontario Energy Board (the "**Board**"), at the Board's Chambers at 2300 Yonge Street, Toronto, Ontario, in connection with the motion by Consumers Council of Canada ("**CCC**") filed on October 31, 2011 for similar relief ("**CCC Motion**").

PROPOSED METHOD OF HEARING: CANDAS proposes that the motion be heard orally.

THE MOTION IS FOR:

1. An Order of the Board directing Toronto Hydro-Electric System Limited ("**THESL**") to provide responsive answers to the following CANDAS interrogatories: general interrogatories 1(h), 1(i), 2, 3(d), 4(a), 4(f); Starkey interrogatories 10(e) and 32; and Yatchew interrogatory 20(b) (the "**CANDAS IRs**"); and

2. Such further and other relief that CANDAS may request and the Board may consider appropriate.

THE GROUNDS FOR THE MOTION ARE:

1. This motion is made pursuant to Rules 8 and 29.03 of the Board's *Rules of Practice and Procedure*;

2. THESL's responses to the CANDAS IRs are unresponsive, incomplete or have been improperly refused;

3. Answers to the CANDAS IRs are necessary so that CANDAS may adequately understand THESL's position and fully prepare for the hearing;

4. The CANDAS IRs are relevant to the issues raised by this Application;

5. The CANDAS IRs may be categorized as follows:

    a. Questions pertaining to THESL's letter to the Board dated August 13, 2010 [Application, para. 2.3, Tab 2[1]]:

        i. General Interrogatories - 1(h), 1(i), 2, 3(d), 4(a) and 4(f);

    b. Questions pertaining to the use of THESL's poles [Application, paras. 3.11, 10.9, 10.11-10.38]:

        i. Starkey Interrogatories –10(e) and 32;

        ii. Yatchew Interrogatories – 20(b); and

6. The CCC Motion;

THE FOLLOWING DOCUMENTARY EVIDENCE will be used at the hearing of the Motion:

1. Relevant documents forming part of the record of this proceeding and as contained in the Motion Record, filed;

2. Such further and other evidence as counsel may advise and this Board may permit.

[1] The references to the relevant sections in the Application are not exhaustive.

November 3, 2011

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AND TO: **All other Intervenors**

TAB 2

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

INTERROGATORY 1:

Reference(s): none provided

(a) On what date did THESL adopt the "no wireless" policy?

(b) Provide a copy of THESL's "no wireless" policy, as adopted.

(c) Has THESL amended or revised the "no wireless" policy since its adoption? If yes, please provide a copy of the amended or revised policy.

(d) Provide copies of THESL's written policy with respect to attachments to distribution poles as it existed prior to the submission date of the August 13, 2010 letter to the Board ("**THESL Letter**").

(e) Did THESL's Board of Directors approve or otherwise endorse the "no wireless" policy?

(f) If the response to (e) is "yes", provide the date of the meeting at which this occurred and a list of those Board members who voted to adopt a "no wireless" policy.

(g) If the adoption of the "no wireless" policy was not endorsed by the THESL Board of Directors, by vote or otherwise, how was the Board of Directors advised of THESL's adoption of the "no wireless" policy?

(h) Were any presentations (oral or in writing) made to the THESL Board of Directors in relation to any of the subjects discussed in the THESL Letter, prior to the letter being filed with the Ontario Energy Board ("**Board**")? If yes, provide particulars of any oral presentations and copies of any written presentations, including, without limitation, power points, notes, memoranda, executive summaries and any similar writing.

(i) Provide copies of all drafts, including notes to draft, of the THESL Letter.

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

RESPONSE:

(a) This in an inaccurate summary of THESL's position with regard to wireless attachments. THESL's policy, clearly stated in the August 13, 2010 letter, is that THESL does not believe that DAS or any other wireless attachers have a right to attach wireless equipment to THESL poles pursuant to the CCTA Decision. The Board's 2005 CCTA Decision did not mandate Ontario distributors to accommodate wireless attachments on their distribution poles. In particular, the issue and subject of wireless attachments was not raised, considered or addressed in the CCTA Decision or the CCTA proceeding. The CCTA Settlement Agreement explicitly excluded wireless as an unsettled issue and the Board accepted that Settlement Agreement as part of the CCTA proceeding, and as such, the CCTA Decision did not encompass wireless.

(b) Please see the response in (a) above. THESL has not developed any particular written policies with respect to wireless since that was unnecessary because the CCTA Decision did not mandate Ontario distributors to accommodate wireless attachments on their distribution poles.

(c) Please see the response in (a) and (b) above.

(d) THESL does not have written policies over and above those provided in Tab 5.1, Schedule 1, Attachment 1 (*Section - 23: Foreign Attachments, Index of Standards.*)

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

(e) There was no need to take anything to THESL's Board because THESL had not adopted a "no wireless" policy at alleged by CANDAS. The Board's 2005 CCTA Decision did not mandate Ontario distributors to accommodate wireless attachments on their distribution poles. Please also see the response in (a) above.

(f) Not applicable.

(g) Not applicable.

(h) THESL declines to respond to this interrogatory on the basis that the information requested is privileged as being in contemplation of litigation.

(i) THESL declines to respond to this interrogatory on the basis that the information requested is privileged as being in contemplation of litigation.

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

INTERROGATORY 2:

Reference(s): none provided

Does the "no wireless" policy apply to the street lighting poles that are to be transferred to THESL from THESI?

RESPONSE:

Please refer to the responses in Tab 5.3, Schedule 1 and Tab 5.1, Schedule 2.

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

INTERROGATORY 2:

Reference(s): Byrne, paras. 3 and 5

(a) Provide a table that shows the breakdown, by pole type (i.e., cedar, various classes of concrete, steel, other), of the 140,000 THESL poles and the 40,000 THESI poles that are to be transferred to THESL, both referenced in paragraph 3.

(b) Do the statements on page 2, paragraph 5, pertain equally to the 40,000 THESI poles that are to be transferred to THESL?

(c) What is the average life span of a:

(i) Cedar pole

(ii) Steel pole

(iii) Concrete pole

RESPONSE:

(a) From THESL's asset records, the following is the breakdown by pole type, for all poles listed as THESL and THESI. Information on all the composition of all (current) streetlight poles is provided below. It is not possible with reasonable effort and within the given timelines to provide the composition of only those streetlight poles that will be transferred to THESL, and in any event, production of the information requested would be onerous and is not justified by the probative value of that information.

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

POLE MATERIAL	THESL	THESI
Wood	101,710	3,096
Concrete	38,218	38,897
Steel	3,146	4,607
Missing Data	1,258	5,814
Aluminum	472	4,263
Fibreglass	27	43
Iron	7	21
TOTAL	**144,838**	**56,741**

(b) Streetlighting poles – currently THESI assets - were erected for a different purpose and have different physical characteristics than THESL's distribution poles, which carry primary voltage. THESL only received approval from the Board to transfer certain streetlighting poles from THESI to THESL in August 2011, and the related transactions have not occurred yet. Accordingly, THESL is currently in the process of transitioning these assets, including assessing the appropriate standards, safety, operational and other considerations that apply in respect of streetlighting poles. It would be premature for THESL to speculate on the considerations that would apply to those streetlighting poles. Further, streetlighting poles are not essential facilities for wireless attachers and the CCTA Decision does not apply to THESI.

(c) THESL uses the following approximations for pole life span:

(i) Cedar pole – 40 years

(ii) Steel pole – 50 years

(iii) Concrete pole – 50 years

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

INTERROGATORY 3:

Reference(s): none provided

(a) Prior to adopting or implementing the "no wireless" policy, did THESL request any input from the Board or Board staff regarding this policy?
(b) Why did THESL not wait for the Board to reply to the THESL Letter, prior to adopting the "no wireless" policy?
(c) Is it THESL's practice to consult with the Board or Board staff prior to implementing new policies or changing existing policies?
(d) Prior to adopting the "no wireless" policy did THESL seek and obtain legal advice as to the application of the CCTA Order to wireless attachments?
(e) Did THESL receive any form of acknowledgement of receipt, by the Board, of the THESL Letter? If yes, provide copies of all correspondence received from the Board or its staff in this regard.

RESPONSE:

(a) Please refer to the response in Tab 5.3, Schedule 1. THESL formed its conclusion regarding the applicability of the CCTA Decision independently and wrote to the Board on August 13, 2010 to advise the Board of that fact and to invite the Board to contact THESL if the Board had any concerns.

(b) Please see the response in (a) above. At no time has the Board expressed concerns with respect to THESL's position as articulated over a year ago in its August 13, 2010 letter.

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

(c) THESL's approach to policy management is dependent on the specific issues and circumstances attending each policy question. Where THESL believes it is appropriate to consult the Board, it does so.

(d) THESL declines this interrogatory on the basis that the information sought is privileged as being in contemplation of litigation.

(e) No.

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

INTERROGATORY 4:

Reference(s): none provided

(a) Did THESL consult with any Canadian Carrier, including DAScom, Public Mobile, Rogers, Telus and Bell, prior to adopting its "no wireless" policy?

(i) If yes, with whom did THESL consult?

(ii) If yes, what feedback was received and from whom?

(b) Was the THESL Letter served on affected and interested parties? If not, why not?

(c) As of August 13, 2010 how many separate parties had wireless equipment attached to THESL poles? Provide the names of such parties, the number of poles attached to, the type of the equipment so attached, and the date on which those parties first started attaching wireless equipment to the THESL poles.

(d) Is it THESL's intention to decline to review all attachment agreements with the parties indentified in response to (c) at the expiry of their pole attachment agreements with THESL?

(e) Is it THESL's intention to require all parties, identified in response to (c), to remove their wireless attachments from THESL poles at the expiration of the attachment agreement?

(f) Has THESL had any negotiations or discussions with any of the parties who have attached wireless equipment with respect to terms and conditions on which attachment will be available in the future?

RESPONSE:

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

(a) THESL disagrees with the premise of this question. THESL has not adopted a "no wireless" policy. Please see the response in Tab 5.3, Schedule 1.

(b) THESL's letter was addressed to the Ontario Energy Board and as it was not filed in the context of any proceeding, so THESL had no obligation to serve on any particular parties.

(c) To produce this information would require an exhaustive examination of THESL's records and cannot be completed within the timelines of this proceeding. The information has questionable relevance and would be overly burdensome to produce relative to its probative value (if any).

(d) THESL reviews matters of contractual negotiation on a case-by-case basis, and declines to speak to future contingent events in this regard.

(e) Please see the response in (d) above.

(f) THESL is unable to interpret this question as worded.

TAB 3

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

INTERROGATORY 10:

Reference(s): THESL's June 2011 Letter, Section 5

"CANDAS does not represent a public interest that is in any way relevant to the Board's mandate. CANDAS represents a consortium of commercial private interests. The public interest in this proceeding centres around: (i) ensuring that LDCs and electricity ratepayers are not subsidizing a private business model and otherwise undermining a competitive market; (ii) ensuring that the safety and reliability of the distribution system is not compromised; and (iii) ensuring that scarce pole attachment space is appropriately value and efficiently allocated among numerous competing demands for that very limited space."

(a) Please provide examples of how the introduction of wireless equipment and antennas would compromise the safety and reliability of the distribution system in a way that is different from the installation of

(i) Cable TV equipment and wireline attachments

(ii) Electricity distribution hardware including transformers, capacitors, breakers, power conductors or other hardware routinely installed on distribution poles

(iii) Copper cables, splice enclosures and power supplies

(iv) Traffic control boxes, security cameras, public safety hardware

(v) SCADA or SmartGrid systems

(vi) WiFi equipment and antenna systems

(b) What is the estimated number of attachment positions available for each pole type owned or controlled by THESL?

(c) What percentage of the poles currently owned or controlled by THESL have attachments? Please provide a breakdown by pole type and identify the number and type

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

of attachments.

(d) What percentage of the poles currently owned or controlled by THESL have attachments in the communication space? Please provide a breakdown by pole type and identify the number and type of wireless attachments.

(e) What percentage of the poles currently owned or controlled by THESL have wireless attachments? Please provide a breakdown by pole type and identify the number and type of wireless attachments.

(f) What percentage of THESL owned or controlled poles have attachments, wireline, equipment or otherwise, in the "unusable space" or otherwise in the space below the communication space?

(g) Does THESL object to the placement of equipment such as optical converters or battery backup in the "unusable space" or otherwise to the space below the communication space provided appropriate Electrical Standards Association ("**ESA**") and other safety guidelines are met? If yes, please explain why THESL objects to placing equipment in the "unusable space" under such conditions.

(h) Is there any equipment which THESL believes could be acceptable to place in the "unusable space"? If yes, what equipment and under what conditions?

(i) What percentage of poles does THESL believe are at full capacity and could not support additional attachments if "make-ready" work or additional support, e.g. guy wires, were added?

(j) Based on the number of poles owned or controlled, or to be owned or controlled by THESL, please explain how the use of approximately 790 poles that were to be used for the wireless attachments of DAScom's Toronto DAS Network would greatly impact the available attachment space on THESL poles.

(k) Does THESL believe that there could be more than three attachments in the

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

communications space provided ESA and other safety guidelines were met and the as-built structure would pass structural and wind loading analysis?

(l) Has THESL evaluated options for increasing the number if attachments on the distribution poles including;

(i) Use of standoff brackets that convert a single attachment to 3 or more wireline attachments

(ii) Overlashing multiple cables onto a single messenger cable

(iii) Increasing the available communication space on taller poles through power "make ready" engineering and commonly used construction standards and practices

(iv) Allowing wireline carriers or antenna attachments to be made on the field side of the pole as opposed to the road side of the pole (pole boxing)

(v) Use of the "unused space" for placement of wireless equipment with antennas on the field side of the pole so as to not consume any existing attachment points on the road side of the pole

(vi) Decreasing space between wireline attachments to allow for additional attachments or any other means of making reasonable accommodation to all Canadian Carriers making applications to attach

If yes, please describe the research that was performed and provide any studies that were produced as a result, including specific references to ESA 22/04, that resulted in their exclusion from consideration. If not, please explain for each numbered section, why these methods haven't been considered?

(m) What is THESL's criteria for efficiently allocating "scarce pole attachment space" among numerous competing demands? Please provide the decision metrics THESL uses to determine if and when poles are available and who can attach to poles if they are

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

available.

(n) Does THESL have any written or unwritten policy regarding reservations of attachment space in the communication space? If yes, which entities are entitled to a reserved space on all or some number of poles?

(o) Provide copies of the distribution pole attachment agreement(s) as between Toronto Hydro (as it then was) and Toronto Hydro Telecom (as it then was).

(p) Provide copies of the distribution pole attachment agreement(s) as between THESL and Cogeco in respect of the One Zone network.

(q) Provide copies of the distribution pole attachment agreement as between THESI and Cogeco in respect of One Zone attachments to poles that are to be transferred to THESL.

(r) Do any existing attachers have a contractual right to reserve space on THESL poles? If yes, please disclose who these entities are and what process is used when a Canadian Carrier requests access to poles with available space that are reserved by others with a contractual right to use the available attachment points.

RESPONSE:

(a) THESL disagrees with the premise of this question. In particular, THESL never stated that "the introduction of wireless equipment and antennas would compromise the safety and reliability of the distribution system", except to the extent that THESL has safety, operational and cost concerns with hosting wireless attachments (which is detailed in the affidavit of Ms. Byrne – see in particular paragraphs 40-55).

(b) THESL standards do not speak to an estimated number of attachment positions available for each THESL Pole. THESL standards speak to the number of

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

telecommunications attachments allowed on any given THESL Pole: which is three, within the communications space. Please see Standard 23-3100 in Tab 5.1, Schedule 1, Attachment 1.

(c) Please see the responses in Tab 5.1, Schedules 2, 7 part (d) and 15.

(d) Please see the response in Tab 5.1, Schedule 7.

(e) Please see the response in Tab 5.1, Schedule 6.

(f) Please see the responses in Tab 1, Schedule 21; Tab 5.2, Schedule 17; and Tab 5.1, Schedules 7 and 15.

(g) THESL cannot answer this question in the abstract. THESL reviews attachment applications on a case-by-case basis (including examining the attachment type and whether the CCTA Decision applies), and before approving any such application, would need ensure that all internal and external standards are met.

(h) Please see (g) above as well as the response in Tab 1, Schedule 21.

(i) Please see the response in Tab 5.1, Schedule 7, part (d). Whether any given THESL pole could not support additional attachments if "make-ready" work or additional support were added, is considered on a case-by-case basis.

(j) Please see the responses in Tab 5.1, Schedules 2 and 7. Placement of wireless

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

ancillary equipment requires connection of that equipment via wireline attachments to the rest of the operator's network, and will therefore create the need for an incremental wireline attachment for all those mini-systems.

(k) No. Please see (b) above.

(l)

(i) No.

(ii) No.

(iii) No. Please see (b) above and the CCTA Decision.

(iv) No.

(v) No.

(vi) No. THESL has had no need to evaluate this.

(m) THESL does not currently have an explicit procedure for "allocation" of THESL Pole Space. THESL processes applications for NDAs on a first-come-first-serve basis while following its current Standards and processes. See affidavit of Ms. Byrne, at paragraph 18, as well as the response in Tab 1, Schedule 1.

(n) No.

(o) The information sought is not relevant to this proceeding and in any event, is confidential.

(p) THESL does not have any records of an agreement with Cogeco in respect of One

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

Zone.

(q) THESI is not a party to this proceeding and therefore the information sought is not relevant.

(r) No.

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

INTERROGATORY 6:

Reference(s): Byrne, para. 4

(a) Are the poles from each of the six former municipal electric distribution utilities subject to the same engineering and construction standards?
(b) If the response to (a) is "no", compare and contrast the various applicable legacy standards.
(c) In the event that a THESL standard conflicts with OR 22/04, CSA C22.3 No. 1, or Ontario OSHA, which standard applies?
(d) Does THESL attempt to reconcile conflicting standards in the field? If so, explain the process by which this is achieved and the time it takes to correct the conflict.
(e) Describe and explain how legacy variations in distribution equipment configurations etc. are managed *vis à vis* the THESL employees and contractors that work on THESL poles.
(f) Is it THESL's position that such legacy variations constitute a safety issue or concern?

RESPONSE:

(a) No. Existing "legacy" assets are not expected to meet current standards, and accordingly, THESL performs like-for-like maintenance on legacy assets without rebuilding to current standards. Any new construction requiring an incremental change to the asset requires assessment of the extent to which current engineering and construction standards apply, and replacement of a legacy asset is done to current THESL Construction Standards.

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

(b) The relevance of such information to this proceeding is minimal. In any event, the onerous nature of generating this information is not justified by its low probative value. THESL cannot provide a meaningful response to this interrogatory within the timelines provided in this proceeding.

(c) O.Reg. 22/04 authorizes the creation of company standards. If a conflict arose between the OSHA or CSA that THESL could not resolve itself, given its ability to create company standards, it would review the specific situation, and could ask for input from other members of the industry, including ESA, the MOL or could ask CSA to review the conflict and propose a resolution through its standards-making processes. As a general matter, the ESA, MOL and the CSA do not overlap in their subjects: ESA oversees the legislation for the safety of the public related to the electricity distribution system, MOL oversees the legislation for worker health and safety, and the CSA publishes standards for design, construction, and maintenance of the electricity distribution system.

(d) Please see the response in (c) above. THESL employees are expected to follow THESL Standards when conducting their work. If THESL employees have any concerns when performing work, they are expected to follow established protocols with regard to questions about job design, or Standards, or unsafe work concerns.

(e) THESL employees gain experience on the various existing assets during their training and apprenticeship, and through their ongoing work experiences. For example, both CPLP apprentices, and staff in groups that performance emergency response, are rotated across the city to gain, and maintain their knowledge base.

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

(f) No. As stated in Ms. Byrne's affidavit at paragraph 4 it is THESL's position that such legacy assets materially contribute to the way in which the configuration, condition and congestion of THESL Poles today is highly varied.

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

INTERROGATORY 32:

Reference(s): **Application, para. 10.21**
Responses to CCC 1 and CEA 9-1

(a) Produce any and all documents, including contracts, evidencing the terms and conditions upon which THESL (or any affiliate) permitted the "One Zone" network to be attached to its poles.

(b) How many of THESL's (or its affiliates') poles are currently utilized to hold:

(i) TTC communications equipment

(ii) "One Zone" communications equipment

(iii) Any other telecommunications equipment

(c) For each of the equipment identified in operations (b)(i), (ii) and (iii) provide:

(i) The identity of the pole (by location and alpha-numerical designation)

(ii) A photograph of each pole, with all communications equipment clearly visible

RESPONSE:

(a) THESL does not have a contract with One Zone for pole attachments. THESI is not a party to this hearing and declines to provide this information.

(b) Please see the responses in Tab 5.1, Schedules 2, 3, 15, as well as Tab 5.3, Schedule 6.

(c) THESL is in the process of gathering this data in the ordinary course, but due to the time-consuming nature of the project, it is not possible to have this data available for the purposes of the present proceeding. In any event, THESL declines this

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

interrogatory on the basis that production of the information sought is unduly onerous as compared with its probative value, and/or not relevant.

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

INTERROGATORY 3:

Reference(s): Byrne, paras. 3 and 5

(a) Does THESL provide services to THESI in connection with the maintenance and operation of THESI poles?

(b) Do the THESL-specific standards (as opposed to external standards such as ESA and CSA standards) that govern the construction, operation and maintenance of THESL distribution poles apply, *mutatis mutandi* to THESI poles?

(c) If the response to (b) is "no", describe how THESL standards differ from THESI standards in this regard.

RESPONSE:

a) THESI is not a party to this proceeding and therefore the information sought is not relevant, however THESL currently provides certain limited services to THESI in connection with the maintenance and operation of THESI poles.

b) No.

c) THESI is not a party to this proceeding and therefore the information sought is not relevant, however there are certain standards applicable to LDC primary distribution assets and a separate set of standards applicable to Streetlighting. The Standards for Streetlighting contain information specific to the poles used for Streetlighting that are not used for primary electricity distribution. Further, many THESL LDC Standards are not relevant to Streetlighting, such as the distribution standards for switches.

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

INTERROGATORY 15:

Reference(s): Byrne, para. 16

a) Do non-communications attachments on power poles present physical impediments to pole workers accessing or climbing the poles?

b) Are line crews trained to navigate around non-communication attachments?

c) Explain how navigating around non-communications, non-distribution attachments ("NDAs") differs from navigating around communications NDAs?

d) CCTV carriers install power supplies in the unused portion of the pole, the communication space and the separation space. Does THESL categorize these types of power supplies as communication or non-communications NDAs?

e) Would splice enclosures installed by the ILEC's or CLEC's in the unused portion of the pole, in the communication space or in the separation space, be considered communication or non-communications NDAs?

f) Provide a list of all non-wireline (i.e. fibre, cable or other) NDAs attached to THESL poles and, for each such NDA, describe:

   (i) The geographic location of each NDA

   (ii) The specific type of NDA attachment (e.g. surveillance camera, Wi-Fi antenna, battery unit, DAS antenna, etc.)

   (iii) The owner of each NDA

   (iv) The size, weight, dimensions and other physical specifications of each NDA

   (v) The attachment location of each NDA on the pole (distribution space, communication space, unusable space, etc.)

   (vi) The attachment method (e.g. through bolt, metal band, in-line (i.e. on-cable, etc.)

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

(vii) The rates charged for each type of NDA

g) Provide a list of all wireless attachments that are used in conjunction with electricity distribution such as SCADA antennas or other SCADA equipment, and, for each such attachment, describe:

(i) The geographic location of each wireless attachment

(ii) The specific type of wireless attachment

(iii) The owner of each wireless attachment

(iv) The size, weight, dimensions and other physical specifications of each wireless attachment

(v) The attachment location on the pole of each wireless attachment (distribution space, communication space, unusable space, etc.)

(vi) The attachment method (e.g. through bolt, metal band, in-line (i.e. on-cable, etc.)

h) Does THESL publish standard terms and conditions pertaining to non-communication attachments?

i) Provide a pro forma copy of one attachment agreement in respect of non-communication attachments.

j) Provide a copy of THESL's policies governing the attachment of non-communication equipment.

k) Provide a copy of THESL's construction guidelines pertaining to non-communication attachments.

l) Provide a copy of the pro forma permit application pertaining to non-communication equipment.

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

m) Is any wireless equipment, including equipment associated with wireless attachments, currently attached outside the communications space on any THESL pole? If "yes", provide:

(i) The geographic location of each such wireless attachment

(ii) The specific type of such wireless attachment

(iii)The owner of each such wireless attachment

(iv)The size, weight, dimensions and other physical specifications of each such wireless attachment

(v) The attachment location on the pole of each such wireless attachment (distribution space, communication space, unusable space, etc.)

(vi)The attachment method (e.g. through bolt, metal band, in-line (i.e. on-cable, etc.)

RESPONSE:

a) NDAs on THESL Poles may limit pole climbing and bucket mobility, and can make work such as stringing conductors more difficult and time consuming for THESL. When performing work such as pole replacements or removals, attachments are an additional project dependency in the project planning and execution, and can delay this work.

b) During their apprentice and other training, as well as on-going work, THESL staff are taught how to work around NDAs on poles. Please see also the response in Tab 5.1, Schedule 5, part (b).

c) All attachments (whether or not communications attachments) create an encumbrance on THESL Poles that THESL crews must navigate around.

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

d) THESL does not consider CCTV NDAs to be communications NDAs.

e) CANDAS has not defined what an ILEC or CLEC is, which is required in order for THESL to answer this question. THESL believes that this refers to splices that are made in-line (i.e. along the wireline), and are not installed on the pole, and therefore THESL does not consider these to be NDAs.

f) Please see also the response in Tab 5.1, Schedule 7. THESL does not have records that capture the geographic location of each NDA, the specific type of NDA attachment, the size, weight, dimensions and other physical specification of each NDA (other than as detailed in THESL's standards, attached as Exhibit "A" to CANDAS Byrne IR 1), the attachment location of each NDA on the pole, nor the attachment method. THESL is in the process of gathering such data in the ordinary course, but due to the time-consuming nature of the project, it is not possible to have this data available for the purposes of the present proceeding.

Regarding (iii), the specific owner name of NDAs is not relevant to this proceeding, and in any event confidential. The non-wireline attachments, by type, are as follows:

TYPE	TOTAL NUMBER
transit shelters	297
DAScom wireless antennae	105

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

rectifier	170
transit equipment	443
baskets, banners, lighting	1968
traffic signs and signals, police cameras	No Data

Regarding (vii), the rate applied to telecommunications attachments on THESL primary distribution poles is $22.35. Others are not relevant to this proceeding, and in any event, confidential.

g)

Refer to the two lists:

- SCADA equipment, attached as Attachment 1
- Radio equipment, attached as Attachment 2

h) Yes. See THESL Standards Section 23. Standards 23-1100 through 2500 provide information for how temporary and decorative attachments are made.

i) DAScom is a current THESL customer and has numerous examples of attachment agreements within its possession.

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

j) See THESL Standards Section 23. Standards 23-100 through 2500 give the information for how temporary and decorative attachments are made. Standards 23-3500 and 3900 show the installation for traffic sensors and Enbridge rectifier power supplies, respectively. THESL does not have any further written policies.

k) See answer to (j) above.

l) DAScom is a current THESL customer and has numerous examples of permit applications within its possession.

m) Yes. Please see the reponses in Tab 1, Schedules 19 and 20. See also see the response in Tab 5.1, Schedule 11, part (d), as well as (f) above. Please see CANDAS Evidence Larson for the specifications and placement of DAScom equipment.

Toronto Hydro IT&S Radio Systems Base Station & Remote Inventory

900 MHz Motorola Smartnet - Trunked Simulcast - Voice Radio System

Base Station Site Number	Base Station Name & Sector	Location	Latitude (dd.dddd)	Longitude (-dd.dddd)	Licensed Frequency (Y/N)	Installation Structure	Leased Structure (Y/N)
1	Forest	6 Forest Laneway	43.762281	79.408914	Y	High-Rise/Apartment/Condominium	Y
2	Eglinton	3434 Eglinton Avenue EAST	43.744726	79.211932	Y	High-Rise/Apartment/Condominium	Y
3	Logan	444 Logan Avenue	43.6653767	79.344634	Y	High-Rise/Apartment/Condominium	Y
4	Weston	3077 Weston Road	43.732261	79.537081	Y	High-Rise/Apartment/Condominium	Y
5	Neilson	1095 Neilson Road	43.8061123	79.2181246	Y	High-Rise/Apartment/Condominium	Y
6	Islington	1300 Islington Avenue	43.6492775	79.5254649	Y	High-Rise/Apartment/Condominium	Y
A	Toronto Western Hospital (Receive Only)	399 Bathurst Street	43.652997	79.4062077	Y	High-Rise/Hospital	Y
B	Fenelon (Receive Only)	135 Fenelon Avenue	43.7628204	79.3386296	Y	High-Rise/Apartment/Condominium	Y
C	Duplex (Receive Only)	500 Duplex Avenue	43.709756	79.401478	Y	High-Rise/Apartment/Condominium	Y

400 MHz Motorola Micor/PURC - Confined Space - Voice Radio System

Base Station Site Identifier	Base Station Name	Location	Latitude (dd.dddd)	Longitude (-dd.dddd)	Licensed Frequency (Y/N)	Installation Structure	Leased Structure (Y/N)
1	ManuLife	44 Charles Street WEST	43.6682961	79.3884279	Y	High-Rise/Apartment/Condominium	Y
2	St.Clair	40 St. Clair Avenue WEST	43.6879274	79.3956344	Y	High-Rise/Apartment/Condominium	Y
3	Erskine	55 Erskine Avenue	43.7115531	79.3968532	Y	High-Rise/Apartment/Condominium	Y
4	C.N. Tower	301 Front Street WEST	43.6416076	79.3868205	Y	High-Rise/CN Tower	Y
5	Oakwood	161 Oakwood Avenue	43.6802561	79.4357398	Y	High-Rise/Apartment/Condominium	Y
6	Parkdale	45 Oakmount Road	43.6552459	79.4627364	Y	High-Rise/Apartment/Condominium	Y
7	Logan	444 Logan Avenue	43.6653767	79.344634	Y	High-Rise/Apartment/Condominium	Y
8	Kingston	1080 Kingston Road	43.6810078	79.2828588	Y	High-Rise/Apartment/Condominium	Y
9	Bloor West	2 Jane Street	43.6493636	79.4844892	Y	High-Rise/Apartment/Condominium	Y
10	Runnymede	61 Pelham Park Gardens	43.6687092	79.4580811	Y	High-Rise/Apartment/Condominium	Y
11	Dufferin	245 Dunn Avenue	43.6410162	79.4344471	Y	High-Rise/Apartment/Condominium	Y
12	Jarvis	96 Gerrard Street EAST	43.6602761	79.3772563	Y	High-Rise/Apartment/Condominium	Y
13	Bathurst	2500 Bathurst Street	43.7055457	79.4264672	Y	High-Rise/Apartment/Condominium	Y
14	Danforth	740 Pape Avenue	43.6800803	79.3456154	Y	High-Rise/Apartment/Condominium	Y
15	Bloor North	730 Dovercourt Road	43.6602678	79.4290569	Y	High-Rise/Apartment/Condominium	Y
16	Toronto Western Hospital	399 Bathurst Street	43.652997	79.4062077	Y	High-Rise/Hospital	Y
17	Coxwell	300 Coxwell Avenue	43.6738931	79.3198169	Y	High-Rise/Apartment/Condominium	Y
18	Control	5800 Yonge Street	43.7847676	79.4168176	Y	Toronto Hydro Work Centre	N
19	60 Eglinton	60 Eglinton WEST	43.7059648	79.4017339	Y	Toronto Hydro Work Centre	N

900 MHz GE-MDS TransIT - SCADA - Data Radio System

Base Station Site Number	Base Station Name	Location	Latitude (dd.dddd)	Longitude (-dd.dddd)	Licensed Frequency (Y/N)	Installation Structure	Leased Structure (Y/N)
1	Forest	6 Forest Laneway	43.762281	79.408914	Y	High-Rise/Apartment/Condominium	Y
2	Eglinton	3434 Eglinton Avenue EAST	43.744726	79.211932	Y	High-Rise/Apartment/Condominium	Y
3	Logan	444 Logan Avenue	43.6653767	79.344634	Y	High-Rise/Apartment/Condominium	Y
4	Weston	3077 Weston Road	43.732261	79.537081	Y	High-Rise/Apartment/Condominium	Y
5	Neilson	1095 Neilson Road	43.8061123	79.2181246	Y	High-Rise/Apartment/Condominium	Y
6	Islington	1300 Islington Avenue	43.6492775	79.5254649	Y	High-Rise/Apartment/Condominium	Y
Subscriber Identifier (Name)	Base Station Name & Sector	Location	Latitude (dd.dddd)	Longitude (-dd.dddd)	Licensed Frequency (Y/N)	Installation Structure	Leased Structure (Y/N)
TRANSIT REMOTE SUBSCRIBER (RADIO) DETAILS CAPTURED IN SCADA ENGINEERING'S DOCUMENT TITLED, "Radio antenna.xlsx" (re: Comm. Type = Transit)							

Base Station Site Number	Base Station Name	Location	Latitude (dd.dddd)	Longitude (-dd.dddd)	Licensed Frequency [Y/N]	Installation Structure	Leased Structure [Y/N]
1	Monogram Hub Site (Formerly Belfield)	6 Monogram Place (Formerly Belfield)	43.7047391	79.5513376	Y	Toronto Hydro Work Centre	N
2	Dixon (Master Station)	330 Dixon Road	43.6956814	79.5530882	Y	High-Rise/Apartment/Condominium	Y
Subscriber Identifier (Name)	Base Station Name & Sector	Location	Latitude (dd.dddd)	Longitude (-dd.dddd)	Licensed Frequency [Y/N]	Installation Structure	Leased Structure [Y/N]
DARCOM REMOTE SUBSCRIBER (RADIO) DETAILS CAPTURED IN SCADA ENGINEERING'S DOCUMENT TITLED, "Radio antenna.xlsx" (re: Comm. Type = DARCOM)							

400 MHz Motorola DACSCAN/MTR2000 - NY SCADA - Data Radio System

Base Station Site Number	Base Station Name	Location	Latitude (dd.dddd)	Longitude (-dd.dddd)	Licensed Frequency [Y/N]	Installation Structure	Leased Structure [Y/N]
1	Forest	6 Forest Laneway	43.762281	79.408914	Y	High-Rise/Apartment/Condominium	Y
Subscriber Identifier (Name)	Base Station Name & Sector	Location	Latitude (dd.dddd)	Longitude (-dd.dddd)	Licensed Frequency [Y/N]	Installation Structure	Leased Structure [Y/N]
DACSCAN REMOTE SUBSCRIBER (RADIO) DETAILS CAPTURED IN SCADA ENGINEERING'S DOCUMENT TITLED, "Radio antenna.xlsx" (re: Comm. Type = NY radio)							

900 MHz GE-MDS SD9 - SCADA - Data Radio System

Base Station Site Number	Base Station Name	Location	Latitude (dd.dddd)	Longitude (-dd.dddd)	Licensed Frequency [Y/N]	Installation Structure	Leased Structure [Y/N]
1	Forest	6 Forest Laneway	43.762281	79.408914	Y	High-Rise/Apartment/Condominium	Y
2	Eglinton	3434 Eglinton Avenue EAST	43.744726	79.211932	Y	High-Rise/Apartment/Condominium	Y
3	Logan	444 Logan Avenue	43.6653767	79.344634	Y	High-Rise/Apartment/Condominium	Y
4	Weston	3077 Weston Road	43.732261	79.537081	Y	High-Rise/Apartment/Condominium	Y
5	Neilson	1095 Neilson Road	43.8061123	79.2181246	Y	High-Rise/Apartment/Condominium	Y
6	Islington	1300 Islington Avenue	43.6492775	79.5254649	Y	High-Rise/Apartment/Condominium	Y
Subscriber Identifier (Name)	Base Station Name & Sector	Location	Latitude (dd.dddd)	Longitude (-dd.dddd)	Licensed Frequency [Y/N]	Installation Structure	Leased Structure [Y/N]
SD9 REMOTE SUBSCRIBERS (RADIOS) HANVE NOT YET BEEN DEPLOYED							

18 GHz Dragonwave Horizon Compact Packet Microwave System

Base Station Site Number	Base Station Name	Location	Latitude (dd.dddd)	Longitude (-dd.dddd)	Licensed Frequency [Y/N]	Installation Structure	Leased Structure [Y/N]
1	Forest	4 Forest Laneway	43.7627254	79.4095117	Y	High-Rise/Apartment/Condominium	Y
2	Forest	6 Forest Laneway	43.762281	79.408914	Y	High-Rise/Apartment/Condominium	Y
3	Duplex	500 Duplex Avenue	43.709756	79.401478	Y	High-Rise/Apartment/Condominium	Y
4	Islington	1300 Islington Avenue	43.6492775	79.5254649	Y	High-Rise/Apartment/Condominium	Y
5	Weston	3077 Weston Road	43.732261	79.537081	Y	High-Rise/Apartment/Condominium	Y

1800 MHz Redline RedMAX WiMAX Wireless Broadband Network

Base Station Site Identifier	Base Station Name & Sector	Location	Latitude (dd.dddd)	Longitude (-dd.dddd)	Licensed Frequency [Y/N]	Installation Structure	Leased Structure [Y/N]
BS2D1	Forest EX-200 Sector 1	6 Forest Laneway	43.762281	79.408914	Y	High-Rise/Apartment/Condominium	Y
BS201	Forest EX-200 Sector 2	6 Forest Laneway	43.762281	79.408914	Y	High-Rise/Apartment/Condominium	Y
BS200	Forest EX-200 Sector 3	4 Forest Laneway	43.762642	79.409822	Y	High-Rise/Apartment/Condominium	Y
BS203	Weston EX-200 Sector 1	3077 Weston Road	43.732261	79.537081	Y	High-Rise/Apartment/Condominium	Y
BS203	Weston EX-200 Sector 2	3077 Weston Road	43.732261	79.537081	Y	High-Rise/Apartment/Condominium	Y
BS202	Duplex EX-200 Sector 1	500 Duplex Avenue	43.709756	79.401478	Y	High-Rise/Apartment/Condominium	Y
BS202	Duplex EX-200 Sector 2	500 Duplex Avenue	43.709756	79.401478	Y	High-Rise/Apartment/Condominium	Y
BS202	Duplex EX-200 Sector 3	500 Duplex Avenue	43.709756	79.401478	Y	High-Rise/Apartment/Condominium	Y
Subscriber Identifier (Name)	Base Station Name & Sector	Location	Latitude (dd.dddd)	Longitude (-dd.dddd)	Licensed Frequency [Y/N]	Installation Structure	Leased Structure (Y/N]
CPE-1-8d	Forest EX-200 Sector 1	300 Dudley Ave & Church Ave	43.764801	79.372892	Y	Hydro Utility Pole	N
CPE-1-4	Forest EX-200 Sector 2	Woodsworth Rd & Hopperton Dr	43.762275	79.474958	Y	Hydro Utility Pole	N
CPE-1-5c	Forest EX-200 Sector 3	555 Sheppard Ave W, East of Bathurst St	43.778366	79.397389	Y	Hydro Utility Pole	N
CPE-3-10	Duplex EX-200 Sector 1	Wilson Ave & Belgrave Ave	43.740877	79.41825	Y	Hydro Utility Pole	N
CPE-3-11	Duplex EX-200 Sector 1	Lawrence Ave & Elm Rd	43.72261	79.411991	Y	Hydro Utility Pole	N
CPE-3-5a	Duplex EX-200 Sector 2	Glenvale Blvd, East of Bayview Ave	43.691393	79.433043	Y	Hydro Utility Pole	N
CPE-3-5d	Duplex EX-200 Sector 2	Commercial Rd, East of Laird Dr	43.704934	79.353373	Y	Hydro Utility Pole	N

CPE-3-7	Duplex EX-200 Sector 3	52 Blossomfield Drive	43.718038	79.449031	Y	Hydro Utility Pole	N
CPE-3-12c	Duplex EX-200 Sector 3	100 Forest Hill Road, North of Lonsdale Rd	43.711222	79.449343	Y	Hydro Utility Pole	N
CPE-2-1	Weston EX-200 Sector 1	3637 Weston Rd, North of Fenmar Dr	43.723137	79.307411	Y	Hydro Utility Pole	N
CPE-2-2	Weston EX-200 Sector 2	Huxley Rd and Clayson Rd	43.723957	79.525661	Y	Hydro Utility Pole	N

Area	RTU name	Address	Comm. Type	Radio ID	RTU Type	Type	Voltage	Fdr1	Fdr2	GPS	GPS	MSL
	1 - Transit Master radi	444 Logan Ave			Tx freq: 928.81875	Rx freq	928.81875					
Scar_EY	EY_OSC10238	Pole 266 Donlands Ave	1-Transit	1	DART 3.95	OH Switch	27.6 KV	34M8				
Scar_EY	EY_OSC41917	Pole 746 O'Connor Dr	1-Transit	2	DART 3.95	OH Switch	27.6 KV	34M4	34M3			
Scar_EY	EY_OSC24910	Pole 760 O'Connor Dr	1-Transit	3	DART 3.95	OH Switch	27.6 KV	53M7	34M3			
Scar_EY	EY_DSC17088	Pole 499 Sammon Ave	1-Transit	4	DART 3.95	OH Switch	27.6 KV	34M8	34M4			
Scar_EY	EY_OSC40052	Pole 210 Dawes Rd	1-Transit	5	DART 3.95	OH Switch	27.6 KV	43M32				
Scar_EY	EY_OSC33B56	Pole 74 Don Valley Dr	1-Transit	6	DART 3.95	OH Switch	27.6 KV	34M1				
Tor	TO_OSC69036	Pole 49 Eglinton Ave W	1-Transit	7	S&C 5801	OH Switch	13.8 KV	A200DX	A220DX	43° 42 304' N	79° 24 34' W	243
Scar_EY	EY_OSC31022	Pole 1092 Victoria Park Ave	1-Transit	8	DART 3.95	OH Switch	27.6 KV	43M32	53M7			
Scar_EY	EY_OSC15961	Pole 78 O'Connor Dr	1-Transit	9	DART 3.95	OH Switch	27.6 KV	34M4	34M8			
Scar_EY	EY_OSC26788	Pole 1108 O'Connor Dr	1-Transit	10	DART 3.95	OH Switch	27.6 KV	53M7				
Scar_EY	EY_OSC38300	Pole 33 Gamble Ave	1-Transit	11	DART 3.95	OH Switch	27.6 KV	34M1	34M24			
Scar_EY	EY_OSC26589	Pole 1025 O'Connor Dr	1-Transit	12	DART 3.95	OH Switch	27.6 KV	53M7				
Scar_EY	EY_OSC21136	Pole 6A Curity Ave	1-Transit	13	DART 3.95	OH Switch	27.6 KV	53M3	53M7			
Scar_EY	EY_DSC39821	Pole 382 Tower Line	1-Transit	14	DART 3.95	OH Switch	27.6 KV	34M3	43M32			
Tor	EY_LS281	Pole 55 Moore Ave	1-Transit	15	DART 3.95	OH Switch	13.8 KV	A12L		43° 41.8' N	79° 22 294' W	135 948
Tor	EY_LS280	Pole 61 Moore Ave	1-Transit	16	DART 3.95	OH Switch	13.8 KV	A12L		43° 41.818' N	79° 22.183' W	135 264
Scar_EY	EY_OSC245B	Pole B Dohme Ave	1-Transit	17	DART 3.95	OH Switch	27.6 KV	53M3	53M7			
Tor	EY_OSC6672	Pole 266 Rumsey Rd	1-Transit	18	DART 3.95	OH Switch	13.8 KV	A13L		43° 42 736' N	79° 22.18' W	135 948
Tor	EY_OSC70113	Pole 1803 Bayview Ave	1-Transit	19	DART 3.95	OH Switch	13.8 KV	A13L		43° 42 726' N	79° 22.645' W	149 9616
Tor	EY_LS295	Pole 226 Millwood Rd	1-Transit	20	S&C 5801	OH Switch	13.8 KV	A12L	A13L	43° 42 157' N	79° 21.726' W	145
Tor	EY_OSC84999	Pole 433 Bayview Ave	1-Transit	21	S&C 5801	OH Switch	13.8 KV	A12L	A13L	43° 42 244' N	79° 22.464' W	142.9512
Scar_EY	EY_OSC23677	Pole 5 Hollinger Rd	1-Transit	22	S&C 5801	OH Switch	27.6 KV	53M3				
Scar	SC_OSC49275	Pole 16 Wynnview Crt	1-Transit	23	DART 3.95	OH Switch	27.6 KV	43M24	43M2B	43° 41 92' N	79° 15.236' W	149 9616
Scar	SC_OSC65211	Pole 3150 St Clair Ave E	1-Transit	24	S&C 5801	OH Switch	27.6 KV	53M7	43M27	43.709101	79 295066	139
Scar	SC_OSC8615	Pole 10-121 Kingston Rd, E/O Fallin	1-Transit	25	S&C 5801	OH Switch	27.6 KV	43M23		43° 39.875' N	79° 2.65' W	14
Tor	TO_DSC959B2	Pole 355 Queen St W	1-Transit	26	S&C 5801	OH Switch	13.8 KV	A240T	A230T	43.64124	-79 432B3	100
Tor	TO_OSC17827	Pole 187 Russell Hill Rd	1-Transit	29	S&C 5801	OH Switch	13.8 KV	A200DX		43.70287° N	79.41521° W	176
Tor	TO_OSC18230	Pole 125 Onole Pkwy	1-Transit	30	S&C 5801	OH Switch	13.8 KV	A200DX		43.70500° N	79.40595° W	180
Tor	TO_OSC14061	Pole 123 Onole Pkwy	1-Transit	31	S&C 5801	OH Switch	13.8 KV	A250DX		43.70472° N	79.40588° W	180
Tor	TO_OSC36607	Pole 58 Chaplin Cres	1-Transit	33	S&C 5801	OH Switch	13.8 KV	A200DX	A250DX	43.69872° N	79.40555° W	184
Tor	TO_OSC18657	Pole 42 Chaplin Cres	1-Transit	34	S&C 5801	OH Switch	13.8 KV	A220DX	A250DX	43.69796° N	79.40282° W	181
Tor	TO_OSC51634	Pole 43 Huron St	1-Transit	36	S&C 5801	OH Switch	13.8 KV	A232B		43.6755° N	79.40522° W	126
Tor	S5274	Pole 243 Eastern Ave	1-Transit	37	DART	OH Switch	13.8 KV	A251BN		43° 39.677' N	79° 19 781' W	98
Tor	TO_OSC63609	Pole 14 Wells St	1-Transit	38	S&C 5801	OH Switch	13.8 KV	A252DN	A231B	43.67078° N	79.41019° W	125
Tor	TO_OSC847B3	Pole 100 Dupont St	1-Transit	39	S&C 5801	OH Switch	13.8 KV	A252DN	A232B	43.67389° N	79.41139° W	167
Tor	TO_OSC14270	Pole 357 Bathurst St	1-Transit	40	S&C 5801	OH Switch	13.8 KV	A252DN		43.67120° N	79.41340° W	122
Tor	TO_OSC81233	Pole 39 Follis Ave	1-Transit	41	S&C 5801	OH Switch	13.8 KV	A252DN		43.66B32° N	79.41895° W	102
Tor	TO_OSC78732	Pole 63 Madison Ave	1-Transit	42	S&C 5801	OH Switch	13.8 KV	A231B		43.67494° N	79.40579° W	110
Tor	TO_DSC57083	Pole 170 Dupont St	1-Transit	43	S&C 5801	OH Switch	13.8 KV	A255DN	A252DN	43.671B1° N	79.42110° W	117
Scar	SC_OSC66373	Pole 1413 Victoria Park Ave	1-Transit	44	S&C 5801	OH Switch	27.6 KV	S3M7	E5M6	43.720327° N	79.300746° W	16
Tor	TO_OSC88292	Pole 367 Queen St W	1-Transit	45	S&C 5801	OH Switch	13.8 KV	A225T		43.6130° N	79.49693° W	120
Scar_EY	SC_OSC15346	Pole 383A Haldon Ave	1-Transit	46	S&C 5801	OH Switch	27.6 KV	43M31	43M32	43.6997° N	79.3125° W	116
Tor	S8224	Pole 52 Greenwood Ave	1-Transit	101	DART 3.95	OH Switch	13.8 KV	A4BE		79° 19 243' N	79° 19 681' W	86 2584
Tor	S8225	Pole 50 Greenwood Ave	1-Transit	102	DART 3.95	OH Switch	13.8 KV	A21E		79° 19.218' N	79° 19.669' W	85 392
Tor	S8234	Pole 50 Greenwood Ave	1-Transit	103	DART 3.95	OH Switch	13.8 KV	A48E		79° 19 248' N	79° 19 689' W	B6 5632
Tor	S8236	Pole 95 Coxwell Ave	1-Transit	104	DART 3.95	OH Switch	13.8 KV	A2E		43° 4 43' N	79° 19 151' W	B8 392
Tor	TO_S8015	Pole 87 Parliament St	1-Transit	105	S&C 5801	OH Switch	13.8 KV	A25GD		43° 39.344' N	79° 21.878' W	37
Tor	TO_OSC28709	Pole 34 Basin St	1-Transit	106	S&C 5801	OH Switch	13.8 KV	A251BN		43° 38.993' N	79° 2.327' W	88
Tor	TO_OSC36939	Pole 76 Commissioners St	1-Transit	107	S&C 5801	OH Switch	13.8 KV	A23BN		43° 39.27' N	79° 2.45' W	93
Scar	SC_OSC19677	Pole 1359 Woodbine Ave	1-Transit	108	S&C 5801	OH Switch	27.6 KV	43M31	34M4	43.69678° N	79.3174B7° W	126
Tor	TO_OSC71749	Pole 36 Basin St	1-Transit	109	S&C 5801	OH Switch	13.8 KV	A23BN		43° 38.994' N	79° 2.31B' W	88
Tor	TO_OSC39227	Pole 43 Coxwell Ave	1-Transit	111	S&C 5801	OH Switch	13.8 KV	A201E		43.6669° N	79.31671° W	79
Tor	TO_OSC77522	Pole 41 Coxwell Ave	1-Transit	112	S&C 5801	OH Switch	13.8 KV	A202BN	A201E	43.6668° N	79.31661° W	79
	2 - Transit Master	1300 Islington Ave			Tx freq: 932.04375	Rx freq	932.04375					
Etob	EH_OSC28943	Pole 63 HONI ROW, Rear 61 Willowridge	2-(P2)Tran	58	MOSCAD	OH Switch	27.6 KV	88M15				
Etob	EH_TST2	Moscad Test RTU in Islington	2-(P2)Tran	100	MOSCAD	Test RTU						
Etob	EH_SINC	17 Sinclair St	2-(P2)Tran	101	MOSCAD	Substation	4 KV					
Etob	EH_ISLI	79 Cordova Ave	2-(P2)Tran	102	MOSCAD	Substation	4 KV					
Etob	EH_MONO	6 Mongram (test)	2-(P2)Tran	103	MOSCAD	TEST	27.6 KV					
Etob	EH_DSC350	Pole 3 Park Lawn Rd	2-(P2)Tran	104	MOSCAD	OH Switch	27.6 KV	30M8				
Etob	EH_MILL	119 Mill Rd	2-(P2)Tran	105	MOSCAD	Substation	4 KV					
Etob	EH_REID	54 Reid Manor	2-(P2)Tran	106	MOSCAD	Substation	4 KV					
Etob	EH_BERR	132 Berry Rd	2-(P2)Tran	107	MOSCAD	Substation	4 KV					
Etob	EH_OSC51012	Pole 1514Kipling Ave	2-Transit	1	S&C 5801	OH Switch	27.6 KV	88M13	88M16	43° 4 8' N	79° 33 137' W	185
Etob	EH_OSC35818	Pole 3991 Eglinton Ave W	2-Transit	2	DART 3.95	OH Switch	27.6 KV	88M18	11M7	43° 41 32' N	79° 3.656' W	116
Etob	EH_OSC8528	Pole 3190 Lakeshore Blvd	2-Transit	3	S&C 5801	OH Switch	27.6 KV	R3-M5	R3-M1	43° 35.86' N	79° 31 182' W	91
Etob	EH_OSC7256	Pole 411 Evans Ave	2-Transit	4	S&C 5801	OH Switch	27.6 KV	R3-M3		43° 36.894' N	79° 31 B5' W	58
Etob_YK	YK_OSC6216	Pole 31 Todd Baylis Blvd	2-Transit	5	S&C 5801	OH Switch	27.6 KV	11M4	35M1	43° 41 689' N	79° 29 262' W	111
Etob	EH_OSC66267	Pole 1447 Islington Ave	2-Transit	6	S&C 5801	OH Switch	27.6 KV	88M13	38M16	43° 39.541' N	79° 31 775' W	15
Etob_YK	YK_OSC5257	Pole 2199 Keele St	2-Transit	7	S&C 5801	OH Switch	27.6 KV	35M1	35-M8	43° 41 864' N	79° 28.518' W	166
Etob_YK	YK_OSC5334	Pole 5 East Or	2-Transit	8	S&C 5801	OH Switch	27.6 KV	11M6	11M7	43° 4 722' N	79° 29.85' W	125
Etob_YK	YK_OSC3735	Pole 12 Bicknell Ave	2-Transit	9	S&C 5801	OH Switch	27.6 KV	11M8		43° 4 963' N	79° 28.451' W	135
Etob_YK	YK_OSC5789	Pole 19 Scarlett Rd	2-Transit	10	S&C 5801	OH Switch	27.6 KV	11M5	11M7	43° 39 9B4' N	79° 29.946' W	122
Etob_YK	YK_OSC863	Pole 187 Wright Ave	2-Transit	11	S&C 5801	OH Switch	27.6 KV	11M2	88M18	43° 42.8' N	79° 3.351' W	154
Etob_YK	YK_OSC829	Pole 298 Weston Rd	2-Transit	12	S&C 5801	OH Switch	27.6 KV	11M2	88M18	43° 41 789' N	79° 3.534' W	7
Etob_YK	YK_OSC5839	Pole 113 Hickery Tree Rd	2-Transit	13	S&C 5801	OH Switch	27.6 KV	88M18		43° 41.925' N	79° 31.87' W	18
Etob_YK	YK_OSC9619	Pole 7 Humber Blvd S	2-Transit	14	S&C 5801	OH Switch	27.6 KV	11M1	11M8	43° 4 94' N	79° 28 B32' W	12
Etob_YK	YK_OSC1563	Pole 1525-4 Jane St	2-Transit	15	S&C 5801	OH Switch	27.6 KV	11M2	11M3	43° 41 6B6' N	79° 31.149' W	118
Etob_YK	YK_OSC4528	Pole 212 Scarlett Rd	2-Transit	16	S&C 5801	OH Switch	27.6 KV	11M7		43° 4 578' N	79° 3.362' W	19
Etob_YK	YK_OSC50245	Pole 238 Bicknell Ave	2-Transit	17	S&C 5801	OH Switch	27.6 KV	11M8	35M1			
Etob_YK	YK_OSC3534	Pole 1246 Weston Rd	2-Transit	18	S&C 5801	OH Switch	27.6 KV	11M2		43° 41.33' N	79° 29.611' W	145
Etob_YK	YK_OSC4182	Pole 165 Rockcliff Blvd	2-Transit	19	S&C 5801	OH Switch	27.6 KV	11M1		43° 4 66' N	79° 29 375' W	14
Etob_YK	YK_OSC2782	Pole 450 St Johns Rd	2-Transit	20	S&C 5801	OH Switch	27.6 KV	11M5		43° 39.747' N	79° 29 272' W	134
Etob_YK	YK_OSC6276	Pole 55 Emmett Ave	2-Transit	21	S&C 5801	OH Switch	27.6 KV	11M3		43° 41.344' N	79° 3.224' W	128
Etob_YK	YK_OSC453	Pole 17 Cobalt St	2-Transit	22	S&C 5801	OH Switch	27.6 KV	11M3	35M1	43° 41 537' N	79° 29 99' W	137
Etob_YK	YK_OSC25383	Pole 617 McRoberts Ave	2-Transit	23	S&C 5801	OH Switch	27.6 KV	35M2		43° 41 543' N	79° 27.63' W	16
NY	NY_OSC2319	Pole 2696 Keele St	2-Transit	24	S&C 5801	OH Switch	27.6 KV	85M25		43.72414° N	79 48199° W	148 m
Etob_YK	YK_OSC19399	Pole 134 Kitchener Ave	2-Transit	25	S&C 5801	OH Switch	27.6 KV	11M8	35M2	43° 41.417' N	79° 27 589' W	157

Etob_YK	YK_OSC7171	Pole 8 Woodborough Ave	2-Transit	26	S&C 5801	OH Switch	27.6 KV	35M1		43° 41.715' N	79° 28.75' W	131
Etob_YK	YK_OSC88012	Pole 1774 Eglinton Ave W	2-Transit	27	S&C 5801	OH Switch	27.6 KV	35M2	35M1	43° 41.768' N	79° 26.918' W	175
Etob_YK	YK_OSC70554	Pole 1401 Castlefield Ave	2-Transit	28	S&C 5801	OH Switch	27.6 KV	35M1		43° 41.871' N	79° 27.953' W	159
Etob_YK	YK_OSC8250	Pole 116 Rogers Rd	2-Transit	29	S&C 5801	OH Switch	27.6 KV	11M8	35M1	43° 41.98' N	79° 26.931' W	155
Etob_YK	YK_OSC49573	Pole 120 Bowie Ave	2-Transit	30	S&C 5801	OH Switch	27.6 KV	35M2		43° 41.779' N	79° 27.454' W	177
Etob_YK	YK_OSC25445	Pole 58 Northcliff Blvd	2-Transit	31	S&C 5801	OH Switch	27.6 KV	35M1		43° 41.173' N	79° 26.638' W	156
Etob_YK	YK_OSC20083	Pole 356 Vaughan Rd	2-Transit	32	S&C 5801	OH Switch	27.6 KV	35M9		43° 41.325' N	79° 25.84' W	18
Etob_YK	YK_OSC36717	Pole 2 Belvidere Ave	2-Transit	33	S&C 5801	OH Switch	27.6 KV	35M9	35M4	43° 41.621' N	79° 26.27' W	54
Etob_YK	YK_OSC81789	Pole 260 Vaughan Rd	2-Transit	34	S&C 5801	OH Switch	27.6 KV	35M9	35M1	43° 41.31' N	79° 25.546' W	13
Etob_YK	YK_OSC51433	Pole 700 Winona Ave	2-Transit	35	S&C 5801	OH Switch	27.6 KV	35M4		43° 41.837' N	79° 26.314' W	166
Etob_YK	YK_OSC80842	Pole 162 Alameda Ave	2-Transit	36	S&C 5801	OH Switch	27.6 KV	35M9		43° 41.819' N	79° 26.396' W	181
Etob_YK	YK_OSC31786	Pole 7 Glenhurst Ave	2-Transit	37	S&C 5801	OH Switch	27.6 KV	35M1		43° 4.931' N	79° 26.111' W	137
Tor	TO_S8263	Pole 62 Campbell Ave	2-Transit	38	DART 3.95	OH Switch	13.8 KV	A53DN	A271DN	43° 39.879' N	79° 26.974' W	145
Etob_YK	YK_OSC724	Pole 235 South Kingsway	2-Transit	39	S&C 5801	OH Switch	27.6 KV	11M5	38M29			
Etob	EH_OSC7699	Pole 39 Willowridge Rd	2-Transit	40	S&C 5801	OH Switch	27.6 KV	86M11		43° 4.561' N	79° 34.123' W	154
Etob	EH_OSC55255	Pole 65 Vulcan St	2-Transit	41	S&C 5801	OH Switch	27.6 KV	88M43	88M14	43° 42.218' N	79° 35.15' W	164
Etob	EH_OSC2489	Pole 40 New Toronto St	2-Transit	42	S&C 5801	OH Switch	27.6 KV	R3-M4				
Etob_YK	YK_OSC53886	Pole 152 Caledonia Rd (352S)	2-Transit	43	DART	OH Switch	27.6 KV	35M1	34M8	43° 42.1' N	79° 27.834' W	
Etob_YK	YK_OSC3317	Pole 3600 Dundas St W	2-Transit	44	S&C 5801	OH Switch	27.6 KV	11M7	11M5			
Etob	EH_OSC7003	Pole 45 The West Mall	2-Transit	45	DART	OH Switch	27.6 KV	88M15				
Etob	EH_OSC78058	Pole 604-1 Dixon Rd	2-Transit	46	S&C 5801	OH Switch	27.6 KV	88M3				
Tor	TO_S5984	Pole 2 Vine Ave	2-Transit	47	S&C 5801	OH Switch	13.8 KV	A273DN		43° 39.996' N	79° 27.935' W	147
Etob	EH_OSC75064	Pole 30 Ronson Dr	2-Transit	48	S&C 5801	OH Switch	27.6 KV	88-M16				
Tor	TO_OSC38218	Pole 113 Sterling Rd	2-Transit	49	S&C 5801	OH Switch	13.8 KV	A251DN		43° 39.195' N	79° 26.658' W	98
Tor	TO_OSC74055	Pole 376 Sorauren Ave	2-Transit	50	S&C 5801	OH Switch	13.8 KV	A251ON	A251DN	43° 39.66' N	79° 26.724' W	15
Tor	TO_OSC52803	Pole 107A Clendenan Ave	2-Transit	51	S&C 5801	OH Switch	13.8 KV	A273ON		43° 39.921' N	79° 28.411' W	94
Etob_YK	YK_OSC92448	Pole 29 Gilpin Ave	2-Transit	52	S&C 5801	OH Switch	27.6 KV	11M8		43° 4.96' N	79° 28.399' W	119
Etob_YK	YK_OSC4662	Pole 175 Rogers Rd	2-Transit	53	S&C 5801	OH Switch	27.6 KV	11M8		43° 4.992' N	79° 27.79' W	125
Etob_YK	YK_OSC73333	Pole 45 Ounraven Dr	2-Transit	54	S&C 5801	OH Switch	27.6 KV	11M8		43° 41.8' N	79° 28.163' W	115
Tor	TO_OSC7565	Pole 2 Noble St	2-Transit	55	S&C 5801	OH Switch	13.8 KV	A240T		43.64214° N	79.42963° W	87
Etob	EH_OSC22629	Pole 106 Rexdale Blvd	2-Transit	56	S&C 5801	OH Switch	27.6 KV	88M17	88M12			
Etob_YK	YK_OSC26809	Pole 2 Keelesdale Dr	2-Transit	59	S&C 5801	OH Switch	27.6 KV	11M1	35M1	43° 68.814' N	79° 48.370' W	108
Etob_YK	YK_OSC38866	Pole 4 Symes Rd	2-Transit	60	S&C 5801	OH Switch	27.6 KV	11M2	11M5			
Etob_YK	YK_OSC43651	Pole 525 McRoberts Ave	2-Transit	61	S&C 5801	OH Switch	27.6 KV	11M8	35M2	43° 41.330' N	79° 27.535' W	129
Etob_YK	YK_OSC69140	Pole 63 Cayuga Ave	2-Transit	62	S&C 5801	OH Switch	27.6 KV	11M2	11M8			
Etob	EH_OSC498	Pole 280 New Toronto St	2-Transit	63	S&C 5801	OH Switch	27.6 KV	30M4	30M6	43° 36.351' N	79° 30.666' W	102
Etob	EH_OSC99327	Pole 446 Kipling Ave	2-Transit	64	S&C 5801	OH Switch	27.6 KV	30M3	30M5	43° 36.512' N	79° 31.296' W	112
Etob	EH_OSC69569	Pole 285 Aldercrest Rd	2-Transit	65	S&C 5801	OH Switch	27.6 KV	30M3	30M7	43° 36.695' N	79° 32.559' W	119
Etob	EH_OSC93977	Pole 3146 Lake Shore Blvd W	2-Transit	66	S&C 5801	OH Switch	27.6 KV	30M9	30M10			
Etob	EH_OSC55264	Pole 64 Thirtieth St	2-Transit	67	S&C 5801	OH Switch	27.6 KV	30M5	30M10			
Etob	EH_OSC58684	Pole 53 Manstor Rd	2-Transit	69	S&C 5801	OH Switch	27.6 KV	WNF2	WNF3	43° 37.102' N	79° 33.551' W	123
Etob	EH_OSC82666	Pole 218 Horner Ave	2-Transit	70	S&C 5801	OH Switch	27.6 KV	30M10	30M2	43° 36.472 N	79° 31.074 W	102
Etob	EH_OSC23352	Pole 2324 Lake Shore Blvd W	2-Transit	71	S&C 5801	OH Switch	27.6 KV	30M2	30M4	43° 37.019 N	79° 29.258 W	63
Etob	EH_OSC24075	Pole 37 Bellman Ave	2-Transit	74	S&C 5801	OH Switch	27.6 KV	38M6	30M7	43° 36.607' N	79° 31.886' W	131
Etob	EH_OSC75130	Pole 445 Royal York Rd	2-Transit	75	S&C 5801	OH Switch	27.6 KV	30M1				
Etob_YK	YK_OSC73280	Pole 156 St. Marks Rd	2-Transit	76	S&C 5801	OH Switch	27.6 KV	11M7	11M5	43° 39.573' N	79°29.819 W	108
NY	YK_OSC36880	Pole 3 Rockcliffe Blvd	2-Transit	77	S&C 5801	OH Switch	27.6 KV	11M2	11M5	43° 40.317' N	79° 29.230 W	117
Tor	TO_S8199	Pole 9 Annette Ave	2-Transit	78	S&C 5801	OH Switch	13.8 KV	A530DN (NORT	A273DN	43° 39.833 N	79° 27.594 W	120
Etob_YK	YK_OSC414	Pole 2116 Lawrence Ave W	2-Transit	79	S&C 5801	OH Switch	27.6 KV	88M12		43° 41.956' N	79° 31.217' W	17
Tor	TO_OSC54501	Pole 136 Indian Rd	2-Transit	80	S&C 5801	OH Switch	13.8 KV	A257DN		43.65492° N	79.45697° W	129
Tor	TO_OSC16487	Pole 118 Roncesvalles Ave	2-Transit	81	S&C 5801	OH Switch	13.8 KV	A258DN		43.65052° N	79.450760° W	120
Tor	TO_OSC91407	Pole 36 Geoffrey St	2-Transit	82	S&C 5801	OH Switch	13.8 KV	A258DN	A257DN	43.64796° N	79.45026° W	110
Etob_YK	YK_OSC61816	Pole 3 Times Rd	2-Transit	83	S&C 5801	OH Switch	27.6 KV	35M9		43° 41.847' N	79° 26.671' W	176
Etob	EH_OSC71901	Pole 198 30th St	2-Transit	84	S&C 5801	OH Switch	27.6 KV	30M10		43° 36.265' N	79° 32.042' W	121
Etob_YK	YK_OSC1786	Pole 60 Symes Rd	2-Transit	85	S&C 5801	OH Switch	27.6 KV	11M8		43° 40.442' N	79° 28.904' W	111
Etob	EH_OSC78438	Pole 10 North Queen St	2-Transit	88	S&C 5801	OH Switch	27.6 KV	38M4		43° 37.504' N	79° 31.828' W	129
Etob	EH_OSC51418	Pole 737 Kipling Ave	2-Transit	89	S&C 5801	OH Switch	27.6 KV	38M12		43° 37.610' N	79° 31.722 W	96
Etob	EH_OSC49707	Pole 579 Kipling Ave	2-Transit	90	S&C 5801	OH Switch	27.6 KV	30M1		43° 36.918' N	79° 31.435' W	114
Etob	EH_OSC34725	Pole 369 Evans Ave	2-Transit	91	S&C 5801	OH Switch	27.6 KV	30M3	30M1	43° 36.944' N	79° 31.450' W	104
Etob	EH_OSC35254	Pole 651 Kipling Ave	2-Transit	92	S&C 5801	OH Switch	27.6 KV	38M4		43° 37.283' N	79° 31.609' W	119
Etob	EH_PSC29816	115 Tenth St	2-Transit	93	S&C 5801	PMH-9	27.6 KV	R30M9		43° 36.056' N	79° 30.256' W	83
Etob	EH_OSC31511	Pole 4571-28 Eglinton Ave W Rear	2-Transit	94	S&C 5801	OH Switch	27.6 KV	88M15	88M45	43.67377° N	79.56541° W	152
Etob	EH_OSC71684	Pole 1574 Royal York Rd	2-Transit	95	S&C 5801	OH Switch	27.6 KV	88M18	88M12	43.6975° N	79.53347° W	176
Etob_YK	YK_OSC43993	Pole 25 Times Rd	2-Transit	96	S&C 5801	OH Switch	27.6 KV	35M9		43.69970° N	79.44544° W	250
Tor	TO_OSC96167	Pole 26 Roncesvalles Ave	2-Transit	97	S&C 5801	OH Switch	13.8 KV	A258DN		43.64148° N	79.44731° W	116
Etob_YK	YK_OSC36794	Pole 15 Rogers Rd	2-Transit	111	S&C 5801	OH Switch	27.6 KV	35M10	35M9	43.68604° N	79.43950° W	192
Etob_YK	YK_OSC15469	Pole 9 McRoberts Ave	2-Transit	112	S&C 5801	OH Switch	27.6 KV	11M8		43.68341° N	79.45671° W	142
Etob	EH_OSC63034	Pole 271 Birmingham St	2-Transit	116	S&C 5801	OH Switch	27.6 KV	R30M5	R30M6	43.60088° N	79.51769° W	101
Etob	EH_OSC3723	Pole 432 Horner Ave	2-Transit	118	S&C 5801	OH Switch	27.6 KV	R30M10		43.60349° N	79.53764° W	119
Etob	EH_OSC9984	Pole 460 Horner Ave	2-Transit	119	S&C 5801	OH Switch	27.6 KV	R30M7	R30M10	43.60269° N	79.54128° W	95
Etob	EH_OSC21749	Pole 619 Kipling Ave	2-Transit	120	S&C 5801	OH Switch	27.6 KV	30M1	38M4	43.62001° N	79.52812° W	112
Etob	EH_OSC74871	Pole 566 Kipling Ave	2-Transit	121	S&C 5801	OH Switch	27.6 KV	30M3		43.61530° N	79.52454° W	115
Etob	EH_OSC72640	Pole 2 Diesel Dr	2-Transit	124	S&C 5801	OH Switch	27.6 KV	R30M3	38M27	43.61394° N	79.53500° W	63
Tor	TO_OSC49719	Pole 390 King St W	2-Transit	125	S&C 5801	DH Switch	13.8 KV	A225T		43.63681° N	79.43803° W	107
Etob	EH_PSC40934	120A Carlingview Blvd	2-Transit	126	DART Tx: 941.14375	PMH-11 Rx: 941.14375	27.6 KV	88M44	88M41	43.67654° N	79.59113° W	149
	3 - Transit Master	1095 Neilson Rd										
Etob_YK	YK_OSC34332	Pole 62 Symes Rd	2-Transit	129	S&C 5801	OH Switch	27.6 KV	11M2		43° 40.4532' N	79° 29.5044' W	149
Scar	SC_OSC14194	Pole 2993 Pharmacy Ave	3-Transit	1	DART 3.95	OH Switch	27.6 KV	502M24				
Scar	SC_OSC49119	Pole 2187 Warden Ave	3-Transit	2	S&C 5801	OH Switch	27.6 KV	502M22				
Scar	SC_OSC65977	Pole 3201 Ellesmere Rd	3-Transit	3	DART	OH Switch	27.6 KV	47M14		43.785719° N	79.190486° W	18
Scar	SC_OSC10728	Pole 3070 Brimley Rd	3-Transit	4	DART 3.95	OH Switch	27.6 KV	63M6	H9M25			
Scar	SC_UC	1000 Scarborough Golf Club Rd	3-Transit	5	SEL 2032	Substation	4 KV					
Scar	SC_OSC78778	Pole 25 Channel Nine Crt	3-Transit	6	DART 3.95	OH Switch	27.6 KV	H9M25		43° 47.22' N	79° 15.389' W	166
Scar	SC_OSC55277	Pole 1564 Markham Rd	3-Transit	7	DART 3.95	OH Switch	27.6 KV	H9M3	H9M27	43° 46.69' N	79° 13.718' W	
Scar	SC_OSC64254	Pole 21 Glen Watford Dr	3-Transit	8	DART	OH Switch	27.6 KV	63M5				
Scar	SC_OSC89976	Pole 2207 Brimely Rd	3-Transit	9	DART	OH Switch	27.6 KV	502M32	63M6			
Scar	SC_OSC38192	Pole 1438 Kennedy Rd	3-Transit	10	DART 3.95	OH Switch	27.6 KV	E5M29		43° 45.891' N	79° 16.867' W	
Scar	SC_OSC59905	Pole 1918 McCowan Rd	3-Transit	11	DART	OH Switch	27.6 KV	H9M25	63M6			
Scar	SC_OSC38623	Pole 4980 Finch Ave E	3-Transit	12	S&C 5801	OH Switch	27.6 KV	63M6		43° 48.472' N	79° 16.83' W	
Scar	SC_OSC46418	Pole 1988 Brimley Rd	3-Transit	13	S&C 5801	OH Switch	27.6 KV	H9M25	E5M24	43° 48.393' N	79° 13.111' W	174 3456
Scar	SC_OSC40834	Pole 2190 Midland Rd	3-Transit	14	DART 3.95	OH Switch	27.6 KV	63M5	E5M26	43° 46.425' N	79° 16.47' W	
Scar	SC_OSC40880	Pole 1933 Kennedy Rd	3-Transit	15	DART 3.95	OH Switch	27.6 KV	E5M29	E5M3	43° 46.71' N	79° 16.887' W	
Scar	SC_OSC38413	Pole 919 Ellesmere Rd	3-Transit	16	DART 3.95	OH Switch	27.6 KV	E5M29		43° 45.953' N	79° 16.816' W	
Scar	SC_OSC20772	Pole 2098 Markham Rd	3-Transit	17	DART	OH Switch	27.6 KV	26M36	H9M32			

Scar	SC_OSC5742	Pole 852 Markham Rd	3-Transit	18	DART	OH Switch	27.6 KV	H9M30	H9M27				
Scar	SC_OSC3015	Pole 6145 Steeles Ave E	3-Transit	19	S&C 5801	OH Switch	27 6 KV	26M23		43° 48.393' N	79° 13 111' W	#NAME?	
Scar	SC_OSC84468	Pole 5235-B Finch Ave E	3-Transit	20	DART	OH Switch	27 6 KV	63M8	26M32				
Scar	SC_EJ	Pole 1919 Midland Ave	3-Transit	21	SEL 2032	Substation	4 KV						
Scar	SC_OSC73460	Pole 2015 Bnmley Rd	3-Transit	22	S&C 5801	OH Switch	27 6 KV	H9M25		43° 47.22' N	79° 16 54' W	184.44	
Scar	SC_OSC84972	Pole 1760 Markham Rd	3-Transit	23	DART	OH Switch	27 6 KV	H9M32	H9M23				
Scar	SC_OSC5574B	Pole 5111 Sheppard Ave E	3-Transit	24	DART 3 95	OH Switch	27 6 KV	H9M23		43° 47.619' N	79° 14.366' W		
Scar	SC_OSC2938	Hydro One ROW West E/O Tiffield Rd	3-Transit	25	DART	OH Switch	27 6 KV	63M12	26M33				
Scar	SC_PSC34341	W/S Neilson N/O Tapscott	3-Transit	26	DART	PMH-11	27 6 KV	47M3	26M34	43.807642° N	79 219997° W	123 m	
Scar	SC_OSC84659	Pole 5500 Finch Ave E	3-Transit	27	DART	OH Switch	27 6 KV	63M5	26M36				
Scar	SC_OSC3215	Pole 850 Passmore Ave	3-Transit	28	S&C 5801	OH Switch	27 6 KV	26M21		43° 49.88' N	79° 14 89' W	173	
Scar	SC_OSC19912	Pole 3180 Markham Rd	3-Transit	29	DART 3.95	OH Switch	27 6 KV	26M21	26M32				
Scar	SC_OSC70721	Pole 4145 Sheppard Ave E	3-Transit	30	S&C 5801	OH Switch	27 6 KV	502M26	63M5	43° 47 097' N	79° 16.870' W	?	
Scar	SC_PSC97430	W/S Meadowvale S/O Kirkhams	3-Transit	31	DART	PMH-11	27 6 KV	47M6	47M16	43.810567° N	79 172448° W	279 m	
Scar	SC_OSC64242	Pole 1134 Momingside Rd	3-Transit	33	DART 3 95	OH Switch	27 6 KV	47M3	47M8	43° 47 925' N	79° 11 929' W		
Scar	SC_OSC68123	Pole 379 Old Finch Ave	3-Transit	34	DART 3 95	OH Switch	27 6 KV	26M36	47M18	43° 49 513' N	79° 11 34' W		
Scar	SC_OSC47289	Pole 5149 Sheppard Ave E	3-Transit	35	DART 3.95	OH Switch	27.6 KV	H9M32	47M1	43° 47.673' N	79° 14.13' W	16.9344	
NY	NY_OSC40550	Pole 2908 Victoria Park Ave	3-Transit	36	S&C 5801	OH Switch	27.6 KV	51M4					
Scar	SC_OSC924	9390 Sheppard Ave E, Pole 8945-4	3-Transit	37	DART	OH Switch	27 6 KV	47M5	47M14	43.808073° N	79.176497° W	336'	
Scar	SC_OSC93757	9390 Sheppard Ave E, Pole 9388-2	3-Transit	38	OART	OH Switch	27 6 KV	47M6	47M13	43 807768° N	79 176095° W	336'	
Scar	SC_OSC45071	Pole 5590 Finch Ave E	3-Transit	39	DART	OH Switch	27 6 KV	26M32	26M31				
Scar	SC_OSC58853	Pole 6715 Sheppard Ave E	3-Transit	40	DART 3.95	OH Switch	27 6 KV	26M21		43° 47 896' N	79° 12 984' W	184 992	
Scar	SC_OSC64753	Pole 7471 Sheppard Ave E	3-Transit	41	S&C 5801	OH Switch	27 6 KV	47M3		43° 48 25' N	79° 12 42' W	184 992	
Scar	SC_OSC33911	Pole 5453 Lawrence Ave E	3-Transit	42	OART	OH Switch	27.6 KV	47M13	47M17				
Scar	SC_OSC943	Pole 6776 Kingston Rd	3-Transit	43	DART 3 95	OH Switch	27.6 KV	47M13	47M17	43 798338° N	79 147353° W	124 968	
Scar	SC_OSC92350	Pole 355 Old Finch Ave	3-Transit	44	DART 3.95	OH Switch	27 6 KV	47M18	47M18	43° 49 62' N	79° 1 91' W	145 39	
Scar	SC_OSC69882	Pole 431 Momingside Ave	3-Transit	45	DART 3.95	OH Switch	27.6 KV	47M14		43° 46 862' N	79° 11 485' W	14 546	
Scar	SC_OSC54003	Pole 3850 Ellesmere Rd	3-Transit	46	S&C 5801	OH Switch	27 6 KV	47M7	47M6				
Scar	SC_OSC75950	Pole 4060 Finch Ave E	3-Transit	49	DART	OH Switch	27 6 KV	502M29	63M8				
Scar	SC_OSC9516	Pole 3620 Finch Ave E	3-Transit	50	S&C 5801	OH Switch	27.6 KV	52M23	63M3				
Scar	SC_OSC22631	Pole 301 Tiffield Rd @ HONI ROW	3-Transit	51	S&C 5801	OH Switch	27 6 KV	63M11	26M32				
Scar	SC_OSC91100	Pole 4040 Finch Ave E	3-Transit	52	S&C 5801	OH Switch	27 6 KV	63M5					
Scar	SC_OSC61279	Pole 4620 Finch Ave E	3-Transit	53	S&C 5801	OH Switch	27 6 KV	63M8					
Scar	SC_OSC83356	Pole 5020 Finch Ave E	3-Transit	54	S&C 5801	OH Switch	27 6 KV	63M6					
Scar	SC_OSC92794	Pole 5177 Finch Ave E	3-Transit	55	S&C 5801	OH Switch	27 6 KV	63M8		43.809430° N	79 260048° W	192	
Scar	SC_OSC44144	Pole 2550 Birchmount Rd	3-Transit	56	S&C 5801	OH Switch	27.6 KV	502M29					
Scar	SC_OSC46563	Pole 3546 Sheppard Ave E	3-Transit	57	S&C 5801	OH Switch	27 6 KV	502M22	502M29				
Scar	SC_OSC64590	Pole 3760-A Sheppard Ave E	3-Transit	58	S&C 5801	OH Switch	27 6 KV	502M29	502M26				
Scar	SC_OSC20317	Pole 34-133 Kennedy Rd	3-Transit	59	S&C 5801	OH Switch	27.6 KV	502M26					
Scar	SC_OSC93304	Pole 5 Milner Ave	3-Transit	60	S&C 5801	OH Switch	27 6 KV	9M25	9M26				
Scar	SC_OSC30210	Pole 237 Milner Ave	3-Transit	61	S&C 5801	OH Switch	27 6 KV	9M26					
Scar	SC_OSC33180	Pole 69-3 Steeles Ave E (3 Poles W/	3-Transit	62	S&C 5801	OH Switch	27 6 KV	63M12	26M32	43° 48.393' N	79° 13 111' W	#NAME?	
Scar	SC_OSC97120	Pole 217 Kennedy Rd	3-Transit	63	S&C 5801	OH Switch	27 6 KV	502M26					
Scar	SC_OSC16198	Pole 8 Progress Ave	3-Transit	64	S&C 5801	OH Switch	27 6 KV	E5M29	E5M26				
Scar	SC_OSC15342	Pole 1061 Ellesmere Serv. Rd SE	3-Transit	65	S&C 5801	OH Switch	27.6 KV	35M29	E5M21				
Scar	SC_OSC7414	Pole 1329 Ellesmere Rd	3-Transit	66	S&C 5801	OH Switch	27 6 KV	E5M21					
Scar	SC_OSC47319	Pole 374 Progress Ave	3-Transit	67	OART	OH Switch	27 6 KV	5M26	5M24	43° 46 55' N	79°15 884' W	168.6592	
Scar	SC_PSC48419	N/W Cor. Sheppard Ave E & Neilson	3-Transit	68	DART	PMH-11	27 6 KV	47M1, 47M3,	9M24, 26M34				
Scar	SC_PSC41403	Steeles Ave E @ Silver Star Blvd	3-Transit	69	DART	PMH-11	27.6 KV	63M4					
Scar	SC_PSC32511	N/E cor. Kennedy & William Kitchen	3-Transit	70	DART	PMH-11	27.6 KV	5M26, 5M29	52M26				
Scar	SC_OSC41954	Pole 102-751 Sheppard Ave E, W/O B	3-Transit	72	S&C 5801	OH Switch	27 6 KV	47M1		43° 48 11' N	79° 12 452' W	537	
Scar	SC_PSC5792	S/E Cor N/Leg Bamburgh Cir & Wa	3-Transit	73	DART	PMH-9	27 6 KV	502M21					
Scar	SC_PSC7260	W/S of Birchmount Ave, S/O Winter	3-Transit	74	DART	PMH-9	27.6 KV	502M21					
Scar	SC_FBT1	2355 Lawrence & Kennedy	3-Transit	75	SEL 2032	Substation	4 KV						
Scar	SC_OSC62447	Pole 3390 Kennedy Rd	3-Transit	78	S&C 5801	OH Switch	27.6 KV	502M23	63M4				
Scar	SC_OSC23778	Pole 3455 Midland Ave	3-Transit	79	S&C 5801	OH Switch	27 6 KV	63M4	63M6	43° 48.737' N	79° 17.327' W		
Scar	SC_OSC26706	Pole 5080 Finch Ave E	3-Transit	80	S&C 5801	OH Switch	27 6 KV	63M8	63M6				
Scar	SC_OSC43225	Pole 126 2 Sheppard Ave E	3-Transit	83	S&C 5801	OH Switch	27 6 KV	47M16	47M6				
Scar	SC_OSC90429	Pole 8121 Sheppard Ave E	3-Transit	84	S&C 5801	OH Switch	27.6 KV	47M3		43 802067° N	79 198804° W	154	
Scar	SC_OSC15939	Pole 7501 Sheppard Ave E	3-Transit	85	S&C 5801	OH Switch	27 6 KV	47M3		43 800702° N	79 205957° W	187	
Scar	SC_OSC8616	Pole 6725 Sheppard Ave E	3-Transit	86	S&C 5801	OH Switch	27 6 KV	47M3		43.798434° N	79 215674° W	124	
Scar	SC_PSC15603	Old Finch @ Morningside	3-Transit	87	DART	PMH-11	27 6 KV	47M3	26M31				
Scar	SC_OSC49484	Pole 221-1 HONI ROW Neilson/Milit	3-Transit	88	S&C 5801	OH Switch	27 6 KV	H9M23	47M8	43 786912° N	79 206115° W	73	
Scar	SC_OSC90073	Pole 5891 Sheppard Ave E	3-Transit	89	S&C 5801	OH Switch	27.6 KV	47M1	H9M23	43 7974° N	79 2212° W	155	
Scar	SC_OSC18358	Pole 5595 Steeles Ave E	3-Transit	90	S&C 5801	OH Switch	27 6 KV	26M21		43 832378° N	79 268543° W	229	
Scar	SC_OSC65945	Pole 4200 Finch Ave E	3-Transit	91	S&C 5801	OH Switch	27 6 KV	63M5	63M6	43.803957° N	79 286163° W	163 m	
Scar	SC_OSC28664	Pole 20 Nugget Ave	3-Transit	92	S&C 5801	OH Switch	27 6 KV	63M6	H9M23	43.792406° N	79 259613° W	168	
Scar	SC_OSC74977	Pole 3100 Ellesmere Rd	3-Transit	93	S&C 5801	OH Switch	27.6 KV	H9M22	47M15	43.785590° N	79.195017° W	144	
	4 - Transit Master	3077 Western Rd	Tx: 932.1437 Rx: 932.14375										
Etob	EH_OSC6870	Pole 2208 Lawrence Ave W	4-Transit	1	DART 3.95	OH Switch	27 6 KV	88M18		43° 4 82' N	79° 33 137' W	185	
Etob	EH_OSC92492	Pole 370 Cardingview Dr	4-Transit	2	S&C 5801	OH Switch	13 8 KV	EHF1	EHF2	43.69575° N	79 59968° W	134	
NY	NY_OSC67983	Pole 18 Norfinch Dr	4-Transit	3	S&C 5801	OH Switch	27.6 KV	55M24	55M26	43.75587° N	79 52475° W	218	
Etob	EH_OSC23137	Pole 2 Skyway Ave & Dixon	4-Transit	4	S&C 5801	OH Switch	27.6 KV	86M44		43° 41 226' N	79° 35.175' W	169	
Etob	EH_OSC20271	Pole 13 Cityview Dr (Dixon & 27)	4-Transit	5	S&C 5801	OH Switch	27.6 KV	88M42		43° 41.519' N	79° 34 963' W	158	
Etob	EH_OSC60353	Pole 130 Rexdale Blvd	4-Transit	6	DART	OH Switch	27 6 KV	47M13		43° 47.652' N	79° 9 217' W	105	
NY	NY_OSC7833	Pole 2 Rivalda Rd	4-Transit	7	S&C 5801	OH Switch	27.6 KV	55M29	55M7				
Etob	EH_OSC4858	Pole 316 Rexdale Blvd	4-Transit	8	S&C 5801	OH Switch	27 6 KV	29M1	29M33	43° 42.887' N	79° 35.091' W	147	
NY	NY_OSC18581	Pole 4600 Jane St	4-Transit	9	S&C 5801	OH Switch	27.6 KV	SS55F1		43° 46 74' N	79° 31.229' W	166	
NY	NY_OSC65589	Pole 2781 Jane St	4-Transit	10	S&C 5801	OH Switch	27 6 KV	55M8		43° 44 933' N	79° 3 726' W	19	
NY	NY_OSC59837	Pole 1927 Sheppard Ave W	4-Transit	11	S&C 5801	OH Switch	27 6 KV	55M25		43° 44 366' N	79° 3.719' W	166	
NY	NY_OSC74827	Pole 230 Norfinch Dr	4-Transit	12	S&C 5801	OH Switch	27.6 KV	55M2		43° 46.373' N	79° 31 92' W	19	
NY	NY_OSC85384	Pole 1384 Finch Ave W	4-Transit	13	S&C 5801	OH Switch	27 6 KV	85M32	55M1	43° 45 774' N	79° 29 596' W	198 12	
NY	NY_OSC32607	Pole 3681 Weston Rd	4-Transit	14	S&C 5801	OH Switch	27.6 KV	55M31	55M1	43° 45.675' N	79° 32.664' W	173	
NY	NY_OSC2414	Pole 5 Kenhar Dr (S1088)	4-Transit	15	S&C 5801	OH Switch	27 6 KV	55M1		43° 45 746' N	79° 32.442' W	176	
NY	NY_OSC58091	Pole 36 Tangiers Rd	4-Transit	16	S&C 5801	OH Switch	27 6 KV	85M4		43 76351° N	79.48820° W	192	
NY	NY_OSC2204	Pole 4843 Steeles Ave W	4-Transit	17	S&C 5801	OH Switch	27.6 KV	55M2	55M32	43° 46.267' N	79° 32.511' W	19	
NY	NY_OSC5251	Pole 121 Fenmar Dr (S116)	4-Transit	18	S&C 5801	OH Switch	27.6 KV	55M5	55M1	43° 45.568' N	79° 32 94' W	157	
NY	NY_OSC5933	Pole 465 Eddystone Ave	4-Transit	19	S&C 5801	OH Switch	27 6 KV	A53DN	A273DN	43° 44.87' N	79° 31 56' W	155	
NY	NY_PSC66410A	Pole 3429 Dufferin St (Yorkdale Mall	4-Transit	20	5802	Vista	27 6 KV	35M3	85M9	43.725227° N	79 456925° W	181 m	
NY	NY_PSC66410B	Pole 3429 Dufferin St (Yorkdale Mall	4-Transit	20	5802	Vista	27.6 KV	35M3	85M9	43.725227° N	79.456925° W	181 m	
NY	NY_OSC9275	Pole 168 Millwick Dr	4-Transit	21	S&C 5801	OH Switch	27.6 KV	55M22		43° 45.621' N	79° 34 245' W	164	
NY	NY_OSC957	Pole 75 Signet Dr	4-Transit	22	S&C 5801	OH Switch	27 6 KV	55M32	55M5	43° 45 538' N	79° 32 336' W	169	
NY	NY_OSC380	Pole 2209 Sheppard Ave W	4-Transit	23	S&C 5801	OH Switch	27 6 KV	55M29	55M26	43° 44 195' N	79° 31 472' W	188	
NY	NY_OSC9429	Pole 112-1 Norfinch Dr	4-Transit	24	S&C 5801	OH Switch	27 6 KV	55M2	55M5	43° 45.64' N	79° 31.776' W	138	

NY	NY_OSC6246	Pole 1630 Finch Ave W	4-Transit	25	S&C 5801	OH Switch	27.6 KV	55M1					
NY	NY_OSC64055	Pole 138 Brookhaven Dr	4-Transit	26	S&C 5801	OH Switch	27.6 KV	35M8	11M4	43° 42 242' N	79° 29.792' W	11	
Etob	EH_OSC30357	Pole 46 Disco Rd	4-Transit	27	S&C 5801	OH Switch	13.8 KV	NFF3	NFF1	43° 42 107' N	79° 35.507' W	176	
NY	NY_OSC52383	Pole 97 Torbarrie Rd	4-Transit	28	S&C 5801	OH Switch	27.6 KV	55M26		43° 43.556' N	79° 31.396' W	137	
NY	NY_OSC4048	Pole 4 Sheffield St	4-Transit	29	S&C 5801	OH Switch	27.6 KV	35M12	35M8	43° 42 9' N	79° 28.141' W	11	
NY	NY_DSC6723	Pole 13 Bradstock Rd	4-Transit	30	S&C 5801	OH Switch	27.6 KV	55M7		43° 44.339' N	79° 32.317' W	185	
NY	NY_OSC74655	Pole 32 Tangiers Rd	4-Transit	31	S&C 5801	OH Switch	13.8 KV	SS58F4		43.76318° N	79.48817° W	202	
NY	NY_OSC203	Pole 2370 Finch Ave W	4-Transit	32	S&C 5801	OH Switch	27.6 KV	55M7	55M27	43° 45.114' N	79° 34.666' W	5	
NY	NY_OSC7954	Pole 3983 Keele St	4-Transit	33	S&C 5801	OH Switch	27.6 KV	85M32		43° 46.85' N	79° 29.111' W	222	
NY	NY_OSC3190	Pole 2565 Jane St	4-Transit	34	S&C 5801	OH Switch	27.6 KV	55M8	55M28	43° 43.981' N	79° 3.676' W	76	
NY	NY_OSC1315	Pole 3402 Keele St	4-Transit	35	S&C 5801	OH Switch	27.6 KV	85M25	85M24	43° 44.913' N	79° 29.246' W	188	
NY	NY_OSC9842	Pole 54 North Park Dr	4-Transit	36	S&C 5801	OH Switch	27.6 KV	35M24		Ready			
NY	NY_OSC6873	Pole 41 Duncanwoods Dr	4-Transit	37	S&C 5801	OH Switch	27.6 KV	55M27					
NY	NY_OSC7652	Pole 141 Toryork Dr	4-Transit	38	S&C 5801	OH Switch	27.6 KV	55M9	55M22	43° 45.61' N	79° 33.256' W	144	
NY	NY_OSC3401	Pole 1879 Jane St	4-Transit	39	S&C 5801	OH Switch	27.6 KV	51M28	51M24	43° 42.561' N	79° 3.314' W	162	
NY	NY_OSC2321	Pole 2391 Steeles Ave W	4-Transit	40	S&C 5801	OH Switch	27.6 KV	55M2	55M3	43° 47.86' N	79° 28.811' W	182	
NY	NY_DSC7621	Pole 1896 Wilson Ave	4-Transit	41	S&C 5801	OH Switch	27.6 KV	55M23		Ready			
NY	NY_DSC6789	Pole 4975 Steeles Ave W	4-Transit	42	S&C 5801	OH Switch	27.6 KV	55M32	55M31	43° 46.219' N	79° 32.743' W	169	
NY	NY_OSC1934	Pole 4246 Chesswood Dr	4-Transit	43	S&C 5801	OH Switch	27.6 KV	85M4	85M24	43° 45.6' N	79° 28.674' W	198	
NY	NY_OSC2160	Pole 2801 Weston Rd	4-Transit	44	S&C 5801	OH Switch	27.6 KV	55M7		43° 43.166' N	79° 32.25' W	138	
NY	NY_OSC5966	Pole 1244 Ormont Dr	4-Transit	45	S&C 5801	OH Switch	27.6 KV	55M31	55M1	43° 45.889' N	79° 33.31' W	188	
NY	NY_OSC2630	Pole 4230 Jane St	4-Transit	46	S&C 5801	OH Switch	27.6 KV	55M3		43° 45.68' N	79° 31.131' W	216	
NY	NY_OSC96074	Pole 222 Norfinch Dr	4-Transit	47	S&C 5801	OH Switch	27.6 KV	SS55F1	SS55F5	43° 46.326' N	79° 31.93' W	2	
NY	NY_OSC4311	Pole 4220-13 York Gate Blvd	4-Transit	48	S&C 5801	OH Switch	27.6 KV	55M2	55M30	43° 45.553' N	79° 13.325' W	186	
NY	NY_OSC7868	Pole 1057 Flint Rd	4-Transit	49	S&C 5801	OH Switch	27.6 KV	85M2		43° 46.883' N	79° 28.721' W	197	
NY	NY_OSC1675	Pole 840 Flint Rd	4-Transit	50	S&C 5801	OH Switch	27.6 KV	85M2	85M7	43° 46.538' N	79° 28.878' W	27	
Etob	EH_OSC37859	Pole 6138 Hwy # 27	4-Transit	51	S&C 5801	OH Switch	27.6 KV	29M1		43° 43.496' N	79° 35.968' W	161	
NY	NY_OSC29837	Pole 15 Dante Rd	4-Transit	52	S&C 5801	OH Switch	27.6 KV	35M7	34M24	43° 42.548' N	79° 29.42' W	129	
NY	NY_OSC82651	Pole 457 Glen Park Ave	4-Transit	53	S&C 5801	OH Switch	27.6 KV	35M12		43° 42.472' N	79° 27.26' W	166	
NY	NY_OSC47899	Pole 2959 Steeles Ave W	4-Transit	54	S&C 5801	OH Switch	27.6 KV	55M24	85M3	43° 46.93' N	79° 29.589' W	2	
NY	NY_OSC31480	Pole 533 Rustic Rd	4-Transit	55	S&C 5801	OH Switch	27.6 KV	85M9	35M24				
NY	NY_OSC46232	Pole 29 Clayson Rd	4-Transit	56	S&C 5801	OH Switch	27.6 KV	55M21	55M23				
NY	NY_OSC71379	Pole 152 Clayson Rd	4-Transit	57	S&C 5801	OH Switch	27.6 KV	55M21		43° 43.628' N	79° 31.712' W		
NY	NY_OSC78043	Pole 1620 Wilson Ave	4-Transit	58	S&C 5801	OH Switch	27.6 KV	55M26	55M28	43° 43.246' N	79° 3.616' W	19	
NY	NY_OSC69795	Pole 729 Trethewey Dr	4-Transit	59	S&C 5801	DH Switch	27.6 KV	11M4					
Etob	EH_OSC85410	Pole 60 Rexdale Blvd	4-Transit	60	S&C 5801	DH Switch	27.6 KV	88M1	55M6	43.71332° N	79.56081° W	164	
NY	NY_DSC93629	Pole 218 Norelco Dr	4-Transit	61	DART	OH Switch	27.6 KV	55M32	55M2				
NY	NY_OSC29608	Pole 8 Wallsey Ave	4-Transit	62	S&C 5801	OH Switch	27.6 KV	55M21	55M7				
NY	NY_OSC71389	Pole 14 Fisherville Rd	4-Transit	65	S&C 5801	DH Switch	27.6 KV	85M7	80M2	43° 47.405' N	79° 26.872' W	unknown	
Etob	EH_OSC20261	Pole 229 Claireville Rd	4-Transit	66	S&C 5801	DH Switch	27.6 KV	BRF1	BRF2	43° 44.753' N	79° 37.415' W	175	
Etob	EH_OSC90097	Pole 55B Carrier Dr	4-Transit	67	S&C 5801	OH Switch	27.6 KV	BRF2	EQF3	43° 44.294' N	79° 36.532' W	169	
Etob	EH_OSC54729	Pole 227 Carrier Dr	4-Transit	68	S&C 5801	DH Switch	27.6 KV	BRF2	EQF3	43° 44.824' N	79° 36.901' W	173	
Etob	EH_OSC92162	Pole 100 Dixon Rd	4-Transit	69	S&C 5801	OH Switch	27.6 KV	88M18		43° 41.998' N	79° 32.095' W	190	
NY	NY_OSC72476	Pole 2562 Finch Ave W	4-Transit	70	S&C 5801	OH Switch	27.6 KV	55M27		43° 44.916' N	79° 33.615' W	161	
NY	NY_OSC45886	Pole 2203-1 Sheppard Ave W	4-Transit	71	S&C 5801	OH Switch	27.6 KV	55M29	55M25	43° 44.217 N	79° 31.416' W	142	
NY	NY_OSC97234	Pole 4034 Keele St	4-Transit	72	S&C 5801	OH Switch	27.6 KV	85M32	55M3	43° 46.325' N	79° 29.607' W	186	
Etob	EH_OSC82070	Pole 418 Carlingview Dr	4-Transit	73	S&C 5801	OH Switch	13.8 KV	EHF1	NFF3	43.69789° N	79.60067° W	161	
Etob	EH_OSC74986	Pole 907 Dixon Rd	4-Transit	74	S&C 5801	DH Switch	13.8 KV	NFF1	ZJF2	43.68670° N	79.59440° W	144	
Etob	EH_OSC33561	Pole 74-1 Guided Crt	4-Transit	75	S&C 5801	OH Switch	13.8 KV	EQF1	EQF2	43° 45.236' N	79° 36.539' W	166	
Etob	EH_OSC88773	Pole 66 Guided Crt	4-Transit	76	S&C 5801	OH Switch	13.8 KV	EQF1	EQF2	43° 45.252' N	79° 36.490' W	146	
Etob	EH_OSC99407	Pole 50 Leading Rd	4-Transit	77	S&C 5801	DH Switch	13.8 KV	EQF3		43.73509° N	79.60861° W	179	
Etob	EH_OSC42959	Pole 7090 Hwy #27	4-Transit	78	S&C 5801	OH Switch	13.8 KV	EQF3	BQF2	43° 44.171' N	79° 36.292' W	188	
Etob	EH_OSC21692	Pole 7198 Hwy #27	4-Transit	79	S&C 5801	DH Switch	13.8 KV	EQF1	EQF3	43° 45.118' N	79° 36.724' W	188	
Etob	EH_OSC95089	Pole 17708 Albion Rd	4-Transit	80	S&C 5801	OH Switch	13.8 KV	BQF1	EQF3	43° 44.629' N	79° 36.248' W	175	
Etob	EH_OSC31064	Pole 6950 Hwy # 27	4-Transit	81	S&C 5801	OH Switch	13.8 KV	BQF2	NFF1	43° 42.041' N	79° 35.674' W	173	
Etob	EH_OSC16399	Pole 280 Carlingview Dr	4-Transit	82	S&C 5801	DH Switch	27.6 KV	EHF2	ZJF2	43° 41.359' N	79° 35.809' W	175	
Etob	EH_OSC5738	Pole 278 Carlingview Dr	4-Transit	83	S&C 5801	OH Switch	27.6 KV	EHF1	ZJF1	43° 41.338' N	79° 35.798' W	174	
Etob	EH_OSC11625	Pole 336 Carlingview Dr	4-Transit	84	S&C 5801	OH Switch	13.8 KV	EHF1	EHF2	43° 41.625' N	79° 35.940' W	167	
Etob	EH_OSC93976	Pole 909 Dixon Rd	4-Transit	92	S&C 5801	OH Switch	13.8 KV	ZJF1	NFF1	43.68658° N	79.59473° W	173	
Etob	EH_OSC60813	Pole 19 Marmac Dr	4-Transit	93	S&C 5801	OH Switch	13.8 KV	NFF1	NFF3	43° 41.808' N	79° 35.240' W	170	
Etob	EH_OSC30877	Pole 31 McLachlan Dr	4-Transit	94	S&C 5801	OH Switch	13.8 KV	NFF1	NFF3	43° 41.599' N	79° 35.253' W	164	
Etob	EH_OSC42909	Pole 17 McLachlan Dr	4-Transit	95	S&C 5801	OH Switch	13.8 KV	NFF2	NFF3	43° 41.613' N	79° 35.174' W	177	
Etob	EH_OSC77371	Pole 80 Brockport Dr	4-Transit	96	S&C 5801	OH Switch	13.8 KV	NFF2	NFF1	43° 41.650' N	79° 37.111' W	177	
Etob	EH_OSC77010	Pole 5 Fordwich Cres	4-Transit	97	S&C 5801	OH Switch	27.6 KV	29M3	55M4	43.72684° N	79.56125° W	142	
NY	NY_OSC20790	Pole 3214 Weston Rd	4-Transit	98	S&C 5801	OH Switch	27.6 KV	55M7	55M7	43° 44.305' N	79° 32.365' W	157	
Etob	EH_OSC53476	Pole 55 Carrier Dr	4-Transit	99	S&C 5801	OH Switch	27.6 KV	29M6	29M35	43.738429° N	79.607902° W		
Tor	TO_OSC13038	Pole 76 Hallam St	4-Transit	100	S&C 5801	OH Switch	13.8 KV	A25SDN					
Etob	EH_OSC72044	Pole 128, Belfield Rd	4-Transit	101	S&C 5801	OH Switch	27.6 KV	88M1	88M3				
Etob	EH_OSC67169	Pole 66 Disco Rd	4-Transit	102	S&C 5801	OH Switch	27.6 KV	88M8	86M43	43.70144° N	79.59480° W	175	
Etob	EH_OSC81081	Pole 259 Humberline Dr	4-Transit	104	S&C 5801	OH Switch	27.6 KV	29M36	29M6				
Etob	EH_OSC44784	Pole 6779 Steeles Ave W	4-Transit	105	S&C 5801	OH Switch	27.6 KV	06M4	D6M1	43.75745° N	79.60490° W	192	
Etob	EH_OSC80131	Pole 1317 Martin Grove Rd	4-Transit	106	S&C 5801	OH Switch	27.6 KV	29M5	29M33	43.71363° N	79.58075° W	167	
Etob	EH_OSC17908	Pole 20 Huddersfield Rd	4-Transit	107	S&C 5801	OH Switch	27.6 KV	29M6	29M8	43.74240° N	79.62515° W	181	
Etob	EH_OSC56767	Pole 7100 Hwy #27	4-Transit	108	S&C 5801	OH Switch	27.6 KV	29M35	29M2	43.73774° N	79.60516° W	173	
Etob	EH_OSC36624	Pole 7094 Hwy #27	4-Transit	109	S&C 5801	OH Switch	27.6 KV	29M1	29M36	43.73712° N	79.60480° W	181	
Etob	EH_OSC21392	Pole 7022 Hwy #27	4-Transit	110	S&C 5801	OH Switch	27.6 KV	29M2	29M2	43.72323° N	79.59873° W	147	
Etob	EH_OSC78249	Pole 14 Racine Rd	4-Transit	111	S&C 5801	OH Switch	27.6 KV	29M33	29M3	43.71550° N	79.57358° W	198	
Etob	EH_OSC26369	Pole 2688 Humberline Dr	4-Transit	112	S&C 5801	OH Switch	27.6 KV	BRF2	BRF3				
NY	NY_OSC62920	Pole 9 Eddystone Ave	4-Transit	113	S&C 5801	OH Switch	27.6 KV	55M8		43.74896° N	79.51614° W	172	
NY	NY_OSC62536	Pole 2058 Finch Ave W	4-Transit	114	S&C 5801	OH Switch	27.6 KV	55M8		43.75623	-79.52362	185	
NY	NY_OSC5149	Pole 2316 Finch Ave W	4-Transit	115	S&C 5801	OH Switch	27.6 KV	55M7		43.75233	-79.54163	145	
NY	NY_OSC79515	Pole 6 Tangiers Rd	4-Transit	116	S&C 5801	OH Switch	27.6 KV	85M4		43.76114	-79.48763	220	
NY	NY_OSC80150	Pole 1 Oak St	4-Transit	117	S&C 5801	OH Switch	27.6 KV	55M7	88M12	43.70833	79.53078	134	
NY	NY_OSC77270	Pole 319 Oak St	4-Transit	118	S&C 5801	OH Switch	27.6 KV	55M7	55M23	43.70842	79.53036	152	
NY	NY_OSC25905	Pole 3812 Keele St	4-Transit	119	S&C 5801	OH Switch	27.6 KV	85M4	85M32	43.75997° N	79.49034° W	221	
NY	NY_OSC13147	Pole 2090 Finch Ave W	4-Transit	120	S&C 5801	OH Switch	27.6 KV	55M10	55M8	43.75599° N	79.52476° W	171	
NY	NY_OSC70002	Pole 20 Norfinch Ave	4-Transit	121	S&C 5801	OH Switch	27.6 KV	55M24		43.75643° N	79.52464° W	183	
NY	NY_OSC11567	Pole 2100 Finch Ave W	4-Transit	122	S&C 5801	OH Switch	27.6 KV	55M10		43.75583° N	79.52559° W	164	
NY	NY_OSC52481	Pole 960 Oakdale Rd	4-Transit	123	S&C 5801	OH Switch	27.6 KV	55M26		43.75865° N	79.52425° W	174	
NY	NY_OSC87697	Pole 481-1 Sentinel Rd	4-Transit	124	S&C 5801	OH Switch	27.6 KV	55M24		43.76381° N	79.50083° W	191 m	
Etob	EH_PSC94783	840 Humberwood Blvd	4-Transit	125	DART	PMH-9	27.6 KV	R29M36	R29M2	43.73024° N	79.61946° W	159	
Etob	EH_PSC90900	146 Westmore Dr	4-Transit	126	DART	PMH-9	13.8 KV	BQ-F2		43.73440° N	79.60112° W	147	
Etob	EH_PSC61809	30 Humberline Dr	4-Transit	127	DART	PMH-9	13.8 KV	BR-F3		43.731855° N	79.615410° W	166	
Etob	EH_PSC36546	10 Humberline Dr	4-Transit	128	DART	PMH-9	13.8 KV	BR-F3		43.73145° N	79.61177° W	145	

NY	NY_OSC67148	Pole 242 Albion Rd	4-Transit	129	S&C 5801	OH Switch	27.6 KV	55M4	55M7	43.72002° N	79.54360° W	12
NY	NY_OSC23095	Pole 3497 Weston Rd	4-Transit	131	S&C 5801	OH Switch	27.6 KV	55M7		43.75181º N	79.54219º W	128 m
Etob	EH_PSC33905	Finch Ave W, W/O Humber College	4-Transit	132	DART	PMH-9	13.8 KV	BR-F2		43.73437º N	79.61309º W	171
Etob	EH_OSC4783	Pole 2329 Islington Ave	4-Transit	133	S&C 5801	OH Switch	27.6 KV	55M6		43.71752° N	79.55605° W	146
Etob	EH_PSC95983	179 Provence Trail	4-Transit	134	DART	PMH-9	13.8 KV	EQF1		43.75529º N	79.60687° W	184
Etob	EH_PSC36024	100 Cabernet Cir (N/Pad)	4-Transit	145	DART	PMH-9	13.8 KV	EQF1		43.75151º N	79.60454º W	149 m
Etob	EH_PSC92012	100 Cabernet Cir (S/Pad)	4-Transit	146	DART	PMH-9	13.8 KV	EQF1		43.75144º N	79.60447° W	148 m
Etob_YK	YK_OSC9385	Pole 14 Todd Balyis Blvd	4-Transit	150	S&C 5801	OH Switch	27.6 KV	11M1	11M2	43° 41.549' N	79° 29.128' W	119
Etob_YK	EH_OSC18917	Pole 492 Weston Rd	4-Transit	151	S&C 5801	OH Switch	27.6 KV	88M12		43.707438° N	79.533499° W	155 m
	5 - Transit Master	3434 Eglinton Ave E		Tx: 941.0437 5	Rx: 941.04375							
Scar	SC_OSC63227	Pole 175 Coronation St	5-Transit	1	DART 3.95	OH Switch	27.6 KV	47M15		43° 45.72' N	79° 11.125' W	
Scar	SC_OSC60779	Pole 4131 Lawrence Ave E	5-Transit	2	DART 3.95	OH Switch	27.6 KV	H9M21	47M5	43° 46.16' N	79° 11.542' W	
Scar	SC_OSC11811	Pole 39-385 Danforth Rd	5-Transit	3	DART 3.95	OH Switch	27.6 KV	43M29		43° 43.389' N	79° 15.342' W	157
Scar	SC_OSC21482	Pole 2826 Eglinton Ave E	5-Transit	4	DART 3.95	OH Switch	27.6 KV	E5M5				157
Scar	SC_OSC85939	Pole 4634 Kingston Rd	5-Transit	6	DART	OH Switch	27.6 KV	47M14	47M7	43.774997° N	79.178566° W	170
Scar	SC_OSC5813	Pole 435 Kingston Rd	5-Transit	7	DART 3.95	OH Switch	27.6 KV	47M14		43° 46.142' N	79° 11.318' W	
Scar	SC_OSC3206	Pole 4232 Kingston Rd	5-Transit	8	DART 3.95	OH Switch	27.6 KV	47M15	47M14	43° 45.653' N	79° 11.795' W	
Scar	SC_OSC52727	Pole 225 Guildwood Ave	5-Transit	9	DART 3.95	OH Switch	27.6 KV	47M15		43° 44.967' N	79° 11.44' W	
Scar	SC_OSC53619	Pole 3812 Kingston Rd	5-Transit	10	S&C 5801	OH Switch	27.6 KV	H9M3	47M15	43° 44.968' N	79° 12.381' W	
Scar	SC_OSC21889	Pole 3267 Kingston Rd	5-Transit	11	DART 3.95	OH Switch	27.6 KV	E5M3	H9M3	43° 43.851' N	79° 13.559' W	167
Scar	SC_DJ	150 Orton Park	5-Transit	12	SEL 2032	Substation	4 KV					
Scar	SC_OSC1031	Pole 530 Midland Ave	5-Transit	13	DART	OH Switch	27.6 KV	43M3		43° 43.38' N	79° 15.57' W	
Scar	SC_OSC74990	Pole 384 Beechgrove Dr	5-Transit	14	S&C 5801	OH Switch	27.6 KV	47M7				
Scar	SC_DSC91703	Pole 645 Coronation Dr	5-Transit	15	DART 3.95	DH Switch	27.6 KV	47M7		43° 45.962' N	79° 9.65' W	
Scar	SC_OSC2007	Pole 821 Brimley Rd	5-Transit	16	DART 3.95	OH Switch	27.6 KV	E5M22	E5M23	43° 45.185' N	79° 15.295' W	
Scar	SC_OSC35169	Pole 1558 Birchmount Rd	5-Transit	17	DART 3.95	OH Switch	27.6 KV	E5M1		43° 45.713' N	79° 17.455' W	
Scar	SC_OSC42204	Pole 1232 Brimley Rd	5-Transit	18	DART	OH Switch	27.6 KV	E5M24				
Scar	SC_DSC11234	Pole 1987 Lawrence Ave E	5-Transit	19	S&C 5801	OH Switch	27.6 KV	52M8	52M9	43° 44.695' N	79° 17.78' W	184.992
Scar	SC_OSC70141	Pole 572 Birchmount Rd	5-Transit	20	DART 3.95	OH Switch	27.6 KV	43M43	43M28	43° 42.85' N	79° 16.253' W	489
Scar	SC_OSC32426	Pole 1313 Pharmacy Ave	5-Transit	21	S&C 5801	OH Switch	27.6 KV	52M8		43° 45.224' N	79° 18.523' W	174.3456
Scar	SC_OSC33094	Pole 14-285 Brian Ave	5-Transit	22	S&C 5801	OH Switch	27.6 KV	52M8		43° 44.624' N	79° 12.71' W	165.928
Scar	SC_RF	29 Canadian Rd	5-Transit	23	SEL 2032	Substation	4 KV					
Scar	SC_OSC38185	Pole 845 Ellesmere Rd	5-Transit	24	DART 3.95	OH Switch	27.6 KV	E5M1	E5M29	43° 45.91' N	79° 16.994' W	167
Scar	SC_OSC23978	Pole 102 McCowan Rd	5-Transit	25	S&C 5801	OH Switch	27.6 KV	E5M3		43° 44.31' N	79° 14.175' W	166
Scar	SC_TJ	Birchmount - Ashtonbee	5-Transit	26	SEL 2032	Substation	4 KV					
Scar	SC_RJ	Morningside - Coronation	5-Transit	27	SEL 2032	Substation	4 KV					
Scar	SC_TA	Saunder - Kingston	5-Transit	28	SEL 2032	Substation	4 KV					
Scar	SC_TC	500 Coronation Dr	5-Transit	29	SEL 2032	Substation	4 KV			43° 45.951' N	79° 9.779' W	133.672
Scar	SC_OSC72810	Pole 347-C Danforth Rd	5-Transit	30	DART 3.95	OH Switch	27.6 KV	43M24	43M28	43° 42.224' N	79° 16.211' W	16
Scar	SC_OSC71732	Pole 101-A Mack Ave	5-Transit	31	DART 3.95	OH Switch	27.6 KV	43M24	43M28	43° 42.91' N	79° 15.948' W	158
Scar	SC_OSC3385	Pole 3 Hollis Ave	5-Transit	32	S&C 5801	OH Switch	27.6 KV	43M23	43M24	43° 44.624' N	79° 12.71' W	129.2352
Scar	SC_OSC19519	Pole 56 Anson Ave	5-Transit	33	DART 3.95	OH Switch	27.6 KV	43M29	E5M3	43° 43.555' N	79° 14.165' W	18
Scar	SC_OSC98546	Pole 60 East Ave	5-Transit	34	DART 3.95	OH Switch	27.6 KV	47M6	47M17	43° 46.954' N	79° 17.95' W	11
NY	NY_OSC81004	Pole 2764-51 Old Leslie St, Rear 29	5-Transit	35	S&C 5801	OH Switch	27.6 KV	51M23				
Scar	SC_OSC11803	Pole 49 Bertrand Ave	5-Transit	36	DART 3.95	OH Switch	27.6 KV	43M25	E5M2	43° 44.79' N	79° 16.928' W	159.414
Scar	SC_OSC264	Pole 3080 Eglinton Ave E	5-Transit	37	DART 3.95	OH Switch	27.6 KV	E5M5	H9M3	43° 44.477' N	79° 13.648' W	159
Scar	SC_OSC8977	Pole 126 Bennet Rd	5-Transit	38	DART 3.95	OH Switch	27.6 KV	47M16	47M15	43.772496° N	79.166394° W	128
Scar	SC_OSC9416	Pole 365 Centennial Rd	5-Transit	39	DART 3.95	OH Switch	27.6 KV	47M13	47M13	43° 47.652' N	79° 9.217' W	15
Scar	SC_OSC10521	Pole 630 Pharmacy Ave, N/O St Clair Ave	5-Transit	40	DART 3.95	OH Switch	27.6 KV	43M27	E5M6	43° 42.621' N	79° 17.479' W	153.3144
Scar	SC_OSC26044	Pole 3563 Lawrence Ave E, W/O Markham Rd	5-Transit	41	DART 3.95	OH Switch	27.6 KV	E5M23	H9M3	43° 45.568' N	79° 13.582' W	167.9448
Scar	SC_OSC65736	Pole 221 Coronation Dr	5-Transit	42	DART	OH Switch	27.6 KV	47M15	H9M29	43.762341° N	79.181598° W	298'
Scar	SC_OSC60575	Pole 4181 Lawrence Ave E	5-Transit	43	DART 3.95	OH Switch	27.6 KV	47M5	47M15	43° 46.79' N	79° 11.246' W	
Scar	SC_OSC65544	Pole 4247 Lawrence Ave E	5-Transit	44	DART 3.95	OH Switch	27.6 KV	47M15	H9M29	43.769127° N	79.181916° W	146
Scar	SC_OSC90459	Pole 358 Coronation Dr	5-Transit	45	S&C 5801	OH Switch	27.6 KV	H9M29	47M16	43° 45.976' N	79° 1.327' W	111.8616
Scar	SC_OSC96095	Pole 303 Port Union Rd	5-Transit	46	DART 3.95	DH Switch	27.6 KV	PJF1	XGF2	43° 47.385' N	79° 8.436' W	97.231
Scar	SC_OSC99384	Pole 6560 Lawrence Ave E	5-Transit	47	DART	OH Switch	13.8KV	XGF1	XGF3			
Scar	SC_OSC81900	Pole 6223 Lawrence Ave E	5-Transit	48	DART 3.95	DH Switch	13.8KV	XGF1	PJF3			
Scar	SC_OSC11170	Pole 175 Ellesmere Rd	5-Transit	49	S&C 5801	OH Switch	27.6 KV	E5M4		43° 45.61' N	79° 18.37' W	139.932
Scar	SC_OSC9874	Pole 65-45 McCowan Rd, N/O Lawrence Ave E	5-Transit	50	S&C 5801	OH Switch	27.6 KV	E5M23	H9M28	43° 44.624' N	79° 12.71' W	156.576
Scar	SC_OSC13178	Pole 571 Coronation Dr	5-Transit	51	S&C 5801	OH Switch	27.6 KV	47M7	47M16			
Scar	SC_OSC5477	Pole 73-75 Bellamy Rd	5-Transit	52	S&C 5801	OH Switch	27.6 KV	H9M28		43° 44.624' N	79° 12.71' W	18
Scar	SC_OSC3515	Pole 56-35 Brimley Rd	5-Transit	53	S&C 5801	OH Switch	27.6 KV	51M22		43° 44.633' N	79° 15.68' W	158
Scar	SC_OSC2961	Pole 1031 Danforth Rd	5-Transit	54	S&C 5801	OH Switch	27.6 KV	43M29	E5M25	43° 44.42' N	79° 14.866' W	186.116
Scar	SC_OSC6864	Pole 3122 Danforth Ave	5-Transit	55	S&C 5801	DH Switch	27.6 KV	43M23	43M27	43° 41.511' N	79° 17.168' W	126.7968
Scar_EY	EY_OSC7562	Pole 2638 St Clair Ave E	5-Transit	56	S&C 5801	OH Switch	27.6 KV	53M7	53M3	43° 44.624' N	79° 12.71' W	12.396
Scar	SC_OSC1602	Pole 12-63 Warden Ave	5-Transit	57	S&C 5801	OH Switch	27.6 KV	E5M1	43M26	43° 43.329' N	79° 17.126' W	156.576
Scar	SC_SA	Kingston - Morningside	5-Transit	58	SEL 2032	Substation	4 KV					
Scar	SC_OSC195	Pole 865 Pharmacy Ave	5-Transit	59	S&C 5801	OH Switch	27.6 KV	5M6				
Scar	SC_OSC82432	Pole 30-112 Birchmount Rd	5-Transit	60	S&C 5801	OH Switch	27.6 KV	43M26	5M3			
Scar	SC_OSC58475	Pole 435 Cornstock Rd	5-Transit	61	S&C 5801	DH Switch	27.6 KV	43M26				
Scar	SC_OSC73914	Pole 3560 St Clair Ave E	5-Transit	62	S&C 5801	OH Switch	27.6 KV	43M30				
Scar	SC_OSC87400	Pole 604 Birchmount Rd	5-Transit	63	S&C 5801	OH Switch	27.6 KV	43M29	43M26			
Scar	SC_OSC90460	Pole 3279 Lawrence Ave E	5-Transit	64	S&C 5801	OH Switch	27.6 KV	5M23				
Scar	SC_OSC64201	Pole 2628 McCowan Rd	5-Transit	65	DART	OH Switch	27.6 KV	63M6				
Scar	SC_AB	10 Lupin	5-Transit	66	SEL 2032	Substation	4 KV			43° 44.624' N	79° 12.71' W	169.4688
Scar	SC_OSC12863	Pole 968 Port Union Rd	5-Transit	67	S&C 5801	OH Switch	27.6 KV	47M17				
Scar	SC_OSC72806	Pole 2949 Kingston Rd	5-Transit	68	S&C 5801	OH Switch	27.6 KV	43M30	E5M3	43° 724564 N	79° 232875 W	152
NY	NY_OSC24776	Pole 150-1 Carnforth Rd	5-Transit	69	S&C 5801	OH Switch	27.6 KV	53M8		43° 43.851' N	79° 13.559' W	496 ft
NY	NY_OSC63454	Pole 1594 Victoria Park Ave	5-Transit	70	S&C 5801	OH Switch	27.6 KV	53M6				
NY	NY_OSC8654	Pole 297-1 Eglinton Ave E	5-Transit	71	S&C 5801	OH Switch	27.6 KV	34M6				
Scar	SC_OSC2234	Pole 19-342 Kingston Rd @ Meadow	5-Transit	72	S&C 5801	OH Switch	27.6 KV	47M13	47M16	43° 78.875' N	79° 16.247' W	84
NY	NY_OSC16780	Pole 2 Sweeney Dr	5-Transit	73	S&C 5801	OH Switch	27.6 KV	53M6	53M8			
Scar	SC_FE	20 Underwriters Rd	5-Transit	74	2032	Substation	4 KV					
NY	NY_OSC80486	Pole 1589 Victoria Park Ave	5-Transit	75	S&C 5801	OH Switch	27.6 KV	53M26	E5M8	43.728697° N	79.304126° W	148
Scar	SC_OSC43119	Pole 6898 Warden Ave	5-Transit	76	S&C 5801	OH Switch	27.6 KV	43M26	43M24	43.42452° N	79.16733° W	140
Scar	SC_OSC36264	Pole 111 Brimley Rd	5-Transit	77	S&C 5801	OH Switch	27.6 KV	43M29	E5M25			
Scar	SC_OSC74582	Pole 161 Galloway Rd	5-Transit	78	S&C 5801	OH Switch	27.6 KV	47M14	H9M29	43.763011° N	79.195028° W	162
Scar	SC_OSC57791	Pole 223 Copperfield Rd	5-Transit	79	S&C 5801	OH Switch	27.6 KV	H9M29	47M7	43.760359° N	79.168229° W	145
Scar	SC_OSC37709	Pole 741 Kennedy Rd	5-Transit	80	S&C 5801	OH Switch	27.6 KV	43M29	E5M5	43.731099° N	79.287388° W	170
Scar	SC_OSC82123	Pole 425 Kennedy Rd	5-Transit	81	S&C 5801	OH Switch	27.6 KV	43M29	43M28	43.42960° N	79.15683° W	158
Scar	SC_PSC3763	Warden Ave & Metropolitan Rd	5-Transit	82	DART	PMH-11	27.6 KV	5M9	52M22			

	6 - Transit Master	6 Forest Laneway			Tx: 928.70625	Rx: 928.70625							
NY	NY_OSC26437	Pole 42-1 Prince Andrew Pl	6-Transit	1	S&C 5801	OH Switch	27.6 KV	34M5					
NY	NY_OSC73169	Pole 5 Finch Ave W	6-Transit	2	S&C 5801	OH Switch	27.6 KV	8M3		43° 46.777' N	79° 24.971' W	96.9	
NY	NY_OSC61755	Pole 956 Willowdale Ave	6-Transit	3	S&C 5801	OH Switch	27.6 KV	8M4	8M6	43° 47.289' N	79° 24.6' W	166	
NY	NY_OSC4593	Pole 43 Dudley Ave	6-Transit	5	S&C 5801	OH Switch	27.6 KV	80M5	80M29	43° 45.874' N	79° 24.680' W	160	
NY	NY_OSC8927	Pole 3620 Dufferin St	6-Transit	6	S&C 5801	OH Switch	27.6 KV	85M9		Ready			
NY	NY_OSC573	Pole 4976 Bathurst St	6-Transit	7	S&C 5801	OH Switch	27.6 KV	8M8		Ready			
NY	NY_OSC76728	Pole 1346 Sheppard Ave E	6-Transit	8	S&C 5801	OH Switch	13.8 KV	SS68F2					
NY	NY_OSC79333	Pole 3108 Victoria Park Ave	6-Transit	9	DART 3.95	OH Switch	27.6 KV	51M32					
NY	NY_OSC98517	Pole 1298 Sheppard Ave E	6-Transit	10	DART 3.95	OH Switch	27.6 KV	51M24	51M6				
NY	NY_OSC14134	Pole 1021 Lawrence Ave E	6-Transit	11	DART 3.95	OH Switch	27.6 KV	53M10	53M25				
NY	NY_OSC29453	Pole 7 Colville Rd	6-Transit	12	DART 3.95	OH Switch	27.6 KV	35M12	35M12				
NY	NY_OSC63962	Pole 2417 Keele St	6-Transit	13	DART 3.95	DH Switch	27.6 KV	35M12	35M24				
NY	NY_OSC41259	Pole 2588 Victoria Park Ave	6-Transit	14	S&C 5801	DH Switch	27.6 KV	51M4					
NY	NY_OSC95536	Pole 2359 Bayview Ave	6-Transit	15	S&C 5801	DH Switch	27.6 KV	51M21	34M7				
Tor	TO_OSC49431	Pole 345 Mount Pleasant Rd	6-Transit	16	S&C 5801	OH Switch	13.8 KV	A210DX	A13L	43° 42.419' N	79° 23.366' W	165	
NY	NY_OSC63706	Pole 137 Johnston Ave	6-Transit	17	S&C 5801	OH Switch	27.6 KV	80M30		43.7574	-79.4104	91 m	
NY	NY_OSC21702	Pole 266 Fisherville Rd	6-Transit	18	S&C 5801	OH Switch	27.6 KV	85M7		43.78707° N	79.49161° W	191	
NY	NY_OSC3851	Pole 459 Patricia Ave	6-Transit	19	S&C 5801	OH Switch	27.6 KV	8M2					
NY	NY_OSC19741	Pole 11 Steeles Ave W	6-Transit	20	S&C 5801	OH Switch	27.6 KV	80M21		43.79770° N	79.42094° W	131	
NY	NY_OSC209	Pole 203 Hilda Ave	6-Transit	22	S&C 5801	OH Switch	27.6 KV	8M10					
NY	NY_OSC4594	Pole 551 Cummer Ave	6-Transit	23	S&C 5801	OH Switch	27.6 KV	52M5					
NY	NY_DSC59662	Pole 5952 Bathurst St	6-Transit	24	S&C 5801	OH Switch	27.6 KV	80M8	80M2	43.78240° N	79.44534° W	219	
NY	NY_OSC44941	Pole 3622 Victoria Park Ave	6-Transit	25	S&C 5801	OH Switch	27.6 KV	52M27	51M32				
NY	NY_OSC3939	Pole 375 Steeles Ave E	6-Transit	26	S&C 5801	OH Switch	27.6 KV	80M21	51M3				
NY	NY_OSC19417	Pole 2513 Steeles Ave E	6-Transit	27	S&C 5801	OH Switch	27.6 KV	51M27					
NY	NY_OSC6921	Pole 3196 Bayview Ave	6-Transit	28	S&C 5801	OH Switch	27.6 KV	51M8	51M5				
NY	NY_OSC56263	Pole 514 Dudley Ave	6-Transit	29	S&C 5801	OH Switch	27.6 KV	51M27	51M32				
NY	NY_OSC29169	Pole 2103 Steeles Ave E	6-Transit	30	S&C 5801	OH Switch	27.6 KV	51M3					
NY	NY_OSC90710	Pole 2002 Sheppard Ave E	6-Transit	31	S&C 5801	OH Switch	27.6 KV	51M4	51M22				
NY	NY_OSC11328	Pole 2043 Bayview Ave	6-Transit	32	S&C 5801	OH Switch	27.6 KV	34M6					
NY	NY_OSC5286	Pole 1101 Magnetic Dr	6-Transit	33	S&C 5801	OH Switch	27.6 KV	85M3	85M6				
Tor	TO_OSC67346	Pole 85 Oriole Pkwy	6-Transit	34	S&C 5801	OH Switch	13.8 KV	A250DX		43.70047° N	79.40403° W	174 m	
NY	NY_DSC1710	Pole 3952 Dufferin St	6-Transit	35	S&C 5801	OH Switch	27.6 KV	85M3					
NY	NY_OSC36749	Pole 1292 Lawrence Ave E	6-Transit	39	S&C 5801	OH Switch	27.6 KV	53M6					
NY	NY_S190	Pole 1895 Leslie St	6-Transit	40	S&C 5801	OH Switch	27.6 KV	51M3	51M7				
NY	NY_OSC281	Pole 1212-1 Finch Ave E	6-Transit	41	S&C 5801	OH Switch	27.6 KV	51M26					
NY	NY_OSC63730	Pole 1202-1 Finch Ave E	6-Transit	42	S&C 5801	OH Switch	27.6 KV	51M26	51M8	43° 47.454' N	79° 21.803' W	65	
NY	NY_OSC85382	Pole 303 Van Horne Ave	6-Transit	43	S&C 5801	OH Switch	27.6 KV	51M28					
NY	NY_OSC902	Pole 610 Wilson Ave	6-Transit	44	S&C 5801	OH Switch	27.6 KV	85M1	85M9	Ready			
NY	NY_OSC8491	Pole 30 Easton Rd	6-Transit	45	S&C 5801	OH Switch	27.6 KV	85M8	80M30				
NY	NY_OSC1256	Pole 253 HONI ROW W/O Victoria P	6-Transit	46	S&C 5801	OH Switch	27.6 KV	SS68F6		43° 48.95' N	79° 2.176' W	184	
NY	NY_OSC7773	Pole 2536 Bayview Ave	6-Transit	47	S&C 5801	OH Switch	27.6 KV	51M21					
NY	NY_OSC4843	Pole 1894 Victoria Park Ave	6-Transit	48	S&C 5801	DH Switch	27.6 KV	53M26	53M6	43° 44.598' N	79° 18.621' W	165	
NY	NY_OSC2118	Pole 69 Underhill Dr	6-Transit	49	S&C 5801	OH Switch	27.6 KV	53M25		Ready			
NY	NY_OSC8209	Pole 486 Lawrence Ave E	6-Transit	50	S&C 5801	OH Switch	27.6 KV	34M7					
NY	NY_OSC3973	Pole 11 Banbury Rd	6-Transit	51	S&C 5801	OH Switch	27.6 KV	34M6	53M24				
NY	NY_OSC4679	Pole 338 Willowdale Ave	6-Transit	52	S&C 5801	OH Switch	27.6 KV	8M6		43° 46.367' N	79° 24.21' W	169.7736	
NY	NY_OSC4855	Pole 5 Kenneth Ave	6-Transit	53	S&C 5801	OH Switch	27.6 KV	8M28		43° 45.817' N	79° 24.322' W	34	
NY	NY_OSC1179	Pole 2440 Sheppard Ave E	6-Transit	54	S&C 5801	OH Switch	27.6 KV	SS68F7	SS68F6				
NY	NY_OSC2363	Pole 465 Steeles Ave E	6-Transit	55	S&C 5801	OH Switch	27.6 KV	SS68F4	SS68F1	43° 48.49' N	79° 22.41' W	182.274	
NY	NY_OSC3898	Pole 865-16 Don Mills Rd (Rear 17 C	6-Transit	56	S&C 5801	OH Switch	27.6 KV	53M27	53M2	43° 43.763' N	79° 19.959' W	25	
NY	NY_OSC9351	Pole 890-1 York Mills Rd, Approx 15	6-Transit	57	S&C 5801	OH Switch	27.6 KV	51M29		43° 45.379' N	79° 2.812' W	12	
NY	NY_OSC4778	Pole 110 Willowdale Ave	6-Transit	58	S&C 5801	OH Switch	27.6 KV	80M29	80M6				
NY	NY_OSC9200	Pole 288 York Mills Rd	6-Transit	59	S&C 5801	OH Switch	27.6 KV	8M29	51M21	43° 44.865' N	79° 23.152' W	15.876	
NY	NY_OSC639	Pole 881 York Mills Rd	6-Transit	60	S&C 5801	OH Switch	27.6 KV	53M28					
NY	NY_OSC1727	Pole 52 York Mills Rd	6-Transit	61	S&C 5801	OH Switch	27.6 KV	85M8	80M29				
NY	NY_OSC4017	Pole 4403 Bathurst St	6-Transit	62	S&C 5801	DH Switch	27.6 KV	85M27					
NY	NY_OSC9792	Pole 2061 Steeles Ave W	6-Transit	63	S&C 5801	DH Switch	27.6 KV	85M7					
NY	NY_OSC353	Pole 695 Finch Ave W	6-Transit	64	S&C 5801	OH Switch	27.6 KV	8M8	85M6	43° 46.221' N	79° 27.578' W	191	
NY	NY_OSC6338	Pole 6 Alness St	6-Transit	65	S&C 5801	OH Switch	27.6 KV	85M31	85M2				
NY	NY_PSC1999	282 Upper Highland Cres	6-Transit	66	DART 3.95	PMH-9	27.6 KV	80M29					
NY	NY_OSC92822	Pole 3142 Bayview Ave	6-Transit	67	S&C 5801	OH Switch	27.6 KV	51M8					
NY	NY_OSC27253	Pole 1198 Lawrence Ave	6-Transit	68	S&C 5801	OH Switch	27.6 KV	53M25	53M6				
Tor	TO_OSC29782	Pole 137 Duplex Avenue	6-Transit	69	S&C 5801	OH Switch	13.8 KV	A220DX		43° 70.5274' N	79° 39.9896' W	128	
Etob_YK	YK_OSC75252	Pole 427 Hopewell Ave	6-Transit	70	S&C 5801	OH Switch	27.6 KV	35M2	35M9	43.69984° N	79.44559° W	175	
NY	NY_OSC5072	Pole 3 Ranee Ave	6-Transit	71	S&C 5801	OH Switch	27.6 KV	85M26	85M5				
NY	NY_OSC10376	Pole 287 Ranee Ave	6-Transit	72	S&C 5801	OH Switch	27.6 KV	35M7		Ready			162.7632
Tor	TO_OSC4941	Pole 226 Duplex Ave	6-Transit	73	S&C 5801	OH Switch	13.8 KV	A23DX	A22GL				
Tor	TO_OSC4764	Pole 264 Duplex Ave	6-Transit	74	S&C 5801	OH Switch	13.8 KV	A22GL					
Tor	TO_OSC3586	Pole 57 St. Clements Ave	6-Transit	75	S&C 5801	OH Switch	13.8 KV	A23DX					
Tor	TO_OSC2261	Pole 31 Lawrence Ave W	6-Transit	76	S&C 5801	OH Switch	13.8 KV	A22GL	A24GL				
Tor	TO_OSC4258	Pole 174 Duplex Ave	6-Transit	77	S&C 5801	OH Switch	13.8 KV	A23DX					
Tor	TO_OSC8344	Pole 14 Strathallan Blvd	6-Transit	78	S&C 5801	OH Switch	13.8 KV	A23DX	A24DX				
NY	NY_PSC834	245 Consumer Rd	6-Transit	79	DART 3.95	PMH-11	27.6 KV	51M28					
Tor	TO_OSC3169	Pole 61 Roselawn Ave	6-Transit	80	S&C 5801	OH Switch	13.8 KV	A24DX					
Scar_EY	EY_OSC600	Pole 32 Browning Ave	6-Transit	81	S&C 5801	OH Switch	27.6 KV	34M1	34M2	43.682064° N	79.352489° W	?	
NY	NY_OSC2907	Pole 2901 Bayview Ave	6-Transit	82	S&C 5801	OH Switch	27.6 KV	51M21	51M8				
NY	NY_OSC48803	Pole 1622 Sheppard Ave E	6-Transit	83	S&C 5801	OH Switch	27.6 KV	SS68F7	SS68F2				
NY	NY_OSC39850	Pole 334 Wilmington Ave	6-Transit	85	S&C 5801	OH Switch	27.6 KV	85M6		43.76911° N	79.46046° W	196 m	
NY	NY_OSC96756	Pole 65 Dufflaw Rd	6-Transit	86	S&C 5801	OH Switch	27.6 KV	35M23		43° 43.18' N	79° 27.79' W	179	
NY	NY_OSC7353	Pole 363 Senlac Rd	6-Transit	87	S&C 5801	OH Switch	27.8 KV	8M1		43° 46.512' N	79° 25.773' W	19	
NY	NY_OSC47012	Pole 479 Cummer Ave	6-Transit	88	S&C 5801	OH Switch	27.6 KV	80M4	80M21	43° 47.518' N	79° 23.683' W	180	
NY	NY_OSC59025	Pole 2558 Bayview Ave	6-Transit	89	S&C 5801	OH Switch	27.6 KV	53M21					
NY	NY_OSC55509	Pole 23 Ernest Ave	6-Transit	90	S&C 5801	OH Switch	27.6 KV	SS68F3	SS68F9				
NY	NY_OSC92828	Pole 2126 Bayview Ave	6-Transit	91	S&C 5801	OH Switch	27.6 KV	34M7					
NY	NY_OSC33749	Pole 698 Sheppard Ave E	6-Transit	92	S&C 5801	OH Switch	27.6 KV	80M5	51M7				
NY	NY_OSC52670	Pole 3350 Victoria Park Ave	6-Transit	93	S&C 5801	OH Switch	27.6 KV	51M32	51M4				
NY	NY_OSC88301	Pole 2230 Victoria Park Ave	6-Transit	94	S&C 5801	OH Switch	27.8 KV	53M26					
NY	NY_OSC91960	Pole 5025 Leslie St	6-Transit	96	S&C 5801	OH Switch	27.6 KV	SS68F1		43° 48.25' N	79° 22.223' W	161.8	
NY	NY_OSC73096	Pole 96 Post Rd	6-Transit	97	S&C 5801	OH Switch	27.6 KV	51M21	53M24	43° 44.344' N	79° 22.094' W	155.7528	
NY	NY_OSC28922	Pole 851 Dolomite Dr	6-Transit	98	S&C 5801	OH Switch	27.6 KV	85M6					
NY	NY_DSC12207	Pole 42-19 888 Don Mills Rd	6-Transit	100	S&C 5801	OH Switch	27.6 KV	34M6	55M27				
NY	NY_OSC74736	Pole 3502 Don Mills Rd	6-Transit	102	S&C 5801	OH Switch	27.6 KV	51M26		43.793129° N	79.355189° W	165	

NY	NY_OSC64725	Pole 851 Willowdale Ave	6-Transit	103	S&C 5801	OH Switch	27.6 KV	80M6		43° 782992' N	79° 407581' W	130		
NY	NY_OSC52475	Pole 3504 Don Mills Rd	6-Transit	104	S&C 5801	OH Switch	27.6 KV	51M26		43.793547° N	79 355160° W	165 m		
NY	NY_OSC44526	Pole 228 Van Horne Ave	6-Transit	105	S&C 5801	OH Switch	27.6 KV	51M24	51M28	43 78766° N	79.351086° W	103		
NY	NY_OSC36739	Pole 517 Kenneth Ave	6-Transit	106	S&C 5801	OH Switch	27.6 KV	80M3	80M5	43° 46.931' N	79° 44 783' W			
NY	NY_OSC38702	Pole 77 Norton Ave	6-Transit	107	S&C 5801	OH Switch	27.6 KV	80M3	80M22	43° 46.371 N	79° 24.563 W	188		
NY	NY_OSC52702	Pole 19 Churchill Ave	6-Transit	108	S&C 5801	OH Switch	27.6 KV	80M22		43.773420° N	79.415370° W	153		
NY	NY_OSC1436	Pole 865-2-1 Don Mills Rd. CPR RO	6-Transit	109	S&C 5801	OH Switch	27.6 KV	53M27	53M11	43.7256° N	79 3392° W	146		
NY	NY_OSC67692	Pole 3924 Victoria Park Ave	6-Transit	110	S&C 5801	OH Switch	27.6 KV	51M27		43.813807° N	79 340271° W	185		
Scar	SC_OSC56394	Pole 3911 Victoria Park Ave	6-Transit	111	S&C 5801	OH Switch	27.6 KV	502M28		43 812618° N	79 339826° W	274		
Tor	TO_OSC77986	Pole 124 Eglinton Ave W	6-Transit	113	S&C 5801	OH Switch	13.8 KV	A220DX		43° 42 199' N	79° 24 922' W	153		
NY	NY_PSC7236	4150 Yonge St N/O York Mills	6-Transit	114	DART	PMH-9	27.6 KV	80M27		43° 44 806' N	79° 24 453' W	119		
NY	NY_OSC98867	Pole 39 Tamworth Rd	6-Transit	115	S&C 5801	OH Switch	27.6 KV	8M9						
NY	NY_OSC23506	Pole 72 Lesmill Rd	6-Transit	116	S&C 5801	OH Switch	27.6 KV	51M23	53M28	43.758202° N	79 356793° W	238		
NY	NY_OSC21189	Pole 2672 Victoria Park Ave	6-Transit	117	S&C 5801	OH Switch	27.6 KV	51M25		43 792418° N	79 331558° W	129 m		
NY	NY_OSC64990	Pole 2465 Steeles Ave E	6-Transit	119	S&C 5801	OH Switch	27.6 KV	51M3	51M27	43.810740° N	79.362030° W	190		
NY	NY_OSC25791	Pole 91 Willowdale Ave	6-Transit	122	S&C 5801	OH Switch	27.6 KV	80M29		43° 45.761' N	79° 23 948' W	173		
NY	NY_OSC82163	Pole 237 Shaugnessy Blvd	6-Transit	124	S&C 5801	OH Switch	13.8 KV	SS68F5		43 784271° N	79 356460° W	130		
NY	NY_OSC39618	Pole 12 De Quincy Blvd	6-Transit	125	S&C 5801	OH Switch	27.6 KV	85M26	85M5	43° 44.425' N	79° 26.179' W	184		
Etob_YK	YK_OSC97076	Pole 53 The Belt Line	6-Transit	126	S&C 5801	OH Switch	27.6 KV	35M5	35M6	43° 42.217 N	79° 25.220 W	194		
NY	NY_OSC83601	Pole 2763 Bayview Ave	6-Transit	127	S&C 5801	OH Switch	27.6 KV	51M21		43.761361° N	79.386567° W	167		
NY	NY_PSC45390	50 Denlow Blvd	6-Transit	129	DART	PMH-9	27.6 KV	53M24	51M30	43 74546	79 36321	131		
NY	NY_OSC75654	Pole 2076 Bayview Ave	6-Transit	130	S&C 5801	OH Switch	27.6 KV	34M7	34M6	43.719115° N	79 378593° W	103		
30	NY_OSC11709	Pole 1216 Sheppard Ave E	6-Transit	131	S&C 5801	OH Switch	27.6 KV	51M7		43.771606° N	79 366891° W	56 m		
NY	NY_OSC28378	Pole 851 York Mills Rd	6-Transit	132	S&C 5801	OH Switch	27.6 KV	51M30	53M28	43.753913° N	79.354503° W	131		
NY	NY_OSC3736	Pole 11 Underhill Dr	6-Transit	133	S&C 5801	OH Switch	27.6 KV	53M25		43.742018° N	79 325303° W	123		
NY	NY_OSC78646	Pole 2764-12 Leslie Railway	6-Transit	134	S&C 5801	OH Switch	27.6 KV	51M7		43 766721° N	79 365250° W	108		
NY	NY_OSC5668	Pole 73 Banbury Rd	6-Transit	136	S&C 5801	OH Switch	27.6 KV	53M24		43 739256° N	79 366048° W	149 m		
NY	NY_OSC46631	Pole 3748 Keele St	6-Transit	139	S&C 5801	OH Switch	27.6 KV	85M24	85M4	43° 45.491' N	79° 29.386' W	217		
NY	NY_OSC53454	Pole 76 Bond Ave	6-Transit	142	S&C 5801	OH Switch	27.6 KV	51M30	53M10	43.745379°	79 350712°	137		
NY	NY_OSC70236	Pole 1863 Leslie St	6-Transit	143	S&C 5801	OH Switch	27.6 KV	51M30	53M24	43.753321° N	79 359954° W	197		
NY	NY_OSC19185	Pole 36 Bogert Ave	6-Transit	144	S&C 5801	OH Switch	27.6 KV	85M27	80M23	43 760385° N	79.412829° W		202	
NY	NY_OSC48471	Pole 885 York Mills Rd	6-Transit	145	S&C 5801	OH Switch	27.6 KV	53M28	51M29	43 755241° N	79 348560° W	98		
NY	NY_OSC84704	Pole 240 Duncan Mill Rd	6-Transit	147	S&C 5801	OH Switch	27.6 KV	51M23	51M29	43.761596° N	79.350937° W	102 m		
NY	NY_OSC67980	Pole 3324 Bayview Ave	6-Transit	148	S&C 5801	OH Switch	27.6 KV	80M6	80M21	43.791714° N	79 393442° W	198		
NY	NY_OSC56690	Pole 2 Laredo Crt	6-Transit	149	S&C 5801	OH Switch	27.6 KV	80M5	51M5	43.785840° N	79 399542° W	174 m		
NY	NY_OSC23846	Pole 91 Norton Ave	6-Transit	150	S&C 5801	OH Switch	27.6 KV	80M3	80M6					
NY	NY_PSC61372	150 Beecroft Ave	6-Transit	151	S&C 5801	PMH-9	27.6 KV	85M27	80M24	43.764883° N	79.415200° W	370		
NY	NY_OSC26003	Pole 619 York Mills Rd	6-Transit	152	S&C 5801	OH Switch	27.6 KV	51M30		43 75325° N	79 3575° W	152		
NY	NY_OSC42196	Pole 82 Parkwoods Village Dr	6-Transit	153	S&C 5801	OH Switch	27.6 KV							
NY	NY_OSC19305	Pole 59 Old Sheppard Ave	6-Transit	154	S&C 5801	OH Switch	13.8 KV	SS68F7		43° 46.672' N	79° 20.214' W	181		
NY	NY_OSC38815	Pole 1103 Finch Ave W	6-Transit	155	S&C 5801	OH Switch	27.6 KV	85M31		43 76733° N	79.47344° W	32		
NY	NY_OSC22678	Pole 61 Cummer Ave	6-Transit	157	S&C 5801	OH Switch	27.6 KV	80M4						
NY	NY_OSC26536	Pole 807 Lawrence Ave E	6-Transit	158	S&C 5801	OH Switch	27.6 KV	34M6	53M25	43.734407° N	79 354752° W	232		
NY	NY_OSC19199	Pole 808-0 Lawrence Ave E	6-Transit	159	S&C 5801	OH Switch	27.6 KV	34M5	34M6	43.734823° N	79 354868° W	147		
Scar	SC_OSC16891	Pole 3635 Steeles Ave E	6-Transit	161	S&C 5801	OH Switch	27.6 KV	502M21		43.818197° N	79 331048° W	307 m		
Scar	SC_OSC22543	Pole 3260 Pharmacy Ave	6-Transit	164	S&C 5801	OH Switch	27.6 KV	502M28		43.803209° N	79 330191° W	182 m		
NY	NY_OSC87704	Pole 11 Cummer Ave	6-Transit	165	S&C 5801	OH Switch	27.6 KV	80M4		43.787093° N	79.416904° W	182 m		
		S&C SpeedNet radio			unlicense freq. 902 - 928 Mhz.									
NY	NY_OSC44438	Pole 17 Wilmington Ave	SpeedNet	10.244.1.1	S&C 5801	OH Switch	27.6 KV	85M1		43° 45.210' N	79° 27 165' W	188		
NY	NY_OSC8354	Pole 194 Wilson Ave	SpeedNet	10.244.1.1	S&C 5801	OH Switch	27.6 KV	85M8		43° 44.374' N	79° 25.405' W	162		
NY	NY_OSC70691	Pole 2111 Avenue Rd	SpeedNet	10.244.1.1	S&C 5801	OH Switch	27.6 KV	85M8	85M23	43° 44.275' N	79° 25.247' W	187		
NY	NY_OSC23592	Pole 110 Wilson Ave	SpeedNet	10.244.1.1	S&C 5801	OH Switch	27.6 KV	85M8		43° 44 463' N	79° 25 11' W	163		
NY	NY_OSC1019	Pole 4022 Yonge St	SpeedNet	10.244.1.1	S&C 5801	OH Switch	27.6 KV	85M8	80M27					
NY	NY_OSC13420	Pole 3690 Dufferin St	SpeedNet	10.244.1.1	S&C 5801	OH Switch	27.6 KV	85M10		43° 43.979' N	79° 27.552' W	199		
NY	NY_OSC72133	Pole 3686 Dufferin St	SpeedNet	10.244.1.1	S&C 5801	OH Switch	27.6 KV	85M10	85M9	43° 43.971' N	79° 27.548' W	199		
NY	NY_OSC7890	Pole 182 Regent Rd	SpeedNet	10.244.1.1	S&C 5801	OH Switch	27.6 KV	85M10		43° 43.834' N	79° 28.295' W	19		
NY	NY_OSC79792	Pole 1077 Wilson Ave	SpeedNet	10.244.1.1	S&C 5801	OH Switch	27.6 KV	85M10	85M25	43° 43.612' N	79° 28.867' W	194		
NY	NY_OSC91140	Pole 1865 Avenue Rd	SpeedNet	10.244.1.1	S&C 5801	OH Switch	27.6 KV	85M23		43° 43.915' N	79° 25.150' W	115		
NY	NY_OSC88314	Pole 254 Faywood Blvd	SpeedNet	10.244.1.2	S&C 5801	OH Switch	27.6 KV	65M1		43° 45.010' N	79° 27.004' W	190		
NY	NY_OSC44472	Pole 1581 Avenue Rd	SpeedNet	10.244.1.2	S&C 5801	OH Switch	27.6 KV	85M23		?	?	?		
NY	NY_OSC85941	Pole 308 Lawrence Ave W	SpeedNet	10.244.1.2	S&C 5801	OH Switch	27.6 KV	85M23	35M5	43° 43.335' N	79 24.974' W	118		
NY	NY_OSC55286	Pole 2992 Keele St	SpeedNet	10.244.1.2	S&C 5801	OH Switch	27.6 KV	85M25		43° 44 203'	79° 29 069'	195		
NY	NY_OSC90796	Pole 2854 Keele St	SpeedNet	10.244.1.2	S&C 5801	OH Switch	27.6 KV	85M25		43° 43.895' N	79° 29.003' W	195		
NY	NY_OSC73743	Pole 1111 Wilson Ave	SpeedNet	10.244.1.2	S&C 5801	OH Switch	27.6 KV	85M25		43° 43.580' N	79° 28.975' W	206		
NY	NY_OSC15257	Pole 1220 Wilson Ave	SpeedNet	10.244.1.2	S&C 5801	OH Switch	27.6 KV	55M28	85M25	43° 43.496' N	79° 29.405' W	174		
NY	NY_OSC80757	Pole 5 Ranee Ave	SpeedNet	10.244.1.2	S&C 5801	OH Switch	27.6 KV	85M26		43° 43.609' N	79° 25.912' W	202		
NY	NY_OSC32360	Pole 139 Ranee Ave	SpeedNet	10.244.1.2	S&C 5801	OH Switch	27.6 KV	85M26		43° 43.495' N	79° 26.443' W	175		
NY	NY_OSC565	Pole 259 Ranee Ave (S725)	SpeedNet	10.244.1.2	S&C 5801	OH Switch	27.6 KV	85M26	35M7					
NY	NY_OSC83748	Pole 144 Faywood Blvd	SpeedNet	10.244.1.3	S&C 5801	OH Switch	27.6 KV	85M1		43° 44.567' N	79° 26.908' W	191		
NY	NY_OSC18706	Pole 3048 Dufferin St	SpeedNet	10.244.1.3	S&C 5801	OH Switch	27.6 KV	35M3		43° 42.815' N	79° 29.29' W	119		
NY	NY_OSC85887	Pole 7 Orfus Rd	SpeedNet	10.244.1.3	S&C 5801	OH Switch	27.6 KV	35M3	35M23					
NY	NY_OSC75577	Pole 3298 Dufferin St	SpeedNet	10.244.1.3	S&C 5801	OH Switch	27.6 KV	35M3		43° 43.271' N	79° 27.386' W	192		
NY	NY_OSC5305	Pole 176 Bentworth Ave	SpeedNet	10.244.1.3	S&C 5801	OH Switch	27.6 KV	85M9	35M3					
NY	NY_OSC879	Pole 9 Glen Park Ave	SpeedNet	10.244.1.3	S&C 5801	OH Switch	27.6 KV	35M5		43° 42.782' N	79° 25.747' W	182		
NY	NY_OSC90200	Pole 2787 Bathurst St	SpeedNet	10.244.1.3	S&C 5801	OH Switch	27.6 KV	35M5		43° 42.714' N	79° 25.679 W	186		
NY	NY_OSC61721	Pole 2895 Bathurst St	SpeedNet	10.244.1.3	S&C 5801	OH Switch	27.6 KV	35M5						
NY	NY_OSC88300	Pole 3077 Bathurst St	SpeedNet	10.244.1.3	S&C 5801	OH Switch	27.6 KV	35M5	35M11					
NY	NY_OSC48846	Pole 764 Marlee Ave	SpeedNet	10.244.1.3	S&C 5801	OH Switch	27.6 KV	35M11		43.715457° N	79.446259° W	176		
NY	NY_OSC93009	Pole 532 Wilson Ave	SpeedNet	10.244.1.4	S&C 5801	OH Switch	27.6 KV	85M1	85M26	43° 44 092' N	79° 26.758' W	173		
NY	NY_OSC2874	Pole 546 Lawrence Ave	SpeedNet	10.244.1.4	S&C 5801	OH Switch	27.6 KV	35M11		43° 43 111' N	79° 25 988' W	198		
NY	NY_OSC63185	Pole 3089 Bathurst St	SpeedNet	10.244.1.4	S&C 5801	OH Switch	27.6 KV	35M11		43° 43.227' N	79° 25 799' W	199		
NY	NY_OSC85768	Pole 228 Wilson Ave	SpeedNet	10.244.1.4	S&C 5801	OH Switch	27.6 KV	85M8						
NY	NY_OSC13613	Pole 230 Wilson Ave	SpeedNet	10.244.1.4	S&C 5801	OH Switch	27.6 KV	85M8	85M23					
NY	NY_OSC56669	Pole 2 Murray Rd	SpeedNet	10.244.1.4	S&C 5801	OH Switch	27.6 KV	85M10		43° 43 781' N	79° 28 314' W	187		
NY	NY_OSC4794	Pole 393 Brooke Ave	SpeedNet	10.244.1.4	S&C 5801	OH Switch	27.6 KV	85M23		43° 43.845' N	79° 25 83 W	119		
NY	NY_OSC38741	Pole 403 Brooke Ave	SpeedNet	10.244.1.4	S&C 5801	OH Switch	27.6 KV	85M23		43° 43.829' N	79° 25.905' W	199		
NY	NY_OSC17651	Pole 3320 Keele St	SpeedNet	10.244.1.4	S&C 5801	OH Switch	27.6 KV	85M25		43° 44.658' N	79° 29 191' W	175		
NY	NY_OSC8071	Pole 1423 Sheppard Ave W	SpeedNet	10.244.1.4	S&C 5801	OH Switch	27.6 KV	55M25	85M25	43° 44 678' N	79° 29.221' W	191		
NY	NY_OSC5958	Pole 60 De Quincy Blvd	SpeedNet	10.244.1.4	S&C 5801	OH Switch	27.6 KV	85M26						
NY	NY_OSC1484	Pole 4117 Bathurst St	SpeedNet	10.244.1.5	S&C 5801	OH Switch	27.6 KV	85M5						
NY	NY_OSC88040	Pole 191 Brooke Ave	SpeedNet	10.244.1.5	S&C 5801	OH Switch	27.6 KV	85M23	80M3	43° 44.020' N	79° 25.045' W	164		
NY	NY_OSC96144	Pole 2677 Bathurst St	SpeedNet	10.244.1.5	S&C 5801	OH Switch	27.6 KV	35M5	35M6					
Tor	S5468	Pole 3 Teddington Pk	SpeedNet	10.244.1.5	S&C 5801	OH Switch	13.8 KV	A230GL						
Tor	S5792	Pole 2 Melrose	SpeedNet	10.244.1.5	S&C 5801	OH Switch	13.8 KV	A240GL						

NY	NY_OSC94709	Pole 3883 Bathurst St	SpeedNet r10.244.1.6 S&C 5801		OH Switch	27.6 KV	85M5				
NY	NY_OSC2820	Pole 3781 Bathurst St (S328)	SpeedNet r10.244.1.7 S&C 5801		OH Switch	27.6 KV	85M26	85M5			
NY	NY_OSC28388	Pole 3557 Bathurst St	SpeedNet r10.244.1.8 S&C 5801		OH Switch	27.6 KV	85M5				
NY	NY_OSC4472	Pole 3285 Bathurst St	SpeedNet r10.244.1.9 S&C 5801		OH Switch	27.6 KV	85M5	35M11			
Etob	EH_OSC11473	Pole 2 Old Park Rd	SpeedNet r 10.244.1.1 S&C 5801		OH Switch	27.6 KV	35M4	35M6			
	1	Pole 197 Faywood Ave	SpeedNet radio						43.74659	-79.44912	
	2	Pole 72 Faywood Ave	SpeedNet radio						43.73842	-79.44738	
	3	Pole 537 Wilson Ave	SpeedNet radio						43.73464	-79.44641	
	4	Pole 402 Wilson Ave on Lat/Long; (O	SpeedNet radio						43.73615	-79.44085	
	5	Pole 1 Transit Rd (N/W Cor @ Wilson) Conc. S/L Pole	SpeedNet radio						43.73331	-79.45323	
	6	Pole 100 Regent Rd	SpeedNet radio						43.73194	-79.46566	
	7	Pole 973 Wilson Ave (S/S), E/O Corne	SpeedNet radio						43.72845	-79.47618	
	9	Pole 3535 Dufferin (S/E Cor. @ Billy E	SpeedNet radio						43.72998	-79.45827	
	10	Pole 321 Ranee Ave	SpeedNet radio						43.72219	-79.45241	
	11	Pole 85 Ranee Ave (S/S, W/O Rajah)	SpeedNet radio						43.72572	-79.43671	
	12	Pole 752 Lawrence Ave W (Conc S/L	SpeedNet radio						43.71501	-79.44953	
	13	Pole 606 Lawrence Ave W (N/S), E/O	SpeedNet radio						43.71683	-79.44095	
	14	Pole 3045 Bathurst St, S/O Lawrence	SpeedNet radio						43.71918	-79.42982	
	15	Pole 448 Lawrence Ave W @ Wellan	SpeedNet radio						43.72011	-79.42634	
	16	Pole 365 Brooke Ave @ Falkirk	SpeedNet radio						43.73112	-79.42854	
	17	Pole 36 Brooke Ave @ Clyde	SpeedNet radio						43.73202	-79.42422	
	18	Pole 1795 Avenue Rd, N/O Melrose	SpeedNet radio						43.73014	-79.41874	
	19	Pole 250 Wilson Ave @ Allard	SpeedNet radio						43.73767	-79.42945	
	20	Pole 2160 Avenue Road	SpeedNet radio						43.73988	-79.42149	
	21	Pole 68 Wilson Ave, E/O Young Blvd	SpeedNet radio						43.74196	-79.41299	
	22	Pole 902 Sheppard Ave W	SpeedNet radio						43.75192	-79.4557	
	23	Pole 3750 Bathurst St & Wilson Ave (S/W Cor.)	SpeedNet radio						43.73731	-79.43403	
	24	Pole 706 Marlee Ave @ Glengrove	SpeedNet radio						43.71063	-79.44447	
	25	Pole 300 Marlee Ave @ Enid	SpeedNet radio						43.70622	-79.44277	
	26	Pole 44 Marlee Ave (N/W Cor.) @ Ro	SpeedNet radio						43.70218	-79.44121	
	27	Pole 3222 Keele St	SpeedNet radio						43.74076	-79.48557	
	28	Pole 106 Bentworth Ave (T10691 @ I	SpeedNet radio						43.69923	-79.43371	
	29	Pole 10612-7 Sheppard Ave W	SpeedNet radio						43.75005	-79.46563	
	30	Pole X Carl Hall Rd E/O John Derry Dr	SpeedNet radio						43.74654	-79.48103	
	31	Pole 2740 Bathurst St	SpeedNet radio						43.7099	-79.42773	
	32	Pole 724 Lawrence Ave W (Conc S/L	SpeedNet radio						43.71562	-79.44546	
	34	Pole 3423 Dufferin St E/S @ Jane Osl	SpeedNet radio						43.72479	-79.45703	
	35	Pole 30, Melrose Ave	SpeedNet radio						43.75632	-79.45923	
	36	Pole 167 Wilmington Ave (E/S), S/O I	SpeedNet radio						43.76084	-79.45603	
	37	Pole 950 Roselawn Ave (N/S), E/O Da	SpeedNet radio						43.70183	-79.44337	
	38	4 Forest Laneway (Condo building)	SpeedNet radio						43.76114	-79.451044	
	40	3077 Weston Rd (Condo building)	SpeedNet radio						43.732189	-79.537582	
	Bathurst Station	176 Goddard Street (substation)	SpeedNet radio								
	Fairbank Station	950 Roselawn (substation	SpeedNet radio								
	41	Pole 32 Old Park road	SpeedNet radio						43.70373	-79.43254	
Etob	Master Darcom radio	330 Dixon Rd	DARCOM	MOSCAD	radio hub						
Etob	EH_MONO	6 Mongram point to point to 330 Dixc	DARCOM	MOSCAD							
Etob	EH_ANNA	1 Annabelle Dr	DARCOM	MOSCAD	Substation	4 KV					
Etob	EH_LONG	1 Longfield Rd	DARCOM	MOSCAD	Substation	4 KV					
Etob	EH_BLAK	395 The East Mall	DARCOM	MOSCAD	Substation	13.8 KV					
Etob	EH_CONS	367 Carlingview Dr	DARCOM	MOSCAD	Substation	13.8 KV					
Etob	EH_ENTE	74 Leading Rd	DARCOM	MOSCAD	Substation	13.8 KV					
Etob	EH_HLIN	267 Humberline Dr	DARCOM	MOSCAD	Substation	13.8 KV					
Etob	EH_INDE	21 Manstor Rd	DARCOM	MOSCAD	Substation	13.8 KV					
Etob	EH_MARM	25 McLachlan Dr	DARCOM	MOSCAD	Substation	13.8 KV					
Etob	EH_METE	139 Carlingview Dr	OARCOM	MOSCAD	Substation	13.8 KV					
Etob	EH_PALM	360 The West Mall	DARCOM	MOSCAD	Substation	13.8 KV					
Etob	EH_SHER	25 The West Mall (Plaza)	DARCOM	MOSCAD	Substation	13.8 KV					
Etob	EH_WALN	510 The West Mall	DARCOM	MOSCAD	Substation	13.8 KV					
Etob	EH_WMOR	127 Westmore Dr	DARCOM	MOSCAD	Substation	13.8 KV					
Etob	EH_WOOD	500 Rexdale Blvd	DARCOM	MOSCAD	customer	13.8 KV					
Etob	EH_OSC10293	Pole 220D Humberline Dr	DARCOM	MOSCAD	OH Switch	27.6 KV	29M36				
Etob	EH_OSC10447	Pole 31 Legion Rd	DARCOM	MOSCAD	OH Switch	27.6 KV	30M8				
Etob	EH_OSC10670	Pole 787 The Queensway	OARCOM	MOSCAD	OH Switch	27.6 KV	38M13	38M12			
Etob	EH_OSC11099	Pole 440 Kipling Ave	OARCOM	MOSCAD	OH Switch	27.6 KV	30M9				
Etob	EH_OSC11169	Pole 115 Skyway Ave	DARCOM	MOSCAD	OH Switch	27.6 KV	88M44				
Etob	EH_OSC11208	Pole 462 Dixon Rd	OARCOM	MOSCAD	OH Switch	27.6 KV	88M18				
Etob	EH_OSC12081	Pole 859 Kipling Ave	OARCOM	MOSCAD	OH Switch	27.6 KV	38M4				
Etob	EH_OSC12617	Pole 1676 Martin Grove Rd	DARCOM	MOSCAD	OH Switch	27.6 KV	29M33				
Etob	EH_OSC12842	Pole 60-A Guided Crt	DARCOM	MOSCAD	OH Switch	27.6 KV	D6M4	29M35			
Etob	EH_OSC13015	Pole 3747 Lakeshore Blvd	DARCDM	MOSCAD	OH Switch	27.6 KV	30M5	30M10			
Etob	EH_DSC13047	Pole 1122 Islington Ave	DARCOM	MOSCAD	OH Switch	27.6 KV	38M5	38M16			
Etob	EH_OSC13535	Pole 110 Vulcan St	DARCOM	MOSCAD	OH Switch	27.6 KV	88M43				
Etob	EH_OSC13747	Pole 4441 Eglinton Ave W	OARCOM	MOSCAD	OH Switch	27.6 KV	88M15				
Etob	EH_OSC13959	Pole 4631 Eglinton Ave W	OARCOM	MOSCAD	OH Switch	27.6 KV	88M46				
Etob	EH_OSC150	Pole 2337 Kipling Ave	DARCOM	MOSCAD	OH Switch	27.6 KV	29M3				
Etob	EH_OSC1516	Pole 213 Bering Ave	OARCOM	MOSCAD	OH Switch	27.6 KV	38M7	38M24			
Etob	EH_OSC1518	Pole 462 Rathburn Rd	DARCOM	MOSCAD	OH Switch	27.6 KV	88M45				
Etob	EH_OSC15450	Pole 1 Pentea Ave	DARCOM	MOSCAD	OH Switch	27.6 KV	29M4				
Etob	EH_OSC1582	Pole 24 Princess Margaret HONI RO	DARCOM	MOSCAD	OH Switch	27.6 KV	38M1	88M13			
Etob	EH_OSC16011	Pole 4081 Eglinton Ave W	DARCOM	MOSCAD	OH Switch	27.6 KV	88M15				
Etob	EH_OSC16293	Pole 414 Rexdale Blvd	DARCOM	MOSCAD	OH Switch	27.6 KV	29M1	29M2			
Etob	EH_OSC16303	Pole 551 Royal York Rd	OARCOM	MOSCAD	OH Switch	27.6 KV	38M13	30M1			
Etob	EH_OSC16986	Pole 1992 Martin Grove Rd	DARCOM	MOSCAD	OH Switch	27.6 KV	29M34	29M5			
Etob	EH_OSC17629	Pole 6 Evans Ave	OARCOM	MOSCAD	OH Switch	27.6 KV	30M7	38M21			
Etob	EH_OSC17900	Pole 145 Evans Ave	DARCOM	MOSCAD	OH Switch	27.6 KV	30M1				
Etob	EH_OSC18109	Pole 2750 Islington Ave	DARCOM	MOSCAD	OH Switch	27.6 KV	55M4				
Etob	EH_OSC21308	Pole 1738 Islington Ave	OARCOM	MOSCAD	OH Switch	27.6 KV	88M15	88M13			
Etob	EH_OSC21905	Pole 108 Neilson Dr	DARCOM	MOSCAD	OH Switch	27.6 KV	38M23				
Etob	EH_OSC22666	Pole 6767 Steeles Ave W	DARCOM	MOSCAD	OH Switch	27.6 KV	D6M1				
Etob	EH_OSC24013	Pole 205 Carrier Dr	DARCOM	MOSCAD	OH Switch	27.6 KV	D6M4	29M36			
Etob	EH_OSC2437	Pole 270 Dixon Rd	OARCOM	MOSCAD	OH Switch	27.6 KV	88M17				

Etob	EH_OSC78347	Pole 7066 Hwy # 27	DARCOM	MOSCAD	OH Switch	27.6 KV	29M2		
Etob	EH_OSC79171	Pole 11 Bethridge Rd	DARCOM	MOSCAD	OH Switch	27.6 KV	88M1		
Etob	EH_DSC80158	Pole 270 Carlingview Dr	DARCOM	MOSCAD	OH Switch	27.6 KV	88M2		
Etob	EH_OSC80306	Pole 6902 Hwy # 27	DARCOM	MOSCAD	OH Switch	27.6 KV	29M2	88M8	
Etob	EH_OSC8146	Pole 197 Royal York Rd	DARCOM	MOSCAD	OH Switch	27.6 KV	3M4	3M9	
Etob	EH_OSC81817	Pole 905 Dixon Rd	DARCOM	MOSCAD	OH Switch	27.6 KV	88M2		
Etob	EH_OSC824	Pole 3481 Lakeshore Blvd	DARCOM	MOSCAD	OH Switch	27.6 KV	30M5		
Etob	EH_OSC82549	Pole 2255 Islington Ave	DARCOM	MOSCAD	OH Switch	27.6 KV	29M5	55M6	
Etob	EH_OSC83124	Pole 1892 Islington Ave	DARCOM	MDSCAD	OH Switch	27.6 KV	88M15	88M17	
Etob	EH_DSC6390	Pole 2 HDNI RDW, Rear 2 Westrose	DARCOM	MDSCAD	OH Switch	27.6 KV	38M7		
Etob	EH_DSC84334	Pole 1 Royalcrest Rd	DARCOM	MDSCAD	OH Switch	27.6 KV	29M35		
Etob	EH_DSC85025	Pole 2094 Martin Grove Rd	DARCOM	MDSCAD	OH Switch	27.6 KV	29M34		
Etob	EH_DSC85412	Pole 255 Royal York Rd	DARCDM	MDSCAD	OH Switch	27.6 KV	3M8	3M4	
Etob	EH_OSC85543	Pole 2760 Lakeshore Blvd	DARCOM	MDSCAD	OH Switch	27.6 KV	30M9		
Etob	EH_DSC85912	Pole 274 Carlingview Dr	DARCOM	MDSCAD	OH Switch	27.6 KV	88M11	88M2	
Etob	EH_DSC8681	Pole 8 Manstor Rd	DARCOM	MOSCAD	OH Switch	27.6 KV	38M23	38M25	
Etob	EH_DSC87281	Pole 518 Rathburn Rd	DARCOM	MDSCAD	OH Switch	27.6 KV	88M45		
Etob	EH_OSC88969	Pole 1325 Martin Grove Rd	DARCDM	MDSCAD	OH Switch	27.6 KV	29M33		
Etob	EH_OSC89050	Pole 586 Scarlett Rd	DARCDM	MOSCAD	OH Switch	27.6 KV	88M18	88M15	
Etob	EH_DSC89248	Pole 45-2 The West Mall	DARCDM	MDSCAD	OH Switch	27.6 KV	38M23		
Etob	EH_OSC90416	Pole 1270 Islington Ave	DARCDM	MOSCAD	OH Switch	27.6 KV	38M16		
Etob	EH_OSC91394	Pole 2285 Islington Ave	DARCOM	MOSCAD	OH Switch	27.6 KV	55M6		
Etob	EH_OSC91565	Pole 260 Rexdale Blvd	DARCDM	MOSCAD	OH Switch	27.6 KV	88M1	29M33	
Etob	EH_OSC91608	Pole 29 Coney Rd	DARCOM	MOSCAD	OH Switch	27.6 KV	38M3	38M2	
Etob	EH_OSC92474	Pole 2135 Kipling Ave	DARCDM	MOSCAD	OH Switch	27.6 KV	29M3		
Etob	EH_OSC92813	Pole 82 The West Mall	DARCOM	MOSCAD	OH Switch	27.6 KV	38M25		
Etob	EH_DSC9297	Pole 1311 Martin Grove Rd	DARCDM	MOSCAD	OH Switch	27.6 KV	88M14	29M33	
Etob	EH_DSC93103	Pole 126 The Queensway	DARCDM	MDSCAD	DH Switch	27.6 KV	30M2	38M13	
Etob	EH_OSC9320	Pole 830 Burnhamthorpe Rd	DARCOM	MOSCAD	OH Switch	27.6 KV	86M46	88M45	
Etob	EH_OSC9343	Pole 160 New Toronto St	DARCOM	MOSCAD	DH Switch	27.6 KV	30M4		
Etob	EH_OSC93935	Pole 428 Mill Rd	DARCOM	MOSCAD	OH Switch	27.6 KV	88M46		
Etob	EH_OSC94501	Pole 350 Humberline Dr	DARCDM	MDSCAD	OH Switch	27.6 KV	29M6		
Etob	EH_OSC95041	Pole 4515 Eglinton Ave W	DARCOM	MDSCAO	DH Switch	27.6 KV	88M13		
Etob	EH_OSC97424	Pole 113 North Queen St	DARCOM	MOSCAD	OH Switch	27.6 KV	38M25		
Etob	EH_DSC99568	Pole 5 McLachlan Dr	OARCOM	MOSCAD	OH Switch	27.6 KV	88M6		
Etob	EH_OSC99632	Pole 50 Northqueen St	DARCOM	MDSCAD	OH Switch	27.6 KV	38M6	38M25	
Etob	EH_OSC9989	Pole 1730 Kipling Ave	DARCDM	MOSCAD	DH Switch	27.6 KV	88M17	88M16	
Etob	EH_ALBI	2 Rampart Rd	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_ALLE	2310 Islington Ave	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_ASHL	1179 Royal York Rd	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_BELF	121 Belfield Rd	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_BELL	10 Bellman Ave	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_BLAC	95 Blackfriar Blvd	DARCDM	MDSCAD	Substation	4 KV			
Etob	EH_BRAE	15 Arcot Blvd	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_BROW	756 Browns Line	DARCDM	MDSCAD	Substation	4 KV			
Etob	EH_BURL	16 Burlingame Rd	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_BURN	790 Burnhamthorpe Rd	DARCDM	MOSCAD	Substation	4 KV			
Etob	EH_CEDR	Rear 18 Bell Royal Crt	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_CENT	56 Centennial Park Rd	DARCOM	MDSCAD	Substation	4 KV			
Etob	EH_CHAL	198 Bethridge Rd	OARCOM	MOSCAD	Substation	4 KV			
Etob	EH_CHAP	20 Trehorne Dr	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_DALE	59 Dalegrove Cres	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_OELA	2094 Martin Grove Rd	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_DUNS	64 Dunsany Cres	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_EDEN	294 Scarlett Rd	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_ELMH	2 Elmhurst Dr	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_FIEL	61 Fieldway Rd	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_GUNT	39 Gunton Dr	DARCOM	MDSCAD	Substation	4 KV			
Etob	EH_HARD	33 Hardwick Crt	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_HART	191 The Westway	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_HBAY	70 Cannon Rd	DARCDM	MOSCAD	Substation	4 KV			
Etob	EH_HIGH	18 Warbeck Pl	DARCDM	MOSCAD	Substation	4 KV			
Etob	EH_HOLL	S/O 1285 The Queensway	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_HUNT	63 Hunting Ridge	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_INVE	913 Islington Ave	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_KING	318 Prince Edward Dr	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_LAMB	130A Westrose Ave	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_MOUN	748 Scarlett Rd	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_NEIL	4237 Bloor St W	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_NORS	1066 Islington Ave	DARCDM	MDSCAD	Substation	4 KV			
Etob	EH_OBER	8 Newell Crt	DARCDM	MOSCAD	Substation	4 KV			
Etob	EH_PORT	2 Guiness Ave	DARCOM	MDSCAD	Substation	4 KV			
Etob	EH_RATH	395 Rathburn Rd	DARCDM	MDSCAD	Substation	4 KV			
Etob	EH_RAVE	1720 Islington Ave	DARCOM	MDSCAD	Substation	4 KV			
Etob	EH_REDC	2130 Kipling Ave	OARCOM	MDSCAD	Substation	4 KV			
Etob	EH_RENF	40 Tornngton Dr	DARCDM	MDSCAD	Substation	4 KV			
Etob	EH_ROSE	1442 Islington Ave	DARCDM	MDSCAD	Substation	4 KV			
Etob	EH_ROYA	4236 Martin Grove Rd	DARCOM	MDSCAD	Substation	4 KV			
Etob	EH_SHAV	78 Shaver Ave S	DARCOM	MDSCAD	Substation	4 KV			
Etob	EH_TAYS	153 Taysham Cres	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_THIS	55 Thistletown Blvd	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_THDR	59 Glen Agar Dr	DARCDM	MDSCAD	Substation	4 KV			
Etob	EH_TIDE	307 Rexdale Blvd	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_WATE	40A Watercliffe Rd	OARCDM	MOSCAD	Substation	4 KV			
Etob	EH_WIND	298 Dixon Rd	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_WING	27 Wingrove Hill	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_WISL	55 Ashbourne Dr	DARCOM	MOSCAD	Substation	4 KV			
Etob	EH_WMOU	174 Dixon Rd	DARCOM	MDSCAD	Substation	4 KV			
Etob	EH_YDRK	714 Royal York Rd S	DARCOM	MOSCAD	Substation	4 KV			
	UHF master radio	6 Forest Laneway	BOW	Tx. 417.6375	Rx: 412 6375				
NY	NY_OSC58582	Pole 5 Raitherm Rd	NY radio	BOW	OH Switch	27.6 KV	35M8		
NY	NY_DSC84852	Pole 2731 Keele St	NY radio	BDW	DH Switch	27.6 KV	35M24	85M25	
NY	NY_OSC59202	Pole 72 Highland Hill	NY radio	BOW	DH Switch	27.6 KV	35M7		
NY	NY_OSC10580	Pole 151 Bartor Rd	NY radio	BOW	OH Switch	27.6 KV	55M21		

NY	NY_OSC10615	Pole 126 Overland Dr	NY radio	BOW	OH Switch	27.6 KV	34M5	
NY	NY_OSC14319	Pole 39 The Donway E	NY radio	BOW	OH Switch	27.6 KV		
NY	NY_OSC14544	Pole 183 Railside Rd	NY radio	BOW	DH Switch	27.6 KV	53M25	53M8
NY	NY_OSC26527	Pole 2 Milvan Dr	NY radio	BOW	DH Switch	27.6 KV	55M27	55M9
NY	NY_OSC28163	Pole 1546 Wilson Ave	NY radio	BOW	OH Switch	27.6 KV	55M28	
NY	NY_OSC36864	Pole 1023 Caledonia Rd	NY radio	BOW	OH Switch	27.6 KV	35M12	
NY	NY_OSC4163	Pole 140 Shaughnessy Blvd	NY radio	BOW	OH Switch	27.6 KV	SS68F5	SS68F2
NY	NY_OSC43532	Pole 143 HONI RDW, Approx 3621	NY radio	BOW	OH Switch	27.6 KV	51M27	
NY	NY_OSC43742	Pole 1002 York Mills Rd	NY radio	BOW	OH Switch	27.6 KV	53M25	51M29
NY	NY_OSC4420	Pole 160 Cactus Ave	NY radio	BOW	DH Switch	27.6 KV	8M10	8M2
NY	NY_OSC48240	Pole 539 Finch Ave W	NY radio	BOW	OH Switch	27.6 KV	8M8	
NY	NY_OSC51878	Pole 3 Jethro Rd	NY radio	BOW	OH Switch	27.6 KV	55M26	
NY	NY_DSC58782	Pole 251 Brooke Ave	NY radio	BDW	OH Switch	27.6 KV	85M23	
NY	NY_OSC62576	Pole 557 Alness St	NY radio	BOW	OH Switch	27.6 KV	85M2	
NY	NY_DSC63584	Pole 2257 Sheppard Ave W	NY radio	BOW	OH Switch	27.6 KV	55M29	
NY	NY_OSC6363	Pole 4 Ashwarren Rd	NY radio	BOW	OH Switch	27.6 KV	85M24	
NY	NY_OSC69028	Pole 18 Oakdale Rd	NY radio	BOW	OH Switch	27.6 KV	55M26	
NY	NY_OSC69414	Pole 323 Churchill Ave	NY radio	BOW	OH Switch	27.6 KV	85M27	8M1
NY	NY_OSC74876	Pole 2937 Fairview Mall Dr, Rear 56	NY radio	BOW	OH Switch	27.6 KV	SS68F9	
NY	NY_OSC76074	Pole 534 Signet Dr	NY radio	BOW	OH Switch	27.6 KV	55M1	55M32
NY	NY_OSC79931	Pole 55 Tycos Dr	NY radio	BOW	OH Switch	27.6 KV	35M8	
NY	NY_OSC81588	Pole 1649 Jane St	NY radio	BOW	OH Switch	27.6 KV	11M4	
NY	NY_OSC85456	Pole 21 Johnston Ave	NY radio	BOW	OH Switch	27.6 KV	8M3	
NY	NY_OSC92100	Pole 2394 Finch Ave W	NY radio	BOW	OH Switch	27.6 KV	55M9	
NY	NY_PSC80063	245 Consumers Rd	NY radio	BOW	OH Switch	27.6 KV	51M4	
NY	NY_OSC46432	Pole 216 Milvan Dr	NY radio	BOW	OH Switch	27.6 KV	55M22	
NY	NY_DSC75500	Pole 5661 Steeles Ave W	NY radio	BOW	OH Switch	27.6 KV	55M31	55M22
NY	NY_S180	Pole 4250 Dufferin St	NY radio	BOW	OH Switch	27.6 KV	85M4	
NY	NY_PSC11854-SC1	1185 Eglinton Ave E (PSC11854)	NY radio	BOW	PAD	27.6 KV	53M1	53M5
NY	NY_PSC56496-SC1	4828 Leslie St, Opp Van Horne	NY radio	BOW	PAD	27.6 KV	51M6	
NY	NY_IBMV2	245 Consumers Rd, IBM Bldg (DXJ)	NY radio	BOW	Vault	27.6 KV		
NY	NY_JJL-SC2	1020 Lawrence Ave W (JJL) Mini-Ru	NY radio	BOW	Vault	27.6 KV	35M24	
NY	NY_TWQ-SC2	950 Lawrence Ave W (TWQ) Mini-Ri	NY radio	BOW	Vault	27.6 KV	35M23	

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INTERROGATORY 6:

Reference(s): none provided

(a) Please list all third parties that have any "non-distribution attachments" ("**NDAs**") on THESL owned or controlled poles. For each third party, please include

(i) What type of wireless attachment is located on the poles

(ii) The total number of each type of wireless attachment located on the poles

(iii) The attachment rate, and all other applicable fees, paid by such third party

(iv) The permitted term of each wireless attachment

(v) Whether there are also wireline attachments associated with any of the wireless attachments

(vi) The number of associated wireline attachments

(vii) Any applicable agreements with such party that allows NDAs

(b) Please provide engineering drawings and specifications of all NDAs currently attached to THESL poles.

(c) Explain how each type of NDA attached to THESL poles could have been attached to alternative structures including, but not limited, buildings, cell towers, or other structures. If they could not have been reasonably been attached, please explain why.

(d) Please provide engineering drawings and specifications of all non-wireline attachments currently attached to THESL poles and the location of all such attachments on THESL poles. For clarity, non-wireline attachments includes all equipment related to or used in conjunction with wireline attachments such as power supplies, rectifiers, cable TV boxes, etc.

(e) As it relates to Figure 2 of page 3 of the Appendix to the THESL Letter, please provide:

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(i) a list of all non-wireline (i.e. fibre, cable or other) NDAs attached to THESL poles including:

A. The geographic location of each NDA

B. The specific type of NDA attachment (e.g. surveillance camera, Wi-Fi antenna, battery unit, DAS antenna, etc.)

C. The owner of each NDA

D. The size, weight, dimensions and other physical specifications of each NDA

E. The attachment location on the pole of each NDA (distribution space, communication space, unusable space, etc.)

F. The attachment method (e.g. through bolt, metal band, in-line (i.e. on-cable), etc.)

RESPONSE:

(a)

TYPE	TOTAL NUMBER
Wireline	83,258
transit shelters	297
DAScom wireless antennae	105
rectifier	170
transit	443

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equipment	
baskets, banners, lighting	1968
traffic signs and signals, police cameras	No Data

Regarding (i) and (ii), see category labelled "DAScom wireless antennae" in the above chart. Please see the response in Tab 5.1, Schedule 11.

Regarding (iii), the rate applied to telecommunications attachments on THESL primary distribution Poles is $22.35. Others are not relevant to this proceeding, and in any event, are confidential.

Regarding (iv), once the attachment is on a THESL Pole, the term of the attachment is provided for in the agreement. All wireless attachments currently on THESL primary distribution Poles are DAScom attachments, and THESL's contract with DAScom provides that the term of the agreement continues through midnight on December 31, 2014.

Regarding (v) and (vi), please see the responses in Tab 5.1, Schedule 16 and 27.

Regarding (vii), the information requested is not relevant to the current

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proceeding, production of it is unduly onerous relative to its probative, and it is, in any event, confidential.

(b) It is not possible for THESL to produce the requested information within the timelines of this proceeding. In any event, production of such information in unduly onerous relative to its probative value.

(c) THESL believes that wireless attachers have other alternatives available. See evidence of Dr. Yatchew and Mr. Starkey. THESL is mandated to grant wireline attachers access to THESL Poles pursuant to the CCTA Decision, which assumes that such THESL Poles are an "essential facility" for those attachers. Other NDAs are non-communications NDAs and are not relevant to this proceeding. In any event, a more detailed response to this question would depend the circumstances, and no particular facts or circumstances have been provided in this interrogatory.

(d) It is not possible for THESL to produce the requested information within the timelines of this proceeding. In any event, production of such information in unduly onerous relative to its probative value.

(e) Please see the responses in Tab 5.1, Schedules 7 and 15.

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INTERROGATORY 7:

Reference(s): Byrne, para. 4

Ms. Byrne states that "the configuration, condition and congestion of the THESL Poles today is highly varied."

(a) How are legacy variations (i.e., different distribution configurations and varying standards on poles) documented and tracked?

(b) What in THESL's view, is an acceptable level of congestion in respect of all "zones" on a pole.

(c) Describe the basis upon which THESL relies to determine when a pole exceeds acceptable levels of congestion.

(d) Provide a breakdown, in tabular form, for the THESL poles (140,000) and the THESI poles to be transferred to THESL (40,000), that shows how many poles are at capacity in terms of the acceptable level of congestion (described in (b)) and how many poles have capacity available to accommodate new attachments.

(e) How is the age and condition of poles tracked and managed to ensure that poles are replaced at the end of their useful life?

(f) If age, condition and congestion (loading) are not tracked on a pole by pole basis, explain how THESL decides when to replace a pole?

(g) Does THESL visually inspect each pole before a decision is taken to replace it? If so, how often are all 140,000 poles inspected?

RESPONSE:

(a) Legacy asset installations may be documented in construction drawings from the time of the installation. There may also be documented Standards from the former

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company. THESL asset information is contained in computer system databases and programs, such as our geographical information system.

(b) The THESL Standards give the approved configurations for conductors or other items installed on a pole.

(c) THESL follows its own Standards for construction in the ordinary course.

(d) THESL records for pole attachments, based on current invoicing, show:

Telecommunications:	83,662 pole attachments
Other commercial:	1,332

THESL does not have records that capture the specific number of attachments on each given distribution pole, nor does it have precise records regarding the number of traffic attachments, police cameras or temporary decorative attachments put up by business improvement areas on its primary distribution poles. THESL is in the process of gathering such data in the ordinary course, but due to the time-consuming nature of the project, it is not possible to have this data available for the purposes of the present proceeding.

Streetlighting poles – currently THESI assets - were erected for a different purpose and have different physical characteristics than THESL's distribution poles, which carry primary voltage. THESL only received approval from the Board to transfer certain streetlighting poles from THESI to THESL in August 2011, and the related transactions have not occurred yet. Accordingly, THESL is currently in the process

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of transitioning these assets, including assessing the appropriate standards, safety, operational and other considerations that apply in respect of streetlighting poles. It would be premature for THESL to speculate on the considerations that would apply to those streetlighting poles. Further, streetlighting poles are not essential facilities for wireless attachers and the CCTA Decision does not apply to them for those wireless attachers' purposes.

(e) THESL has various maintenance programs for preventive, predictive and corrective or emergency maintenance, including asset condition assessments.

(f) THESL will replace a Pole if under any of the various maintenance programs, or through any other means, a pole is found to be in unacceptable condition. THESL Poles may also be replaced for other reasons. For example, refer to page 37, Section 3.3.7 in the EB-2011-0144 THESL Evidence, Exhibit D1, Tab 7l, Schedule 6 that discusses the Rear Lot and Box Construction Conversion capital programs. This information can be found on the Board's website at the following weblink: http://www.rds.ontarioenergyboard.ca/webdrawer/webdrawer.dll/webdrawer/search/rec&sm_udf10=eb-2011-0144&sortd1=rs_dateregistered&rows=200

(g) Not necessarily. For example, where THESL is required to move its poles for the purposes of road widenings, not every THESL Pole would be visually inspected.

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INTERROGATORY 15:

Reference(s): Byrne, para. 16

a) Do non-communications attachments on power poles present physical impediments to pole workers accessing or climbing the poles?

b) Are line crews trained to navigate around non-communication attachments?

c) Explain how navigating around non-communications, non-distribution attachments ("NDAs") differs from navigating around communications NDAs?

d) CCTV carriers install power supplies in the unused portion of the pole, the communication space and the separation space. Does THESL categorize these types of power supplies as communication or non-communications NDAs?

e) Would splice enclosures installed by the ILEC's or CLEC's in the unused portion of the pole, in the communication space or in the separation space, be considered communication or non-communications NDAs?

f) Provide a list of all non-wireline (i.e. fibre, cable or other) NDAs attached to THESL poles and, for each such NDA, describe:

   (i) The geographic location of each NDA

   (ii) The specific type of NDA attachment (e.g. surveillance camera, Wi-Fi antenna, battery unit, DAS antenna, etc.)

   (iii) The owner of each NDA

   (iv) The size, weight, dimensions and other physical specifications of each NDA

   (v) The attachment location of each NDA on the pole (distribution space, communication space, unusable space, etc.)

   (vi) The attachment method (e.g. through bolt, metal band, in-line (i.e. on-cable, etc.)

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(vii) The rates charged for each type of NDA

g) Provide a list of all wireless attachments that are used in conjunction with electricity distribution such as SCADA antennas or other SCADA equipment, and, for each such attachment, describe:

(i) The geographic location of each wireless attachment

(ii) The specific type of wireless attachment

(iii) The owner of each wireless attachment

(iv) The size, weight, dimensions and other physical specifications of each wireless attachment

(v) The attachment location on the pole of each wireless attachment (distribution space, communication space, unusable space, etc.)

(vi) The attachment method (e.g. through bolt, metal band, in-line (i.e. on-cable, etc.)

h) Does THESL publish standard terms and conditions pertaining to non-communication attachments?

i) Provide a pro forma copy of one attachment agreement in respect of non-communication attachments.

j) Provide a copy of THESL's policies governing the attachment of non-communication equipment.

k) Provide a copy of THESL's construction guidelines pertaining to non-communication attachments.

l) Provide a copy of the pro forma permit application pertaining to non-communication equipment.

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m) Is any wireless equipment, including equipment associated with wireless attachments, currently attached outside the communications space on any THESL pole? If "yes", provide:

(i) The geographic location of each such wireless attachment

(ii) The specific type of such wireless attachment

(iii)The owner of each such wireless attachment

(iv)The size, weight, dimensions and other physical specifications of each such wireless attachment

(v) The attachment location on the pole of each such wireless attachment (distribution space, communication space, unusable space, etc.)

(vi)The attachment method (e.g. through bolt, metal band, in-line (i.e. on-cable, etc.)

RESPONSE:

a) NDAs on THESL Poles may limit pole climbing and bucket mobility, and can make work such as stringing conductors more difficult and time consuming for THESL. When performing work such as pole replacements or removals, attachments are an additional project dependency in the project planning and execution, and can delay this work.

b) During their apprentice and other training, as well as on-going work, THESL staff are taught how to work around NDAs on poles. Please see also the response in Tab 5.1, Schedule 5, part (b).

c) All attachments (whether or not communications attachments) create an encumbrance on THESL Poles that THESL crews must navigate around.

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d) THESL does not consider CCTV NDAs to be communications NDAs.

e) CANDAS has not defined what an ILEC or CLEC is, which is required in order for THESL to answer this question. THESL believes that this refers to splices that are made in-line (i.e. along the wireline), and are not installed on the pole, and therefore THESL does not consider these to be NDAs.

f) Please see also the response in Tab 5.1, Schedule 7. THESL does not have records that capture the geographic location of each NDA, the specific type of NDA attachment, the size, weight, dimensions and other physical specification of each NDA (other than as detailed in THESL's standards, attached as Exhibit "A" to CANDAS Byrne IR 1), the attachment location of each NDA on the pole, nor the attachment method. THESL is in the process of gathering such data in the ordinary course, but due to the time-consuming nature of the project, it is not possible to have this data available for the purposes of the present proceeding.

Regarding (iii), the specific owner name of NDAs is not relevant to this proceeding, and in any event confidential. The non-wireline attachments, by type, are as follows:

TYPE	TOTAL NUMBER
transit shelters	297
DAScom wireless antennae	105

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

rectifier	170
transit equipment	443
baskets, banners, lighting	1968
traffic signs and signals, police cameras	No Data

Regarding (vii), the rate applied to telecommunications attachments on THESL primary distribution poles is $22.35. Others are not relevant to this proceeding, and in any event, confidential.

g)

Refer to the two lists:

- SCADA equipment, attached as Attachment 1
- Radio equipment, attached as Attachment 2

h) Yes. See THESL Standards Section 23. Standards 23-1100 through 2500 provide information for how temporary and decorative attachments are made.

i) DAScom is a current THESL customer and has numerous examples of attachment agreements within its possession.

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j) See THESL Standards Section 23. Standards 23-100 through 2500 give the information for how temporary and decorative attachments are made. Standards 23-3500 and 3900 show the installation for traffic sensors and Enbridge rectifier power supplies, respectively. THESL does not have any further written policies.

k) See answer to (j) above.

l) DAScom is a current THESL customer and has numerous examples of permit applications within its possession.

m) Yes. Please see the reponses in Tab 1, Schedules 19 and 20. See also see the response in Tab 5.1, Schedule 11, part (d), as well as (f) above. Please see CANDAS Evidence Larson for the specifications and placement of DAScom equipment.

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

INTERROGATORY 16:

Reference(s): Byrne, paras. 19-20

The reference states that: "[P]rior to 2009, THESL had a group of four dedicated employees who processed NDA applications" and "[W]hereas in 2007 and 2008, we received 103 and 418 attachment requests respectively, in 2009 we received 1135 requests."

a) What percentage of the annual increase in applications received the period 2007 to present were in respect of wireless attachments? What percentage were in respect of DAS?

b) How many attachment applications were received annually, in the period 2007 to present, in respect of:

   (i) NDAs

   (ii) Other types of applications

   (iii) Wireless attachments (please include a breakdown of different types of wireless attachments)

   (iv) Wireline attachments

c) Given the increase in applications for NDAs between 2007 and 2009, why did THESL wait until 2009 to begin to augment staffing in this area?

d) What were the average times to process an attachment application, by type of attachment (i.e. wireless, wireline, etc.) in the period 2007 to present. Describe how these times have been calculated, including methodology and data collection methods.

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e) For each year in the period 2007 to present, provide the average time required to perform fieldwork (e.g. make ready work) to accommodate a permitted attachment.

f) How does THESL prioritize the processing of attachment applications, e.g. first in-first out, by application type, by complexity of the application, by entity requesting attachment, etc.?

RESPONSE:

(a) Please refer to the response in Tab 5.1, Schedule 27. THESL is not able to tell on the face of wireline applications which applications are to support wireless. The information provided by CANDAS in response to THESL IR 1.1 is that Cogeco submitted 303 applications between 2009 and 2010 for the wireline aspect needed for DAScom's wireless attachments.

(b) (i) THESL has incomplete data on total number of NDA applications it received annually, in the period 2007 to present.
(ii) not applicable
(iii) see answer to (a) above
(iv) Please see the affidavit of Ms. Byrne, at paragraph 32

(c) There were no set time frames in the applicable agreements within which attachment applications needed to be processed by THESL.

(d) THESL does not track processing time by type of attachment.

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

(e) THESL does not track average time required to perform fieldwork.

(f) THESL has historically used a first-in-first-out system, but clients are allowed to designate which attachments are to be processed within their positions in the first-in-first out queue.

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

INTERROGATORY 27:

Reference(s): Byrne, para. 34

Ms. Byrne states, "[T]he major distinction signified by the term "wireless" (as compared to wireline) is that the equipment being supported is not composed primarily of cable which must run contiguously between poles in order to function."

a) Is it THESL's position that the attachment of the wireline components of a wireless network is mandated by the CCTA Decision in the same manner as the attachment of the wireline component of a wireline network? If the response is "no", explain why not.

b) Is it THESL's position that the wireline connection required to support DAS networks is materially different than the wireline connection required to support CATV components? If "yes", explain the reasons why.

RESPONSE:

a) THESL treats applications for wireline attachments equally. THESL does not know the ultimate purpose of the wireline application at the time of processing that application. It is THESL's understanding that DAScom has entered into an agreement with Public Mobile (perhaps via Extenet, which is not a "Canadian carrier" as defined within the Telecommunications Act) to put up all of the attachments necessary to build Public Mobile's telecommunications network, and that one or both of these parties has entered into an agreement with Cogeco to put up the wireline component of this network. Therefore, applications for the wireless and wireline portions respectively of the DAS network come from different entities, and the connection between them (if any) is not apparent to THESL.

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

b) Yes. The material difference between "stand alone" wireline attachments telecommunications and those which support wireless systems is that in the case of the latter (i.e. wireline which is a component of wireless systems), but-for the wireless attachments, the wireline component is unnecessary. In the case of DAS, the need for the wireline component is dependent on the existence of the DAS wireless equipment, including the antenna(s) associated with those wireless mini-systems.

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INTERROGATORY 20:

Reference(s): Yatchew, page 29, lines 23-24

Dr. Yatchew states:

"Wireline attachers are fundamentally different from wireless entities as the latter do not require continuous corridors for placement of their wireless facilities."

(a) Confirm whether Dr. Yatchew relies on the LCC International, Inc. report for his understanding that wireless entities "do not require continuous corridors for placement of their wireless facilities."

(i) If so, provide the specific excerpts from the LCC International, Inc. report upon which Dr. Yatchew relies in this regard.

(b) Advise whether Dr. Yatchew relies on any other sources for his understanding that wireless entities "do not require continuous corridors for placement of their wireless facilities."

(i) If so, provide the all relevant references and specific excerpts upon which Dr. Yatchew relies.

(c) Advise whether Dr. Yatchew has any personal knowledge or experience relevant to the requirements or desirable features of the deployment of wireless facilities.

(i) If so, answer the following questions. If Dr. Yatchew has no prior knowledge or experience concerning the placement of equipment on utility poles, Dr. Yatchew need not answer the following questions:

A. Explain how the unique contiguous nature of a pole route's design differs from the required contiguous nature of a Greenfield wireless network design to provide for basic mobile service coverage in a given area.

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

B. Can fibre cables be strung overhead, from building rooftop, to towers, to billboards or alternate structures on anything other than utility poles?
C. Indicate whether Dr. Yatchew would agree that the installation of wireless equipment on utility poles within 10 feet of the fibre optic cable is more commercially viable than attempting to attach to buildings, rooftops, towers or other structures, which will inevitably require fibre lateral engineering and construction from the pole line to the building?
D. Would the cost, increased administrative burdens, disruptive nature of underground construction, road and sidewalk restoration and other factors and costs in building a fibre network to reach an alternative location represent a barrier to entry to wireless carriers if wireless carriers were refused access to utility poles?
E. If not, provide an economic and operational assessment that demonstrates specifically what barriers to entry exist for wireline carriers that do not exist for wireless carriers having to use alternate structures.

RESPONSE:

a) The LCC study is helpful and informative.

Moreover, it is reassuring that my conclusion, that "Wireline attachers are fundamentally different from wireless entities as the latter do not require continuous corridors for placement of their wireless facilities.", which I arrived at long before the present proceeding, is confirmed by the engineering expertise underlying this document.

RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

b) I arrived at this conclusion earlier in the course of reviewing various issues associated with attachments to power poles.

c) Please see below.

A. The development of a true "Greenfield" setting, such as a new residential, commercial or industrial development, would entail the provision of a number of physically connected networks: power, water supply, sewage, natural gas if available, and cables/fibre for the provision of telecom services. (Presently, it is common to put all of these systems underground.) A wireless network would then be super-imposed on the existing wireline systems by placing wireless components at judicious locations and connecting them to wireline systems.

B. Wireline systems are attached to structures other than poles, indeed the provision of centrally generated electricity to our homes would be impossible otherwise. Fibre can also be attached to structures other than poles. However, the main supply lines for wireline services are overwhelmingly run along support structures such as poles, or through underground conduits.

C. Each siting option, no doubt has advantages and disadvantages.

D. To the extent that up-front costs -- for example those associated with obtaining access to wireline systems -- represent a barrier to entry, such costs are incurred by all participants in the provision of wireless services. That Public Mobile and other new entrants were able to launch their services in a timely fashion in both Toronto and Montreal, suggests that these costs do not represent an especially adverse barrier to entry.

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E. Perhaps the most stringent barrier to entry for a wireline service provider that wishes to construct a new network of above-ground support structures is that government approvals would most likely not be granted in areas where such structures already exist.

TAB 4

APPLICATION

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

APPLICATION

1.0 Relief Sought

The Canadian Distributed Antenna Systems Coalition ("**CANDAS**" or the "**Applicant**"), on behalf of its member companies and pursuant to Rule 16 of the *Ontario Energy Board Rules of Practice and Procedure,* applies to the Ontario Energy Board ("**Board**" or "**OEB**") for the following relief:

(a) Orders under subsections 70(1.1) and 74(1) of the *Ontario Energy Board Act, 1998* ("**OEB Act**"): (i) determining that the Ontario Energy Board's RP-2003-0249 Decision and Order dated March 7, 2005 ("**CCTA Order**") requires electricity distributors to provide "Canadian carriers," as that term is defined in the *Telecommunications Act*, S.C. 1993, c. 38 ("**Telecommunications Act**"), with access to the power poles of such distributors for purposes of attaching wireless equipment, including wireless components of distributed antenna systems ("**DAS**"); and (ii) directing all licensed electricity distributors to provide such access if they are not so doing;

(b) in the alternative, an Order under subsection 74(1) of the OEB Act amending the licences of all electricity distributors requiring them to provide Canadian carriers with timely access to the power poles of such distributors for purposes of attaching wireless equipment, including wireless components of DAS;

(c) an interim Order under subsection 21(7) of the OEB Act directing electricity distributors to refrain from adopting, implementing or enforcing, as the case may be, any policy or conduct that denies Canadian carriers timely access to the power poles of such distributors for purposes of attaching wireless equipment, including wireless components of DAS, pending disposition of the Applicant's requests for final orders;

(d) an interim Order under subsection 21(7) of the OEB Act directing Toronto Hydro Energy Services Inc. ("**THESI**") to identify THESI's light standards, poles or other structures classified as distribution assets in accordance with the Board's Decision and Order issued on February 11, 2010 in EB-2009-0180 ("**MADD Order**") and to refrain from removing, selling or disposing of any DAS facilities currently affixed to any of the foregoing, pending disposition of the Applicant's requests for final orders. A copy of the MADD Decision and Order is included at Tab 1 of this Application;

(e) an Order under subsections 74(1) and 70(2)(c) of the OEB Act amending the licences of all licensed electricity distributors requiring them to include, in their Conditions of Service, the terms and conditions of access to power poles by Canadian carriers, including the terms and conditions of access for the purpose of deploying the wireless and wireline components of DAS, such terms and conditions to provide for, without limitation: commercially reasonable procedures for the timely processing of applications for attachments and the performance of the work required to prepare poles for attachments ("**Make Ready Work**"); technical requirements that are consistent with applicable safety regulations and standards; and a standard form of licensed occupancy agreement, such agreement

to provide for attachment permits with terms of at least 15 years from the date of attachment and for commercially reasonable renewal rights;

(f) its costs of this proceeding in a fashion and quantum to be decided by the Board pursuant to s. 30 of the OEB Act; and

(g) such further and other relief as the Board may consider just and reasonable.

2.0 Why Board Intervention is Required

2.1 In 2005, the Board made the CCTA Order. It requires electricity distributors to grant Canadian carriers and cable companies access to distributors' power poles for the purpose of attaching telecommunications equipment. In making the CCTA Order, the Board drew no distinction between wireless and wireline carriers or equipment.

2.2 Until August of 2010, Toronto Hydro-Electric System Limited ("**THESL**") complied with the CCTA Order. THESL did so without distinguishing between wireless and wireline carriers or equipment. THESL entered into pole access agreements permitting the attachment of both wireless and wireline equipment, charging the Board-approved rate per pole.

2.3 All of this changed suddenly when, on August 13, 2010, THESL sent a letter to the Board advising of a new "policy" not to permit the attachment of wireless equipment to its power poles. In its letter, THESL expressed the view that the CCTA Order did not apply to wireless equipment. For reasons unknown to the Applicant, THESL chose not to serve this letter on any directly affected parties; moreover, THESL repeatedly refused to provide the letter to affected parties who requested a copy. A copy of THESL's written response to one such request is included at Tab 2 of this Application.

2.4 Some months after the August 13th filing, the Applicant obtained, from the Board, a copy of the letter and the accompanying attachment (together, the "**THESL Letter**"). A copy of the THESL Letter is included at Tab 3 of this Application.

2.5 CANDAS is not aware of any response of the Board to the THESL Letter.

2.6 Since the date of the THESL Letter, THESL has purported to be honouring existing pole access agreements with wireless attachers. It will not, however, enter into new agreements for wireless attachments or, presumably, renew existing pole access agreements at the end of their terms. THESL's unregulated sister company, THESI, appears to have adopted the same "no wireless" policy, refusing to renew an existing agreement with a wireless attacher and exercising its contractual right to require the attacher to remove all of its equipment from THESI's poles.

2.7 At least one other large electricity distributor in Ontario appears to be following THESL's lead by adopting a "no wireless" policy. Certain other distributors appear to be considering whether or not to permit wireless attachments and, if so, on what terms and conditions. They are, accordingly, not prepared to offer pole access agreements for wireless attachments at this time.

2.8 In the result, investments in wireless networks that were made in reliance on the CCTA Order have become stranded. Moreover, Canadian carriers who require access to power poles to enable their wireless networks are now effectively precluded from entering the market. This is either because they are unable to obtain pole access at all, or because the terms and conditions of such access are completely indeterminate or subject to such uncertainties as to prelude the requisite capital investments.

2.9 If left unchecked, the ability of electricity distributors to use their monopoly power to unduly discriminate among Canadian carriers by unilaterally deciding who may have access to regulated assets and who may not, will materially and adversely affect the development of a competitive wireless industry in Ontario.

3.0 The CCTA Order

3.1 On December 13, 2003 the Canadian Cable Television Association ("**CCTA**"), on behalf of the 23 cable companies then operating in Ontario, applied to the Board for certain relief. Specifically, the CCTA sought a generic amendment to the licences of all electricity distributors, under subsections 74(1) and 21(7) of the OEB Act, establishing uniform terms of access to power poles.

3.2 For more than six years prior to the filing of the CCTA application, the member companies of the CCTA had been negotiating with electricity distributors regarding the terms and conditions of a new pole attachment agreement. The last pole attachment agreement between CCTA members and the Ontario Municipal Electric Association, ("**MEA**"), the predecessor to the Electricity Distributors' Association ("**EDA**"), had expired on December 31, 1996.

3.3 Prior to seeking the Board's assistance, the CCTA had also applied to the Canadian Radio-television and Telecommunications Commission ("**CRTC**") to obtain a determination regarding the appropriate pole access charge. The CRTC had subsequently issued an order setting the charge at $15.89 per year.[1] The MEA appealed this order to the Federal Court of Appeal which, in 2001, ruled that the CRTC lacked jurisdiction to regulate access to power poles by cable companies and Canadian carriers.

3.4 In 2003, on appeal by the CRTC, the Supreme Court of Canada upheld the decision of the Federal Court of Appeal.[2]

3.5 In May 2004, and in response to the CCTA application, the OEB convened a proceeding ("**CCTA Proceeding**") to hear and decide whether: (i) it should regulate pole access; (ii) if so, who should be granted access; and (iii) on what terms and conditions. A copy of the Issues List from the CCTA Proceeding ("**Issues List**") is included at Tab 4 of this Application.

3.6 During a settlement conference convened prior to the commencement of the oral hearing, the parties to the CCTA Proceeding reached a complete settlement on only one of the five issues on the Issues List. A copy of the Settlement Agreement filed on October 19, 2004, as amended on October 20th (together, the "**Settlement Agreement**"), is included at Tab 5 of this Application.

3.7 On March 7, 2005, after hearing testimony from cable companies, Canadian carriers and electricity distributors during the course of a seven month proceeding, the Board released

[1] *CCTA v. MEA et al. – Final Decision*, Telecom Decision CRTC 99-13, September 28, 1999.
[2] *Barrie Public Utilities v. Canadian Cable Television Assn.*, 2003 SCC 28.

its decision and order (i.e., the "**CCTA Order**"). A copy of the CCTA Order is included at Tab 6 of this Application.

3.8 On the issue of whether the Board should regulate pole access (Issue 1 on the Issues List), there was no settlement among the parties. The Board decided the issue as follows:[3]

> There has been some evidence on both sides with respect to abuse. In the end the CCTA says that the electricity distributors do have monopoly power and the fact that the parties have been unable to come to an agreement for over a decade demonstrates the exercise of that monopoly power whether this results in abuse or not.
>
> The Board agrees. A showing of abuse is not necessary to justify the intervention of this Board in this matter. The fact is the parties have been unable to reach an agreement in over a decade. This degree of uncertainty is not in the public interest.
>
> The Board agrees that power poles are essential facilities. It is a well established principle of regulatory law that where a party controls essential facilities, it is important that non-discriminatory access be granted to other parties. Not only must rates be just and reasonable, there must be no preference in favour of the holder of the essential facilities. Duplication of poles is neither viable nor in the public interest.
>
> The Board concludes that it should set access charges. [emphasis added]

3.9 The Board had also addressed the concept of "essential facilities" and "monopoly assets" earlier in the CCTA Proceeding, in response to certain motions:

[3] CCTA Order, p. 3.

> We realize that we've departed from our earlier decision with respect to costs in this matter, but the proceeding has changed materially in its complexion. In particular, the telecom companies have intervened and we think that has made a difference. We think it is important that the access to be enjoyed by telecom companies be dealt with at the same time as the cable companies. It's not in the Board's interest, nor in the public interest, or any of the parties' interest to split this into two separate proceedings.
>
> We recognize that these are essential facilities. They are not only monopoly assets, as Mr. Brett stressed, but they are essential facilities, and non-discriminatory access is important. In this regard, the Board notes these industries are converging. The cable companies are increasingly competing with telecom companies and vice versa, and the LDCs are, themselves, entering into some telecommunication activities. In such circumstances, it is important that there be non-discriminatory access and no undue preference to any of the competing entities. [emphasis added]

3.10 On the issue of who should have access (Issue 2 on the Issues List), the parties to the CCTA proceeding (including THESL) did reach a settlement. In presenting the Settlement Agreement[4] to the Board, CCTA's counsel submitted as follows:[5]

> On the second issue, though, we did reach agreement, after some considerable discussion. And in general, I think it would be fair to say that the parties reached more agreement than they thought they would. There was a genuine effort made, I believe, by both sides, and I believe, Gail Morrison, the facilitator, assisted the process very ably. So we did reach agreement on certain issues, and we

[4] The Settlement Agreement was filed as Exhibit E1.1.
[5] RP-2003-0249, Transcript Vol. 1 at 183.

> were able to provide a framework, or a sort of a summary framework for issues that we didn't agree on, to some degree.
>
> Number 2 is an example of an issue that we did agree on. Number 2 is:
>
> "If the Board does set conditions of access, to what types of cable or telecommunications services providers should these conditions apply to?"
>
> And you can see the answer there is that they should apply to - "These conditions should apply to access to the communication space on an LDC's poles by Canadian carriers as defined in the *Telecommunications Act* and cable companies, provided, however" – and this is an important exception – "that these conditions shall not apply to joint-use arrangements between incumbent local exchange carriers and hydro distributors that grant reciprocal access to each other's poles."
>
> And you will recall that this is really – that exception is crafted to exempt arrangements between Bell Canada and hydro companies in Ontario where they have, effectively, an arrangement where they use each other's poles. [emphasis added]

3.11 That the parties' settlement on this issue was reached after "considerable discussion" and resulted in universal access by all Canadian carriers (with only the Bell Canada carve-out) is significant. As appears from the THESL Letter, THESL now takes the position that the CCTA Order does not apply to wireless attachments because there was no discussion about such attachments during the CCTA Proceeding and the Board never "turned its mind" to this issue. To suggest that wireless attachments are not within the scope of the CCTA Order because the issue was not debated in the CCTA Proceeding ignores the fact that the parties in that proceeding had already agreed, as part of the settlement, that access should be given to all Canadian carriers and not just to wireline

carriers. Accordingly, there was no need for further discussion of this issue during the CCTA Proceeding. Moreover, to now suggest that the Board never turned its mind to the issue is to suggest that the Board and Board counsel did not apprehend that the definition of "Canadian carrier" included wireless carriers. Such a suggestion would be quite remarkable.

3.12 The Board's reasons for accepting the settlement of Issue 2 are articulated in the following passages:[6]

> On this issue, the parties are in agreement. In the Settlement Agreement of October 19, 2004, all parties agreed that if the Board does set access conditions, these conditions should apply to access...by all Canadian Carriers as defined in the Telecommunications Act and cable companies. The only exception is that these conditions would not apply to the current joint use agreements between telephone companies and electricity companies that grant reciprocal access to each others poles.
>
> This Board has accepted the settlement agreement in this regard. In addition, the Board has heard submissions to the effect that the LDCs agree that their own telecommunication affiliates would access poles on the same conditions as other users of the communications space. The LDCs also confirmed that all users of the communications space should pay the same charge.
>
> This is an important clarification. This market is changing rapidly and industries are converging. Cable companies are now providing the telecommunication services just as the electricity distributors enter this industry. The fact that two groups that have been warring over the past decade are fast becoming competitors is an additional reason for the Board to intervene and establish clear

[6] CCTA Order, p. 4.

> guidelines. From this Board's perspective, it is equally important that costs be properly allocated and that the electricity distributor (and ultimately, the electricity ratepayer) receives its fair share of revenue. [emphasis added]

3.13 In the result, the Board ordered that[7]:

> The licence conditions of the electricity distributors licensed by this Board shall as of the date of this Order be amended to provide that all Canadian carriers as defined by the Telecommunications Act and all cable companies that operate in the Province of Ontario shall have access to the power poles of the electricity distributors at the rate of $22.35 per pole per year. [emphasis added]

3.14 The parties did not agree on the Issue 3 series of issues dealing with the appropriate charge for joint pole use. In particular, with respect to Issue 3(b) – "[H]ow should the charge be applied?" – one group took the position that the access charge should be applied on a per-pole, per user basis and not on a per-attachment basis, regardless of the number of attachments on a pole.[8] The parties who took this position defined "attachment," for this purpose (i.e., for the purpose of their position on the joint use charge issue and only for this purpose) as excluding "wireless transmitters and power line carriers."[9,10] The Board ultimately decided the pole charge issue in a way that did not distinguish among various types of attachments.

3.15 There was no agreement on what terms and conditions should govern pole access (Issue 4 on the Issues List) but the parties did agree to negotiate this matter separately, after the Board had issued its decision on the other issues on the Issues List.[11] Pending the outcome of such negotiations, the CCTA, EDA and the Canadian Electricity Association

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[7] CCTA Order, p. 11.
[8] Settlement Agreement, p. 6.
[9] Presumably, the exclusion was intended to pertain to the "wireless attachments" of "wireless carriers".
[10] RP-2003-0249, Transcript Vol.1 at 221.
[11] Settlement Agreement, p. 8.

agreed to recommend, to their respective members, that pole access not be denied on the basis that an access agreement had yet to be negotiated.[12]

3.16 By letter dated April 14, 2005, the CCTA requested that the Board confirm that all Ontario electricity distributors were required to provide pole access to "any attacher that is prepared to pay the rate established by the Board" regardless of whether agreement had been reached on terms and condition of access. A copy of this letter is included at Tab 7 of this Application. On May 30, 2005, the Board's Chief Compliance Officer issued Compliance Bulletin 200505 which stated that the obligation to provide pole access was in effect, that distributors were required to process attachment requests in a timely manner and that the access obligation applied, regardless of whether an agreement had been negotiated. A copy of the Compliance Bulletin is included at Tab 8 of this Application.

3.17 On August 3, 2005, some months after the conclusion of the CCTA Proceeding, the CCTA and the Mearie Group (representing 60 electricity distributors) filed an agreed-upon standard form of access agreement with the Board. Significantly, the Board never reviewed or approved this form of agreement and it appears that the Board never responded to the filing.

3.18 In 2005, the OEB's decision in the CCTA proceeding was followed by the New Brunswick Board of Commissioners of Public Utilities ("**NBPUC**") in another pole access case (the "**NB Pole Access Case**").[13] In that case, Rogers Cable Communications Inc. brought an application seeking access to the poles of the New Brunswick Power Distribution and Customer Service Corporation ("**Disco**").

3.19 After noting that the New Brunswick legislative scheme was "patterned on and to some extent drawn from" the OEB Act, the NBPUC held that the CCTA Order had dealt with "virtually the same issue". The NBPUC went on to state the "reasoning of the OEB to be

[12] *Ibid.*
[13] *Ruling-Rogers Jurisdiction Motion*, October 27, 2005, Appendix C to the Decision of the New Brunswick Board of Commissioners of Public Utilities dated June 9, 2006 in the matter of a Rate Application dated March 21, 2005 by New Brunswick Power Distribution & Customer Service Corporation.

on all fours with the [NBPUC's] appreciation of the situation in New Brunswick" and ordered that access should be granted.

4.0 The Applicant

4.1 CANDAS is a coalition of Canadian companies engaged in the telecommunications industry sector. CANDAS was formed for the purpose of promoting the ongoing improvement of wireless communications services in Canada, by creating an environment conducive to the rapid deployment of DAS networks in those areas where DAS technology offers technical, economic and environmental advantages that cannot be realized through traditional macro cell site infrastructure.

4.2 The members of CANDAS – Public Mobile Inc. ("**Public Mobile**"), ExteNet Systems (Canada), Inc. ("**ExteNet**") and DAScom Inc. ("**DAScom**") – collaborated, with others, in a project to establish a new wireless network in the City of Toronto using DAS technology. This network – the **Toronto DAS Network** – and the technology that underpins it are described in more detail in sections 5 and 6 below.

5.0 DAS Technology

5.1 A DAS network comprises three main elements: (i) multiple telecommunications "nodes," incorporating small, low elevation antennas and low-power radio units; (ii) fibre optic cabling that connects the nodes to the communications network through one or more hubs where the communications signal traffic is aggregated and interfaced with the equipment of the wireless carrier or carriers utilizing the DAS network; and (iii) one or more central hub facilities housing the wireless carriers' equipment that propagates and receives communication signals to and from the nodes utilizing the wireless carriers' licensed radio frequency spectrum.

5.2 The wireless and wireline components of a DAS network are equally essential to the operation of the network. One cannot function without the other. The antennas and radio units must be proximate to and interconnected with the fibre optic cabling which, as with other wireline systems, is most effectively and efficiently deployed by aerial suspension

from support structures in public rights-of-way or established utility easements. Therefore, it makes sense – economically, environmentally and operationally – to attach the wireless equipment on the same support structures from which the fibre optic cabling is suspended.

5.3 Optimal and effective design and deployment of DAS networks require that node antennas be attached at elevations that correspond roughly to the heights of utility and street light poles (9-14 meters), as opposed to higher elevations of towers and the roof tops of multi-story buildings (greater than 15 meters). Ideally, cabling and equipment should also be located at street intersections and along traffic corridors to enable unimpeded transmission of wireless signals in the areas traversed by mobile users and into the most heavily traveled areas of surrounding buildings.

5.4 Depending on the particular needs of a given wireless carrier, the customers it serves and the characteristics of the area in which services are to be provided, a DAS network may be: (i) a complete substitute for a traditional macro cell site deployment (as detailed below); or (ii) a complement to a traditional deployment, providing enhanced coverage and increased network capacity in particular areas with high demands for services. Once installed, a DAS network (or portions thereof) may also be used to support the services of multiple wireless carriers, with relatively little incremental construction and disruption.

5.5 Traditional cellular telephone network technology relies on "**Macro Cell Sites**," comprising large antenna arrays mounted on tall communication towers or on building tops. These sites transmit high powered radio signals over large areas. Especially in urban settings, these large, wireless installations: (i) are typically more obtrusive; (ii) often provide incomplete coverage in areas around tall buildings which block radio signals; (iii) are less flexible in areas where capacity requirements may be changing; (iv) do not allow for the most efficient use of radio spectrum and radio equipment; and (v) are less suited to providing the high data through-put required by "smart phone" services. Compounding these problems is the fact that increases in the demand for high data rate services can only be met through the construction of more Macro Cell Sites.

5.6 In contrast, DAS networks can be deployed rapidly to provide precise, targeted coverage in areas that are not easily accessible to Macro Cell Sites. Such networks can more readily accommodate changes in capacity utilization and enable more efficient use of the carriers' licensed radio frequency spectrum. Moreover, DAS technology functions with less interference and delivers services at high data rates, using less radio frequency spectrum bandwidth.

5.7 Although the upfront capital cost of a DAS network may be higher than that of a Macro Cell Site deployment designed to cover the same geographic area, long-term user costs are generally substantially less. This is due to the flexibility and efficiencies described above and the fact that multiple wireless carriers can utilize components of the same DAS network, thereby spreading the cost over more users. Cost efficiencies can also result from the enhanced efficiency with which the wireless carriers' radio spectrum bandwidth can be used.

5.8 There are at least two operating DAS networks in Canada, both in the City of Montreal. Both of these DAS networks are located within existing city utility corridors, attached to the existing utility and streetlight pole infrastructure. One of these networks is owned and operated by Le Group Videotron Ltee. ("**Videotron**"). The other is a partially completed network that DAScom and ExteNet are constructing in collaboration with a local fiber provider. Public Mobile is already using this network to deliver cellular service in Montreal.

5.9 In the United States, DAS networks have been successfully deployed in most major cities. Such networks typically utilize hydro and telephone poles.

5.10 DAS technology facilitates a more competitive market for wireless services because it is particularly attractive to new entrants who wish to launch new services quickly. Such entrants may have less radio spectrum bandwidth with which to work, may have fewer deployed transmission facilities and may face challenges in accessing existing tower infrastructure.

5.11 In 2008, the Canadian government allowed new entrants into the wireless market to bid for wireless licences. As *The Globe and Mail* recently reported, at that time, only 60 percent of Canadians were wireless users. Today, 72.5 percent of Canadians are consumers of wireless services. By the end of 2010, cell phone prices offered by new wireless carriers such as Public Mobile, Videotron, Wind and Mobilicity were over 60 percent less than the prices offered by the large incumbent carriers. In 2010 alone, this resulted in the migration of approximately 36 percent of residential wireline telephone customers to wireless substitutes. This trend is expected to accelerate. Incumbent telecoms are being forced to reduce prices in order to preserve their customer base.[14]

6.0 The Toronto DAS Network

6.1 Public Mobile is a mobile wireless carrier that has been licensed by Industry Canada to provide mobile wireless services to customers in Toronto as well as in other geographic regions in Ontario and Québec. Public Mobile is also registered with the CRTC as a Canadian carrier. In 2009, Public Mobile determined that DAS technology was its preferred solution for delivering new mobile wireless services to Toronto residents and local businesses. Public Mobile selected ExteNet to develop a DAS network.

6.2 ExteNet, working with two underlying suppliers, DAScom and Cogeco Data Services Inc. ("**Cogeco**"), undertook to design, develop and implement the Toronto DAS Network, initially for use by Public Mobile in launching its new wireless services. ExteNet is a Canadian corporation that is registered with the CRTC as a reseller of telecommunications services. ExteNet and its parent company have significant experience in the design and construction of DAS networks.

6.3 The plan for the Toronto DAS Network involved DAScom constructing the approximately 790 node sites (in relation to what CANDAS believes are some 100,000 poles controlled by THESL and THESI) required to cover the City of Toronto and

[14] *The Globe and Mail* Report on Business, April 4, 2011, "Canada's Newest Wireless Entrants are on the Attack"; this article is based on a report prepared by Convergence Consulting Group Ltd. See also *The Globe and Mail* articles dated April 6, 2011 and April 7, 2011 entitled, respectively, "Telus Delivers Low-key Launch of Clearnet Wireless" and "Telus Seeks Licensing Edge to Build New Network". Copies of these articles are included at Tab 9 of this Application.

Cogeco providing the approximately 1,000 kilometers of fiber cabling required to connect the nodes with Public Mobile's hub facilities and switching center. DAScom and Cogeco are both registered with the CRTC as Canadian carriers. DAScom was selected because of its experience in the Canadian fibre cabling and construction industry. Cogeco was selected because it already had a municipal access agreement with the City of Toronto that permitted it to utilize public rights-of-way as well as the required pole attachment agreements with THESL and THESI.

(a) Agreement with City of Toronto

6.4 In order to construct the Toronto DAS Network, the consent of the City of Toronto was required. The City agreed and entered into a Municipal Access Agreement for Telecommunication Installations with DAScom as of August 6, 2009 (the "**Municipal Access Agreement**"). Copies of this Agreement and the City of Toronto Staff Report ("**Staff Report**") that sought Council approval to enter into the Agreement are included at Tabs 10 and 11 of this Application, respectively. The Municipal Access Agreement is for an initial term of 15 years and gives DAScom access to City roads for the purpose of constructing, installing, operating and maintaining a telecommunications network, including wireless antennas, radios and power supply equipment.

6.5 The Municipal Access Agreement includes a number of express prohibitions, including the construction or erection of poles or other above ground structures (s. 3(1)(a)). It also restricts the installation of overhead cabling to locations where overhead cabling already exists (s. 3(2)). The Municipal Access Agreement also imposes a number of safety-related requirements, including requiring DAScom to comply with technical standards relating to wireless equipment prescribed by Industry Canada and the City of Toronto.

(b) Pole Access Agreements

6.6 Without access to existing power and lighting poles in the City of Toronto upon commercially reasonable terms and conditions, neither the Toronto DAS Network, nor any other DAS network deployment in Toronto, would be economically or technically feasible. Since DAS technology depends on low elevation attachment of nodes near fiber

optic cabling and electric power, as a practical matter, its components must be attached to existing poles.

6.7 The economic and environmental costs of creating a new corridor and erecting a duplicative system of poles along City of Toronto streets would be unacceptable, not only to investors, but also to the public. The economic costs would ultimately be borne by the very consumers who have already funded the capital cost of existing electric and telephone infrastructure. Moreover, given that both sides of most City streets are already occupied by various and differing support structures (telephone, electrical and lighting), there is simply no room for additional poles. In any event, construction of a duplicative system of poles within City rights-of-way is not permitted under the terms of the Municipal Access Agreement.

6.8 It is against this backdrop that in November 2008, ExteNet first approached THESL and THESI to obtain information regarding requirements for access to their poles for the purpose of "attaching wireline and wireless infrastructure to utility structures."[15] On November 13, 2008, THESL advised that while THESI already had wireless attachments on its poles, THESL did not, but would be prepared to permit wireless attachments. Subsequently, THESL's legal department forwarded its "standard pole attachment agreement" to ExteNet, noting in its cover email that "the current Pole Rental Rate is $22.35 per pole in use."[16] THESL also suggested that the basic terms of its standard pole attachment agreement were not negotiable.

6.9 Over several months in 2009, prior to entering into any pole access agreements, DAScom and ExteNet communicated and met with representatives of THESL and THESI regarding the overall scope and also the technical and operational details of the proposed Toronto DAS Network. During this time, DAScom and ExteNet provided THESL and THESI with detailed drawings and photographs of the proposed node installations. Subsequently, they constructed a full-sized prototype of the proposed node installation on a utility pole at DAScom's Toronto office parking lot in order to assist THESL and

[15] Email from ExteNet to THESL, dated November 13, 2008 (Tab 12 hereto).
[16] Email from THESL to ExteNet, dated November 14, 2008 (Tab 13 hereto).

THESI personnel in understanding how the DAS equipment assembly would co-exist with other attachments on a utility pole. Representatives of both THESL and THESI inspected the prototype and indicated that they had no objections or suggested changes. A photograph of this prototype is included as Tab 14 of this Application.

6.10 On July 20, 2009 representatives of ExteNet and Public Mobile met with Mr. David O'Brien, the then President and Chief Executive Officer of THESL, to discuss the Toronto DAS Network project, including Public Mobile's new wireless network. Mr. O'Brien expressed his support for the new wireless network.

6.11 Subsequently, DAScom entered into an Agreement for Licensed Occupancy of Support Structures with THESL, effective August 1, 2009 ("**Distribution Pole Access Agreement**"). DAScom also entered into an Agreement for Licensed Occupancy of Support Structures with THESI, effective September 4, 2009 ("**Light Pole Access Agreement**").

6.12 Copies of the Distribution Pole and Light Pole Access Agreements and descriptions of the detailed provisions thereof are not included with this Application because THESI and THESL required DAScom to sign Confidentiality Agreements as a precondition to providing copies of their standard form of access agreements. Moreover, both the Distribution Pole Access Agreement and the Light Pole Access Agreement prohibit DAScom from disclosing their terms to third parties, except with the consent of THESL or THESI, as the case may be.

6.13 The Applicant understands and believes that others, such as Cogeco, have entered into pole access agreements with THESL and THESI and are similarly bound, thus preventing them from disclosing the terms of their agreements.

6.14 DAScom submits that the Board should require all such agreements to be placed on the public record in this proceeding. There is no reason not to do so.

7.0 Course of Dealing with THESL

7.1 Very soon after the effective dates of the Distribution Pole and Light Pole Access Agreements, representatives of Cogeco, DAScom, ExteNet and THESL met to discuss the procedures that would be necessary to process the large number of attachment permit applications that Cogeco and DAScom would need to submit in order to carry out the Toronto DAS Network project. THESL advised DAScom, ExteNet and Cogeco that THESL's practice was to process applications for attachment permits within three to four weeks. This was considered to be a commercially reasonable turnaround time for such applications and comparable to turnaround times of utilities in other jurisdictions. In the ensuing months, these parties met regularly to review the status of attachment permitting.

7.2 On October 1, 2009, Mr. Anthony Haines succeeded Mr. O'Brien as THESL's Chief Executive Officer. Until shortly after Mr. Haines became THESL's new CEO, the processing of DAScom's attachment applications proceeded in a relatively timely manner. For example, in September 2010, DAScom submitted 44 node attachment applications to THESL and, by November 13, 2009, had received 32 corresponding attachment permits. Soon thereafter, however, it became apparent that Cogeco's fiber attachment applications and DAScom's node attachment applications were not being processed within the three to four weeks timeframe that had been promised. The slow processing of Cogeco's fiber attachment applications was of particular concern and the Toronto DAS Network participants attempted to escalate these issues to higher levels of management within THESL.

7.3 On November 30, 2009, during a conference call, Mr. Haines questioned the appropriateness of any policy or regulation requiring THESL to allow attachment of telecommunications facilities on its poles. Mr. Haines indicated that he intended to confer with THESL's Board of Directors with respect to these issues and suggested that Cogeco, DAScom and ExteNet should explore how the Toronto DAS Network might be developed without reliance on THESL's poles.

7.4 On January 13, 2010, representatives of Public Mobile met with Mr. Haines and other representatives of THESL in an attempt to resolve the on-going problems with respect to delays in processing of the attachment permits, which delays threatened to severely impact Public Mobile's business plan. At the meeting, Mr. Haines stated that he was unaware of any wireless equipment mounted on THESL poles and would order the removal of such equipment if an internal investigation revealed that such attachments existed. This came at a time when THESL and THESI had already issued approximately 164 attachment permits; applications for another 104 node attachment permits were pending.

7.5 On January 14, 2010, a representative of THESL advised DAScom that THESL had: (i) stopped processing all Toronto DAS Network pole attachment applications, including Cogeco's fiber optic cable attachment applications; and (ii) ordered all work on DAScom's previously permitted attachments to cease, pending a review of THESL's policy on such attachments (the "**Stop Work Order**").

7.6 On January 22, 2010, representatives of DAScom and ExteNet met with Mr. Haines and other representatives of THESL to discuss the Stop Work Order. At this meeting, THESL stated that it had an unwritten policy against allowing wireless attachments on its poles and suggested that the actions and statements of THESL employees in respect to the Toronto DAS Network project, including the issuance of attachment permits, had been unauthorized. Following a detailed discussion of the Toronto DAS Network project, Mr. Haines undertook to review THESL's policies related to wireless telecommunications attachments with THESL's Board of Directors and get back to DAScom.

7.7 By separate letters dated February 5, 2010, each of THESL and THESI advised DAScom that they would continue to entertain and process pole attachment applications in accordance with the terms of the Distribution Pole and Light Pole Access Agreements, respectively. Copies of these letters are included as Tab 15 of this Application.

7.8 Shortly thereafter, at a meeting among representatives of DAScom, ExteNet and THESL, THESL responded to the concerns about the continuing problem of delays in processing permit applications by suggesting that DAScom and ExteNet should find another way to construct the Toronto DAS Network.

7.9 By February 22, 2010, there was a backlog of approximately 301 Cogeco applications and 244 DAScom attachment applications. In the period from January 11 to March 19, 2010, THESL did not process a single pole attachment application nor issue a single attachment permit, to either Cogeco or DAScom.

7.10 By June, 2010 and after over six months of construction, the Toronto DAS Network was still only partially completed. As a result of the continuing delays in permit processing and the uncertainty as to when the Toronto DAS Network would be 100 percent completed, Public Mobile decided to launch its new Toronto service using "temporary" Macro Cell Sites. Accordingly, Public Mobile, ExteNet and DAScom agreed to terminate arrangements for the committed use of the Toronto DAS Network by Public Mobile. Although Public Mobile is still interested in utilizing DAS technology for portions of its network in Toronto, it will not commit to do so unless and until it receives credible assurances, including assurances that THESL will grant timely and long-term pole access for node and fiber attachments.

8.0 The THESL Letter and the THESL/THESI Email

8.1 The THESL Letter, filed with the Board on August 13, 2010, advised that as a matter of policy, the attachment of wireless telecommunications equipment to THESL power poles would not be permitted. THESL raised a number of points to support its claim that the CCTA Order was never intended to apply to wireless attachments and, if it was, that it should no longer so apply. THESL's position may be summarized as follows:

(i) notwithstanding the actual wording of the CCTA Order, it was not intended to extend to wireless attachments;

(ii) utility poles are not essential for the deployment of wireless technology;

(iii) essential and scarce resources, such as power poles, should not be allocated to undertakings that have other alternatives;

(iv) wireless attachments impair operational efficiency and present incremental safety hazards to electricity distributors; and

(v) a utility's obligation of non-discriminatory access to its distribution system pertains only to access required by "generators, retailers and consumers for the purposes of electricity distribution."

8.2 To the Applicant's knowledge, the THESL Letter was the first time that THESL had raised concerns about safety hazards allegedly created by wireless attachments. Certainly, THESL had never raised these issues with DAScom or ExteNet. Moreover, it had entered into the Distribution Pole Access Agreement without reservation and had issued many node attachment permits, also without reservation.

8.3 On August 17, 2010 and subsequent to the THESL Letter, Public Mobile received an email from Mr. Lawrence Wilde ("**THESL/THESI Email**") advising that neither THESL nor THESI would enter into any agreements for access to their poles for the purpose of affixing wireless attachments. With respect to wireline attachments, the email stated as follows: "[I]f your intent is to gain access for the purpose of affixing wireline attachments to Toronto Hydro-Electric System Limited poles please advise as to the nature of the attachments which you are contemplating and we will advise regarding our requirements." A copy of the THESL/THESI Email is included as Tab 16 of this Application.

8.4 The THESL Letter and the THESL/THESI Email were the first written articulation of THESL's and THESI's new policy prohibiting wireless attachments. These communications came one year after THESL and THESI had executed the Distribution Pole and Light Pole Access Agreements and after ExteNet, DAScom, and Public Mobile

had, collectively, invested more than $10 million in developing the Toronto DAS Network.

9.0 Termination of the Pole Access Agreements

9.1 By letter to DAScom dated September 28, 2010, THESI terminated the Light Pole Access Agreement at the end of its initial term; i.e., as of December 31, 2010 ("**Termination Notice**"). By further letter to DAScom dated January 20, 2011, THESI advised DAScom that it would be required to remove all wireless attachments in accordance with the terms and conditions of the Light Pole Access Agreement ("**Removal Notice**"). Copies of the Termination and Removal Notices are included as Tabs 17 and 18 of this Application, respectively.

9.2 THESI's refusal to renew the Light Pole Access Agreement suggests that THESL will also refuse to renew the Distribution Pole Access Agreement when it expires. This means that even if a portion of the Toronto DAS Network could be completed in a form that could be utilized by Public Mobile or other wireless carriers, it would become stranded when the initial term of the Distribution Pole Access Agreement expires.

9.3 The Termination and Removal Notices add an element of urgency to the situation. This is because THESI has expressed its intention to require DAScom to remove its attachments from THESI poles within the applicable time frames, failing which THESI will remove the attachments and charge DAScom for so doing.

9.4 In the MADD Order[17], the Board found that certain of THESI's street light assets fall within the meaning of "distribution" and/or "distribution system". Specifically, with respect to streetlighting poles, the Board found that where the distribution circuits are in the form of overhead lines, the associated poles are distribution assets because the primary purpose of the pole is related to the distribution of electricity. If the distribution circuits are buried underground, however, categorization depends on whether the circuits are located in a "mixed urban use setting" or in a "residential" setting. Poles in a

[17] See para. 1.0(d) above.

residential setting, where circuits are buried underground, are likely to be used exclusively for streetlighting and, thus, are not distribution assets. Poles located in a mixed urban use setting where circuits are buried underground are likely to be used for both street lighting and the distribution of electricity and, thus, may be characterized as distribution assets. The Board also concluded that luminaires are not distribution assets no matter where they are located.

9.5 In the result, the Board approved the sale, to THESL, of those assets which it deemed to be distribution assets, conditional on THESL and THESI filing: (i) additional evidence that "sets out the revised transactions;" and (ii) a new asset valuation to be used by the Board for rate-making purposes (the Board declined to accept the valuation that was filed as part of the original application).

9.6 On January 31, 2011, THESL and THESI (and a related entity) filed "Additional Evidence Regarding the Transfer of Streetlighting Assets" with the Board ("**Additional MADD Evidence**"), a copy of which is included as Tab 19 of this Application.

9.7 The Additional MADD Evidence classified 40,274 of THESI's 54,674 streetlighting poles as "distribution"[18]. As distribution assets, these poles are now subject to the CCTA Order and, in consequence, THESL and THESI are now obligated to grant Canadian carriers who so request, access to these poles.

9.8 Many, if not most, of the THESI poles on which DAScom's wireless equipment is attached pursuant to the terms of the Light Pole Access Agreement have been deemed to be part of THESL's distribution system in accordance with the MADD Order. This means that such attachments are now governed by the Distribution Pole Access Agreement as opposed to the Light Pole Access Agreement. Accordingly, by letter dated February 24, 2011 (a copy of which is included as Tab 20 of this Application), DAScom notified THESI of its position that neither the Termination Notice nor the Removal Notices pertained to the 40,274 streetlighting poles that were now classified as distribution assets.

[18] See Table 2, p. 14 of 21 of the Additional MADD Evidence.

9.9 By letter dated March 18, 2011, THESI responded, stating that:

(i) the Termination and the Renewal Notices pertain to all permits issued under the Light Pole Access Agreement;

(ii) no street lighting poles had been transferred to THESL but, if such poles were transferred in the future, DAScom would be at liberty to apply to THESL under the Distribution Pole Access Agreement, to install any proposed attachments; and

(iii) THESI was prepared to extend the deadline for attachment removal and pole restoration to May 1, 2011, but not beyond.

A copy of the March 18, 2011 letter is included as Tab 21 of this Application.

10.0 Grounds

(a) Public Utilities vs. Private Corporations

10.1 A public utility is not in the same position as a commercial vendor. It is more akin to a public body entrusted with the management of assets for the benefit of the public. In a sense, an owner of a public utility holds the utility in trust for the benefit of the general public (or, at least, that portion of it resident in the city within which the utility is located) and not just for the utility's ratepayers.[19]

10.2 The CRTC recognized the distinction between public and private corporations in 1974, in its first pole access case:[20]

> It is not disputed that the telephone poles erected by Bell are its property, but as herein noted, the use or enjoyment Bell has of this property is subject to certain limitations imposed by law in the public interest. We believe that when one devotes one's property to a use in which the public has an interest, one, in effect, grants to

[19] *Canada (Attorney General) v. Toronto (City)* (1893), 23 S.C.R. 514.
[20] *Transvision (Magog) Inc. v. Bell Canada*, [1975] C.T.C. 463 at 485.

> the public an interest in that use, and must submit to be controlled by the public for the common good, to the extent of the interest one has thus created. We believe that Bell is in that position with respect to its telephone poles which cease, for this reason to be *juris privati* only. [emphasis added]

10.3 More recently, in a case involving THESL, the Court of Appeal for Ontario also noted the "important distinction" between private corporations and publicly regulated corporation:

> At the heart of a regulator's rate-making authority lies the "regulatory compact" which involves balancing the interests of investors and consumers. In this regard, there is an important distinction between private corporations and publicly regulated corporations. With respect to the latter, in order to achieve the "regulatory compact", it is not unusual to have constraints imposed on the utilities that may place some restrictions on the board of directors. That is so because the directors of utility companies have an obligation not only to the company, but to the public at large.[21] [emphasis added]

10.4 Having devoted its poles to a use in which the public has an interest, an electricity distributor must submit to being controlled by the public (i.e., the Board), for the common good. In this context, the common good or public interest would include avoiding the duplication of infrastructure, accommodating local government objectives and avoiding the impairment of competition in converging industries.

10.5 This very point was addressed by the New Brunswick Public Utility Commission in the NB Pole Access Case:[22]

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[21] *Toronto Hydro-Electric System Ltd. v. Ontario Energy Board*, [2010] O.J. No. 1594 (C.A.) at para. 49.
[22] Oral Ruling, October 27, 2005 Transcript.

> It is clear that one of the overall purposes of the Act is to ensure the provision of electricity to residents of New Brunswick in a safe, reliable and economic manner. It is essential to these objectives that Disco utilize electric power poles. However, it would be uneconomic and wasteful if all utilities and persons seeking to provide services in New Brunswick were required to acquire their own easements and poles in areas already served by electric power poles. It would be appropriate to allow access to electric power poles to provide services provided it can be done without interference with the distribution system. In New Brunswick Disco and Aliant own virtually all the poles in the Disco operating area and they have joint use agreement with respect to poles. The Disco power poles are an essential service provided by Disco in delivering services pursuant to the Act. It is not in the public interest that there be a proliferation of poles. The arrangement between Disco and Aliant to share poles for attachment of their respective services is to be encouraged as being prudent and economical. The exclusion of Rogers from equivalent access to Disco's electric power poles is not in keeping with the provisions of the Act or in the public interest. [emphasis added]

(b) Breach of CCTA Order and Electricity Distribution Licences

10.6 The fact that utility assets are not *juris privati* and must be "controlled by the public for the public good" was recognized by the Ontario legislature when it conferred, on the OEB, the express jurisdiction to impose licence conditions requiring a licensee to enter into agreements with third parties "for the ... use of any ...plant owned or operated by the licensee."[23] This provision empowers the Board to require electricity distributors to enter into user agreements with attachers. This power is similar to powers conferred on

[23] OEB Act, ss. 70(2).

other provincial energy regulators and simply reflects the public nature of regulated utilities.[24]

10.7 The OEB relied on its statutory power when it issued the CCTA Order, thereby recognizing that Ontario electricity distributors have a public utility obligation to manage utility assets for the benefit of the public as a whole and not simply for the benefit of their ratepayers.

10.8 The CCTA Order amended the licences of all Ontario electricity distributors by requiring them to provide pole access to all Canadian carriers, as defined by the Telecommunications Act, and to all cable companies that operate in Ontario. The Telecommunications Act defines a "Canadian carrier" as an owner or operator of "transmission facilities" which, in turn, are defined to mean "any wire, cable, radio, optical or other electromagnetic system, or any similar technical system, for the transmission of intelligence between network termination points". [emphasis added] Accordingly, the owners and operators of wireless transmission facilities are considered to be Canadian carriers under the Telecommunications Act.

10.9 The CCTA Order does not distinguish between Canadian carriers that seek to attach wireline equipment and those that seek to attach wireless equipment.

10.10 The CCTA Order has not been set aside, varied or amended. The condition imposed by the CCTA Order on the licences of all electricity distributors continues to pertain.

[24] See for example, subsection 70(1) of the British Columbia *Utilities Commission Act*, R.S.B.C. 1996, c. 473, which provides as follows: "On application and after a hearing, the commission may make an order directing a public utility to allow a person, other than a public utility, to use the electricity transmission facilities of the public utility if the commission finds that
(a) the person and the public utility have failed to agree on the use of the facilities or on the conditions or compensation for their use,
(b) the use of the facilities will not prevent the public utility or other users from performing their duties or result in any substantial detriment to their service, and
(c) the public interest requires the use of the facilities by the person."

(c) Unjust Discrimination and Undue Preference

10.11 As is set out below, there is no question that THESL's refusal to permit wireless attachments discriminates unjustly. Access is granted to cable attachers. Access is granted to wireline attachers, but not to wireless attachers. And, access is granted to some wireless attachers, but not DAScom.

10.12 A public utility with a monopoly over services or facilities of fundamental importance to the public has a common law obligation to provide such services or grant access to such facilities to all who request it and are willing to pay the prescribed rates, without unjust discrimination.

10.13 The British Columbia Supreme Court aptly summarized these principles as follows:[25]

> The obligation of a public utility or other body having a practical monopoly on the supply of a particular commodity or service of fundamental importance to the public has long been clear. It is to supply its product to all who seek it for a reasonable price and without unreasonable discrimination between those who are similarly situated or who fall into one class of consumers. The great utility systems supplying power, telephone and transportation services now so familiar may be of relatively recent origin, but special obligations to supply service have been imposed from the very earliest days of the common law upon bodies in like case, such as carriers, innkeepers, wharfingers and ferry operators. This has been true in England and in the common-law jurisdictions throughout the world. In *Munn v. Illinois*, 94 U.S. 113, in the Supreme Court of the United States, the historical roots of this principle were examined and they have been applied in the United

[25] *Chastain v. British Columbia Hydro and Power Authority* (1973), 32 D.L.R. (3d) 443 at 454 (B.C.S.C.); see also *Bell Canada v. Challenge Communication Ltd.*, [1979] 1 F.C. 857 (C.A.); leave to appeal refused (June 6, 1978, S.C.C.) ("**Challenge**").

> States. In Canada the law has followed the same path. [emphasis added]

10.14 It is important to note that a public utility's obligation to provide non-discriminatory service and access exists as a matter of common law. It is not dependent on the existence of a contractual obligation:[26]

> That a public utility was at common law compelled to treat all consumers alike, to charge one no more than the others and to supply the utility as a matter of duty and not as a result of a contract, seems clear.[27]

10.15 The prohibition against undue discrimination by public utilities cannot be displaced by operation of statute, except by express language.[28] Moreover, this prohibition exists outside of any statutory expression.[29]

10.16 Once discrimination is shown to exist (as in this case) the onus shifts to the utility as a matter of law to justify that discrimination. The Federal Court of Canada stated this principle in *Challenge*[30] which, like this case, pertained to the wireless telecommunications sector. THESL has offered no rational explanation to justify its abrupt change in policy.

10.17 This concept of onus was an important aspect of the Board's recent decision involving THESL and its refusal to connect two large condominiums unless they agreed that the smart meters in those buildings would be provided exclusively by THESL and not by

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[26] *St. Lawrence Rendering Co. v. Cornwall (City),* 1951 CarswellOnt 74 at para. 39 (H.C.J.).
[27] *Canada (Attorney General) v. Toronto (City)* (1893), 23 S.C.R. 514; *Scottish Ontario and Manitoba Land Co. v. Toronto (City)* (1899), 26 O.A.R. 345 at p. 349; *Hamilton (City) v. Hamilton Distillery Co.* (1907), 38 S.C.R. 239 at p. 254.
[28] See: E.A. Driedger, *Construction of Statutes*, 2nd ed., (Butterworths, 1983) at p. 213, citing *Goodyear Tire & Rubber Co. of Can. v. T. Eaton Co.*, [1956] S.C.R. 610, at p. 614. See also *Slaight Communications Inc. v. Davidson*, [1989] 1 S.C.R. 1038 at 1077 per Lamer J.: "...in the absence of a clear provision to the contrary, the legislator should not be assumed to have intended to alter the pre-existing ordinary rules of common law".
[29] *Chastain, supra*, footnote 25; see also *Minister of Justice for the Dominion of Canada v. Levis*, [1919] A.C. 505 at 513 (H.L.)
[30] *Challenge, supra*, footnote 25; *CNCP Telecommunications: Interconnection with Bell Canada*, CRTC Decision 79-11; *Alabama Power Company v. Federal Power Commission,* 511 F.2d 383 at p. 391 (U.S.C.A, D.C. Cir., 1974).

competing suppliers[31]. The Board held that this practice was contrary to the *Electricity Act*, 1998 ("**Electricity Act**") the *Distribution Service Code* ("**DSC**") and THESL's own licence.

10.18 What was particularly important in the Smart Meter Case was the Board's analysis of the onus a utility must satisfy when refusing to connect. The Board concluded that such refusal must be statutorily justified as otherwise permitted by the DSC. As the Board held:

> It is significant that section 28 of the *Electricity Act* does not provide any justifications for the refusal to connect. It merely states two conditions, both of which are met by both the developments in this proceeding. There are justifications for refusal to connect set out in the DSC. The Board believes those should be narrowly interpreted. A utility refusing connection on the basis of the Code must clearly satisfy the Board that those conditions exist. This responsibility is also reflected in Toronto Hydro's distribution licence, which provides that an offer to connect shall be fair and reasonable and the utility should not refuse to connect unless it is permitted to do so by the *OEB Act*, or a regulation or any codes.[32]

10.19 CANDAS submits that these principles also apply in this proceeding. Not only is there an onus on a utility to justify any termination or refusal to connect, the termination or refusal must also be in strict compliance with all statutory and other applicable requirements, such as the DSC. The only conceivable justification offered by THESL is a vague reference to a safety issue. This is not sufficient for THESL to discharge its onus.

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[31] EB 2009-0308, Decision and Order dated January 27, 2010 ("**Smart Meter Case**").
[32] Smart Meter Case, supra, para. 40. The Board's footnote at the conclusion of this paragraph reference to THESL's Electricity Distribution Licence, ED-2002-0497 at s. 7.

10.20 Notwithstanding their legal obligation (as set out in the foregoing paragraphs) to provide non-discriminatory access to all Canadian telecommunication carriers who are prepared to pay the Board-approved rate, some Ontario electricity distributors are now engaging in conduct that unjustly discriminates against certain wireless attachers and confers an undue preference on themselves or on related parties.

10.21 For example, although the THESL Letter articulates a blanket, "no wireless" policy, THESL is allowing the Toronto Transit Commission ("**TTC**") access to its poles in respect of the attachment of 750 wireless microwave transmitters that the TTC uses in connection with its bus service.[33] Presumably, THESL is not requiring the TTC to remove these transmitters. This conduct discriminates among wireless attachers – some, like the TTC, are granted access, while others, like members of CANDAS, are not. This conduct also confers an undue preference on an entity that is related to THESL.

10.22 THESL is also using its own facilities for wireless purposes. This is evidenced by the fact that it holds a number of Industry Canada "radio station" licences, many of which pertain to wireless equipment that is attached to its poles. Such conduct unduly discriminates against wireless carriers. It also confers an undue preference on THESL.

10.23 The Applicants do not know the reasons why at least one Ontario distributor, other than THESL, has adopted a "no wireless" policy. The Applicants do know that THESL is justifying its "no wireless" policy on the grounds of safety. THESL's willingness, however, to attach its own wireless equipment and that of the TTC puts the lie to its claims that wireless attachments pose certain electrical safety "risks". If THESL is able to see its way clear to attaching its own wireless devices and those of the TTC, one might well ask whether safety of wireless attachments is a real issue.

10.24 The fact that THESL willingly entered into the Distribution Pole Access Agreement with DAScom and then, for over a year, facilitated the attachment of DAScom's wireless equipment to its poles, is further evidence that THESL's expression of safety concerns merely amount to rationalizations for its discriminatory conduct. It is noteworthy that

[33] See *Toronto Transit Commission v. The Minister of Finance*, 2009 CanLII 28407 ON S.C.

THESL and THESI received and processed many applications for wireless attachments in 2009 and throughout much of 2010 without raising any generalized safety concerns about wireless attachments with DAScom or ExteNet.

10.25 If any electricity distributor in Ontario is of the view that pole access should not be available to certain types of customers or equipment attachments, its remedy is to request the Board to vary the CCTA Order. It may not simply deny access unilaterally and, in so doing, unduly discriminate among categories of attachers and attachments in a manner that is not countenanced by the CCTA Order. If a distributor identifies concerns regarding safety that are unique to certain types of wireless attachments, it is obliged to bring these to the attention of the Board and request that the CCTA Order be varied to exclude the offending carriers. It may not, as THESL has done, take unilateral action to address the alleged concerns and in so doing, unduly discriminate among categories of attachers and attachments in a manner that is not countenanced by the CCTA Order.

(d) Anti-Competitive Behaviour

10.26 It is well established that a regulated monopoly, with control of an essential facility, may not refuse to supply such facility or create an unfair advantage by engaging in discriminatory behaviour in order to undermine competitors.[34] The OEB quite clearly relied on this principle in the 2010 THESL compliance decision: [35]

> When a company is a sole supplier of an essential product, such as electricity, it faces special responsibility in terms of supplying customers. This is one of the most fundamental principles and obligations that face a public utility in this county.

10.27 In Canada, the CRTC has relied on the essential facility doctrine since the first pole attachment decision in 1974 where the CRTC noted that certain utility assets, such as electricity utility poles have a public interest component and the public has an interest in

[34] The United States Supreme Court first articulated the doctrine in *United States* v. *Terminal Railroad Ass'n,* 224 U.S. 383 (1912). See also: *Otter Tail Power Company v. United States,* 410 U.S. 366 (1973).
[35] EB-2009-0308, Decision and Order, at para. 38.

their use.[36] The CRTC expanded this concept in its 1979 decision concerning an application by CNCP seeking access to the facilities of Bell Canada in order to provide competitive, long-distance service. In light of the public interest in a competitive communications industry, the Director of Investigation and Research ("**Director**") (now the Commissioner of Competition) intervened in the application in support of CNCP. In its decision, the CRTC agreed with the Director's submission, as follows:[37]

> Based on this and other more recent authorities, the Director asserted that the principal had been established "that regulated companies with control of essential facilities may not refuse to supply us such facilities or create an unfair advantage through discriminatory tariffs to undermine competitors". The Commission agrees with this approach.

10.28 Like *CNCP*, the case now before the Board also raises public interests issues about competition in telecommunications. The issuance of licences in 2008 to new, lower cost wireless carriers signalled the federal government's commitment to fostering competition in this sector. The policies of THESL and other electricity distributors prohibiting wireless attachments can only serve to limit competition.

10.29 Applying the foregoing principles to the facts at hand:

(i) power poles are essential facilities; both the OEB and the NBPUC have so determined;

(ii) electricity distributors have a virtual monopoly on pole infrastructure in Ontario;

(iii) the successful development of a DAS network depends on the ability to attach DAS equipment to existing poles within existing linear corridors; the need to acquire new rights-of-way and

[36] *Transvision (Magog) Inc. v. Bell Canada*, [1975] C.T.C. 463 at 485.
[37] *CNCP Telecommunications: Interconnection with Bell Canada*, Telecom Decision CRTC 79-11 at 124.

construct new pole infrastructure would render a DAS project impractical and unfeasible;

(iv) cable companies and wireline telecommunications companies (who both have access to power poles) compete with wireless telecommunication companies and *vice versa*; moreover, the affiliates of electricity distributors also engage in telecommunications activities;[38,39]

(v) the development of DAS networks is essential to the creation of a competitive wireless telecommunications market in Canada; and

(vi) there have been no findings by regulators or courts that the attachment of wireless equipment on power poles poses an unacceptable safety risk or otherwise impairs functionality.

(e) Ontario Utilities are Acting with Unfettered Discretion

10.30 The CCTA Order mandated pole access for all Canadian carriers at a prescribed rate of $22.35 per pole per year. The Board refrained from imposing any other terms and conditions of access, preferring to leave the issue to be negotiated among the parties.[40] Ultimately, while some parties did negotiate private access agreements, the Board never revisited the issue and never promulgated standard terms and conditions.

10.31 In the result, electricity distributors have enjoyed completely unfettered discretion in deciding on the terms and conditions that should govern access to their poles. This has led to a patchwork of arrangements that differ from utility to utility and, it appears, attacher to attacher. More troubling, perhaps, is that it has allowed distributors to impose on attachers what, in some cases, are onerous requirements. As the access agreements

[38] See para. 3.10 above. See also CCTA Order at p. 7 where the Board stated as follows: "In addition, an increasing number of telecommunication providers are entering the market to compete with incumbent telephone company providing voice and data services. A number intervened in this proceeding and by virtue of the settlement agreement will have access to the poles in question. Finally, in a number of major markets the Ontario electricity distributors have established their own affiliates to offer telecommunication services."
[39] Of the licensed electricity distributors in Ontario today, approximately 12 have telecommunications affiliates.
[40] See paragraphs 3.16-3.17 above.

offered by electricity distributors are typically not negotiated in any meaningful way, carriers such as DAScom, who wish to develop their own communications networks, have no choice but to accept the terms and conditions that are unilaterally imposed by the utility.

10.32 Once an access agreement has been executed, the attacher continues to be at the mercy of the distributor with respect to matters related to:

(i) the timeframes within which applications are processed and Make Ready Work is carried out by the utility;

(ii) the engineering and other requirements that are imposed by the utility; and

(iii) the rejection of attachment applications.

10.33 The course of dealing between THESL and DAScom and Cogeco in connection with the Toronto DAS Network project (described in section 7.0 above) aptly illustrates the problem. Although pole access is a mandated and rate-regulated "service" in Ontario, utilities have the ability to frustrate, in a myriad of ways, those who seek such access.

10.34 The need for transparent and equitable terms and conditions of pole access was the impetus for a report and order ("**Report**") issued on April 7, 2011[41] by the U.S. Federal Communications Commission ("**FCC**").[42] The Report comprehensively revises the FCC's pole attachment rules by removing barriers to the deployment of wireline and wireless services in order to "promote competition and increase the availability of robust, affordable telecommunications and advanced services to consumers throughout the nation".[43] A copy of the Report is included at Tab 22 of this Application.

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[41] FCC 11-50, Report and Order on Order on Reconsideration, April 7, 2011.
[42] Section 224 of the United States *Telecommunications Act of 1934,* 47 U.S.C. § 151, gives the FCC the jurisdiction to mandate attachments on telephone and electricity poles and to set the terms and conditions of such access, except in circumstances where an individual state has chosen to exercise its option to regulate matters.
[43] Report, para. 1

10.35 In commenting on the need for new access rules, the FCC stated as follows:[44]

> In its efforts to identify barriers to affordable telecommunications and broadband services, the Commission has recognized that lack of reliable, timely, and affordable access to physical infrastructure – particularly utility poles – is often a significant barrier to deploying wireline and wireless services. There are several reasons for this. First, the process and timeline for negotiating access to poles varies across the utility companies that own this key infrastructure. The absence of fixed timelines and the potential for delay creates uncertainty that deters investment. Second, if a pole owner does not comply with applicable requirements, the party requesting access may have limited remedies; because of time constraints, cost, or the need to maintain a working relationship with the pole owner, it may not wish to pursue the enforcement process. Third, the wide disparity in pole rental rates distorts service providers' decisions regarding deployment and offering of advanced services. For example, providers that pay lower pole rates may be deterred from offering services, such as high-capacity links to wireless towers, that could fall into a separate regulatory category and therefore risk having a higher pole rental fee apply to the provider's entire network. [emphasis added]

10.36 A regulatory framework where terms and conditions of pole access are matters to be negotiated between a utility and the attacher does not work. The FCC recognized this in its Report:[45]

> The record in this proceeding demonstrates that the current framework often results in negotiation processes that may be so

[44] Report, para. 3.
[45] Report, para. 6.

> prolonged, unpredictable, and costly that they impose unreasonable costs on attachers and may create inefficiencies by deterring market entry.

10.37 In the result, the FCC adopted a number of rules aimed at removing barriers to entry. These include a rule that establishes a four-stage timeline for granting access (with a maximum timeframe of up to 148 days) and a rule that requires an electricity distributor who rejects a request for attachment to explain the reasons why, in relation to capacity, safety, reliability or engineering concerns.[46]

10.38 The Applicant requests that the Board establish well-defined and equitable terms and conditions of access, similar to those adopted by the FCC. At a minimum, such terms and conditions should:

(i) establish commercially reasonable procedures (including a timeline) for the processing of applications for attachment permits and the performance of Make Ready Work;

(ii) establish technical attachment requirements, by reference to existing legislation that already "occupies the field"; and

(iii) establish a standard form of licensed occupancy agreement that provides for attachment permits with terms of at least 15 years from the date of attachment and that includes commercially reasonable renewal rights.

11.0 Interim Orders

11.1 CANDAS seeks interim relief to preserve the *status quo*, pending final action on this Application. In particular, CANDAS requests that no distributor be permitted to implement the sort of "no-wireless" policy articulated in the THESL Letter unless and until the Board determines that the CCTA order does not and should not pertain to

[46] Report, para. 8.

wireless attachments. CANDAS also asks that THESL and/or THESI be directed not to remove any wireless equipment from the 40,274 streetlighting poles that are now classified "distribution", as a consequence of the MADD Order.

11.2 CANDAS's request for interim relief meets the criteria established by the Supreme Court of Canada in *Manitoba v. Metropolitan Stores Ltd.*[47] An applicant for interim relief must meet the following three criteria: (i) there is a serious issue to be decided by the tribunal; (ii) the applicant would suffer irreparable harm if interim relief were denied; and (iii) the balance of convenience supports the grant of the requested relief, taking into consideration the public interest.

11.3 There can be no doubt that this Application raises serious issues such as whether THESL has breached the CCTA Order, whether access to power poles by all Canadian carriers is in the public interest and, generally, whether THESL's conduct has had and, if left unchecked, would continue to have an adverse impact on competition in the Ontario telecommunications sector.

11.4 Irreparable harm is harm that cannot be quantified. In this case, the harm to the members of CANDAS that would flow from the implementation of THESL's "no-wireless" policy would indeed be unquantifiable. If members of the public have no choice other than to subscribe to wireless services provided by wireless carriers who rely on traditional Macro Cell Site technology, the lost opportunity created by such consumer choices (or lack thereof) simply cannot be recouped.

11.5 The balance of convenience favours the *status quo*. Should CANDAS succeed on this Application, any wireless equipment already installed on THESL's or THESI's poles would be available for use by DAScom and ExteNet. On the other hand, were THESL and THESI permitted to remove the already attached equipment but, ultimately, were ordered to permit such attachments, the resulting delays and waste would be significant.

[47] [1987] 1 S.C.R. 110.

11.6 The facts of this case meet the criteria for the granting of interim relief. It is, accordingly, in the public interest for the Board to grant the interim relief that CANDAS seeks.

12.0 Costs

12.1 In the Smart Meter Case, the Board ordered THESL to pay the costs of all parties, including the Board's. CANDAS submits that THESL should also be directed to pay all parties' costs of this application. Here, as in the Smart Meter Case, THESL has unilaterally refused access in clear violation of the DSC, THESL's own licence and the CCTA Order.

13.0 Evidence

13.1 CANDAS relies on the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, sched. B, as amended, including without limitation, sections 1, 4(2), 19(1), 19(4), 19(6), 21(7), 23(1), 70(1.1), 70(2)(c) and 74.

13.2 The Applicant will also rely on such evidence as may be filed by it in support of this Application as counsel may advise and the Board may permit.

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