

E.L.K. Energy Inc.

Document Brief

**for Oral Hearing
dated Thursday, February 9, 2017**

EB-2016-0155

		Scenarios			
		25%	50%	75%	100%
Monthly Volume	kW	321	642	963	1,284
Monthly Service Rate	\$	\$1,849.67	\$1,849.67	\$1,849.67	\$1,849.67
Distribution Volumetric Rate	\$/kW	\$0.2751	\$0.2751	\$0.2751	\$0.2751
Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until April 30, 2017	\$/kW	(\$2.1739)	(\$2.1739)	(\$2.1739)	(\$2.1739)
Rate Rider for Disposition of Global Adjustment Account (2016) - effective until April 30, 2017 Applicable only for Non-RPP Customers	\$/kW	\$3.6847	\$3.6847	\$3.6847	\$3.6847
Low Voltage Service Rate (*)	\$/kW	0.4388	0.4445	0.4500	0.4555
Retail Transmission Rate - Network Service Rate	\$/kW	\$2.2195	\$2.2195	\$2.2195	\$2.2195
Retail Transmission Rate - Line and Transformation Connection Service Rate	\$/kW	\$1.5110	\$1.5110	\$1.5110	\$1.5110
(*) Incremental Hydro One costs to E.L.K. which occur whether Sellick is a E.L.K. or Hydro One customer					
E.L.K. cost to Hydro One as Embedded Distributor					
Monthly Service Rate		\$1,849.67	\$1,849.67	\$1,849.67	\$1,849.67
Distribution Volumetric		\$82.51	\$165.01	\$247.52	\$330.03
Disposition of Deferral/Variance Accounts (2016)		(\$651.99)	(\$1,303.97)	(\$1,955.96)	(\$2,607.95)
Disposition of Global Adjustment Account (2016)		\$1,105.10	\$2,210.20	\$3,315.30	\$4,420.40
Low Voltage Service		\$131.60	\$266.63	\$404.89	\$546.45
Retail Transmission Rate - Network Service		\$712.46	\$1,424.92	\$2,137.38	\$2,849.84
Retail Transmission Rate - Line and Transformation Connection Service		\$485.03	\$970.06	\$1,455.09	\$1,940.12
Total Monthly		\$3,714.38	\$5,582.52	\$7,453.89	\$9,328.56
Total Annual		\$44,572.60	\$66,990.19	\$89,446.65	\$111,942.70
Total Annual with HST		\$50,367.04	\$75,698.92	\$101,074.71	\$126,495.25

Corrected Table re: E.L.K. IRR (Second Round), Nov 10, HONI-1(b)



- c) When did E.L.K receive a request for an Offer to Connect from 1710690 Ontario Inc.? Please provide a copy of every written request received from this customer.

E.L.K. Response:

E.L.K. has not received a request for an Offer to Connect from 1710690 Ontario Inc. Currently their only customer is the new customer subject of the SAA application.

HONI-6

Reference:

The delivery point is located adjacent at the intersection of McLean Road and Sellick Drive which is consistent for both the applicant and the incumbent. The connection point for the applicant is 2.060 Km's South West of the delivery point immediately adjacent of the lot subject to the SAA amendment. The connection point for the incumbent is 2.035 km from the delivery point across the road from the lot subject to the SAA amendment (Section 7.2.1 a)

Interrogatory:

Please confirm that these distances remain the same even after the preemptive relocation work undertaken by E.L.K.

E.L.K. Response:

The applicants connection point would now be 2.072 Km's with the pole having been relocated. This places the applicants existing distribution assets 0.037 Km's closer to the area subject of the SAA application.

ELK's responses to interrogatories suggest that the relocation cost of the distribution assets is \$8,432.49 and that this cost is included in ELK's OTC to the Customer. The Customer should not be responsible for relocation charges that resulted from the expansion of a municipal roadway, charges that should be a responsibility of the municipality or, if an arrangement has been made, the Developer. Either way, Hydro One agrees the charges are a cost of the connection but they should not be recovered from the Customer unless these costs were specifically triggered by the Customer.

Instead of incurring the \$8K relocation expense, ELK could have, and should have, consulted with Hydro One in an effort to achieve a resolution that was fair and reasonable, as outlined in Section 3.4 of the DSC. Good utility practice would be for the two companies to explore the feasibility of various alternatives and come up with the most economical and technically feasible solution. This in turn would mitigate costs to connect the Customer.

Providing an Offer to Connect to the Customer

Much has been suggested by the Applicant that Hydro One was non-responsive to the Customer request for an OTC¹⁹. Hydro One was not in a position to provide the Customer with an OTC as Hydro One was still waiting for information that was required to provide an accurate estimate. Consequently, Hydro One did not provide the Customer an OTC, consistent with Section 6.1.1 of the DSC. Hydro One did not receive a complete New Customer Connection Information ("NCCI") package from the customer until May 10, 2016. Hydro One, at that time, consulted further with the Customer to ensure that the Customer understood the charges and that the information provided was accurate. During this consultation it was discovered that there would need to be a loading revision to that NCCI package – increasing the Customer peak load to 1.2MW. This revised NCCI was provided to Hydro One on July 25, 2016, and is provided as Attachment 2 of Hydro One's response to Board Staff Interrogatory 9. An OTC was then provided to the Customer on August 5, 2016, based on this load²⁰. Subsequently, due to a further Customer requirement change on September 15, 2016, a revised OTC was provided to the Customer on September 21, 2016.

Instead of expeditiously advancing plans to increase rate base and circumvent well-defined SAA practices, had ELK thoroughly investigated the needs of the Customer, in concert with the incumbent distributor, this prematurely-filed SAA could have been avoided. This would have improved the customer experience, mitigated costs to the system, and, in so doing, improved the overall quality of service provided to the Customer.

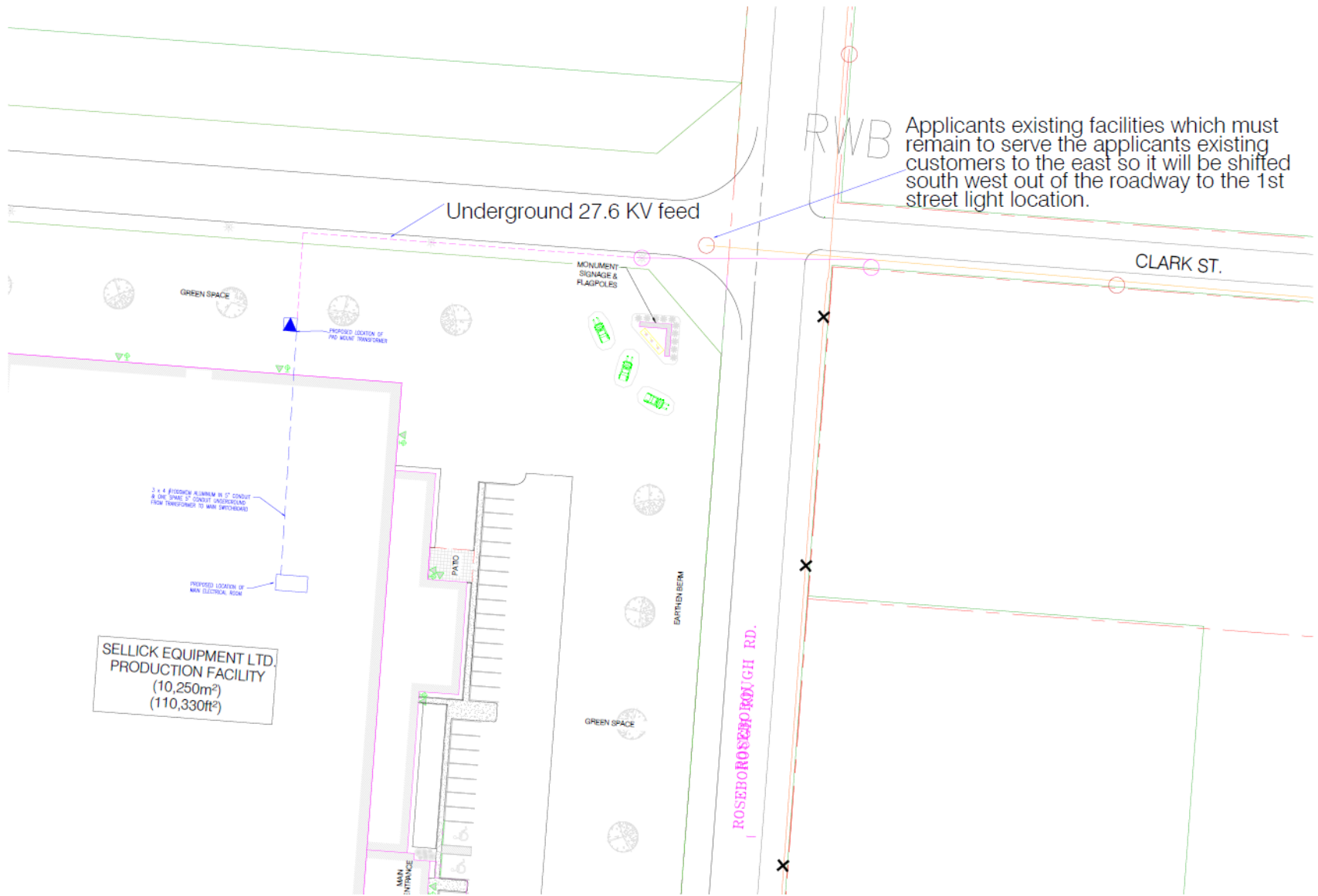
For all these reasons, Hydro One submits that this Application fails to demonstrate that this SAA is in the public interest and should be denied. In fact, Hydro One states that this Application demonstrates that the service territory should remain with Hydro One, although the onus is on the Applicant, not on the incumbent LDC.

¹⁹ EB-2016-0155 – ELK Application: Section 7.5.1, Attachment 3.3 – September 8, 2016

²⁰ EB-2016-0155 – Hydro One Interrogatory Response to Board Staff Interrogatory 9 – September 8, 2016

Appendix 1





Applicants existing facilities which must remain to serve the applicants existing customers to the east so it will be shifted south west out of the roadway to the 1st street light location.

E.L.K. Service Amendment Application (Apr 12, 2016), Attachment 1.4.

E.L.K. Evidence Update (Oct 6, 2016), Exhibit 2.

-5- I requested and have confirmation that you received the current CAD files for this subdivision on May 31st.

Norm MacAulay
Operations Manager
E.L.K. Energy Inc.
172 Forest Avenue
Essex, ON N8M 3E4

Phone: 519-776-5291 Ext. 209
Email: nmacaulay@elkenenergy.com

From: john.boldt@HydroOne.com [<mailto:john.boldt@HydroOne.com>]
Sent: May-27-16 3:53 PM
To: Norm MacAulay; john.siebert@HydroOne.com
Cc: angela.yorgiadis@HydroOne.com; d.fraser@HydroOne.com; Mark Danelon; phil.mckee@HydroOne.com
Subject: RE: Sellick - Clark Street and Roseborough Rd design request

Hi Norm,

Thanks for the call today as it has helped to sort some issues out and I hope this email captures the actions.

-1- I have spoken to John Siebert and he is going to contact you early in the week to field review where you are placing your new pole and you need to come to agreement that the existing fly tap, if relocated, will satisfy both or clearance requirements. If poles need to be changed, those costs need to be added to your costs for us to compare costs for economic efficiency.

-2- as discussed, the customer contribution does not play into our comparison of costs between each of our OTCs. We need to compare "apples to apples" labour and material. Basically true costs to connect as per the OEB rules.

-3- to do a apples to apples comparison, Hydro One has to re-do the existing design where we have designed to build an overhead pole line as you informed me that this industrial subdivision is to be underground, but we are not comparing the total park for economic efficiency, but only what I have captured here:

(a) Each company will get across the road and create a 27.6kV dip into a kiosk, which will then allow for Sellick to be fed, but also allow the serving LDC to take off and continue at a later date throughout the rest of the lots

(b) ELK will remove the 750kva transformer from their design as HONI does not supply the transformer, but HONI will get contractor costs to do all civil work to dig and back fill trench to Sellick, install pad complete with all wire and terminations

-4- neither company wants to delay this connection, and based on the OEB rules, our companies have to compare costs to serve prior to application to the board. I am going to expedite this on the HONI side so that we are able to sit down once both of us prepare the OTC for cost comparison and then determine who should serve this new connection. The costs to build is what determines who should serve.

-5- Hydro One has not received the final approved plan for this subdivision and final design of the intersection, so Norm is to run that down and supply it to Hydro One. WE need to meet on site and discuss where each company will place their poles for design as ELK's existing pole needs to stay on the west side of the road as it currently is supplying power on Clark st and the electrical configuration at this corner was designed the way it currently is due to large truck traffic at that corner.

HONI-2(b) (Second Round) that the incremental ST Charges identified by HONI will **occur in both cases.**

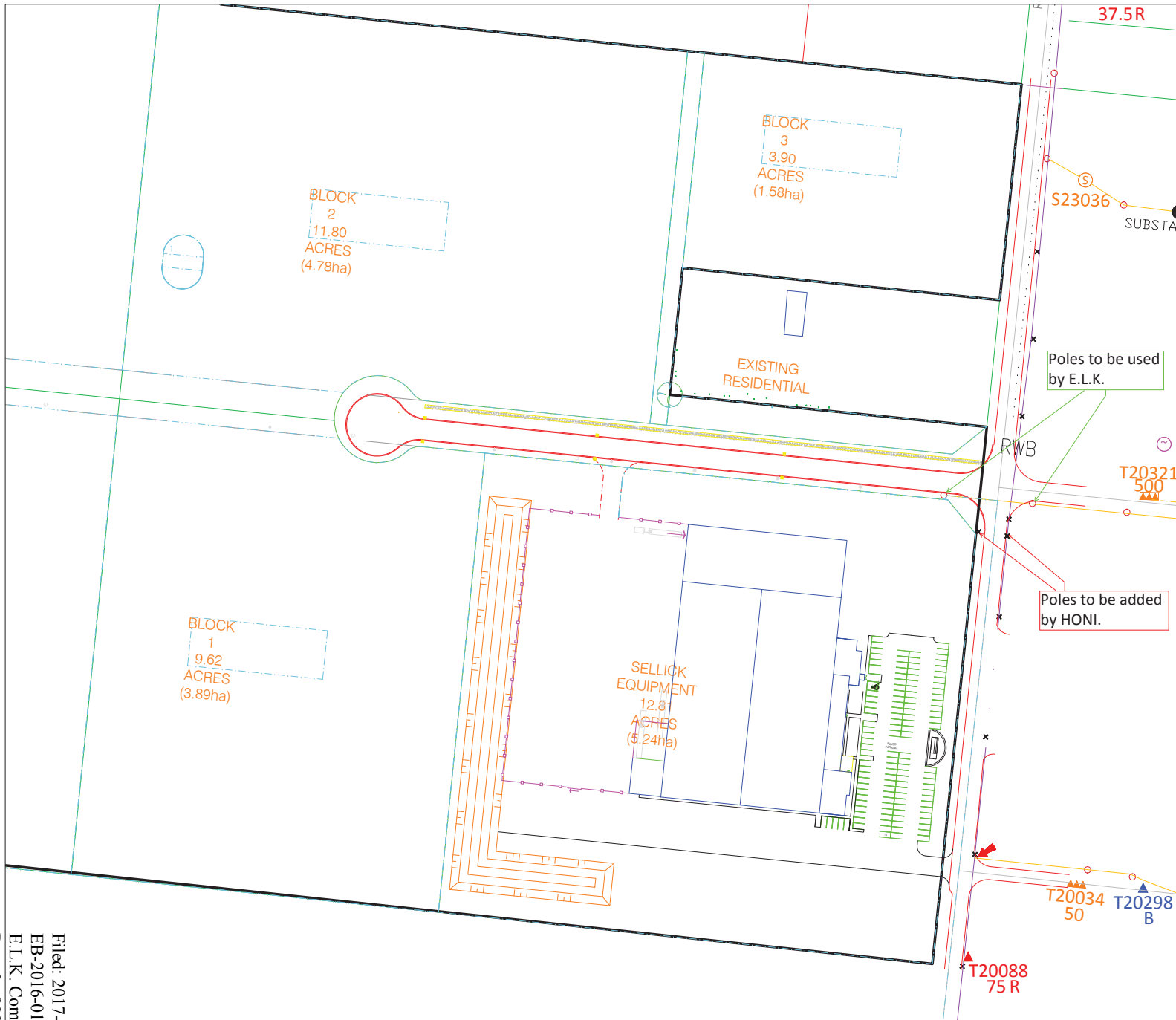
42. E.L.K. goes on to explain that the OEB also needs to take into account other incremental upstream charges which HONI will incur from E.L.K. if the Customer is served by HONI. These costs are calculated in part 2 of its response to HONI-1(b) (Second Round) and ranged from \$12,625.21 to \$50,676.62 depending on the monthly volume scenario used. **These costs will only occur if the Customer is a customer of HONI.**
43. For these reasons, E.L.K. submits that the OEB should ignore HONI’s arguments around the incremental ST Charges. HONI is not proposing that the OEB perform an “apples to apples” comparison. Rather, HONI is attempting to confuse and obfuscate the evidentiary record in this proceeding.

E. CONNECTION COSTS AND ECONOMIC EFFICIENCY

44. Board Staff summarized the costs to be incurred by HONI and E.L.K. in final submissions. These costs were detailed in offers to connect filed on the evidentiary record and shown in the table below.
45. While it is not a factor in the OEB’s economic assessment methodology for SAAs – nor is E.L.K. arguing that it should be - E.L.K. has also included each utility’s respective materiality thresholds to help keep everything in perspective.

Cost Item	E.L.K.	Hydro One
Non-contestable work	\$8,702.67	\$16,103.17
Contestable work	Not required	Not required
Civil works	Supplied by Sellick	Supplied by Sellick
Capital contribution	\$0	\$0
Materiality Threshold	\$50,000	\$1,000,000

46. Board Staff argues that E.L.K.’s offer to connect does not represent the “fully loaded costs”. Board Staff’s conclusion is based on three main assertions.



E.L.K. Energy Inc.

LEGEND

- 27kV 3ph Overhead
- 16kV B Overhead
- 16kV R Overhead
- 16kV W Overhead
- 27kV 3ph Underground
- 16kV B Underground
- 16kV R Underground
- 16kV W Underground
- 4kV 3ph Overhead
- 2.4kV B Overhead
- 2.4kV R Overhead
- 2.4kV W Overhead
- 27 kV 3ph Hydro Line Overhead
- Area Subject of SAA
- ▲ Pole Mount Transformer
- ▲ 3ph Pole Mount Transformer
- ▲ Pad Mount Transformer
- ▲ 3ph Pad Mount Transformer
- ▲ Pole Mount Step Down Transf
- ▲ Fused Switch
- ▲ Load Break Switch
- ▲ Switch
- ▲ Normal Open
- ▲ Recloser
- ▲ Primary Meter
- ▲ E.L.K. Owned Pole
- ▲ Foreign Owned Pole
- ▲ Switching Cubicle
- ▲ FIT GENERATION SITE

KEY MAP

SCALE	SHEET NUMBER
Not to Scale	PO#3
PLOT DATE	
02/02/2016	
FILE NAME	
Harrow System Map	

System Diagram
 Applicant's Compendium, Tab 2

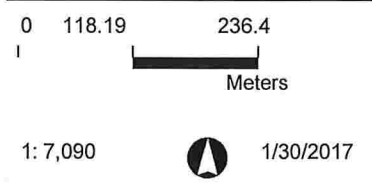
Map of Neighbouring Customers
 Applicant's Compendium, Tab 4



Town of Essex Mapping



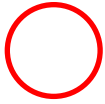
- Legend**
- Viscount Estates
 - Lucier Estates
 - Essex Assessment
 - Water
 - Essex County Municipalities



Notes
 Enter Map Description

THIS MAP IS NOT TO BE USED FOR NAVIGATION
 Copyright the Corporation of the Town of Essex, 2014. Data herein is provided by the Corporation of the Town of Essex on an 'as is' basis. Assessment parcel provided by Teranet Enterprises Inc. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

Map Legend



HONI customer connected to the M7 feeder downstream of E.L.K.'s wholesale metering point and settled annually with E.L.K. as a LTLT customer.



Lot fabric of the HONI customers settled with E.L.K. as LTLT customers.



Sellick's new facility.



Lot fabric of the Collavino Industrial Park.

Map Identifier

Map Identifier	Operating Centre	Grid (Utility Code)	Business Partner	Contract Account	Contract	Installation Number	Serial Number	CA Status	Rate Category - Key	Rate Category	Premise Address	Lot & Concession
1	Essex	ELKENERGY						Active	GSE_TOURPP	General Svc Energy TOU RPP	2225 ROSEBOROUGH RD, COLCHESTER SOUTH Ontario	-
2	Essex	ELKENERGY						Active	GSE_2TRRPP	General Svc Energy 2TIER RPP	2225 ROSEBOROUGH RD, garage, COLCHESTER SOUTH Ontario	-
3	Essex	ELKENERGY						Active	C_GSD_DCB	C General Svc Demand DCB	2215 ROSEBOROUGH RD, COLCHESTER SOUTH Ontario	-
4	Essex	ELKENERGY						Active	R1_TOU_RPP	Medium Density Residential - TOU RPP	2448 COUNTY RD 20 W, COLCHESTER SOUTH Ontario	-
5	Essex	ELKENERGY						Active	GSE_2TRRPP	General Svc Energy 2TIER RPP	2131 ROSEBOROUGH RD, COLCHESTER SOUTH Ontario	-
6	Essex	ELKENERGY						Active	R1_TOU_RPP	Medium Density Residential - TOU RPP	2000 ROSEBOROUGH RD, COLCHESTER SOUTH Ontario	-
7	Essex	ELKENERGY						Active	R1_TOU_RPP	Medium Density Residential - TOU RPP	2025 ROSEBOROUGH, COLCHESTER SOUTH Ontario	-
8	Essex	ELKENERGY						Active	GSE_DCB	General Svc Energy DCB	2444 COUNTY RD 20 W, COLCHESTER SOUTH Ontario	-
9	Essex	ELKENERGY						Active			2215 or 2225 ROSEBOROUGH RD, Solar Project, COLCHESTER SOUTH Ontario	-

Map of Neighbouring Customers
Applicant's Compendium, Tab 4

RATE AND BILLING ANALYSIS E.L.K. SAA

> 500 kW Average, Customer Transformer, Connected to 13.8kV Line or Greater - Rate Assumes Primary Metering

Sub Transmission Line Loss Factor	7.03%	3.40%	8.10%
Monthly Peak	1,200	1,212	1,200
Adjusted Peak	1,284	1,253	1,297.2
Monthly Usage	262,800	265,428	262,800
Adjusted Usage	281,275	274,453	284,087

Line Item	ELK			H1			ELK Charge to H1 Pseudo LTLT		
	2016 Rate	Quantity		2016 Rate	Quantity		2016 Rate	Quantity	
Electricity	\$ 2,905.57	\$ 0.0103	281,275	\$ 2,835.09	\$ 0.0103	274,453	\$ 2,934.62	\$ 0.0103	284,087
Global Adjustment	\$ 29,064.60	\$ 0.1033	281,275	\$ 28,359.64	\$ 0.1033	274,453	\$ 29,355.16	\$ 0.1033	284,087
Global Adjustment Rate Rider				\$ (274.45)	\$ (0.0010)	274,453			
Delivery									
Service Charge	\$ 187.07	\$ 187.07	1	\$ 481.41	\$ 481.41	1	\$ -	\$ 187.07	-
Meter Charge				\$ 741.21	\$ 741.21	1			
ELK Rate Rider Disposition of Deferral Variance	\$ (2,427.60)	-\$ 2.0230	1,200				\$ (2,427.60)	-\$ 2.0230	1,200
ELK Rate Rider Disposition of GA	\$ 3,014.76	\$ 2.5123	1,200				\$ 3,014.76	\$ 2.5123	1,200
Rate Rider: Foregone Revenue				\$ 47.56	\$ 47.56	1			
Common ST - Distribution Volumetric	\$ 1,899.24	\$ 1.5827	1,200	\$ 1,422.89	\$ 1.1740	1,212	\$ 1,899.24	\$ 1.5827	1,200
Rate Rider: Disposition of Variance General (Volumetric)				\$ 381.90	\$ 0.3151	1,212			
Rate Rider: Disposition of Variance Wholesale Market Service				\$ (541.16)	\$ (0.4465)	1,212			
Transmission Network Service	\$ 2,850.64	\$ 2.2195	1,284	\$ 4,185.21	\$ 3.3396	1,253	\$ 2,879.14	\$ 2.2195	1,297
Transmission Line Connection	\$ 1,940.67	\$ 1.5110	1,284	\$ 976.37	\$ 0.7791	1,253	\$ 1,960.07	\$ 1.5110	1,297
Transmission Transformation Connection				\$ 2,219.81	\$ 1.7713	1,253			
Low Voltage	\$ 546.60	\$ 0.4555	1,200				\$ 546.60	\$ 0.4555	1,200
Regulatory									
Wholesale Market Service	\$ 1,012.59	\$ 0.0036	281,275	\$ 988.03	\$ 0.0036	274,453	\$ 1,022.71	\$ 0.0036	284,087
Rural & Remote Rate Protection	\$ 365.66	\$ 0.0013	281,275	\$ 356.79	\$ 0.0013	274,453	\$ 369.31	\$ 0.0013	284,087
Ontario Electricity Support Program	\$ 309.40	\$ 0.0011	281,275	\$ 301.90	\$ 0.0011	274,453	\$ 312.50	\$ 0.0011	284,087
Standard Supply Administration	\$ 0.25	\$ 0.2500	1	\$ 0.25	\$ 0.25	1	\$ -	\$ 0.2500	1
Debt Retirement	\$ 1,839.60	\$ 0.0070	262,800	\$ 1,858.00	\$ 0.007	265,428	\$ -	\$ 0.0070	-
HST	\$ 5,656.18			\$ 5,764.26	13.0%		\$ 5,442.65		
TOTAL	\$ 49,165.22			\$ 50,104.71	\$ (939.49)	\$ (11,273.90)	\$ 47,309.15		
					Yearly Savings				

Table re: E.L.K. Rate and Billing Analysis Applicant's Compendium, Tab 3.

RATE AND BILLING ANALYSIS E.L.K. SAA

> 500 kW Average, Customer Transformer, Connected to 13.8kV Line or Greater - Rate Assumes Primary Metering

Sub Transmission Line Loss Factor	7.03%	3.40%	7.03%
Monthly Peak	1,200	1,212	1,200
Adjusted Peak	1,284	1,253	1,284
Monthly Usage	262,800	265,428	262,800
Adjusted Usage	281,275	274,453	281,275

Line Item	ELK Charge to H1 Using Embedded Distributor Rates (Retail Meter Installed)			H1 Charge to ELK for Sellick			IESO Charge to ELK for Sellick		
	2016 Rate	Quantity		2016 Rate	Quantity		2016 Rate	Quantity	
Electricity	\$ 2,905.57	\$ 0.0103	281,275	\$ -	\$ 0.0103	-	\$ 2,905.57	\$ 0.0103	281,275
Global Adjustment	\$ 29,064.60	\$ 0.1033	281,275	\$ -	\$ 0.1033	-	\$ 29,064.60	\$ 0.1033	281,275
Global Adjustment Rate Rider									
Delivery									
Service Charge	\$ 1,849.67	\$ 1,849.67	1	\$ -	540.59				
Meter Charge									
ELK Rate Rider Disposition of Deferral Variance	\$ (2,608.68)	\$ 2.1739	1,200						
ELK Rate Rider Disposition of GA	\$ 4,421.64	\$ 3.6847	1,200						
Rate Rider: Foregone Revenue									
Common ST - Distribution Volumetric	\$ 330.12	\$ 0.2751	1,200	\$ 1,422.89	1.174	1,212			
Rate Rider: Disposition of Variance General (Volumetric)				\$ 381.90	0.3151	1,212			
Rate Rider: Disposition of Variance Wholesale Market Service				\$ -	-0.4465				
Transmission Network Service	\$ 2,850.64	\$ 2.2195	1,284	\$ 4,185.21	3.3396	1,253			
Transmission Line Connection	\$ 1,940.67	\$ 1.5110	1,284	\$ 976.37	0.7791	1,253			
Transmission Transformation Connection				\$ 2,219.81	1.7713	1,253			
Low Voltage	\$ 546.60	\$ 0.4555	1,200						
Regulatory									
Wholesale Market Service	\$ 1,012.59	\$ 0.0036	281,275	\$ -	0.0036		\$ 1,012.59	0.0036	281,275
Rural & Remote Rate Protection	\$ 365.66	\$ 0.0013	281,275	\$ -	0.0013		\$ 365.66	0.0013	281,275
Ontario Electricity Support Program	\$ 309.40	\$ 0.0011	281,275	\$ -	0.0011		\$ 309.40	0.0011	281,275
Standard Supply Administration	\$ 0.25	\$ 0.2500	1	\$ 0.25	0.25	1			
Debt Retirement	\$ -	\$ 0.0070	-						
HST	\$ 5,588.53			\$ 1,194.24			\$ 4,375.52		
TOTAL	\$ 48,577.25			\$ 10,380.67			\$ 38,033.33		
				\$ 124,568.05			\$ 48,414.00		

Table re: E.L.K. Rate and Billing Analysis (Continued)
Applicant's Compendium, Tab 3.



E.L.K. Response:

Please see response to HONI 1 (c) (Second Round).

Hydro One Networks Inc. Interrogatory Questions for E.L.K

Topic: Economic Efficiency - Recovery of ST Charges at Kingsville TS

HONI – 1 (Second Round)

Reference:

1. Exhibit 6 of ELK Response to Board Staff Interrogatories, September 8, 2016
2. The sensitivity analysis provided by Hydro One estimates that ELK's costs as an ST customer will range anywhere between \$31,000 and approximately \$125,000 annually. – Hydro One Intervenor Evidence, Att. 1-4: Scenario Analysis of Annual Incremental ELK ST Charges at Kingsville TS
3. "To assist the Board, E.L.K. has updated its bill comparison after incorporating the incremental sub transmission charges that were provided in the Hydro One evidence. E.L.K. utilized its cost allocation and rate design models from its last Cost of Service to give an accurate reflection of the impact of Hydro One's incremental charges. E.L.K. specifically took into account all of the incremental ST charges. Exhibit 3 provides the details of this analysis for each of the 4 loading scenarios provided by Hydro One. Notably, the monthly savings to be received by Sellick[s] continues to range between \$873.66 and \$849.43 (depending on the loading scenario assumed)". - ELK Revised Evidence, Paragraph 3, Issued October 6, 2016
4. Exhibit 3 of ELK Revised Evidence, Issued October 6, 2016

Interrogatory:

- a) In contrast to ELK's original submission provided in Exhibit 6 of ELK's response to Board staff interrogatories (Reference 1), please confirm that, after taking into account Hydro One's expected charges to E.L.K. at Kingsville TS (Reference 2), E.L.K's revised evidence (Reference 3) anticipates recovering approximately an additional \$120 to \$420 annually from Sellick.

E.L.K. Response:

E.L.K. is unable to replicate the exact \$120 to \$420 but E.L.K's analysis indicates these numbers are close to the numbers determined by E.L.K.

As a result, E.L.K. confirms that, after taking into account Hydro One's expected charges to E.L.K. at Kingsville TS (Reference 2), E.L.K's revised evidence (Reference 3) anticipates recovering approximately an additional \$120 to \$420 annually from Sellick

- b) Please explain how ELK expects to pay the \$31,000-\$125,000 incremental charge if ELK expects to collect only a maximum of \$420 annually from the Customer. Will all other ELK ratepayers pay the difference? Please explain.



E.L.K. Response:

Part 1

This question relates to certain incremental upstream charges that E.L.K. would incur due to the incremental load caused by Sellick assuming Sellick becomes a customer of E.L.K.

In order to evaluate the impact on Sellick as a customer of E.L.K., the additional Hydro One upstream costs such as ST and transmission cost to E.L.K. need to be included in the Board Approved cost allocation and rate design models for low voltage and retail transmission service to determine the rate impact on Sellick from the additional costs. The additional costs and volumes associated with Sellick are included in ELK's cost allocation and rate design models for all E.L.K. customers and the cost are distributed across all rate classes in accordance with Board policy. The resulting rates for the E.L.K. rate class for which Sellick is assigned are used to determine the impact on Sellick. As a result, Sellick will experience a maximum additional cost of around \$400 from the incremental charge of \$31,000-\$125,000.

To provide additional insight, this response will now refer to the Base Case and the 100% Case outlined in response to c) below. The Base Case reflects the cost allocation and rate design supporting the current approved Low Voltage Service Rate for the General Service 50 to 4,999 kW class of \$0.4332 / kW. The 100% Case is the scenario in which Hydro One estimates that E.L.K.'s additional costs as an ST customer will be approximately \$125,000 annually. The \$125,000 includes about \$22,000 of low voltage charges, \$89,000 in retail transmission charges and \$14,000 in HST charges. As shown in response to c) below when the additional \$22,000 of low voltage charges are included in the OEB approved LV cost allocation and rate design model along with the additional volume for Sellick the resulting Low Voltage Service Rate for the General Service 50 to 4,999 kW class is \$0.4555 / kW. The difference in LV service rate between \$0.4555/kW and \$0.4332/kW is \$.0223 /kW. When this difference is applied to the Sellick demand of 1,284 kW per month the result is \$28.65 per month or \$343.90 per year. **This means of the \$22,000 of additional LV charges Sellick will pay \$343.90 per year of this amount and other E.L.K ratepayers will pay the difference.**

E.L.K. has been informed by Sellick that when the new plant at the new location opens, the existing plant owned by Sellick within the E.L.K. service territory will decrease consumption by 325 KW (i.e. the business and process will move over to the new building). This fact does not appear to be reflected in Hydro One's scenarios or estimates regarding incremental load.

With regards to Hydro One retail transmission charges of \$89,000, E.L.K.s total transmission charges are \$2.5 million. As a result, it is E.L.K.'s view that once the additional Hydro One transmission charges, which are less than 4% of E.L.K's total transmission cost, are included in the OEB's approved retail transmission service rate model along with the additional volume for Sellick there will be minimal or no impact on E.L.K's retail transmission rates. The \$89,000 will be distributed to each rate class and the amount assigned to Sellick will be the amount already included in the Base Case

With regards to additional HST charges this will be collected from each E.L.K customer as the low voltage and retail transmission charges are collected.



Part 2.

To be comparable, the Board also needs to take into consideration the incremental upstream charges that Hydro One would incur from E.L.K. as an Embedded Distributor of E.L.K. due to the incremental load cause by Sellick assuming Sellick becomes a customer of Hydro One. The following table outlines these incremental upstream charges from E.L.K. to Hydro One assuming Sellick becomes a customer of Hydro One. These charges will not occur if Sellick is a E.L.K. customer. The scenarios included in the table are consistent with the scenarios used by Hydro One to develop the range of incremental ST charges of **between \$31,000 and \$125,000 annually** that Hydro One will charge E.L.K. Since Hydro One is an Embedded Distributor of E.L.K., the load associated Sellick will impact E.L.K. whether Sellick is a E.L.K. customer or a Hydro One customer. As a result, the incremental ST charges will occur in both cases.

		Scenarios			
		25%	50%	75%	100%
Monthly Volume	kW	321	642	963	1,284
Distribution Volumetric Rate	\$/kW	\$0.2751	\$0.2751	\$0.2751	\$0.2751
Rate Rider for Disposition of Deferral/Variance Accounts (2016) - effective until April 30, 2017	\$/kW	(\$2.1739)	(\$2.1739)	(\$2.1739)	(\$2.1739)
Low Voltage Service Rate (*)	\$/kW	0.4388	0.4445	0.4500	0.4555
Retail Transmission Rate - Network Service Rate	\$/kW	\$2.2195	\$2.2195	\$2.2195	\$2.2195
Retail Transmission Rate - Line and Transformation Connection Service Rate	\$/kW	\$1.5110	\$1.5110	\$1.5110	\$1.5110
(*) Incremental Hydro One costs to E.L.K. with occur whether Sellick is a E.L.K. or Hydro One customer					
E.L.K. cost to Hydro One as Embedded Distributor					
Distribution Volumetric		\$88.31	\$176.61	\$264.92	\$353.23
Disposition of Deferral/Variance Accounts (2016)		(\$697.82)	(\$1,395.64)	(\$2,093.47)	(\$2,791.29)
Low Voltage Service		\$140.85	\$285.37	\$433.35	\$584.86
Retail Transmission Rate - Network Service		\$712.46	\$1,424.92	\$2,137.38	\$2,849.84
Retail Transmission Rate - Line and Transformation Connection Service		\$485.03	\$970.06	\$1,455.09	\$1,940.12
Total Monthly		\$1,052.10	\$2,105.60	\$3,162.56	\$4,223.05
Total Annual		\$12,625.21	\$25,267.16	\$37,950.71	\$50,676.62

The Board also needs to determine how these incremental charges would flow through the Hydro One rate models to assess the impact on Sellick.

FULLY ALLOCATED CONNECTION COSTS

E.L.K.: Table as Per November 30, 2016 Reply Submission - Page 16

Cost Item	E.L.K.	Hydro One
Non-contestable work	\$8,702.67	\$16,103.17
Contestable work	Not required	Not required
Civil works	Supplied by Sellick	Supplied by Sellick
Capital Contribution	\$0	\$0
Pole relocation cost (already incurred)	\$8,432.49	\$8,432.49
Incremental ST Charge	up to approx. \$125k	up to approx. \$125k
Incremental Embedded Distributor Charge	\$0	up to approx. \$50k
Materiality Threshold	\$50,000.00	\$1,000,000.00

Hydro One: Table 1 - Fully Loaded Connection Costs for Sellick Connection*

Distributor Serving Sellick	E.L.K.	Hydro One
Cost Item		
Non-contestable work	\$8,702.67	\$16,103.17
Contestable work	Not required	Not required
Civil works	Supplied by Sellick	Supplied by Sellick
Capital Contribution	\$0	\$0
Pole relocation cost (already incurred)	\$8,432.49	\$0
One Time Connection Costs	\$17,135.16	\$16,103.17
Annual Incremental "Embedded Distributor" Charge from ELK to H1		\$126,159.46 ¹
Annual Incremental Embedded Distributor Charge from H1 to ELK	\$124,564.66 ²	(\$124,564.66) ³
Net Annual Incremental Settlement Between Distributors	\$124,564.66	\$1,594.80

*Analysis assumes 100% Sellick load scenario as has been utilized throughout this case

^{1,3} Detailed calculations for these figures are provided in Hydro One Table 3

² Detailed calculations for this figure is provided in Hydro One Table 2

1 **Ontario Energy Board (Board Staff) INTERROGATORY #01**

2
3 **Reference:**

4
5 Hydro One Evidence, Page 4

6
7 **Interrogatory:**

8
9 Hydro One states that its costs to connect the customer are lower than the applicant's and
10 has provided a table for comparison purposes. However, only non-contestable costs were
11 included in the table. The proper application of the economic evaluation model relies on
12 factoring in the total capital costs of the project, including the costs of the contestable
13 work. The economic evaluation model considers capital tax and depreciation costs, etc.,
14 so by excluding the capital costs of the contestable work, the model would not be
15 providing an accurate picture. Therefore:

- 16
17 a) Provide a table including a breakdown of all the non-contestable and contestable costs
18 to connect the customer.
19
20 b) Provide Hydro One's **detailed** economic evaluation based on the methodology and
21 **inputs** described in Appendix B of the Distribution System code. Provide a detailed
22 description of all capital costs included in the economic evaluation. Provide the
23 capital contribution amount resulting from the economic evaluation, which will be
24 required from the customer, if applicable.

25
26 **Response:**

- 27
28 a) All assets being constructed by the Customer will remain owned by the Customer. As
29 a result there are no contestable costs associated with the Hydro One connection.
30 Therefore, the costs provided in the Hydro One Offer To Connect ("OTC") are
31 indicative of the total costs to connect the Customer as all costs are non-contestable.
32 Hydro One has not investigated whether or not there are any contestable costs in
33 ELK's latest revised OTC.

34
35 The non-contestable costs are broken down in the OTC as Connection Work costs,
36 specifically outlined in Section 2.0 of the Hydro One OTC, and Expansion costs,

1 outlined in Section 5.0 of the OTC. For ease of reference, the one page extract from
2 Hydro One's OTC is provided as Attachment 1 of this interrogatory response.

3 The Connection Work costs, captured in Section 2.0 of the OTC under Other Related
4 Work, includes items such as installing the meter, installing the Bell tangent pole and
5 connecting the expansion work to the system. Connection Work costs account for
6 \$2,527.03, inclusive of labour dollars associated with this specific work.

7
8 The Expansion Work, outlined in Section 5.0 of the OTC, is broken down into
9 material, labour, equipment and administrative activities. This work includes
10 supplying and installing the overhead primary conductor. Together, these Expansion
11 Work costs account for \$13,576.14.

12
13 The total of all Hydro One related costs, \$16,103.17 are broken down and provided
14 below in Table 1.

15
16 **Table 1: Breakdown of Hydro One Total Costs**

Type of Cost	Total Dollars (\$)
Connection Costs (Not Eligible for Alternative Bid)	
Other Related Work	\$2,527.03
Expansion Costs (Not Eligible for Alternative Bid)	
Labour	\$5,720.17
Material	\$3,540.76
Equipment	\$3,211.32
Administrative Activities	\$1,103.89
Total	\$16,103.17

17
18 Regardless of which ELK OTC the Applicant ultimately decides to proceed with,
19 Hydro One continues to submit that the costs to connect the Customer to Hydro One
20 are significantly less than the alternative provided by the Applicant. ELK's
21 connection costs would include an increase in their embedded LDC bill from Hydro
22 One. Hydro One has updated the comparison provided at the reference of this
23 interrogatory question to account for this additional cost and has provided it as Table
24 2. The disparity between Hydro One and ELK's connection alternatives could result
25 in as much as \$125,000 annual increase in costs if the ELK application is approved.

1

Table 2: Comparison of Costs

Item	Hydro One Costs	ELK Costs
Non-Contestable Costs – Line Expansion	N/A	N/A
Non-Contestable Costs – (other than line expansion) - Secondary	N/A	\$8,432.49
Non-Contestable Costs – (other than line expansion) - Primary	\$16,103.17	\$8,702.67
Costs to be recovered from all other ELK ratepayers via LV Service Charge - Annually	N/A	\$31,141.16 to \$124,564.66
Total	\$16,103.17	\$48,276.32 to \$141,699.82

2

3

4

5

6

7

b) Provided as Attachment 2 is the summary of Hydro One’s detailed economic evaluation including the necessary inputs prescribed in Appendix B of the Distribution System Code. There is no capital contribution required by the customer and the capital costs incurred by Hydro One to connect the customer have been outlined in Table 1 of sub-question a) of this interrogatory.

**HONI Interrogatory Response (Oct 20, 2016), OEB 1(a),
Attachment 1.**

Filed: 2016-10-20
EB-2016-0155
Exhibit I-01-01
Attachment 1
Page 1 of 1

ATTACHMENT 1



Hydro One Net
Hydro One, 56 Embro Street Box 130, Beachville
ON, N0J 1A0
Phone: 800-957-7756

NEW CONNECTIONS, SERVICE UPGRADES & EMBEDDED GENERATION
(OTHER THAN MICRO-EMBEDDED GENERATION FACILITIES)

ECRA/ESA Lic 7002572

Date Prepared: 21/Sep/2016

SECTION 1.0 CUSTOMER INFORMATION

Name: SELICK EQUIPMENT LIMITED
Address: 358 ERIE ST N
HARROW, ON, N0R1G0
Phone: 5197382255
Alt Phone:
Fax:

Service Location:

LE301010343
Lot 4 Con 2 RP# Sublot#
Twp Colchester
2131 ROSEBOROUGH RD, COLCHESTER SOUTH, ON,

CUSTOMER: Please complete all shaded areas

SECTION 2.0 CONNECTION WORK – NOT ELIGIBLE FOR ALTERNATIVE BID (Must be Performed by Hydro One)

Net Revenue Credit Applied To This Section	\$	-2527.03
Other Related Work	\$	2527.03
Cost of Service Wire	\$	0.00
Credit for up to 30m of Overhead Service Wire	\$	0.00
Easement and Associated Costs	\$	0.00
Standard Service Charges (ex. Additional Layout Fee)*	\$	0.00
Misc Charges (ex. 400 Amp Self Contained rebate)*	\$	0.00
Incremental Cost for Transformer*	\$	0.00
Deposit Paid	\$	0.00
SUB TOTAL	\$	0.00

Description of Other Related Work:

PLEASE SIGN & RETURN

* Items Excluded from Receiving Revenue Support

SECTION 3.0 CONNECTION WORK – ELIGIBLE FOR ALTERNATIVE BID (May be Performed by Customer's Contractor or Hydro One)

	<u>HYDRO ONE</u>	<u>CONTRACTOR</u>	
Other Related Work	\$ 0.00	\$	Description of Other Related Work:
Net Revenue Credit Applied To This Section	\$ 0.00	\$ 0.00	
Incremental Cost for Pad-Mounted Transformer*	\$ 0.00	\$ 0.00	
SUB TOTAL	\$ 0.00	\$ 0.00	

* Items Excluded from Receiving Revenue Support

SECTION 4.0 WORK ON CUSTOMER-OWNED EQUIPMENT (May be Performed by Customer's Contractor or Hydro One)

Cost of Work Described*	\$	0.00
Electrical Safety Authority Permit*	\$	0.00
SUB TOTAL	\$	0.00

Description of Work

* Items Excluded from Receiving Revenue Support

SECTION 5.0 EXPANSION WORK

	5.0A Work Not Eligible for Alternative Bid (Must be Performed by Hydro One)	5.0B Work Eligible for Alternative Bid (May be Performed by Hydro One or Customer's Contractor)	
5.1 Engineering Design	\$ 0.00	N/A	5.0A Description of Work:
5.2 Material	\$ 3540.76	\$ 0.00	
5.3 Labour	\$ 5720.17	\$ 0.00	
5.4 Equipment	\$ 3211.32	\$ 0.00	
5.5 Administrative Activities	\$ 1103.89	\$ 0.00	
5.6 Easement and associated Costs	\$ 0.00	N/A	5.0B Description of Work:
5.7 Unforecasted Connection Costs (From Earlier Expansion)	\$ 0.00	N/A	
5.8 Engineering Design (paid)	\$ 0.00	N/A	
5.9 Net Revenue Credit or Cost	\$ -13576.14	\$ 0.00	
SUB TOTAL	\$ 0.00	\$ 0.00	

Supply and install Bell tangent pole, supply and install O/H primary conductor, pull up customer conductor and connect.



Basic Discounted Cash Flow Calculation

<u>Capital Costs and Charges</u>	Hydro One does all the work (Option A)	Alternative Bid Option (Option B)
Connection Cost	\$ 2317.35	\$ 2317.35
Expansion Cost Total Length 20 metres	\$ 11965.62	\$ 11965.62
Subtotal	\$ 14282.97	\$ 14282.97
Overheads and Interest during construction	\$ 1820.20	\$ 1820.20
Total Capital Cost	\$ 16103.17	\$ 16103.17

<u>Operating and Maintenance (O&M) Costs over 10 year revenue horizon</u>			
Estimated Connection O&M per year	\$ 6214.21		
Estimated Expansion O&M per year			
Based on 0 m O/H Distribution	\$ 0.00		
Based on 20 m O/H Sub Trans.	\$ 34.26		
Based on 0 m Underground	\$ 0.00		
Estimated Yearly O&M	\$ 6248.47		
Estimated Total O&M Over 10 Years	\$ 62484.70	PV \$ 47780.25	\$ 47780.25
Total Cost of Connection		\$ 63883.42	\$ 63883.42

<u>Revenues over 10 year revenue horizon</u>			
Kilowatt (kW) (Your Usage for ST Rate Class.)	1025	Demand Billed at a Rate of \$0.574 per kW per Month for Delivery Charges.	
Monthly Revenue	\$ 588.35		
Service Charge	\$ 1222.62		
Total	\$ 1810.97		
Yearly Revenue	\$ 21731.64		
Total Revenue Over 10 Years	\$ 217316.40	PV \$ 196606.13	\$ 196606.13

Taxes, Tax Credits and Other		PV \$ 20136.48	\$ 20136.48
PV Income Taxes	\$ 39438.86		
CCA Tax Shield and Municipal Tax	\$ -2435.57		
PV Working Capital	\$ 161.65		
Capital Contribution Adjustment	\$ -17028.46		
Revenue After Tax		\$ 176469.65	\$ 176469.65
Customer Pays This Amount* plus Excluded Items and HST		\$ 0.00	\$ 0.00
<small>*Difference between the Total Cost of Connection and Revenue After Tax (note negative number indicates Capital Contribution is required) PV = Present Value Rev Feb. 2016 </small>			

Ontario Energy
Board

Commission de l'Énergie
de l'Ontario



RP-2003-0044

IN THE MATTER OF APPLICATIONS BY

Centre Wellington Hydro	EB-1999-0269
Veridian Connections Inc. (1)	EB-1999-0260
Enwin Powerlines Ltd.	EB-1999-0281
Erie Thames Powerlines Corp.	EB-2002-0462
Chatham-Kent Hydro Inc.	EB-1999-0216
Essex Powerlines Corp.	EB-2002-0524
Cooperative Hydro Embrun Inc.	EB-2002-0482
Veridian Connections Inc. (2)	EB-2003-0020
Hydro One Networks Inc.	EB-2003-0031

FOR

AMENDMENTS TO THEIR LICENSED SERVICE AREA

DECISION WITH REASONS

2004 February 27

228
Hydro One also emphasized its view that to the extent that customer preference is based on distribution rates, such rates ought not to be a major factor in the consideration of such applications. While the immediate rate structure may be very influential in driving a customer's preference for one service provider over another, these rates should be understood to be transitional, and unreliable given the fact that a new generation of distribution rates will be implemented based on a much more acute cost and rate calculation. Hydro One has expressed the view that most local distribution rates are too low, and will rise following the completion of the Board's second generation rate design process.

229
The Board's duty to protect the interests of consumers as expressed in the objectives, means that the interest of any particular market participant must cede to the system's requirements where these interests conflict. Insofar as the Board has indicated elsewhere in this decision that it does not generally support the fostering of competition in the distribution activity, in its consideration of service area amendments, it will favour those applications which show that a given connection proposal represents the most economically efficient use of existing resources within the distribution system.

230
In many cases, the interests of the individual customer will align with the interests of other customers, and the system as a whole. Each market participant must accept the interdependence which is fundamental to the system. Each participant has a right to expect that others engaged in the same system meet their respective costs, without subsidization or penalty. That is as true for new customers as it is for others.

231
The Board agrees that current distribution rates are not necessarily the best guide to service choices. The Board expects that over time the rate making methodologies will yield ever more accurate representations of cost. It should be noted however, that Hydro One's concern in this area may not be completely addressed by this evolution. That is because its rates in areas contiguous to well developed local distribution systems are often significantly higher than those offered by the local distribution system. This arises from the fact that Hydro One's rates are based on the low density areas it serves which lie, by definition, between the service areas of urbanized systems. While the local distribution companies' rates may rise through the application of better rate setting methodologies, the fact remains that Hydro One's rates may suffer from fundamental differences in the cost and service structures as between Hydro One and the local distribution systems. The resulting rate differential may prevent Hydro One from being the distributor of choice for a new connecting customer. The extension of low density based service to areas contiguous to local distribution systems is often not an optimization of the system resources.

232
However, while recognizing certain disadvantages faced by Hydro One in its efforts to attract customers, these circumstances cannot be permitted to compromise the optimized growth of the system as a whole in the areas where most growth actually occurs - that is in the areas within and contiguous to existing urbanized zones currently served by well developed electricity distribution systems. Support for the societal role played by Hydro One must be funded otherwise than in protection of its geographic service area at the expense of orderly growth in the system.

233
In summary, the Board finds that customer preference is an important, but not overriding consideration when assessing the merits of an application for a service area amendment. **Customer choice**

may become a determining factor where competing offers to the customer(s) are comparable in terms of economic efficiency, system planning and safety and reliability, demonstrably neutral in terms of price impacts on customers of the incumbent and applicant distributor, and where stranding issues are addressed.

4.3 Economic Efficiency

The Board considers that economic efficiency comprises the concept of the most effective use of existing distribution resources. It is a concept that involves an objective assessment of the efficiencies attendant upon the connection of a customer by a distribution utility. The assessment involves a consideration of the distribution assets available for the connection, their proximity to the proposed point of connection, and the other costs necessary to effect the connection. Where new assets must be developed to effect the connection, a comparison of the costs associated with such development will inform the assessment of economic efficiency.

In all instances, the costs associated with the connection should be the fully loaded costs, which capture all of the relevant indirect and direct costs reasonably associated with the project at issue, not merely the price of connection quoted to the prospective connection customer. Costs developed with respect to other connection projects which are not contested will serve as a guide in assessing the authenticity of costs associated with a contested project.

In determining the efficiency of a given connection proposal, the Board will be strongly influenced by the extent to which a proponent can demonstrate that the proposed connection is reasonably contiguous to an existing, well-developed electricity distribution system. In such cases, it is very likely that economic efficiency will be served in approving that connection.

Where the proposed connection is not contiguous to a well-developed distribution system, contesting proponents will have to demonstrate that their respective proposals optimize the existing infrastructure to the extent possible.

In circumstances where a proposed connection lies adjacent to an isolated pocket of distribution customers served by one distributor, and contiguous to a dense, highly developed electricity distribution system operated by another distributor, the Board will have regard to the efficiency of the connection of the pocket, as well as the new connection, in considering competing connection proposals. In this way it is hoped that inefficient historic connections will not serve as support for new proposals which would fail but for their proximity to the old, inefficient connections.

The Board regards service areas to be rooted in the ability of distribution system operators to connect and serve customers efficiently. The service area defines the area in which a distributor is obliged to make an offer to serve if requested to do so. Existing service areas have developed over time and do not necessarily represent the most efficient way of serving any particular customer. It is not geography that ought to form the basis for service areas, but rather the definition of an area which can be efficiently serviced by a given distribution operator. Applications for amendment which involve broad swathes of geography, without detailed proposals respecting specific customers, should be avoided. The issue is always rooted in the economics associated with connections.