Goodmans LLP

Barristers & Solicitors

Bay Adelaide Centre
333 Bay Street, Suite 3400
Toronto, Ontario M5H 2S7

Telephone: 416.979.2211
Facsimile: 416.979.1234
goodmans.ca

Direct Line: 416.597.6286
rmalcolmson@goodmans.ca

September 19, 2011

Delivered by Email, RESS and Courier

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

Dear Ms. Walli:

Re: Board File No. EB-2011-0120 (CANDAS Application)
Canadian Electricity Association – Responses to Interrogatories of the Energy Probe Research Foundation (Energy Probe)

Pursuant to Procedural Order No. 2, dated August 26, 2011, and the letter of the Assistant Board Secretary, dated September 7, 2011, extending the deadline for filing responses to interrogatories on intervenor evidence, please find attached the responses of the Canadian Electricity Association (the CEA) to the interrogatories of Energy Probe in the EB-2011-0120 proceeding.

Yours very truly,

Goodmans LLP

Robert Malcolmson
Encls.

c.c. Helen T. Newland, CANDAS counsel (via e-mail)
Michael Schafler, CANDAS counsel (via e-mail)
Kristi Sebalj, OEB counsel (via e-mail and courier)
David MacIntosh, case manager, Energy Probe Research Foundation (via e-mail and courier)
All Parties (via e-mail)

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

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

RESPONSES TO INTERROGATORIES OF

THE ENERGY PROBE RESEARCH FOUNDATION ("Energy Probe")

(on the evidence of the Intervenor, the Canadian Electricity Association (the "CEA")

September 19, 2011

12.

Reference: LCC Report, p. 7

Issue: Emerging technologies

Question:

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

Response:

Please see response in CANDAS 5(c).

Additionally, numerous cities have embarked on Muni-Wi-Fi initiatives using one of the alternative technologies discussed. Below are some examples:

Canada

- Calgary, Alberta - Operated by WestNet Wireless, first city Wi-Fi in Canada.
- Cambridge, Ontario - paid service provided by Atria Networks for various locations throughout Waterloo Region, free at Central Public Library.
- Fredericton, New Brunswick - free, Fred-e Zone.
- Kitchener, Ontario - paid service provided by Atria Networks for locations throughout Waterloo Region, free at Kitchener Public Library branches.
- Mississauga, Ontario - free, wireless access at Mississauga Libraries, Community Centres and Arenas.
- Moncton, New Brunswick - free, service provided by Red Ball Internet of Moncton. Wireless access available at Arenas and Moncton's Public Library. It was also the first city in Canada to provide wireless internet on its public transportation fleet.
- Montreal, Quebec - free, community supported.
- Moose Jaw, Saskatchewan - free, city centre and campus.
- Prince Albert, Saskatchewan - free, city centre and campus.
- Quebec, Quebec - free, community supported ZAP Quebec.
- Regina, Saskatchewan - free, city centre and campus.
- Saskatoon, Saskatchewan - free, city centre and campus.
- Sherbrooke, Québec - free, limited to downtown, provided by ZAP Sherbrooke.

- Shawinigan, Quebec - free service, limited to downtown. City-operated.
- Toronto, Ontario - free service provided by Wireless Toronto and the Toronto Public Library system for locations throughout the Greater Toronto Area;
- Waterloo, Ontario - paid service provided by Atria Networks for locations throughout Waterloo Region, free at Waterloo Public Library branches.

United States

- Akron, Ohio – free wifi accross the downtown and University of Akron campus.
- Albany, New York – one hour free in downtown.
- Anderson, Indiana -through Anderson WiFi.
- Binghamton, New York - free service.
- Boston, Massachusetts & Brookline, Massachusetts - paid, through Galaxy Internet Services.
- Cambridge, Massachusetts - free (pilot), through the Cambridge Public Internet (CPI) Initiative.
- Clearwater Beach, Florida - free service.
- Corpus Christi, Texas - paid service, through Earthlink.
- Denver, Colorado - free Wifi in Downtown Denver.
- Elk Grove, California – Frontier Communications provides Wi-Fi throughout city.
- El Paso, Texas - free Wifi in downtown El Paso.
- Escondido, California - free service in downtown area and Public Library.
- Hollywood, Florida - Wi-Fi network for wireless automated meter reading (AMR), free Wi-Fi service for residents.
- Houston, Texas - free service in downtown area and selected neighborhoods around the city; free service also available in all Houston Public Library and Harris County Public Library branches .
- Honolulu, Hawaii - free, through Tri-Net Solutions LLC
- Kennesaw, Georgia - free, City of Kennesaw WiFi - available in city parks and other areas.
- Lawrence, Kansas - free, Lawrence Freenet, not-for-profit company that works in conjunction with the City of Lawrence and local internet providers.
- Madison, Wisconsin - paid, only covers central part of city.
- Maywood, California – free, city-wide.

- Miami Beach, Florida - free, covers most of the city outdoors.
- Minneapolis, Minnesota - paid, through USI Wireless.
- Mountain View, California – free, through Google WiFi.
- Pacifica, California - paid service, through PacificaNet.
- Peachtree City, Georgia - free at two parks and the public library, City Hall plaza.
- Philadelphia, Pennsylvania - free service, recently transferred from Earthlink to a local company.
- Pittsburgh, Pennsylvania - free downtown, two hours per day.
- Plattsmouth, Nebraska - free in all public buildings and Main Street.
- Powell, Ohio - free, covers downtown.
- Riverside, California - access via main street corridors.
- Skokie, Illinois - downtown and park areas.
- Southaven, Mississippi - paid service, city-operated, branded as Magnoliawave.
- Spokane, Washington - two free hours/day, paid after.
- Statesville, North Carolina- free access.
- Storrs, Connecticut - used for students of University of Connecticut.
- Springfield, Ohio - free, downtown and Clark State Community College campus.
- The Dalles, Oregon - free, via Google grant to downtown and key event areas. City-operated.
- Winston-Salem, North Carolina - free, limited to downtown. City-operated: no technical support.
- Yazoo City, Mississippi - paid network. Branded as Yazoo Wireless, Provided by CYTEC.
- Yorktown, Indiana - free, limited to downtown.
- Ocala, Florida - free, Downtown Square.

(http://en.wikipedia.org/wiki/Municipal_wireless_network)

13.

Reference: LCC Report, p.18

Issue: ODAS and utility pole attachment

Questions:

a. Please describe the membership of the Coalition of Concerned Utilities.

b. Are any of these members government-owned local distribution companies?

c. Has the Coalition made submissions on other topics to US regulators?

Responses:

a) The Coalition of Concerned Utilities is comprised of a diverse group of electric utility companies in terms of size, attacher relationships and operational characteristics. The membership of the Coalition of Concerned Utilities, at the time of the submission of the Coalition's comments cited in LCC's report, included the following:

Allegheny Power & First Energy

On February 25, 2011 FirstEnergy and Allegheny Energy's merged.
This company is headquartered in Akron, Ohio, and comprises the nation's largest investor-owned electric system based on serving six million customers in the Midwest and Mid-Atlantic regions**.** It is publicly traded on the NYSE.

Baltimore Gas and Electric

BGE is a subsidiary of Constellation Energy, a Baltimore-based Fortune 500 energy company that is a major generator of electricity throughout the U.S. and Canada and a leading supplier of energy products and services to wholesale and retail electric and natural gas customers. BGE delivers energy across almost 24,000 miles of electricity transmission and distribution lines, and more than 7,000 miles of gas main.

Dayton Power and Light

Dayton Power and Light is a subsidiary of Dayton-headquartered DPL Inc., a regional energy company with more than $4 billion in assets. Its 1,500 employees deliver electricity to more than 500,000 customers in 24 counties in the Miami Valley. DPL generates electricity at 10 power plants, mainly located along the Ohio River, and has approximately 3,700 megawatts of total generating capacity. It is publically traded on the NYSE.

National Grid

National Grid owns and operates regulated electricity and gas infrastructure networks in the U.K. and northeastern U.S. The company operates high voltage electricity transmission networks and gas distribution systems in the Great Britain, New York, and New England; gas transmission networks in the Great Britain; electricity distribution networks in New York and New England; and electricity generation facilities in New York. It is publically traded on New York and London Stock Exchange

NSTAR

NSTAR is a large, Massachusetts-based, investor-owned electric and gas utility, with revenues of approximately $3 billion and assets totalling approximately $8 billion. NSTAR transmits and delivers electricity and gas to 1.1 million electric customers in 81 communities and nearly 300,000 gas customers in 51 communities. NSTAR employs more than 3,000 employees in its regulated business.

PPL Electric Utilities

Headquartered in Allentown, Pa., PPL controls or owns about 19,000 megawatts of generating capacity in the U.S., sells energy in key U.S. markets, and delivers electricity and natural gas to about 10 million customers in the U.S and the U.K. It is publically traded on NYSE.

South Dakota Electric Utilities

South Dakota Electric Utilities is no longer operating as such.

Wisconsin Public Service Company

Wisconsin Public Service Company (WSPC) is a subsidiary of Integrys Energy Group, which is publically traded on NYSE. Integrys is headquartered in Chicago, Illinois, and its operating subsidiaries provide natural gas and electricity in regulated and unregulated markets.

b) No - to the best of LCC's knowledge, no members of the Coalition are members government-owned local distribution companies.

c) No - to the best of LCC's knowledge, the Coalition has not made submissions on other topics to US regulators.

14.

Reference: LCC Report, p.21

Issue: "first-mover" advantage

Question:

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

Response:

The ODAS technology is built deliberately to allow the signals from multiple mobile communications service providers to be distributed on the fibre portion of the system, and to be radiated from the antennas on the remote locations (on buildings, poles etc). From a technology perspective, this means that the first mover is in a better position to be the conduit for all subsequently mobile operators wanting to use antennas mounted in the same geographic area.

From a market perspective, the first mover's contract with the pole owner is the only method by which the pole owner will be paid for the first attachment to the pole. A second operator could indeed try and gain pole attachment rights, but as illustrated elsewhere, the equipment and logistics of securing even one pole attachment for an ODAS system is more complex than for a wireline attacher. The ability for a second or third mobile operator (typically in most competitive markets there are three or more) to be able to negotiate a deployment with the pole owner is more difficult, and so the first mover essentially governs the access to the ODAS distribution networks.

In the case of a wireline attachment, there is precedent for multiple wireline attachments from either the same or multiple wireline communications service providers, with coaxial cable, fibre and copper wire connections. The negotiation of each of these is with the owner of the utility poles, not with any of the other owners of other wireline attachers. It is atypical for these facilities to be shared, as these facilities are integrated into the software and systems of the network operator, so each has their own facilities requirements.

In summary:

A first-mover ODAS operator will control the access to the poles for any other competitor and will be able to set the price, even if the price it has paid to the utility pole owner may be at a below market price. This means that the owner of the pole for all practical purposes relinquishes its rights to negotiate with any future wireless operator desiring to install ODAS as part of its network. A first-mover wireline operator does not have any exclusive control over attachment rights, and, in fact, is only one of several operators who typically obtain rights to the poles. This also means that the owner of the utility pole gains revenues from each attachment.