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December 2, 2011

via RESS e-filing - signed original to follow by courier

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

Dear Ms. Walli:

Re: OEB File No. EB-2011-0120

> Toronto Hydro-Electric System Limited ("THESL") Updated Responses to Select Interrogatories of Canadian Distributed Antenna Systems Coalition ("CANDAS")

THESL writes in respect of the above-noted proceeding. In particular, THESL writes to provide updated responses to select interrogatories that are the subject of the CANDAS and CCC motions for further and better responses to certain interrogatories (the "Motions"). These interrogatory updates are provided pursuant to THESL's responding submissions dated November 15, 2011 in respect of the Motions, in which THESL indicated its willingness to update the following interrogatory responses (paragraph 4):

- CANDAS to THESL general interrogatory 4(a);
- CANDAS to THESL general interrogatory 4(f); and
- CANDAS to Yatchew interrogatory 20(b).

THESL encloses the three above-named interrogatory updates.

Yours truly,

[original signed by]

Amanda Klein

Senior Regulatory Counsel Legal Services Division Toronto Hydro Electric-System Limited regulatoryaffairs@torontohydro.com

Applicant and Intervenors of Record for EB-2011-0120, by electronic mail only CC: J. Mark Rodger, Counsel for THESL, by electronic mail only

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Interrogatory Responses

Tab 5.3 Schedule 4

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RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

1	INTERROGATO	ORY 4:
2	Reference (s):	none provided
3		
4	(a) Did THESL consult with any Canadian Carrier, including DAScom, Public Mobile,	
5	Rogers, Telus and Bell, prior to adopting its "no wireless" policy?	
6	(i) If yes, with whom did THESL consult?	
7	(ii) If yes, what feedback was received and from whom?	
8	(b) Was the THES	SL Letter served on affected and interested parties? If not, why not?
9	(c) As of August 1	13, 2010 how many separate parties had wireless equipment attached to
10	THESL poles? Pro	ovide the names of such parties, the number of poles attached to, the
11	type of the equipm	nent so attached, and the date on which those parties first started
12	attaching wireless	equipment to the THESL poles.
13	(d) Is it THESL's	intention to decline to review all attachment agreements with the
14	parties indentified	in response to (c) at the expiry of their pole attachment agreements
15	with THESL?	
16	(e) Is it THESL's	intention to require all parties, identified in response to (c), to remove
17	their wireless attac	chments from THESL poles at the expiration of the attachment
18	agreement?	
19	(f) Has THESL ha	ad any negotiations or discussions with any of the parties who have
20	attached wireless	equipment with respect to terms and conditions on which attachment
21	will be available in	n the future?
22		

RESPONSE:

23

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1	(a)	THESL disagrees with the premise of this question. THESL has not adopted a "no
2		wireless" policy. Please see the response in Tab 5.3, Schedule 1. Nevertheless,
3		THESL did not 'consult' with any Canadian Carriers with respect to the
4		formulation of its position that the CCTA Decision does not apply to wireless
5		attachments and that THESL was therefore under no obligation to permit those
6		attachments pursuant to the CCTA Decision.
7	(b)	THESL's letter was addressed to the Ontario Energy Board and as it was not filed
8		in the context of any proceeding, so THESL had no obligation to serve on any
9		particular parties.
10		
11	(c)	To produce this information would require an exhaustive examination of THESL's
12		records and cannot be completed within the timelines of this proceeding. The
13		information has questionable relevance and would be overly burdensome to
14		produce relative to its probative value (if any).
15		
16	(d)	THESL reviews matters of contractual negotiation on a case-by-case basis, and
17		declines to speak to future contingent events in this regard.
18		
19	(e)	Please see the response in (d) above.
20		
21	(f)	No. Please also see the response in (d) above.

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Tab 5.4

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RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS **COALITION INTERROGATORIES**

INTERROGATORY 20:

2	2 Reference(s): Yatchew, page	e 29, lines 23-24
3	3	
4	4 Dr. Yatchew states:	
5	5 "Wireline attachers are fundamentally	y different from wireless entities as the latter do not
6	6 require continuous corridors for place	ement of their wireless facilities."
7	7 (a) Confirm whether Dr. Yatchew rel	ies on the LCC International, Inc. report for his
8	8 understanding that wireless entities "	do not require continuous corridors for placement of
9	9 their wireless facilities."	
10	(i) If so, provide the specific e	excerpts from the LCC International, Inc. report
11	upon which Dr. Yatchew relie	es in this regard.
12	(b) Advise whether Dr. Yatchew relie	es on any other sources for his understanding that
13	wireless entities "do not require conti	nuous corridors for placement of their wireless
14	14 facilities."	
15	(i) If so, provide the all releva	nt references and specific excerpts upon which Dr.
16	16 Yatchew relies.	
17	17 (c) Advise whether Dr. Yatchew has	any personal knowledge or experience relevant to
18	the requirements or desirable features	s of the deployment of wireless facilities.
19	(i) If so, answer the following	questions. If Dr. Yatchew has no prior knowledge
20	or experience concerning the	placement of equipment on utility poles, Dr.
21	Yatchew need not answer the	following questions:
22	A. Explain how the un	ique contiguous nature of a pole route's design
23	23 differs from the requir	ed contiguous nature of a Greenfield wireless
24	network design to pro-	vide for basic mobile service coverage in a given
25	25 area.	

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Interrogatory Responses Tab 5.4

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RESPONSES TO CANADIAN DISTRIBUTED ANTENNA SYSTEMS COALITION INTERROGATORIES

B. Can fibre cables be strung overhead, from building rooftop, to towers, 1 2 to billboards or alternate structures on anything other than utility poles? C. Indicate whether Dr. Yatchew would agree that the installation of 3 wireless equipment on utility poles within 10 feet of the fibre optic cable 4 is more commercially viable than attempting to attach to buildings, 5 rooftops, towers or other structures, which will inevitably require fibre 6 lateral engineering and construction from the pole line to the building? 7 D. Would the cost, increased administrative burdens, disruptive nature of 8 underground construction, road and sidewalk restoration and other factors 9 and costs in building a fibre network to reach an alternative location 10 represent a barrier to entry to wireless carriers if wireless carriers were 11 refused access to utility poles? 12 E. If not, provide an economic and operational assessment that 13 demonstrates specifically what barriers to entry exist for wireline carriers 14 that do not exist for wireless carriers having to use alternate structures. 15 16 **RESPONSE:** 17 a) The LCC study is helpful and informative. 18 19 Moreover, it is reassuring that my conclusion, that "Wireline attachers are 20 fundamentally different from wireless entities as the latter do not require continuous 21 corridors for placement of their wireless facilities.", which I arrived at long before the 22 present proceeding, is confirmed by the engineering expertise underlying this 23 document. 24

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1	b)	My original understanding of the basic structure of networks providing wireless
2		services was acquired some years ago in the ordinary course of professional
3		experience, including during the period when I was a consultant to Bell Mobility
4		(1991 through 1994) providing short term market assessments and forecasts for their
5		cellular telephone sales. Documentation of the specific sources is therefore not
6		available. However, further details of my previous professional experience can be
7		located in the curriculum vitae, attached to my evidence filed with the Board in this
8		proceeding on September 2, 2011.

c) Please see below.

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- 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.

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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.
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

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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.