

Hydro One Networks Inc.

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Andrew Skalski

Director – Major Projects and Partnerships
Regulatory Affairs



BY COURIER

September 13, 2012

Ms. Kirsten Walli
Secretary
Ontario Energy Board
Suite 2700, 2300 Yonge Street
P.O. Box 2319
Toronto, Ontario
M4P 1E4

Dear Ms. Walli:

**EB-2012-0181 – Orangeville Hydro Limited – Application for Service Area Amendment –
Hydro One Networks Inc. Interrogatory Responses**

Please find attached two (2) hard copies and an electronic copy of responses provided by Hydro One Networks Inc. to interrogatory questions from Board Staff.

Sincerely,

ORIGINAL SIGNED BY JOANNE RICHARDSON FOR ANDREW SKALSKI

for
Andrew Skalski

c – Orangeville Hydro Limited (Electronic Only)
Intervenors (Electronic Only)

Ontario Energy Board (Board Staff) INTERROGATORY #1 List 1

Interrogatory

Reference: Hydro One's Evidence, Page 5

Hydro One states "*HONI's design and cost to connect includes an internal loop feed. As per OHL's response to Board Staff's IR 2a, OHL's cost to connect does not include an internal loop feed.*"

- a. Please explain whether inclusion of internal loop feed in Hydro One's design and cost to connect has been triggered by the requirements to service the proposed amendment area.
 - i. If yes, please provide a detailed explanation addressing the requirements to include the internal loop feed.
 - ii. If not, please provide reasons for inclusion of the internal loop feed in Hydro One's cost to connect the development.
- b. Does Hydro One believe that regardless of which distributor service the proposed development the internal loop feed is necessary to service the area? Please provide reasons.

Response

- a. The internal loop feed has been triggered by the requirements to service the proposed development. In fact, because the loop feed design increases reliability, its use is consistent with the HONI underground standards for residential subdivisions which state that 'the electric supply to residential subdivisions shall be planned for an eventual loop feed system, terminated on separate riser/dip poles, kiosks or switchgear'. This loop feed design will enable isolating faults and restoring power to the rest of the subdivision customers by feeding the customers downstream of the faulted section from an alternate source.
- b. Yes, because of the reasons stated in a. above.

1 **Ontario Energy Board (Board Staff) INTERROGATORY #2 List 1**

2
3
4 **Interrogatory**

5
6 Reference: Hydro One's Evidence, Page 5

7
8 Please describe the density of Hydro One's distribution system in the area adjacent to the
9 proposed amendment area, from which Hydro One could supply the proposed
10 development (i.e. low, medium, or high) and how does it compare with OHL's system,
11 from which OHL proposes to supply the proposed development.

12
13 **Response**

14
15 HONI has a well-developed distribution system currently serving low-density customers
16 in the area adjacent to the proposed development. The residence in the proposed
17 development will be classified as Residential R1 which, as per HONI's Conditions of
18 Service, is the rate class for year-round residences in a Medium Density Zone. Regional
19 planning and investments have been made and are planned to handle the increased
20 customer growth and move to urban density in the area. HONI's distribution system is
21 currently lightly loaded compared to OHL's system and has sufficient capacity capable of
22 servicing the proposed development and future load growth.

Ontario Energy Board (Board Staff) INTERROGATORY #3 List 1

Interrogatory

Reference: Hydro One's Evidence, Page 8, Table - Comparison of connection costs between HONI and OHL

Board staff had difficulty reconciling the amounts provided by Hydro One in the table on page 8 of its evidence to the amounts included in Hydro One's offer to connect filed by OHL with its revised application dated May 10, 2012. Also there appears to be inconsistency with assumptions for customer connection schedules as well as average monthly consumption used by Hydro One and OHL in their respective calculations of capital contribution required from the customer.

a. Please provide Hydro One's economic evaluation based on methodology and inputs described in Appendix B of the Distribution System Code for 114 units. Please provide a detailed description of all capital costs included in economic evaluation. Please provide the capital contribution amount resulting from the economic evaluation, which will be required from the customer.

b. Please prepare the economic evaluation based on average consumption of 700 kWh in order to make projection of incremental revenue and O&M expenses comparable with OHL's.

c. In OHL's economic evaluation it is assumed that customer connections are staggered over five years, while in Hydro One's offer to connect it is assumed that all customers are connected in one year.

Please prepare your economic evaluation based on five year connection schedule so that Hydro One's economic evaluation is comparable with OHL's.

d. In its interrogatory 4, Hydro One stated that it estimates relocation and removal costs of existing line to be \$175,853.80.

Please explain why costs for relocation of existing line included in Hydro One's comparison table amount to \$98,834 for Hydro One and \$175,854 for OHL.

Response

a. The cost comparison table in HONI's evidence on page 8 was based on a revised Offer to Connect ("OTC") that was requested by the developer due to a change in the design of the development. Included as Attachment #1 of this interrogatory response is a copy of HONI's updated OTC. This OTC was not previously provided to the developer because the approval of the location of underground facilities was awaiting

1 Township approval. HONI has now provided a copy of the OTC to the developer and
2 has also attached a copy to this interrogatory response for reference. This OTC is
3 based on 114 units. Schedule 'F' of this OTC includes the details of the economic
4 evaluation. The DCF used to obtain these calculations is based on the methodology
5 and inputs described in the Distribution System Code. Schedule 'A' in this OTC
6 includes a detailed breakdown of the items included in the Contestable and Non-
7 Contestable costs. Schedule 'F' also describes the capital contribution amount
8 resulting from the economic evaluation, which will be required from the customer.
9 Although HONI has provided the foregoing information, the fact remains that the
10 total costs to the developer should not be a factor in this proceeding because,
11 consistent with the principles established in RP2003-0044, the Board should
12 undertake a comparison of the total overall costs to connect the new development to
13 the distribution system, regardless of who is paying, in determining whether a
14 neighbouring LDC should be awarded the territory.

15
16 b. HONI's economic evaluation is generated by using Board Staff-approved
17 methodology to produce a customer specific Offer to Connect based on specific
18 average load calculations for the houses being built for each development. These
19 factors include the size of the homes being built and major appliance usage such as
20 electric heating, electric water heating and air conditioning. These loads are further
21 based on the latest building codes to predict the latest heat loss efficiencies. This
22 results in the connection-specific 1,069kWh load forecast that is included in HONI's
23 economic evaluation. OHL, on the other hand, has simply used the average monthly
24 consumption for OHL's residential rate class of 700kWh, an approach which Board
25 Staff have directed HONI not to use since it does not provide an Offer to Connect
26 specific to the connection requested by the customer and is therefore non-compliant.
27 It therefore seems inappropriate for HONI to redo its specific customer analysis for
28 the purpose of utilizing OHL's non-compliant average consumption rate. In addition,
29 HONI's integrated DCF model is not easily manipulated to plug in such an arbitrary
30 monthly consumption number rather than the appropriately derived 1,069kWh
31 forecast. Because inputting a different usage such as 700kWh and staggering the
32 customer connections over 5 years does not work with HONI's business model,
33 HONI is unable to provide that calculation today. It is a lengthy calculation that can
34 be done manually but could not be completed for today's filing. It will be provided
35 by HONI no later than next Wednesday, September 19, 2012, but will not delay
36 HONI's submissions, which are due on Thursday, September 20, 2012.

37
38 c. Please refer to HONI's response to Boards Staff IR #3b.

39
40 d. The costs for the relocation of the existing line for HONI is \$98,834, whereas it is
41 \$175,854 for OHL, because HONI has incorporated this relocation into the design of
42 the development. HONI will be incorporating the new feeder underground through
43 the development and tied into the supply of the new homes. If OHL supplies the
44 development, the existing line will have to be relocated through the Township of
45 Grand Valley via overhead lines on Joint Use poles. The line cannot be underground
46 through the development if the development is awarded to OHL. Therefore, it is

- 1 more efficient and cost-effective for HONI to retain the service territory and make
- 2 best use of existing resources.

MULTI-SERVICE CONNECTION COST AGREEMENT

Between

Thomasfield Homes Ltd.

And

Hydro One Networks Inc.



for

Mayberry Hill Subdivision Phase 1

THOMASFIELD HOMES LTD. (the “Developer”) has requested and **HYDRO ONE NETWORKS INC.** (“Hydro One”) has agreed to perform certain work pertaining to the connection of the project described below, on the terms and conditions set forth in this Multi-Service Connection Cost Agreement dated this **12th day of September 2012**, (the “Agreement”). The attached Standard Terms and Conditions for Multi-Service Connection Projects V1 06-2011 (the “**Standard Terms and Conditions**”) and the following schedules, as amended, supplemented or restated from time to time, are to be read with and form part of the Agreement:

- Schedule “A” (Description of the Non-Contestable Work and the Contestable Work);
- Schedule “B” (Description of Civil Work);
- Schedule “C” (Specifications);
- Schedule “D” (Hydro One Design - Drawing # **00333-12-002 R5**)
- Schedule “E” (Developer’s Load Forecast)”
- Schedule “F” (Economic Evaluation Results)
- Schedule “G” (Option A/Option B Chart)
- Schedule “H” (Form of Transfer of Ownership of Primary Distribution System, Secondary Distribution System, Line Expansion and Residential Service Cables)
- Schedule “I” – certified copy of the Band Council resolution where the Developer is a Band of Indians, authorizing the execution of this Agreement and the issuance of any permits required under Section 28(2) of the *Indian Act* (Canada).

Unless otherwise defined herein, all capitalized terms herein shall have the meaning ascribed to them in the Standard Terms and Conditions.

I. Project Summary

The Developer is planning to:

expand or develop a residential subdivision known as Mayberry Hill Subdivision Phase 1 at the property located at Lot 29 and 30, Concession 2 and 3, Township of East Luther Grand Valley in the County of Dufferin as more particularly described in PIN _____, and where a plan of subdivision has been registered as _____ at __:__ a.m./p.m. on the _____ day of _____, _____ (the foregoing being hereinafter described as “**Project**”).

The Developer hereby agrees to proceed with one of the following options:

Option A: Hydro One performs the Non-Contestable Work and the Contestable Work; or

Option B: The Developer performs the Contestable Work and Hydro One performs the Non-Contestable Work,

by confirming its' selection of the appropriate option contained in below:

The Developer hereby elects Option A by checking the box below and initialling where specified below and agrees with and accepts all the figures contained in the Option A Chart set out in Schedule "C".

Option A ☐ _____ (Developer's Signatories' Initials)

The Developer hereby elects Option B by checking the box below and initialling where specified below and agrees with and accepts all the figures contained in the Option B Chart set out in Schedule "C".

Option B ☐ _____ (Developer's Signatories' Initials)

II. Term

Except as expressly set out in this Agreement; this Agreement shall be in full force and effect and binding on the parties upon execution by both parties and shall terminate on the 7th anniversary of the Energization Date. Termination of the Agreement for any reason shall not relieve either party of its liabilities and obligations existing under the Agreement at the time of termination. Termination of this Agreement for any reason shall be without prejudice to the right of either party, including the terminating party, to pursue all legal and equitable remedies that may be available to it including, but not limited to, injunctive relief.

III. Impact on Agreement if Developer Fails to Execute the Agreement by the Required Execution Date

All amounts quoted in the applicable Option A Chart or the Option B Chart (including, but not limited to, the Firm Offer and the estimate of Available Support and the estimate of the Capital Contributions will only be remain valid until the Required Execution Date (see Part IV below).

This Agreement shall be null and void and neither party shall have any further liability or obligation to the other if the Developer fails to do any of the following by the Required Execution Date:

- (i) execute and deliver this Agreement to Hydro One; or
- (ii) Deliver the Capital Contribution to Hydro One upon the execution of the Agreement by the Developer; or
- (iii) Deliver the Expansion Deposit to Hydro One upon the execution of the Agreement by the Developer; or
- (iv) Deliver proof of insurance as required under the terms of this Agreement upon the execution of the Agreement by the Developer; or
- (v) Deliver a certified copy of the Band Council resolution upon the execution of the Agreement by the Developer where the Developer is a Band of Indians with such Band Council Resolution authorizing the execution of this Agreement and the issuance of any permits required under Section 28(2) of the *Indian Act* (Canada).

IV. Miscellaneous:

Developer's HST Registration Number:¹

Expansion Deposit:²

\$915222.26

Easement Date:³

17th day of October 2012

Customer Connection Horizon:

5 years

Required Execution Date:

12th day of March 2013

Revenue Horizon:

25 years

Developer Notice Info:⁴

Thomasfield Homes Ltd.

P.O. Box 1112, 295 Southgate Drive, Guelph, N1G 3M5

Attention: Mr. Paul Heitshu

Fax: 519-836-2119

V. Entire Agreement

Subject to Section 2.4 of the Standard Terms and Conditions, this Agreement constitutes the entire agreement between the parties with respect to the subject matter of this Agreement and supersedes all prior oral or written representations and agreements concerning the subject matter of this Agreement.

[SIGNATURE PAGE FOLLOWS]

¹ See Subsection 1.1(e) of the Standard Terms and Conditions.

² See Sections 6.1 and 6.2 of the Standard Terms and Conditions.

³ See Subsections 5.2(l) of the Standard Terms and Conditions.

⁴ See Section 13.5 of the Standard Terms and Conditions.

VI. Amendments

It is recognised that from time to time during the currency of the Agreement the parties hereto may mutually, unless otherwise provided for in the Agreement, alter, amend, modify or vary the provisions of the Agreement and such alteration, amendment, modification, variation or substitution shall be effected in writing and attached hereto and shall be deemed to form part hereof and shall, from the date agreed upon, alter, amend, modify, vary or substitute the Agreement in the manner and to the extent set forth in writing by the parties. Subject to the foregoing, no amendment, modification or supplement to the Agreement shall be valid or binding unless set out in writing and executed by the parties with the same degree of formality as the execution of the Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement.

HYDRO ONE NETWORKS INC.

Name: **Gordon Messervey**
Title: **Supervisor Planning and Design**
Date:
I have the authority to bind the Corporation

Thomasfield Homes Ltd.

Name:
Title:
Date:

Name:
Title:
Date:
I/We have the authority to bind the corporation.
The corporation has the authority to bind the Limited Partnership.

Schedule “A” Description of the Contestable and Non-Contestable Work

See attached Drawing **00333-12-002 R5**

Description of Non-Contestable Work Hydro One MUST perform:

For Underground Lines (Including Submarine):

1. Perform make ready work on existing Hydro One facilities (dip pole or existing transformer or kiosk)
2. Termination of all primary and secondary cables within the Electrical Distribution System
3. Installation of transformers and kiosks including inserts, elbows, insulating caps, arrestors and feed through
4. Install kiosks including insulating caps
5. Install numbering, signs, locks and phase markings on transformers and kiosks
6. Connection of grounds to transformers and kiosks
7. Install switching/isolation of existing Hydro One facilities
8. Perform Inspection

For Overhead Lines:

1. Perform make ready work on existing Hydro One facilities
2. Termination of all primary cables at transformer and switch locations and secondary cables transitioning to underground within the Electrical Distribution System
3. Install transformers and transformer framing
4. Install switches

Description of Contestable Work Hydro One or Developer/Contractor can perform (Unless otherwise stated on Drawing):

For Underground Lines (Including Submarine):

1. Supply and install primary and secondary cables
2. Install secondary splices

For Overhead Lines:

1. Install new poles, primary and secondary conductor, guys and anchors
2. Install primary and secondary framing
3. Install grounding (Plates and Rods)

Schedule “B” – Description of Civil Work

The Developer shall perform the following Civil Work, at its own expense, in accordance with the terms of this Agreement, including, the applicable Hydro One Specifications and standards:

For Underground Lines:

- Excavate trenches;
- Install sand padding with masonry sand;
- Supply and install pre-cast concrete vaults and backfill;
- Install bollards if specified by Hydro One in the design of the Electrical Distribution System;
- Install grounding (Rods);
- Install a crushed stone base for transformers and kiosks;
- Install partial and complete duct banks as specified on drawing (Direct Buried and or Concrete Encased);
- Install road crossing ducts (Including Road Cuts and Bores) complete with pull rope and caps for spares; and
- Perform any other Civil Work referenced in the applicable Hydro One Specifications and standards.

For Sub-cable work (In addition to requirements for Underground Lines):

- Install poured pads (when specified on drawing) in accordance with Hydro One’s Standard DU-06-302;
- Supply and install pre-cast concrete vaults and or aluminum vaults;
- Install grounding (Rods or Plates);
- Install masonry sand padding and crushed stone; and
- Perform any other Civil Work referenced in the applicable Hydro One specifications and standards.

All Forestry work outside of operating clearances around existing lines

Schedule “C” - Specifications

The following will be provided to the Developer on a CD-ROM:

The Hydro One Overhead and Underground Distribution Standards – 2011 Editions

Schedule “D” - Hydro One Design - Drawing # 00333-12-002 R5

Schedule “E” –“Developer’s Load Forecast”

Residential Services

Rate Class	#of Lots	Sq. Ftge	Load Type	Service Size (Amps)
R1	114	2000 Sq Feet	Base + WH + AC	200 Amp

Commercial Services

Rate Class	#of Lots	Secondary Voltage	Service Size (Amps)	Usage	Business Type
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Submitted by the Developer on this 12th day of January 2012.

Thomasfield Homes Ltd.

Name:

Title:

Name:

Title:

I/We have the authority to bind the corporation.

The corporation has the authority to bind the Limited Partnership.

Schedule “F”: Economic Evaluation Results

<u>Capital Costs and Charges</u>		Hydro One does all the work (Option A)	Alternative Bid Option (Option B)
Subdivision Expansion Cost	Total Length 2400 metres	\$ 429379.39	\$ 211672.74
Line Expansion Cost	Total Length 0 metres	\$ 0.00	\$ 0.00
	Subtotal	\$ 429379.39	\$ 211672.74
	Overheads and Interest during construction	\$ 52294.84	\$ 26894.08
Total Capital Cost		\$ 481674.23	\$ 238566.82

<u>Operating and Maintenance Costs over 25 year revenue horizon</u>				
Estimated Connection O&M per year	\$ 14021.40			
Estimated Expansion O&M per year				
Line Expansion O/H Line Based on 0 m	\$ 0.00			
Line Expansion U/G Line Based on 0 m	\$ 0.00			
Subdivision O/H Line Based on 0 m	\$ 0.00			
Subdivision U/G Line Based on 2400 m	\$ 2479.20			
Estimated System Reinforcement O&M per year	\$ 30030.72			
Estimated Yearly O&M	\$ 46531.32			
Estimated Total O&M Over 25 Years	\$ 1163283.00	PV \$	602380.33	\$ 602380.33

<u>Total Cost of Connection</u>				
	Total Capital Cost		481674.23	238566.82
	Total PV of O&M		602380.33	602380.33
	Total Cost of Connection	PV \$	1084054.56	\$ 840947.15

<u>Revenues over 25 year revenue horizon</u>					
kWh (Combined averages for 114 R1 customers)	121957.73127	Energy Billed at a Rate of 3.317 Cents per kWh for Delivery Charges			
Monthly Combined Revenue	\$ 4045.34				
Service Charge Totaled for the Project	\$ 2248.08				
Total	\$ 6293.42				
Yearly Revenue	\$ 75521.04				
Total Revenue Over (25) Years	\$ 1888026.00	PV	\$	977672.44	\$ 977672.44

<u>Taxes, Tax Credits and Other Adjustments</u>					
PV Income Taxes	\$ 106207.67				
CCA Tax Shield, and Municipal Taxes	\$ -74011.75				
PV Working Capital	\$ 4312.30				
Capital Contribution Adjustment	\$ 25941.96				
PV of Taxes, Tax Credits and Other Adjustments	62450.18	PV	\$	62450.18	\$ 62450.18
Revenue After Tax		PV	\$	915222.26	\$ 915222.26

<u>Summary of Costs and Revenues</u>					
Total Cost of Connection		\$	1084054.56	\$	840947.15
Less Revenue After Tax		\$	915222.26	\$	915222.26
Customer Pays This Amount* plus Excluded Items and HST		\$	168832.30	\$	-74275.11
**					
*Difference between the Total Cost of Connection and Revenue After Tax					
** In the case of a credit, the maximum amount of this value is equal to the Contestable support of Option A					
PV = Present Value					

This is how the calculation relates to Option A and B of the Agreement.

	Hydro One does all the work (Option A)	Alternative Bid Option (Option B)
Customer Contribution Required For The Connection (from above)	\$ 168832.30	\$ -74275.11
Less Pre Paid Amounts		
Line 1.1 Design Fees Paid	\$ 8700.00	\$ 8700.00
Line 3.4 Miscellaneous Approvals	\$ 0.00	\$ 0.00
Plus Items Excluded From Receiving Support (As per Section 3.1.6 of the Distribution System Code)		
Pad-mount Transformer Incremental Cost (NonContestable)	\$ 12362.32	\$ 12362.32
Work Site Inspection	\$ 0.00	\$ 21606.20
Returned Material Charge	\$ 0.00	\$ 0.00
Sub Total	\$ 172494.62	\$ -49006.59
HST	\$ 22424.30	\$ -6370.86
Amount Due*	\$ 194918.92	\$ -55377.45

Average Support Per Service	
Option A	\$ 8028.27
Option B	\$ 7225.44
Note: Option B Amount includes 10% Warranty Holdback	

Schedule “G”: Option A/Option B Charts

Option A – Hydro One Networks Performs Non-Contestable Work and Contestable Work				
<u>Part 1 Non-Contestable Work Firm Offer</u>		TOTAL	PAID	DUE
1.0	Engineering & Design			
1.1	Design Costs	\$ 10705.00	\$ 8700.00	\$ 2005.00
	Total Cost Section 1.1	\$ 10705.00	\$ 8700.00	\$ 2005.00
	Less: Revenue Support Applied To This Section (to a maximum of the cost above)	\$ 0.00	\$ 0.00	\$ 0.00
	Remaining Balance Section 1.1	\$ 10705.00	\$ 8700.00	\$ 2005.00
2.0	Cost of Non-Contestable Work Other Than Line Expansion			
		TOTAL	PAID	DUE
2.1	Non-Contestable Subdivision Secondary Costs			
	Material	\$ 40019.25		\$ 40019.25
	Labour	\$ 48525.69		\$ 48525.69
	Equipment	\$ 27467.37		\$ 27467.37
	Other Miscellaneous	\$ 6409.05		\$ 6409.05
	Administration & Overheads	\$ 9155.79		\$ 9155.79
	400A Meterbase Credit	\$ 0.00		\$ 0.00
	Total Cost Section 2.1	\$ 131577.15		\$ 131577.15
	Less: Revenue Support Applied To This Section (to a maximum of the cost above)	\$ 131577.15		\$ 131577.15
	Remaining Balance Section 2.1	\$ 0.00		\$ 0.00
2.2	Non-Contestable Subdivision Primary Costs			
	Material	\$ 49681.82		\$ 49681.82
	Labour	\$ 24699.51		\$ 24699.51
	Equipment	\$ 13980.86		\$ 13980.86
	Other Miscellaneous	\$ 3262.20		\$ 3262.20
	Administration & Overheads	\$ 4660.28		\$ 4660.28
	Cost To Connect To An Existing Powerline	\$ 0.00		\$ 0.00
	Forestry Cost (If Applicable)	\$ 0.00		\$ 0.00
	Total Cost Section 2.2	\$ 96284.67		\$ 96284.67
	Less: Revenue Support Applied To This Section (to a maximum of the cost above)	\$ 95333.67		\$ 95333.67
	Remaining Balance Section 2.2	\$ 951.00		\$ 951.00

Continued

Option A – Hydro One Networks Performs Non-Contestable Work and Contestable Work				
3.0	Cost Of Non-Contestable Line Expansion (If Applicable)			
		TOTAL	PAID	DUE
3.1	Non-Contestable Line Expansion Costs			
	Material	\$ 0.00		\$ 0.00
	Labour	\$ 0.00		\$ 0.00
	Equipment	\$ 0.00		\$ 0.00
	Other Miscellaneous	\$ 0.00		\$ 0.00
	Administration & Overheads	\$ 0.00		\$ 0.00
3.2	Cost To Connect To An Existing Powerline	\$ 0.00		\$ 0.00
3.3	Forestry Cost (If Applicable)	\$ 0.00		\$ 0.00
3.4	Miscellaneous Approvals Such As Water Crossing, Railway Crossing, Pipeline Crossing, etc.	\$ 0.00	\$ 0.00	\$ 0.00
3.5	Easements, Permits and Approvals	\$ 0.00		\$ 0.00
	Total Cost Section 3.1 to 3.5	\$ 0.00		\$ 0.00
	Less: Revenue Support Applied To This Section (to a maximum of the cost above)	\$ 0.00		\$ 0.00
	Remaining Balance Section 3.1 to 3.5	\$ 0.00	\$ 0.00	\$ 0.00
4.0	Cost of Contestable Work Other Than Line Expansion			
		TOTAL	PAID	DUE
4.1	Contestable Subdivision Secondary Costs			
	Material	\$ 39148.96		\$ 39148.96
	Labour	\$ 24794.54		\$ 24794.54
	Equipment	\$ 14034.64		\$ 14034.64
	Other Miscellaneous	\$ 3274.75		\$ 3274.75
	Administration & Overheads	\$ 4678.22		\$ 4678.22
	Total Cost Section 4.1	\$ 85931.11		\$ 85931.11
	Less: Revenue Support Applied To This Section (to a maximum of the cost above)	\$ 85931.11		\$ 85931.11
	Remaining Balance Section 4.1	\$ 0.00		\$ 0.00
4.2	Contestable Subdivision Primary Costs			
	Material	\$ 108294.24		\$ 108294.24
	Labour	\$ 25907.49		\$ 25907.49
	Equipment	\$ 14664.62		\$ 14664.62
	Other Miscellaneous	\$ 3421.74		\$ 3421.74
	Administration & Overheads	\$ 4888.21		\$ 4888.21
	Total Cost Section 4.2	\$ 157176.30		\$ 157176.30
	Less: Revenue Support Applied To This Section (to a maximum of the cost above)	\$ 0.00		\$ 0.00
	Remaining Balance Section 4.2	\$ 157176.30		\$ 157176.30

Continued

Option A – Hydro One Networks Performs Non-Contestable Work and Contestable Work

5.0 Contestable Cost Of Line Expansion (If Applicable)

5.1	Contestable Cost of Line Expansion			
	Material	\$ 0.00		\$ 0.00
	Labour	\$ 0.00		\$ 0.00
	Equipment	\$ 0.00		\$ 0.00
	Other Miscellaneous	\$ 0.00		\$ 0.00
	Administration & Overheads	\$ 0.00		\$ 0.00
	Total Cost Section 5.1	\$ 0.00		\$ 0.00
	Less: Revenue Support Applied To This Section (to a maximum of the cost above)	\$ 0.00		\$ 0.00
	Remaining Balance Section 5.1	\$ 0.00		\$ 0.00

	Remaining balance on Non-Contestable and Contestable Work (Sections 1.0 through 5.0)	\$ 168832.30	\$ 8700.00	\$ 160132.30
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Part 3 Non-Contestable and Contestable Work Above Standard Connection

		TOTAL	PAID	DUE
6.0	Items Excluded From Receiving Support			
6.1	Pad-mount Transformer Incremental Cost (NonCont.)	\$ 12362.32		\$ 12362.32
6.2	Pad-mount Transformer Incremental Cost (Contestable)	\$ 0.00		\$ 0.00
6.3	Returned Material Charge	\$ 0.00		\$ 0.00
	Total Cost Section 6.1 to 6.2	\$ 12362.32		\$ 12362.32

Part 4 Totals

	Revenue Shortfall (if applicable)	\$ 0.00		\$ 0.00
	Sub-Total (without HST) for Option A	\$ 181194.62	\$ 8700.00	\$ 172494.62
	HST for Option A	\$ 23555.30	\$ 1131.00	\$ 22424.30
	Grand Total (with HST) for Option A	\$ 204749.92	\$ 9831.00	\$ 194918.92

GST/HST# 870865821RT0001

A-1	The Developer has paid the cost of Design and Staking, incurred by Hydro One Networks in the amount of =		\$ 9831.00	
A-2	The Developer shall pay 100% of the Remaining Cost to be incurred by Hydro One Networks at the time of signing of this Agreement, in the amount of =			\$ 194918.92
A-3	Refund After Hydro One Networks Support Applied			\$ 0.00

I elect to choose Option A

☐

← Signature

Option B – Hydro One Networks Performs Non-Contestable Work Only

<u>Part 1 Non-Contestable Work Firm Offer</u>		TOTAL	PAID	DUE
1.0	Engineering & Design			
1.1	Design Costs	\$ 10705.00	\$ 8700.00	\$ 2005.00
	Total Cost Section 1.0	\$ 10705.00	\$ 8700.00	\$ 2005.00
	Less: Revenue Support Applied To This Section (to a maximum of the cost above)	\$ 0.00	\$ 0.00	\$ 0.00
	Remaining Balance Section 1.0	\$ 10705.00	\$ 8700.00	\$ 2005.00
2.0	Cost of Non-Contestable Work Other Than Line Expansion			
		TOTAL	PAID	DUE
2.1	Non-Contestable Subdivision Secondary Costs			
	Material	\$ 40019.25		\$ 40019.25
	Labour	\$ 48525.69		\$ 48525.69
	Equipment	\$ 27467.37		\$ 27467.37
	Other Miscellaneous	\$ 6409.05		\$ 6409.05
	Administration & Overheads	\$ 9155.79		\$ 9155.79
	400A Meterbase Credit	\$ 0.00		\$ 0.00
	Total Cost Section 2.1	\$ 131577.15		\$ 131577.15
	Less: Revenue Support Applied To This Section (to a maximum of the cost above)	\$ 131577.15		\$ 131577.15
	Remaining Balance Section 2.1	\$ 0.00		\$ 0.00
2.2	Non-Contestable Subdivision Primary Costs			
	Material	\$ 49681.82		\$ 49681.82
	Labour	\$ 24699.51		\$ 24699.51
	Equipment	\$ 13980.86		\$ 13980.86
	Other Miscellaneous	\$ 3262.20		\$ 3262.20
	Administration & Overheads	\$ 4660.28		\$ 4660.28
	Cost To Connect To An Existing Powerline	\$ 0.00		\$ 0.00
	Forestry Cost (If Applicable)	\$ 0.00		\$ 0.00
	Total Cost Section 2.2	\$ 96284.67		\$ 96284.67
	Less: Revenue Support Applied To This Section (to a maximum of the cost above)	\$ 95333.67		\$ 95333.67
	Remaining Balance Section 2.2	\$ 951.00		\$ 951.00

Continued

Option B – Hydro One Networks Performs Non-Contestable Work Only

3.0	Non-Contestable Cost Of Line Expansion (If Applicable)			
		TOTAL	PAID	DUE
3.1	Non-Contestable Line Expansion Costs			
	Material	\$ 0.00		\$ 0.00
	Labour	\$ 0.00		\$ 0.00
	Equipment	\$ 0.00		\$ 0.00
	Other Miscellaneous	\$ 0.00		\$ 0.00
	Administration & Overheads	\$ 0.00		\$ 0.00
3.2	Cost To Connect To An Existing Powerline	\$ 0.00		\$ 0.00
3.3	Forestry Cost (If Applicable)	\$ 0.00		\$ 0.00
3.4	Miscellaneous Approvals Such As Water Crossing, Railway Crossing, Pipeline Crossing, etc.	\$ 0.00	\$ 0.00	\$ 0.00
3.5	Easements, Permits and Approvals	\$ 0.00		\$ 0.00
	Total Cost Section 3.1 to 3.5	\$ 0.00		\$ 0.00
	Less: Revenue Support Applied To This Section (to a maximum of the cost above)	\$ 0.00		\$ 0.00
	Remaining Balance Section 3.1 to 3.5	\$ 0.00	\$ 0.00	\$ 0.00
	Remaining balance on Non-Contestable and Contestable Work (Sections 1.0 through 3.0)	\$ 11656.00	\$ 8700.00	\$ 2956.00
	Total Unused Support Available For Contestable Work	\$ 85931.11		\$ 85931.11
	Total Remaining Balance	\$ -74275.11	\$ 8700.00	\$ -82975.11
<u>Part 2 Non-Contestable Work Above Standard Connection</u>				
4.0	Items Excluded From Receiving Support			
4.1	Pad-mount Transformer Incremental Cost	\$ 12362.32		\$ 12362.32
4.2	Work Site Inspection (If Applicable)	\$ 21606.20		\$ 21606.20
4.3	Returned Material Charge	\$ 0.00		\$ 0.00
	Total Cost Section 4.1 to 4.2	\$ 33968.52		\$ 33968.52
<u>Part 3 Totals</u>				
	Revenue Shortfall (if applicable)	\$ 0.00		\$ 0.00
	Sub-Total (without HST) for Option B	\$ -40306.59	\$ 8700.00	\$ -49006.59
	HST for Option B	\$ -5239.86	\$ 1131.00	\$ -6370.86
	Grand Total (with HST) for Option B	\$ -45546.45	\$ 9831.00	\$ -55377.45
GST/HST# 870865821RT0001				

Continued

Option B – Hydro One Networks Performs Non-Contestable Work Only

Part 3 Totals Unused Support Available For Contestable work

		TOTAL	PAID	DUE
B-1	The Developer has paid the cost of Design and Staking, incurred by Hydro One Networks in the amount of =		\$ 9831.00	
B-2	The Developer shall pay 100% of the Remaining Cost to be incurred by Hydro One Networks at the time of signing of this Agreement, in the amount of =			\$ 0.00
B-3	Refund After Hydro One Networks Support Applied			\$ 55377.45

I elect to choose Option B

☐

← Signature

Schedule “H” – Form of Transfer of Ownership of Primary Distribution System, Secondary Distribution System, Line Expansion and Residential Service Cables

**TRANSFER OF OWNERSHIP OF PRIMARY DISTRIBUTION SYSTEM, SECONDARY DISTRIBUTION SYSTEM, LINE EXPANSION AND RESIDENTIAL SERVICE CABLES
(CONSTRUCTED BY HYDRO ONE NETWORKS INC. OR DEVELOPER)**

Hydro One Networks Inc. Expansion/Connection #: 00333-12-002 R5

Mayberry Hill Subdivision Phase 1

In accordance with the Multi-Service Connection Cost Agreement made between the undersigned Developer (the “**Developer**”) and Hydro One Networks Inc. dated the 12th day of September 2012 (the “**Agreement**”), the Developer hereby irrevocably conveys all rights, title and interest, free and clear of all present and future mortgages, liens, demands, charges, pledges, adverse claims, rights, title, retention agreements, security interests, or other encumbrances of any nature and kind whatsoever in the:

- (a) Primary Distribution System and any Line Expansion as described in Schedule “D” of the Agreement and as referred to in the said Agreement; and
- (b) that part of the Secondary Distribution System as described in Schedule “D” of the Agreement and as referred to in the said Agreement that has been installed as of the Energization Date of the Primary Distribution System; and
- (c) any Residential Service cables connected to the Secondary Distribution System described in (b) above on the Energization Date of the Primary Distribution System,

to Hydro One Networks Inc. with effect as of the Energization Date of the Primary Distribution System;

AND:

- (1) any addition to the Secondary Distribution System as described in Schedule “E” of the Agreement and as referred to in the said Agreement that is installed following the Energization Date of the Primary Distribution System; and
- (2) any Residential Service cables connected to the Secondary Distribution System ,

to Hydro One Networks Inc. with effect as of the Energization Date of the addition to the Secondary Distribution System described in (1) above.

Thomasfield Homes Ltd.

Name:

Title:

Name:

Title:

I/We have the authority to bind the corporation.

The corporation has the authority to bind the Limited Partnership.

Hydro One Networks Inc. hereby agrees to assume ownership and responsibility for operation and maintenance of the Primary Distribution System, the Secondary Distribution System, the Line Expansion and the Residential Service cables (all as described above) and as referred to in the said Agreement above on the respective Energization Dates described above.

HYDRO ONE NETWORKS INC.

Name: Gordon Messervey

Title: Supervisor Planning and Design

Date:

I have the authority to bind the corporation

Ontario Energy Board (Board Staff) INTERROGATORY #4 List 1

Interrogatory

Reference: Hydro One's Evidence, Page 9, Developer Capital Contribution

Hydro One states that "...there are additional costs included in HONI's assessment of the developer's capital contribution that are not included in OHL's. These OM&A costs for upstream system reinforcement are incurred by HONI ratepayers regardless of which LDC services the subdivision, given that both utilities will utilize HONI's existing distribution station in the area to supply the new development. These costs amount to \$244,273."

- a. Please describe when this upstream system reinforcement took place and explain whether it occurred specifically to accommodate the subject development.
- b. If \$244,273 is only OM&A cost for upstream system reinforcement, please explain what are capital costs incurred for upstream system reinforcement and whether these capital costs were included in Hydro One's economic evaluation. If yes, please provide calculations. If not, explain why not.
- c. Please describe what methodology Hydro One used to estimate incremental OM&A amounts for system reinforcement required to accommodate connection of the subject development and provide calculations

Response

- a. The upstream reinforcement took place when the 44 kV feeder and Grand Valley DS were constructed. These facilities provide sufficient capacity to supply the existing load and this new load and will accommodate the foreseeable future load growth.
- b. The capital costs were the costs of constructing the 44kV feeder and Grand Valley DS. These capital costs were not included in HONI's economic evaluation as they were incurred in the past as part of the sub-transmission pool.
- c. HONI based the OM&A costs on the sub-transmission rates that will be charged to OHL if OHL's SAA application is successful. The following are the calculations used to arrive at this amount.

1

Facility Charge for connection to Common ST Lines (44kV to 13.8 kV)	\$0.668 per kW per month
Facility Charge for connection to low voltage Distribution Station	\$1.944 per kW per month
Total	\$2.612 per kW per month
	\$31.344 per kW per year

Year	Annual ST Rate	Number of Customers added per year	Total Number of Customers	Peak Demand per Customer kW	Annual ST Charges
1	\$31.34	23	23	2.97	\$2,141.11
2		23	46	2.97	\$4,282.22
3		23	69	2.97	\$6,423.33
4		23	92	2.97	\$8,564.43
5		22	114	2.97	\$10,612.45
6			114	2.97	\$10,612.45
7			114	2.97	\$10,612.45
8			114	2.97	\$10,612.45
9			114	2.97	\$10,612.45
10			114	2.97	\$10,612.45
11			114	2.97	\$10,612.45
12			114	2.97	\$10,612.45
13			114	2.97	\$10,612.45
14			114	2.97	\$10,612.45
15			114	2.97	\$10,612.45
16			114	2.97	\$10,612.45
17			114	2.97	\$10,612.45
18			114	2.97	\$10,612.45
19			114	2.97	\$10,612.45
20			114	2.97	\$10,612.45
21			114	2.97	\$10,612.45
22			114	2.97	\$10,612.45
23			114	2.97	\$10,612.45
24			114	2.97	\$10,612.45
25			114	2.97	\$10,612.45

Total ST Revenue \$244,272.57

2

Ontario Energy Board (Board Staff) INTERROGATORY #5 List 1

Interrogatory

Reference: Hydro One's Evidence, Page 9, Rate impacts on existing HONI customers.

Hydro One states that if "...OHL were granted the SAA being sought, existing **HONI customers would continue** [emphasis added] to be held responsible for \$224K in upstream reinforcement costs associated with this phase of the development, without benefit of offsetting future customer revenue or developer contribution".

- a. Please describe how these OM&A costs for system reinforcement are presently recovered from existing Hydro One customers.
- b. Please quantify revenues from Hydro One customers attributable to recovery of these costs.
- c. Please confirm that in case OHL will service the development Hydro One will be collecting LV charges for additional load based on LV rates approved by the Board. If yes, please provide the amount. If not, explain why not.
- d. Please explain whether LV revenues have been forecasted and accounted for in calculating the amount Hydro One believes OHL has to include in its economic evaluation. If yes, please provide calculations of the amounts. If not, explain why not.

Response

- a. These OM&A costs for system reinforcement are presently recovered from HONI ratepayers, net the capital contribution paid for by the developer, through HONI's residential rates.
- b. If OHL's SAA application is successful, please refer to the detailed calculation in HONI's response to Board Staff IR #4c. If HONI retains the service area and supplies this development, the system reinforcement costs would be \$30,030.72 per year, times 25 years as shown in HONI's updated OTC attached as Attachment 1 to HONI's response to Board Staff IR #3.
- c. HONI confirms that if OHL's SAA is successful and OHL services the development, HONI will be collecting LV charges for additional load based on Board-approved LV rates. For calculations of the amounts, please refer to HONI's response to Board Staff IR #4c.

- 1 d. Please refer to HONI's response to Board Staff IR #4c for the calculation of the LV
2 revenues HONI has forecasted that OHL should include in its economic evaluation if
3 OHL's SAA application is successful. This represents the portion of upstream
4 OM&A costs that will be incurred by HONI in relation to this development. These
5 costs will be recovered by HONI through sub-transmission rates that will be charged
6 to OHL. Therefore, OHL must include these sub-transmission costs in its discounted
7 cash flow calculation in determining the capital contribution for the developer so that
8 the developer, rather than the balance of OHL's customers, is charged the cost of
9 servicing the development.