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**Susan Frank** Vice President and Chief Regulatory Officer Regulatory Affairs



# BY COURIER

March 24, 2010

Ms. Kirsten Walli Secretary Ontario Energy Board Suite 2700, 2300 Yonge Street Toronto, ON. M4P 1E4

Dear Ms. Walli:

EB-2009-0425 – Hydro One Networks' Section 92 – Toronto Midtown Transmission Reinforcement Project – Responses to North Rosedale Ratepayers Association List 2 Interrogatory Questions

I am three (3) paper of the Hydro One Networks' interrogatory responses to questions from North Rosedale Ratepayers Association filed on March 19, 2010.

The electronic copy of the responses and the evidence has been filed using the Board's Regulatory Electronic Submission System (RESS) and the proof of successful submission slip is attached.

Sincerely,

## ORIGINAL SIGNED BY SUSAN FRANK

Susan Frank

Attach.

c. EB-2009-0425 Intervenor (Electronic only)

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North Rosedale Ratepayers Association (NRRA) INTERROGATORY #1 List 2		
Interrogatory		
Reference:		
1) Section 4.8 - Key Issues Summ	ary and Hydro One Responses	
Preamble:		
Table 4-2 contains very general "I serious concerns.	Hydro One Responses" and fails to address a number of	
Question/Request:		
	following (emphasis added), particularly in the vicinity of	
-	ng area and the exit and intermediate shafts:	
ROUTE SELECTION		
a) Since the cost of tunneling see	ems very much higher than the cost of trenching, why isn't	
trenching, on the CPR corridor, be	eing seriously considered? Please provide Plans and/or	
Surveys showing full details of the	e existing use of the relevant portion of the CPR corridor	
with dimensions.		
COST OF BURYING TRANSMI	SSION LINE	
b) Please provide detailed cost con	mparisons for trenching and tunneling options	
INCONVENIENCE		
INCONVENIENCE		
c) "Hydro One recognizes that sor	<i>ne</i> neighbourhood disruption will occurthis <i>temporary</i>	
	<i>itigation measures</i> addressing resident concerns". For	
	rticularly in the vicinity of the main-shaft and construction	
· •	isruption, in the form of heavy truck traffic, construction	
	ition will be both severe and long-lasting, since	
construction of the Project is expe	cted to last nearly 3 years. Please provide detailed	
comparisons of all such factors rel	levant to trenching and to tunneling.	
LOCATION OF SHAFTS AND O	CONSTRUCTION STAGING AREAS	
N TT · · · · · · · · · · · · · · · · · ·		
	given to placing the main-shaft and construction staging	
area on the west side of Mt. Please	ant Koau? Flease provide details.	
TRAFFIC		
e) "Hydro One will make <i>best effect</i>	orts to schedule construction activities in order to minimize	
	" Please explain in detail and provide comparisons of all	

such factors relevant to trenching and to tunneling. 

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1 2	NC	DISE AND EMISSIONS FROM VEHICLES
3 4 5 6 7 8 9	as dis dis its	<i>'Standard best practices</i> will be followed to ensure <i>typical</i> construction disturbances, such noise, are <i>minimized</i> . What does Hydro One consider to be "typical construction turbances" in a residential neighbourhood? What steps will Hydro One take to ensure that contractors and sub-contractors also use well maintained equipment and noise silencers at times?
10 11	-	What specific "best practices" will be taken to minimize emissions from vehicles during paration and construction of the Project?
12 13 14	VI	BRATION
15 16 17		Please provide detailed support for the statement that that "During the boring of the deep k tunnel, there will be no noticeable vibration at surface."
18 19	<u>Re</u>	<u>sponse</u>
20	0)	Saa raapanaa to Board Staff Interrogatory 5 (Exhibit C. Tab 1. Sabadula 5)
21 22	a)	See response to Board Staff Interrogatory 5 (Exhibit C, Tab 1, Schedule 5).
23 24	b)	See responses to Board Staff Interrogatories 5 and 6 (Exhibit C, Tab 1, Schedule 5).
25 26	c)	See response to Board Staff Interrogatory 6 (Exhibit C, Tab 1, Schedule 6).
27 28 29	d)	Hydro One has not considered placing the main-shaft and the construction staging area on the west side of Mt. Pleasant for the following reasons:
30 31 32 33 34 35 36 37 38		<ol> <li>Hydro One has property at the proposed location and not at the west side of Mt. Pleasant which is owned by the City of Toronto. We understand that there are future plans for the Toronto Water plant to be extended in this area and adequate space will not be available for our requirements.</li> <li>Our current proposed main shaft location is closer to the middle of the tunnel which is desirable for construction and future cable pulling.</li> <li>We believe that it will be less impactful on the community for construction traffic to turn north from Carstowe onto Mt. Pleasant rather than south toward the downtown core.</li> </ol>
39 40	e)	See response to Board Staff Interrogatory 6 (Exhibit C, Tab 1, Schedule 6).
41 42 43 44 45	f)	Typical construction disturbances that would impact the community would be noise, dust, construction vehicles and traffic disruptions all of which have been considered during initial planning and recorded in our ESR. Contractors will have to comply with City noise by-laws. Hydro One will also request contractors to use construction

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equipment which will be monitored to assess noise levels, action will be taken when necessary to reduce noise to acceptable levels. As indicated previously Hydro One intends to erect a 12' temporary noise attenuation fence around the construction compound area.

g) Hydro One's contractors and sub-contractors will be monitored to ensure that they
 follow municipal idling bylaws. We will also obtain a site specific power service to
 eliminate the requirement for portable generators as much as possible.

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h) Hydro One has not done a detailed engineering assessment and design because the project is still in the approval phase. Hydro One's past tunnel experience together
with industry expert opinion on this subject matter, provides us with assurance that no
measureable vibration is likely to occur. At our downtown location we tunneled very
close to the street limit of the CBC building on Front St., the Flatiron building on
Front, and not too far from the Hockey Hall of Fame and none of these building
occupants noticed any vibration from our tunneling.

17

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1	North Rosedale Ratepayers Association (NRRA) INTERROGATORY #2 List 2
2	$\frac{1}{10} \frac{1}{10} \frac$
2	Interrogatory
4	<u>Interrogatory</u>
5	Reference:
6	I) Section 5.4 - Construction Method Selection (Trenching or Tunnelling)
7	2) Section 6 - Project Description
8	
9	Preamble:
10	Trenching versus Tunnelling - Section 5.4 briefly discusses two alternative methods of
11	construction to undertake the cable section between Bayview Jet and Birch Jet and certain
12	advantages and disadvantages of each. Section 6 describes the Project as involving
13	construction using the "rock tunnel method and construction of five associated shafts"
14	between Bayview Jet and Birch Jet. However, the ESR does not examine the environmental
15	issues associated with trenching or compare their impact with those associated with
16	tunneling.
17	
18	Question/Request:
19	Please provide an Addendum to the ESR containing an examination of the environmental
20	issues associated with trenching and a comparison of the environmental impact of trenching
21	and the environmental impact of tunneling.
22	
23	Demonstra
24	<u>Response</u>
25	The questions raised by NDDA are related to the content in the ESD and are best addressed
26 27	The questions raised by NRRA are related to the content in the ESR and are best addressed via the environmental assessment (EA) process. In order to avoid overlapping of
27	jurisdictional responsibilities and to address the questions raised by the NRRA, Hydro One
28 29	suggests the Association direct their comments/questions to the Hydro One EA contact

- person, as indicated in Attachment 1 to this response. 30
- 31

A comparison of trenching versus tunneling is described in detail in Section 5.4.1 of the 32

ESR. If the NRRA requires additional information, they should submit a detailed request to 33

Hydro One, as directed in Attachment 1. 34

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# NOTICE OF COMPLETION – Draft Environmental Study Report – Midtown Electricity Infrastructure Renewal Project ("Midtown Project")





Hydro One Networks Inc. (Hydro One) has completed the draft Environmental Study Report (ESR) for the proposed Midtown Project. The purpose of this undertaking is to address the need to refurbish the aging 115 kilovolt (kV) transmission infrastructure which currently serves the midtown Toronto area, and add additional capacity to ensure a continued and reliable power supply. This need was identified in a joint planning review between Hydro One and the Toronto Hydro Electric System Limited.

The proposed undertaking consists of the following:

- 1. Leaside Transformer Station (TS) to Bayview Junction (Jct)
  - Install an additional 115 kV overhead circuit (wire) to relieve loading on the existing two circuits between Leaside TS and Bayview Jct. New towers (combination of lattice towers and steel poles) will replace the existing towers on the existing right-of-way.

#### 2. Bayview Jct to Birch Jct

 Replace an aging underground cable and add a second cable using a deep-rock tunnel 60-70 metres below ground. This option would also require the installation of five shafts along the proposed route to provide access for construction and future maintenance. The main shaft and construction staging area will be located on Hydro One's property east of Carstowe Road (C). The approximate locations of the proposed exit and intermediate shafts are shown in more detail on the maps above.

#### 3. Birch Jct to Bridgman TS

- Replace and restring the 115 kV overhead lines on the existing towers.
- 4. Leaside TS, Bayview, Birch and Bridgman Junctions Install new equipment associated with the line and cable
  - refurbishments within Hydro One's property at these sites.

## How to Provide Your Input

In accordance with the Class Environmental Assessment for Minor Transmission Facilities, a draft Environmental Study Report (ESR) will be available for public review and comment for 45-days, from March 8 to April 21, 2010. The draft ESR can be viewed on Hydro One's website www.HydroOne.com/projects/midtown.

A copy of the draft ESR is available at the following locations. Call for hours of operation.

**City Clerk's Office** Toronto City Hall 100 Queen Street West. 13th Floor West Tel: 416-392-8018

**Toronto Reference Library** 789 Yonge Street Tel: 416-395-5577

**Toronto Public Library -Deer Park Branch** 40 St Clair Ave. East Tel: 416-393-7657

Toronto Public Library -**Leaside Branch** 165 McRae Drive Tel: 416-396-3835

Written questions or comments on the draft ESR must be received by Hydro One no later than 4:30 p.m. on April 21, 2010. Please address correspondence to:

Ms. Yu San Ong Environmental Planner, Environmental Services & Approvals Hydro One Networks Inc. 483 Bay Street, South Tower, 4th Floor Toronto, ON M5G 2P5 Tel: 416-345-5031 Fax: 416-345-6919 Email: yusan.ong@HydroOne.com

Hydro One will respond to and make best efforts to resolve any issues raised by concerned parties during the public review period. If no concerns are expressed, the ESR will be finalized and filed with the Ministry of the Environment (MOE). The project will be considered acceptable and will proceed as outlined in the draft ESR. The Environmental Assessment Act has provisions that allow interested parties to ask for a higher level of assessment for a Class EA project if they feel that outstanding issues have not been adequately addressed by Hydro One. This higher level of assessment is referred to as a Part Il Order request. Such requests must be addressed in writing to the Minister of the Environment and received no later than 4:30 p.m. E.S.T. on April 21, 2010, at the following address:

## Minister of the Environment

135 St. Clair Avenue West, 12th Floor Toronto, ON M4V 1P5

Please note that a duplicate copy of a Part II Order request must also be sent to Hydro One at the address noted above.

For more information call 416-345-6799 or visit our website: www.HydroOne.com/projects/midtown





electric system

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1	North Rosedale Ratepayers Association (NRRA) INTERROGATORY #3 List 2
2 3	Interrogatory
4 5 6	<b>Reference:</b> I) Section 7 - Potential Environment Effects and Mitigation Measures
7 8 9 10	<b>Preamble:</b> Tables 7-1 and 7-2 are very general in terms of both "Proposed Mitigation" and "Residual (Net) Effects" and fail to address a number of serious environmental concerns.
11 12 13 14	<b>Question/Request:</b> Please be more specific about the following <i>(emphasis added)</i> , particularly in the vicinity of the main shaft / construction staging area and the exit and intermediate shafts:
15 16	AIR QUALITY & NOISE
17 18 19	a) <i>"effective</i> dust suppression techniques" - what kind and amount of dust and debris will this Project generate and what chemicals and toxins will they contain?
20 21	b) "Cheminfo (2005) best practices to minimize effects on air quality" - provide full copy
22 23 24	c) "locate access routes and lay down areas away from residences to the extent possible"
25 26 27 28	d) <i>"noise</i> levels will conform to municipal noise by-law" - provide full copy of relevant bylaw (bearing in mind that an industrial type operation is being proposed in the heart of an well-established, low density residential neighbourhood) - what will be the maximum noise level associated with the Project?
29 30 31	e) "suitable noise controls or silences, as required" - please specific the types of equipment and proposed noise controls
32 33 34	f) Please provide complete plans and specifications for fences and gates to surround and secure the main-shaft / construction staging area and the exit and intermediate shafts.
35 36 37 38	g) Air pollution and odours caused or released by the Project or related activities – please provide complete details of all emissions, including those from truck traffic, cranes, ventilation fans
39 40 41 42 43	h) It was our understanding that construction activity would be limited to the hours of 7:00 a.m. to 7:00 p.m. weekdays, but not on Saturdays, Sundays and public holidays. This is a residential neighbourhood. Please explain why it would be acceptable to have industrial type activity being conducted in a residential neighbourhood on weekends and

Filed: March 19, 2010 EB-2009-0425 Exhibit C Tab 3 Schedule 4 Page 2 of 2 public holidays. What exactly do you mean by "if activities need to be extended to 1 2 facilitate their completion"? 3 VIBRATION Please provide complete details. 4 5 TRAFFIC 6 7 i) Will Carstowe Road withstand the loading from the extremely heavy truck traffic that 8 is proposed? Please provide details. 9 10 j) Dozens of heavy trucks will create serious air pollution. Please provide study of this 11 issue 12 13 k) Please provide details of arrangements to ensure that truck traffic serving the project 14 will, with the exception of Carstowe Road, use only major arterial roads and not the local 15 streets in Rosedale and Moore Park 16 17 **AESTHETICS - DURING PREPARATION AND CONSTRUCTION PERIODS** 18 19 1) Please provide details consistent with verbal assurances previously received from Mr. 20 Goodfellow. 21 22 23 **Response** 24 25 These questions are best addressed as a part of the EA process. We will forward these 26 detailed questions to the Hydro One EA contact, where they will be addressed as part of 27 that process. 28 29 Responses to Board Staff Interrogatories 16 and 17 (Exhibit C, Tab 1, Schedules 16 & 30 17), Toronto District School Board Interrogatory 2 (Exhibit C, Tab 2, Schedule 2), and 31 NRRA Interrogatory 1 (Exhibit C, Tab 3, Schedule 1) provide additional information on 32

33 construction and community impact.