Osler, Hoskin & Harcourt LLP Box 50, 1 First Canadian Place Toronto, Ontario, Canada M5X 1B8 416.362.2111 MAIN 416.862.66666 FACSIMILE



Toronto

April 23, 2008

Gordon M. Nettleton Direct Dial: 403.260.7047 gnettleton@osler.com

Our Matter Number: 1099714

Montréal

Ottawa

BY ELECTRONIC MAIL & COURIER

Calgary

New York

Ontario Energy Board P.O. Box 2319 2300 Yonge Street

Suite 2700

Toronto, ON M4P 1E4

Attention: Ms. Kirsten Walli, Board Secretary

Dear Ms. Walli:

Re: EB-2007-0050 - Hydro One Networks Inc. ("Hydro One") - Bruce to Milton

Transmission Reinforcement Project

Please find enclosed for filing the interrogatory requests of Hydro One to the Saugeen Ojibway Nation.

Yours very truly

Gordon M. Nettleton

GMN:njm

All Interested Parties in EB-2007-0050

1 2		Hydro One Networks Inc. ("Hydro One") – Saugeen Ojibway Nation ("SON") INTERROGATORY 1	
3	D.	f (-). D11 ACC 1	
4		f. (a): Russell Affidavit, para. 3	
5		f. (b): Exh. B /T 6/ Sch 5	
6		f. (c): Exh. C/T 11/S1/Attachment A	
7		f. (d): Exh. B/T1/S 1/p. 3 f. (o): Exh. B/T6/S5/A7	
8 9	Ne	f. (e): Exh. B/T6/S5/A7	
9 10	Dr	eamble: Hydro One requires more information concerning Mr. Russell's	
11 12		derstanding of the policy direction underlying the project.	
13 14	Re	f. (a) discusses Ontario policy influences on the Project's design.	
15 16	Re	f. (b) contains Ontario wind power and renewable energy objectives.	
17 18		f. (c) directs the OPA to acquire 2,000 MW of new renewable electricity supply from ejects that are greater than 10 MW in size.	
19	1		
20 21	Re	f. (d) contains the OPA's wind generation forecast for the Bruce Area.	
22 23	Ref. (e) directs the OPA to plan for nuclear capacity to meet base-load electricity requirements, but limit the installed in-service capacity of nuclear power over the life of		
24 25	the	plan to 14,000 MW.	
26 27	Qu	nestions:	
28 29 30 31	a)	When did Mr. Russell first come to understand the Government of Ontario's policy directives concerning renewable energy generation, as more particularly described in Hydro One's application in Ref. (b)?	
32 33 34 35	b)	Please explain how Mr. Russell took into account the Minister of Energy's Directive dated August 2007 in Ref. (c) for the procurement of up to 2,000 MW of large wind Renewable Energy Supply, in addition (i.e., incremental) to the generation within the Standard Offer Program, the RES I and RES II programs.	
36 37	c)	Please list the geographical areas that Mr. Russell assumed, in his consideration of	
38 39		Ref (c), as to the location of the source(s) of incremental renewable energy supply. Please provide the analysis that Mr. Russell conducted into the ability for all of the	
40 41 42		2,000 MW of large wind Renewable Energy Supply to be sourced from the identified geographical areas, including all comparative cost estimates, to increase the required transfer capability from those areas and in order to meet the Minister's Directive.	
13 14	4)	OPA's forecast has assumed that of the 2,000 MW which the Minster of Energy has	
45 46	u)	directed OPA to procure, 700 MW (or approximately 35%) is expected to be sourced from the Bruce Area by 2015 (Ref (d)). Does Mr. Russell accept that his suggested	

use of generation rejection and series compensation would not provide the necessary
 transfer capability for this incremental level of wind generation, in satisfaction of the
 Minister's Directive? If not accepted, please fully explain your response.

4 5

e) What other geographic locations in Ontario does Mr. Russell believe would be able to make up the 700 MW shortfall and that would otherwise be necessary to access in order to meet the Minister's Directive?

7 8

6

f) In light of Ref. (e) and the obligation to plan for a nuclear base-load, limited to 14,000 MW, does Mr. Russell consider it to be reasonable, or not, from a transmission planning system perspective, for the OPA to reflect in its long-term Bruce area generation forecast a level of nuclear generation capacity equal to the capacity of 8 units for the period beyond 2015?

1		HONI – SON INTERROGATORY 2	
2			
3	Re	f. (a): Russell Affidavit at para. 22.	
4			
5	Preamble: Ref. (a) discusses circulating loop flow concerns resulting from the proposed		
6	project. Hydro One requires more information to understand and test this concern.		
7			
8	Questions:		
9			
10	a)	Please provide any studies that Mr. Russell has completed or relies upon that	
11		quantifies the impact of loop flow with respect to the applied-for Bruce to Milton	
12		transmission facilities.	
13			
14	b)	What analysis has been undertaken by Mr. Russell that quantifies the effects of loop	
15		flow arising from the implementation of his generation rejection/series compensation	
16		alternative?	

1	HONI – SON INTERROGATORY 3	
2		
3	Re	f. (a): Russell Affidavit, paras. 26-32
4	Re	f. (b): Russell Affidavit, paras. 33-56
5	Re	f. (c): Exh. KT.1, Panel 1 Technical Conference Presentation
6	Re	f. (d): Exh. C /T5 / S 16
7		
8		eamble: Hydro One requires more information concerning Mr. Russell's
9	uno	derstanding of the Ontario transmission system.
10		
11		fs. (a) and (b) explain Mr. Russell's view that series compensation and generation
12	rej	ection are a viable project alternative.
13		
14	Refs. (c) and (d)describe the generation moratorium imposed by the OPA in the Bruce	
15	Ar	ea ("orange zone").
16	_	
17	Qu	estions:
18		
19	a)	Does Mr. Russell agree that implementation of his generation rejection/series
20		compensation alternative will require the moratorium relating to "orange zone"
21		generation (Refs. (c) and (d)) to continue over an indefinite period? If not, please
22		fully explain.
23	1. \	If a manufacture of the manufacture of the manufacture is
24	D)	If agreement is provided, please discuss whether continued use of the moratorium is
25		likely to have a positive or negative effect on the development of renewable
26		generation sources from the Bruce area in the future?
27 28	a)	If agreement is not provided, what level of congestion does Mr. Russell expect to
29	()	exist through relaxation of a moratorium during times when all renewable resources
30		are available? Please provide the analysis used to support this response.
31		are available. Thease provide the analysis used to support this response.
32	4)	Please state the Canadian jurisdictions that Mr. Russell is familiar with in which
33	u)	increased transmission congestion is considered to be a "sound" transmission system
34		planning principle? Provide all supporting evidence to support this view.
JT		planning principle. Trovide an supporting evidence to support and view.

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2		
3	Re	f. (a): Russell Affidavit at para. 47.
4		
5	Pr	eamble: Hydro One requires more information concerning Mr. Russell's
6	un	derstanding of generation rejection and the Bruce Special Protection System.
7		
8	Re	f (a) contains Mr. Russell's view that continued long term reliance on generation
9	rej	ection and the Bruce Special Protection System, as at present, is reasonable.
10		
11	Qι	nestions:
12		
13	a)	Please have Mr. Russell indicate the North American jurisdictions in which it is a
14		"routine" planning principle to automatically trip multiple nuclear units in response to
15		a transmission contingency. Please provide copies of all planning standards that
16		contain such a principle.
17		
18	b)	Please state the maximum number of hours that Mr. Russell considers to be
19		reasonable (in each year) for the transmission system to use generation rejection as a
20		means of meeting normal operation transfer capability requirements? Please provide a
21		full explanation for the answer provided.
22		
23	c)	Please state the maximum number of hours of planned generation rejection use that
24		Mr. Russell considers to be reasonable (in each year) for the design of transmission
25		system requirements. Please provide a full explanation for the answer provided.

HONI – SON INTERROGATORY 4

1		HONI – SON INTERROGATORY 5	
2 3	P ₀	f. (a): Russell Affidavit at para. 47	
4	IXC	1. (a). Russen Amuavit at para. 47	
5	Pr	eamble: Ref (a) discusses the Ontario Resource and Transmission Assessment Criteria	
6	("ORTAC"). Hydro One is interested in Mr. Russell's understanding of the content and		
7	application of the ORTAC.		
8	_		
9	Qı	nestions:	
10 11	۵)	In developing Mr. Dyggall's evidence what stone if any, years taken to confirm the	
12	a)	In developing Mr. Russell's evidence what steps, if any, were taken to confirm the reasonableness of his interpretation of the ORTAC with the IESO as it concerns the	
13		acceptability of Mr. Russell's "proposed alternative"?	
14		acceptationity of twit. Rusself & proposed atternative .	
15	b)	Does Mr. Russell accept that a contingency involving two adjacent circuits on a	
16		multiple circuit tower (e.g., a double-circuit line) is an ORTAC "transmission design	
17		criterion" contingency? If not, please fully explain why not.	
18			
19	c)	If so, does Mr. Russell understand that the IESO does not consider this contingency to	
20 21		be an "exceptional circumstance"? If not, please fully explain why not. In your	
22		response please refer to all ORTAC planning standards that support this view.	
23	d)	If so, does Mr. Russell accept that a special protection system cannot be relied upon	
24	α,	to meet this contingency under ORTAC design criteria? If not, please fully explain	
25		why not. In your response please refer to all NPCC planning standards that support	
26		this view.	