



T.J. Moore Law  
Professional Corporation

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June 25, 2012

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

Dear Ms. Walli:

**Re: Orangeville Hydro Limited – Application for Service Area Amendment  
Response to Board Staff and Hydro One Interrogatories  
Board File Number EB-2012-0181**

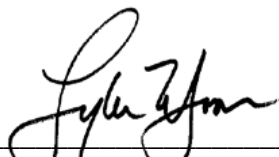
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Please find enclosed Orangeville Hydro Limited's responses to the interrogatories of Board Staff and Hydro One Networks Inc.'s in connection with the above-referenced proceeding.

In addition to this electronic copy of the revised application, two (2) paper copies will be delivered via courier.

Yours very truly,

**T.J. MOORE LAW PROFESSIONAL CORPORATION**

By:   
Tyler J. Moore, LL.B.

**TJMLAW**

**Orangeville Hydro Limited  
Application for Service Area Amendment  
Board File # EB-2012-0181  
Response to Board Staff Interrogatories**

**Questions:**

**1. Reference: Page 4 Section 7.1.2**

***OHL states that it is the incumbent distributor given that a small portion of the development is already within OHL's licensed service area.***

***a) Please provide reasons why this parcel of land was not part of the proposed service area in OHL's service area amendment application EB-2011-0213 filed in 2011 for the same development lands to be included in OHL's service territory.***

The portion of the Development within OHL's licensed service area ("Part of Lot 8") is identified in the plan of subdivision for the proposed Development. In the Application (Section 7.0, page 2), OHL contends that it is an incumbent distributor given (i) Part of Lot 8 is already within OHL's licensed service area and (ii) based on the definition of incumbent distributor in the Board's *Filing Requirements for Service Area Amendments, Chapter 7 of the Filing Requirements for Transmission and Distribution Application* (pages 3-4 define an incumbent distributor as a "distributor that currently has the region that is the subject of the SAA application in its service area"). OHL submits that this interpretation is supported by the need to amend OHL's distribution license in the event that OHL does not service the Development Lands.

Part of Lot 8 was included the proposed service area in OHL's previous service area amendment application ("EB-2011-0213"). Part of Lot 8 was listed in the legal description of the proposed development in the EB-2011-0213 application (section 2.3, page 5) and it was also identified in the draft plan of subdivision included with the EB-2011-0213 application (Tab A). However, OHL did not realize that Part of Lot 8 was in its licensed service area when EB-2011-0213 was submitted. The fact that Part of Lot 8 was already in OHL's service area was recently identified when OHL was preparing the current Application and it analyzed the license amendments required in connection with the proposed service area amendment ("SAA")

***b) Please describe the electricity distribution services to be provided to the part of the development within OHL's licensed service territory.***

As described in the Application (Section 7.1.2, page 4), Part of Lot 8 is "a small portion of the Development" that "connects the subject area with Grand Valley and an existing subdivision in OHL's service territory that runs parallel to the eastern boundary of the Development Lands."

This small portion of the Development that is already within OHL's licensed service area will not contain any electricity distribution services at this stage of the proposed Development.

**2. Reference: Page 11, Section 7.2.6**

***OHL states "The proposed SAA will provide OHL with the opportunity to provide an additional internal loop feed to future and existing customers in the proposed development and adjacent areas... OHL proposes to extend the duct work ... to allow the option for creating this internal loop feed as part of OHL's three year capital plan"***

**a) Please indicate whether OHL's plan to provide an additional internal loop feed is contingent upon the proposed service area amendment. If yes, please:**

**i. Provide details:**

The opportunity to provide an additional internal loop feed is contingent upon the proposed service area amendment given that it would use OHL's new infrastructure within the proposed Development.

OHL would utilize the new infrastructure within the proposed Development to provide an internal loop feed to OHL's existing customers. At the same time, OHL's existing infrastructure would be utilized to provide a loop feed to future customers in the proposed Development. Since OHL's existing distribution system borders the proposed development, minimal additional infrastructure will be required to install a looped system instead of a radial feed to the proposed Development.

OHL's offer to connect provides for the extension of the duct work to the limit of construction at the southern boundary of the Development. In the event that this SAA is granted, OHL would install one switching cubicle in order to allow for internal looping. The cost for this switching cubicle is approximately \$40,000. Given that the internal loop feed would benefit OHL's existing customers, as well as the future customers in the proposed Development, OHL would include costs in its three year capital plan.

**ii. provide reasons behind inclusion of this extension option in OHL's three year capital plan**

As discussed in response to Board Staff Interrogatories No. 2(a)(i), OHL's offer to connect provides for the extension of the required duct work but a switching

cubicle is required to complete the internal loop feed. The cost of this switching cubicle would be included in OHL's three year capital plan because the internal loop feed would improve the reliability of OHL's existing customers and those in the proposed Development.

**b) *Please indicate whether there would be any financial impact on the extension project if the proposed development would be supplied by Hydro One. If yes, please provide details.***

If the proposed development was supplied by Hydro One, OHL would not move forward with the internal loop feed extension. Without the infrastructure of the proposed Development, OHL will not be able to provide an additional internal loop to existing OHL customers or future customers in the Development.

**3. *Reference: Page 12, Section 7.2. 6***

***OHL states: "By granting this SAA, and including the future customers of the Development with the rest of the residents of Grand Valley, customer confusion will be avoided which will have a positive impact on safety and reliability."***

**a) *Please explain why there would be customer confusion if the SAA is not granted and how this would impact safety and reliability.***

OHL's existing service area in the Township of East Luther Grand Valley is defined as the former Village of Grand Valley as of December 31, 1994. This physically represents the current urban area of the Township of East Luther ("Grand Valley").

Currently, urban citizens (i.e. citizens within populated subdivisions in Grand Valley) are serviced by OHL. These citizens are required to call OHL for underground locates and during power outages. If the proposed Development is serviced by OHL, Grand Valley's urban citizens will continue to contact OHL. If Hydro One services the Development, the new customers in the proposed Development will be required to call Hydro One for locates and during a power outage. This will create a division between the urban citizens of Grand Valley which may cause customer confusion, particularly in emergency situations.

As stated in the Application (Section 7.1.2, page 6), OHL also bills Grand Valley residents for water and electricity on the same bill. If Hydro One services the proposed Development, urban residents of Grand Valley will receive an electricity bill from Hydro One and a separate bill from OHL for water which may create additional customer confusion.

This division and confusion described in response to Board Staff Interrogatory No.3 (a) could cause customers to call the wrong company for a locate which is a safety concern. Also, a

customer may call the wrong distributor during a power outage which will increase response times and negatively affect reliability indicators.

In addition, the local fire department understands that the urban area of Grand Valley is serviced by OHL. If Hydro One services the proposed Development, the fire department may need to determine the appropriate distributor to contact which may result in delays and impact on safety and reliability.

**b) *Please explain how the existing situation with respect to safety and reliability would improve if OHL was to supply the development.***

If OHL was to supply the Development, the division and customer confusion describe in response to Board Staff Interrogatories No. 3(a), and the resulting implications on safety and reliability, would be avoided.

In addition, longer power interruption may be avoided if OHL services the proposed Development given OHL's designation of the subject area as urban (with a 60 minute emergency response time) versus Hydro One's designation of the subject area as rural (with a 120 minute emergency response time).

**4. *Reference: Page 16, Section 7.5.5 and Schedule K***

**a) *Although OHL filed a comparison of connection plans by both distributors, it does not provide a clear comparison of the capital contribution a customer must pay if he chooses one distributor or the other.***

***Please file a comparison of both offers in a table side by side where all costs required by each distributor to connect the development are listed. Please arrange the table in a format that would provide detailed and clear comparison of all costs associated with the connection and capital contribution required from the developer by each distributor. Please outline all relevant assumptions being used for the calculation of capital contribution required by both distributors. It should be clear that both distributors use the same assumptions in their calculations and there are no significant differences in how the capital contribution is calculated by the two distributors.***

OHL respectfully submits that it has used its best efforts to compare the connection plans of both distributors in a clear and understandable manner. However, such a comparison has proven difficult based on the following factors:

- Difference in the Number of Lots – OHL has prepared its offer to connect based on 154 lots pursuant to the *Request for Electrical System Connection Form* submitted by the developer to OHL. The developer and the Mayor of East Luther Grand Valley have both

confirmed that the proposed Development is being registered as one subdivision with 154 lots. Contrarily, Hydro One has prepared its offer to connect based on only 115 lots due to a concern that some details regarding 39 townhome condominium lots at the north of the proposed Development may change. This discrepancy is explained in greater detail in response to Hydro One's Interrogatory No. 2. In any event, this discrepancy has resulted in difficulties in comparing the two distributors' offers to connect.

- Consumption Statistics – In its economic evaluation model, OHL used an average consumption of 700kWh. OHL submits that this is consistent with the Board's 2010 Yearbook of Electricity Distributors (which provides for an annual consumption of 720kWh). Hydro One used an average consumption of 1,069kWh (versus the annual consumption of 613.55kWh used by Hydro One in EB-2011-0085 and Hydro One's annual consumption in the 2010 Yearbook is 912kWh). These discrepancies in annual consumption amounts also make comparisons difficult.
- Civil Costs – In addition to contestable costs, the cost estimate of \$399,080 provided by the developer's engineer and set out in OHL's Application also includes civil costs. Hydro One's cost estimates do not include civil costs which makes some adjustment necessary to compare costs on an apples-to-apples basis.
- Contestable vs. Non-Contestable Costs – The developer has indicated that it prefers to install the contestable work related to the proposed Development. The developer has provided OHL with an estimate of contestable costs for electrical work inside the point of supply, as prepared by it's the developer's engineer. OHL has then provided the developer with costing for non-contestable items in accordance with the Distribution System Code (i.e. work up to and including the point of supply). Hydro One has provided an estimate of non-contestable costs that include certain items inside the point of supply (e.g. transformers) which OHL and the developer view as contestable costs. Accordingly, for the purposes of an apples-to-apples comparison, it is necessary to remove certain costs from Hydro One's non-contestable costs to (i) make a fair comparison with OHL's non-contestable costs and (ii) ensure that these items are not double counted in the developer's contestable costs. These discrepancies have also resulted in difficulties in comparing the two distributors' connection plans.
- Lack of Detail in Hydro One's Economic Evaluation Model – As was indicated in the applicant's final argument in EB-2011-0085, Hydro One's high-level summary of its economic model provides minimal details to support the assumptions used by Hydro

One in preparing its economic evaluation. Accordingly, it is difficult to provide the assumptions requested by the Board in this interrogatory.

Given the above discrepancies and difficulties, OHL has amended its economic evaluation model as described below in order to produce a clear apples-to-apples comparison of the two distributors' connection plans. A copy of the amended economic evaluation reflecting the following changes is attached to these responses. The changes to OHL's costing for comparison purpose include:

- Difference in the Number of Lots – For comparison purposes, OHL has reduced the number of lots used in its economic evaluation model to 115. This reduction in the number of lots has also resulted in (i) a reduction of OHL's non-contestable costs (from \$28,543.00 to \$23,237.00) and (ii) a reduction of the contestable costs provided by the developer (the amended amount is \$158,898.00 which is consistent with the amended estimate provided by the developer's engineer).
- Consumption Statistics – In its revised economic evaluation, OHL used the same average consumption (i.e. 1,069kWh) employed by Hydro One.
- Civil Costs – Given that Hydro One did not include civil costs in its pricing, OHL has removed civil costs to allow for an apples-to-apples comparison.
- Contestable vs. Non-Contestable Costs – Given the above-described difficulties in comparing contestable and non-contestable costs due to the two distributors' different approaches to categorizing these costs, OHL proposes that the comparison be based on "Option A" in Hydro One's offer to connect which includes Hydro One's cost estimates for both contestable and non-contestable costs. In comparison, OHL will use its non-contestable cost estimate and the contestable cost estimate provided by the developer (both adjusted to reflect 115 lots).

In light of the above changes, OHL presents the following cost comparison table for consideration by the Board:

<u>Costs</u>	<u>OHL</u>	<u>Hydro One</u>
Non-contestable	\$23,237.00	\$231,341.62
Contestable	\$158,898.00	\$236,750.26
Civil	n/a	n/a
<b>Total Capital Costs</b>	\$182,135.00	\$468,091.88
Total Customer Costs	\$11,865.00	\$160,966.14

## Expansion - CHEC Economic Evaluation Model

Version Dec 27 2008 Capital Tax updated and Tax Shield Added

Version Dec 2 2008 Capital Structure Updated

Version Oct 1 2008 Dev Summary Updated

### INDEX

Tab Title	Description
Table of Contents	This page lists and describes each of the sheets in the order that they appear within the spreadsheet.
Upstream Costs	This sheet is provided to calculate the System Capacity Enhancement cost and to allocate those costs to new customers based on the load those customers are adding to the system.
Inputs	This sheet is where all the inputs for the economic evaluation model are entered into the model. Please note that as per the Distribution System Code this model does not consider inflation in the analysis.
Summary	This sheet provides a summary of the Capital Cost program, the Net Present Value of the Capital Cost program, the Capital Contribution amounts from the LDC and the Customer, and the Expansion Deposit calculations.
Revenue	This sheet calculates the incremental Revenue from new customers assuming currently approved rates excluding transition cost. The rates are also adjusted to reflect the phase-in of Market Based Rate of Return.
OM&A	This sheet calculates the OM&A expense for the project. OM&A is determined on a per customer and a kWh or kW basis. The OM&A value to use here is your most recent OEB RRR submission. Dollars in future years can be input if known with certainty.
Municipal Tax CCA & Cap Tax	This sheet calculates incremental Municipal Taxes on new property of the project This sheet determines the level of Capital Cost Allowance (CCA) for the calculation of Income Taxes as well as the amount of Capital Tax. CCA is determined on declining balance basis
Dep'n & Int	This sheet determines the level of Depreciation and the amount of Deemed Interest to be used in the calculation of Income Taxes. Depreciation is determined on straight line basis.
Income Tax	This sheet calculates Income Taxes or in other words Payments in Lieu of Taxes.
Expansion Deposit	This sheet calculates the amount of the Expansion Deposit to be collected from the customer/developer depending whether a shortfall exists based on the economic evaluation calculation
NPV Cash Flow Anal	This sheet determines the Net Present Value for all the incremental Cash Flows resulting from the Capital program.
Mid Year PV Factor	This sheet calculates the incremental Cost of Capital factors to be used in the net Present Value equations.



## Upstream Costs

Monthly kW Load per Customer	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Residential						2.97	2.97	2.97	2.97	2.97
<50 General Service						0.00	0.00	0.00	0.00	0.00
>50 General Service						0.00	0.00	0.00	0.00	0.00
0						0.00	0.00	0.00	0.00	0.00
0						0.00	0.00	0.00	0.00	0.00
0						0.00	0.00	0.00	0.00	0.00
0						0.00	0.00	0.00	0.00	0.00
0						0.00	0.00	0.00	0.00	0.00
0						0.00	0.00	0.00	0.00	0.00
0						0.00	0.00	0.00	0.00	0.00

Number of Connections	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Residential						23	23	23	23	23
<50 General Service						0	0	0	0	0
>50 General Service						0	0	0	0	0
0						0	0	0	0	0
0						0	0	0	0	0
0						0	0	0	0	0
0						0	0	0	0	0
0						0	0	0	0	0
0						0	0	0	0	0
0						0	0	0	0	0

## Upstream Cost Calculation

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Capacity / Enhancement Cost	\$0	\$0	\$0	\$0	\$0					
New Capacity Added (kW)										
\$/kW	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Annual kW of New Customer Load						68.30	68.30	68.30	68.30	68.30
5 year average \$ per kW					\$0.00					
<b>Upstream cost</b>						<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>

## Version Dec 27 2008

Thomas Field Homes - Mayberry Hills Subdivision

C

2012

### Capital Classes

18350 OH Conductors & Devices  
18400 U/G Conduit  
18450 U/G Conductors & Devices  
18500 Transformers  
18550 Services

LDC Upstream Costs  
LDC Non-Contestable Amounts

### Rate Classes

Residential  
<50 General Service  
>50 General Service

[illegible]

0  
0  
2016  
Residential  
<50 General Service  
>50 General Service  
0  
0  
0  
0  
0  
0  
0  
0

Monthly Service Charge	Volumetric Charge	
(\$/Customer)	(\$/kWh)	(\$/kW)
\$16.14	\$0.0139	

Monthly Consumption Assumptions

	Average Monthly Consumption		
	(kWh)	(kW)	kW Load
2012			
Residential	1,069		2.97
<50 General Service			0.00
>50 General Service			0.00
0			0.00
0			0.00
0			0.00
0			0.00
0			0.00
0			0.00
0			0.00
0			0.00
0			0.00
2013			
Residential	1,069		2.97
<50 General Service			0.00
>50 General Service			0.00
0			0.00
0			0.00
0			0.00
0			0.00
0			0.00
0			0.00
0			0.00
0			0.00
2014			
Residential	1,069		2.97
<50 General Service			0.00
>50 General Service			0.00
0			0.00
0			0.00
0			0.00
0			0.00
0			0.00
0			0.00
0			0.00
2015			
Residential	1,069		2.97
<50 General Service			0.00
>50 General Service			0.00
0			0.00
0			0.00
0			0.00
0			0.00
0			0.00
0			0.00
0			0.00
2016			
Residential	1,069		2.97
<50 General Service			0.00
>50 General Service			0.00
0			0.00
0			0.00
0			0.00
0			0.00
0			0.00
0			0.00
0			0.00

Estimated Customer Connections

	2012	2013	2014	2015	2016	Total
Residential	23	23	23	23	23	115
<50 General Service						0
>50 General Service						0

Total	23	23	23	23	23	115
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### Actual Capital Costs

Please Note: Land is a fixed capital category because it is the only capital cost to attract municipal tax. In addition, Land does not depreciate for accounting or income tax purposes. If you do not have Land in the project then leave the input field blank.

## Financial Assumptions

Please Note: Land will not have a depreciation or CCA rate applied to it because it is a non depreciating asset. However, provision for a capital overhead rate on Land has been provided if required for evaluation purposes

Municipal Tax Rate (%)

Income Tax Rate (%)	28.31	28.31	28.31	28.31	28.31
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### Expansion Deposit Refund Breakdown

	KW	# Customers	Total kW	%	Total Refund	Refund Per Connection
See Important Comment in Cell B255						
Residential	2.97	115	341.5	100.00%	\$424,441	\$3,691
<50 General Service	0.00	0	0.0	0.00%	\$0	\$0
>50 General Service		0	0.0	0.00%	\$0	\$0
	0	0	0.0	0.00%	\$0	\$0
	0	0	0.0	0.00%	\$0	\$0
	0	0	0.0	0.00%	\$0	\$0
	0	0	0.0	0.00%	\$0	\$0
	0	0	0.0	0.00%	\$0	\$0
	0	0	0.0	0.00%	\$0	\$0
	0	0	0.0	0.00%	\$0	\$0
	2.97		341.5	100.00%	\$424,441	

## Expansion - CHEC Economic Evaluation Model

### Developer Summary

#### Thomas Field Homes - Mayberry Hills Subdivision

**Section 1** This calculation and transaction takes place when the model is first run with estimated costs and updated at energization with actual costs.

<b>Expansion Deposit</b> (due to LDC prior to commencement of construction)	<b>\$471,601</b>
<b>Warranty Holdback</b> (10% of Expansion Deposit for 2 years if Developer Installed)	\$47,160
<b>Expansion Deposit Available on Connection</b>	\$424,441

**Section 2** This transaction takes place at energization based on the actual costs of the project.

Transfer Price if Developer Installed (due to Developer)	\$158,898
Capital Contribution (shortfall due to LDC)	\$11,865
<b>Net Due to Developer upon energization</b>	<b>\$147,033</b>

**Section 3** The transaction noted in Section 2 is based on inputted information from the Electrical System Connection Form provided by the Developer. When actual calculations are made there may be applicable impacts that the Developer is responsible for.

The following indicates the inputs utilized that may or may not need adjustment during the 5 year constructin horizon

<u>Construction Costs</u>		<u>Expected Connections</u>		<u>Expected Avge Yrly Load/Cntn</u>
Contestable	\$158,898.00	Year 1	23	0.13
Non-Contestable	\$23,237.00	Year 2	23	0.13
Upstream Costs	\$0.00	Year 3	23	0.13
<b>TOTAL</b>	<b>\$182,135.00</b>	Year 4	23	0.13
		Year 5	23	0.13
		<b>TOTAL</b>	<b>115</b>	

Summary of Results For	Thomas Field Homes - Mayberry Hills Subdivision		Important Note
Capital Costs	Total Expansion Cost / Transfer Price	%	Contributed Capital Allocation if Negative
18350 OH Conductors & Devices	\$158,898	87%	-\$10,351
18400 U/G Conduit	\$0	0%	\$0
18450 U/G Conductors & Devices	\$0	0%	\$0
18500 Transformers	\$0	0%	\$0
18550 Services	\$0	0%	\$0
0	\$0	0%	\$0
0	\$0	0%	\$0
0	\$0	0%	\$0
LDC Upstream Costs	\$0	0%	\$0
LDC Non-Contestable Amounts	\$23,237	13%	-\$1,514
Land	\$0	0%	\$0
<b>Total</b>	<b>\$182,135</b>	<b>100%</b>	<b>-\$11,865</b>
<b>Capital Contribution Required ONLY if Negative</b>			<b>-\$11,865</b>
<b>Transfer Price Payment if Customer Installed</b>			<b>\$158,898</b>
This should be the sum of only the items from B9:B19 installed at the customers cost			
<b>EXPANSION DEPOSIT</b>			<b>\$471,601</b>
<b>Warranty Holdback - 10%</b>			<b>\$47,160</b>
<b>Expansion Deposit Available on Connection</b>			<b>\$424,441</b>
Refund later of: 2 years after last connection or 2 years after connection horizon ends			

[illegible]

## Expansion - CHEC Economic Evaluation Model

### Distribution Revenue Model

Rate Class: Residential

	Monthly Service Charge	Volumetric Charge	
	(\$/Customer)	(\$/kWh)	(\$/kW)
2012	\$16.14	\$0.0139	\$0.0000
2013	\$16.14	\$0.0139	\$0.0000
2014	\$16.14	\$0.0139	\$0.0000
2015	\$16.14	\$0.0139	\$0.0000
2016	\$16.14	\$0.0139	\$0.0000

	Average Monthly Consumption	
	(kWh)	(kW)
2012	1,069	0
2013	1,069	0
2014	1,069	0
2015	1,069	0
2016	1,069	0

	Annual Connections	Accum. Connections	Monthly Energy (kWh)	Monthly Demand (kW)	Annual Service Charge Revenue	Annual Energy Charge Revenue	Annual Demand Charge Revenue	Total Revenue
2012	23	23	24,587	0	\$4,455	\$4,101	\$0	\$8,556
2013	23	46	49,174	0	\$8,909	\$8,202	\$0	\$17,112
2014	23	69	73,761	0	\$13,364	\$12,303	\$0	\$25,667
2015	23	92	98,348	0	\$17,819	\$16,404	\$0	\$34,223
2016	23	115	122,935	0	\$22,273	\$20,506	\$0	\$42,779

Rate Class: <50 General Service

	Monthly Service Charge	Volumetric Charge	
	(\$/Customer)	(\$/kWh)	(\$/kW)
2012	\$0.00	\$0.0000	\$0.0000
2013	\$0.00	\$0.0000	\$0.0000
2014	\$0.00	\$0.0000	\$0.0000
2015	\$0.00	\$0.0000	\$0.0000
2016	\$0.00	\$0.0000	\$0.0000

	Average Monthly Consumption	
	(kWh)	(kW)
2012	0	0
2013	0	0
2014	0	0
2015	0	0
2016	0	0

	Annual Connections	Accum. Connections	Monthly Energy (kWh)	Monthly Demand (kW)	Annual Service Charge Revenue	Annual Energy Charge Revenue	Annual Demand Charge Revenue	Total Revenue
2012	0	0	0	0	\$0	\$0	\$0	\$0
2013	0	0	0	0	\$0	\$0	\$0	\$0
2014	0	0	0	0	\$0	\$0	\$0	\$0
2015	0	0	0	0	\$0	\$0	\$0	\$0
2016	0	0	0	0	\$0	\$0	\$0	\$0

Rate Class: >50 General Service



	Monthly Service Charge	Volumetric Charge	
	(\$/Customer)	(\$/kWh)	(\$/kW)
	\$0.00	\$0.00	\$0.00
2012	\$0.00	\$0.00	\$0.00
2013	\$0.00	\$0.00	\$0.00
2014	\$0.00	\$0.00	\$0.00
2015	\$0.00	\$0.00	\$0.00
2016			

	Average Monthly Consumption	
	(kWh)	(kW)
	0	0
2012	0	0
2013	0	0
2014	0	0
2015	0	0
2016		

	Annual Connections	Accum. Connections	Monthly Energy (kWh)	Monthly Demand (kW)	Annual Service Charge Revenue	Annual Energy Charge Revenue	Annual Demand Charge Revenue	Total Revenue
	0	0	0	0	\$0	\$0	\$0	\$0
2012	0	0	0	0	\$0	\$0	\$0	\$0
2013	0	0	0	0	\$0	\$0	\$0	\$0
2014	0	0	0	0	\$0	\$0	\$0	\$0
2015	0	0	0	0	\$0	\$0	\$0	\$0
2016								

0

Rate Class:

	Monthly Service Charge	Volumetric Charge	
	(\$/Customer)	(\$/kWh)	(\$/kW)
	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
2012	\$0.00	\$0.00	\$0.00
2013	\$0.00	\$0.00	\$0.00
2014	\$0.00	\$0.00	\$0.00

	Average	
	Monthly Consumption	
	(kWh)	(kW)
	0	0
	0	0
2012	0	0
2013	0	0
2014	0	0

	Annual Connections	Accum. Connections	Monthly Energy (kWh)	Monthly Demand (kW)	Annual Service Charge Revenue	Annual Energy Charge Revenue	Annual Demand Charge Revenue	Total Revenue
	0	0	0	0	\$0	\$0	\$0	\$0
	0	0	0	0	\$0	\$0	\$0	\$0
2012	0	0	0	0	\$0	\$0	\$0	\$0
2013	0	0	0	0	\$0	\$0	\$0	\$0
2014	0	0	0	0	\$0	\$0	\$0	\$0
2015								
2016								

0

Rate Class: Monthly Service

	<u>Charge</u>	<u>Volumetric Charge</u>	
	(\$/Customer)	(\$/kWh)	(\$/kW)
	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
2012	\$0.00	\$0.00	\$0.00
2013	\$0.00	\$0.00	\$0.00
2014	\$0.00	\$0.00	\$0.00

2015	Average		
2016	<u>Monthly Consumption</u>		
	(kWh)	(kW)	
	0	0	
	0	0	
2012	0	0	
2013	0	0	
2014	0	0	

2015					Annual	Annual	Annual	
2016					Service	Energy	Demand	
	Annual	Accum.	Monthly	Monthly	Charge	Charge	Charge	Total
	Connections	Connections	Energy	Demand	Revenue	Revenue	Revenue	Revenue
			(kWh)	(kW)				
	0	0	0	0	\$0	\$0	\$0	\$0
	0	0	0	0	\$0	\$0	\$0	\$0
2012	0	0	0	0	\$0	\$0	\$0	\$0
2013	0	0	0	0	\$0	\$0	\$0	\$0
2014	0	0	0	0	\$0	\$0	\$0	\$0
2015								
2016								

0

Rate Class:	Monthly Service		
	<u>Charge</u>	<u>Volumetric Charge</u>	
	(\$/Customer)	(\$/kWh)	(\$/kW)
	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
2012	\$0.00	\$0.00	\$0.00
2013	\$0.00	\$0.00	\$0.00
2014	\$0.00	\$0.00	\$0.00

2015	Average		
2016	<u>Monthly Consumption</u>		
	(kWh)	(kW)	
	0	0	
	0	0	
2012	0	0	
2013	0	0	
2014	0	0	

2015					Annual	Annual	Annual	Total
2016					Service	Energy	Demand	
	Annual	Accum.	Monthly	Monthly	Charge	Charge	Charge	Revenue
	Connections	Connections	Energy	Demand	Revenue	Revenue	Revenue	
			(kWh)	(kW)				
	0	0	0	0	\$0	\$0	\$0	\$0
	0	0	0	0	\$0	\$0	\$0	\$0
2012	0	0	0	0	\$0	\$0	\$0	\$0
2013	0	0	0	0	\$0	\$0	\$0	\$0
2014	0	0	0	0	\$0	\$0	\$0	\$0
2015								
2016								

0

Rate Class:	Monthly Service Charge		
	<u>Charge</u>		
	(\$/Customer)	(\$/kWh)	(\$/kW)
	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
2012	\$0.00	\$0.00	\$0.00
2013	\$0.00	\$0.00	\$0.00
2014	\$0.00	\$0.00	\$0.00
2015			
2016			

	Average	
	<u>Monthly Consumption</u>	
	(kWh)	(kW)
	0	0
	0	0
2012	0	0
2013	0	0
2014	0	0
2015		
2016		

			Monthly Energy (kWh)	Monthly Demand (kW)	Annual Service Charge Revenue	Annual Energy Charge Revenue	Annual Demand Charge Revenue	Total Revenue
	Annual	Accum.						
	Connections	Connections						
	0	0	0	0	\$0	\$0	\$0	\$0
	0	0	0	0	\$0	\$0	\$0	\$0
2012	0	0	0	0	\$0	\$0	\$0	\$0
2013	0	0	0	0	\$0	\$0	\$0	\$0
2014	0	0	0	0	\$0	\$0	\$0	\$0
2015								
2016								

0

Rate Class:	Monthly Service Charge		
	<u>Charge</u>		
	(\$/Customer)	(\$/kWh)	(\$/kW)
	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
2012	\$0.00	\$0.00	\$0.00
2013	\$0.00	\$0.00	\$0.00
2014	\$0.00	\$0.00	\$0.00
2015			
2016			

	Average	
	<u>Monthly Consumption</u>	
	(kWh)	(kW)
	0	0
	0	0
2012	0	0
2013	0	0
2014	0	0
2015		
2016		

			Monthly Energy (kWh)	Monthly Demand (kW)	Annual Service Charge Revenue	Annual Energy Charge Revenue	Annual Demand Charge Revenue	Total Revenue
	Annual Connections	Accum. Connections						
	0	0						
	0	0						
	0	0						
2012	0	0	0	0	\$0	\$0	\$0	\$0
2013	0	0	0	0	\$0	\$0	\$0	\$0
2014	0	0	0	0	\$0	\$0	\$0	\$0
2015								
2016								

0

Rate Class:	Monthly Service		
	<u>Charge</u>	<u>Volumetric Charge</u>	
	(\$/Customer)	(\$/kWh)	(\$/kW)
	\$0.00	\$0.00	\$0.00
	\$0.00	\$0.00	\$0.00
2012	\$0.00	\$0.00	\$0.00
2013	\$0.00	\$0.00	\$0.00
2014	\$0.00	\$0.00	\$0.00

2015	Average		
2016	<u>Monthly Consumption</u>		
	(kWh)	(kW)	
	0	0	
	0	0	
2012	0	0	
2013	0	0	
2014	0	0	

2015					Annual	Annual	Annual	
2016					Service	Energy	Demand	
	Annual	Accum.	Monthly	Monthly	Charge	Charge	Charge	Total
	Connections	Connections	Energy	Demand	Revenue	Revenue	Revenue	Revenue
			(kWh)	(kW)				
	0	0	0	0	\$0	\$0	\$0	\$0
	0	0	0	0	\$0	\$0	\$0	\$0
2012	0	0	0	0	\$0	\$0	\$0	\$0
2013	0	0	0	0	\$0	\$0	\$0	\$0
2014	0	0	0	0	\$0	\$0	\$0	\$0
2015								
2016								

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Rate Class:		Monthly Service																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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# Expansion - CHEC Economic Evaluation Model

## OM&A Calculation

Year	OM&A per Customer	New Customers	Accum Cust Connections	Accum OM&A on per Customer Basis	OM&A per kWh	New Annual kWhs	Accum OM&A on per kWh Basis	OM&A per kW	New Annual kW	Accum OM&A on per kW Basis	Total OM&A
2012	\$234.52	23	23	\$5,394	\$0.00	295,044	\$0	\$0.00	0	\$0	\$5,394
2013	\$234.52	23	46	\$10,788	\$0.00	295,044	\$0	\$0.00	0	\$0	\$10,788
2014	\$234.52	23	69	\$16,182	\$0.00	295,044	\$0	\$0.00	0	\$0	\$16,182
2015	\$234.52	23	92	\$21,576	\$0.00	295,044	\$0	\$0.00	0	\$0	\$21,576
2016	\$234.52	23	115	\$26,970	\$0.00	295,044	\$0	\$0.00	0	\$0	\$26,970

# Expansion - CHEC Economic Evaluation Model

## Municipal Tax Calculations

	Land Capital	Accum	Municipal	
	Costs	Land Costs	Tax Rate	Municipal Taxes
2012	\$0	\$0	0%	\$0
2013	\$0	\$0	0%	\$0
2014	\$0	\$0	0%	\$0
2015	\$0	\$0	0%	\$0
2016	\$0	\$0	0%	\$0

### Capital Cost Allowance and Capital Tax Calculation

[illegible]

Expansion - CHEC Economic Evaluation Model

Depreciation and Interest Calculations

1800 OH Conductors & Devices										1900 LDC Conductors & Devices										1900 Transformers										1900 Services										0										0										0										LDC Upstream Costs										LDC Non-Convertible 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## Expansion - CHEC Economic Evaluation Model

### Income Tax Calculations

Year	Revenue	O&M	Municipal Tax	Capital Tax	Interest	CCA	Taxable Income Excl CCA	Tax Rate	Taxes Payable	Tax Shield on Gross Capital CCA x Tax Rate
2012	\$8,556	\$5,394	\$0	\$131	\$6,029	\$7,285	-\$2,999	28.31%	-\$849	\$2,062
2013	\$17,112	\$10,788	\$0	\$121	\$5,783	\$13,988	\$420	28.31%	\$119	\$3,960
2014	\$25,667	\$16,182	\$0	\$111	\$5,537	\$12,869	\$3,837	28.31%	\$1,086	\$3,643
2015	\$34,223	\$21,576	\$0	\$102	\$5,291	\$11,839	\$7,254	28.31%	\$2,054	\$3,352
2016	\$42,779	\$26,970	\$0	\$94	\$5,045	\$10,892	\$10,670	28.31%	\$3,021	\$3,084
2017	\$42,779	\$26,970	\$0	\$86	\$4,799	\$10,021	\$10,924	28.31%	\$3,092	\$2,837
2018	\$42,779	\$26,970	\$0	\$80	\$4,553	\$9,219	\$11,177	28.31%	\$3,164	\$2,610
2019	\$42,779	\$26,970	\$0	\$73	\$4,307	\$8,482	\$11,429	28.31%	\$3,236	\$2,401
2020	\$42,779	\$26,970	\$0	\$67	\$4,061	\$7,803	\$11,681	28.31%	\$3,307	\$2,209
2021	\$42,779	\$26,970	\$0	\$62	\$3,815	\$7,179	\$11,932	28.31%	\$3,378	\$2,032
2022	\$42,779	\$26,970	\$0	\$57	\$3,568	\$6,605	\$12,184	28.31%	\$3,449	\$1,870
2023	\$42,779	\$26,970	\$0	\$52	\$3,322	\$6,076	\$12,434	28.31%	\$3,520	\$1,720
2024	\$42,779	\$26,970	\$0	\$48	\$3,076	\$5,590	\$12,684	28.31%	\$3,591	\$1,583
2025	\$42,779	\$26,970	\$0	\$44	\$2,830	\$5,143	\$12,934	28.31%	\$3,662	\$1,456
2026	\$42,779	\$26,970	\$0	\$41	\$2,584	\$4,731	\$13,184	28.31%	\$3,732	\$1,339
2027	\$42,779	\$26,970	\$0	\$38	\$2,338	\$4,353	\$13,433	28.31%	\$3,803	\$1,232
2028	\$42,779	\$26,970	\$0	\$35	\$2,092	\$4,005	\$13,683	28.31%	\$3,874	\$1,134
2029	\$42,779	\$26,970	\$0	\$32	\$1,846	\$3,684	\$13,931	28.31%	\$3,944	\$1,043
2030	\$42,779	\$26,970	\$0	\$29	\$1,600	\$3,390	\$14,180	28.31%	\$4,014	\$960
2031	\$42,779	\$26,970	\$0	\$27	\$1,354	\$3,118	\$14,429	28.31%	\$4,085	\$883
2032	\$42,779	\$26,970	\$0	\$25	\$1,107	\$2,869	\$14,677	28.31%	\$4,155	\$812
2033	\$42,779	\$26,970	\$0	\$23	\$861	\$2,639	\$14,925	28.31%	\$4,225	\$747
2034	\$42,779	\$26,970	\$0	\$21	\$615	\$2,428	\$15,173	28.31%	\$4,295	\$687
2035	\$42,779	\$26,970	\$0	\$19	\$369	\$2,234	\$15,421	28.31%	\$4,366	\$632
2036	\$42,779	\$26,970	\$0	\$18	\$123	\$2,055	\$15,668	28.31%	\$4,436	\$582
Sum of columns						\$158,499	\$285,264		\$80,758	\$44,871

(\$1,592)

## Expansion - CHEC Economic Evaluation Model

EXPANSION DEPOSIT IF CAPITAL CONTRIBUTION REQUIRED						EXPANSION DEPOSIT IF CAPITAL CONTRIBUTION NOT REQUIRED														
Year	Revenue	PV Factor utilizing mid year discounting	Net Present Value	Cumulative Net Present Value		Year	Capital	O&M	Municipal Tax	Capital Tax	Income Taxes	Total	PV Factor utilizing mid year discounting	Net Present Value	Cumulative Net Present Value	CCA Tax Shield	Net Present Value	Cumulative Present Value		
2012	\$8,556	1.031298008	\$8,296	\$8,296		2012	\$182,135	\$5,394	\$0	\$131	-\$849	\$186,811	1.031298008	\$181,142	\$181,142	\$2,062	\$2,000	\$2,000		
2013	\$17,112	1.095853155	\$15,615	\$23,911		2013	\$0	\$10,788	\$0	\$121	\$119	\$11,027	1.095853155	\$10,063	\$191,205	\$3,960	\$3,614	\$5,614		
2014	\$25,667	1.164449197	\$22,042	\$45,953		2014	\$0	\$16,182	\$0	\$111	\$1,086	\$17,379	1.164449197	\$14,925	\$206,129	\$3,643	\$3,129	\$8,742		
2015	\$34,223	1.237339078	\$27,659	\$73,612		2015	\$0	\$21,576	\$0	\$102	\$2,054	\$23,732	1.237339078	\$19,179	\$225,309	\$3,352	\$2,709	\$11,451		
2016	\$42,779	1.314791576	\$32,537	\$106,148		2016	\$0	\$26,970	\$0	\$94	\$3,021	\$30,084	1.314791576	\$22,882	\$248,190	\$3,084	\$2,345	\$13,796		
2017	\$42,779	1.397092291	\$30,620	\$136,768		2017		\$26,970	\$0	\$86	\$3,092	\$30,149	1.397092291	\$21,580	\$269,770	\$2,837	\$2,031	\$15,827		
2018	\$42,779	1.484544703	\$28,816	\$165,584		2018		\$26,970	\$0	\$80	\$3,164	\$30,213	1.484544703	\$20,352	\$290,122	\$2,610	\$1,758	\$17,585		
2019	\$42,779	1.577471287	\$27,119	\$192,703		2019		\$26,970	\$0	\$73	\$3,236	\$30,279	1.577471287	\$19,194	\$309,316	\$2,401	\$1,522	\$19,107		
2020	\$42,779	1.676214706	\$25,521	\$218,224		2020		\$26,970	\$0	\$67	\$3,307	\$30,344	1.676214706	\$18,103	\$327,419	\$2,209	\$1,318	\$20,425		
2021	\$42,779	1.781139069	\$24,018	\$242,242		2021		\$26,970	\$0	\$62	\$3,378	\$30,410	1.781139069	\$17,073	\$344,492	\$2,032	\$1,141	\$21,566		
2022	\$42,779	1.892631279	\$22,603	\$264,844		2022		\$26,970	\$0	\$57	\$3,449	\$30,476	1.892631279	\$16,102	\$360,595	\$1,870	\$988	\$22,554		
2023	\$42,779	2.011102458	\$21,271	\$286,116		2023		\$26,970	\$0	\$52	\$3,520	\$30,542	2.011102458	\$15,187	\$375,781	\$1,720	\$855	\$23,409		
2024	\$42,779	2.13698946	\$20,018	\$306,134		2024		\$26,970	\$0	\$48	\$3,591	\$30,609	2.13698946	\$14,323	\$390,105	\$1,583	\$741	\$24,150		
2025	\$42,779	2.270756488	\$18,839	\$324,973		2025		\$26,970	\$0	\$44	\$3,662	\$30,676	2.270756488	\$13,509	\$403,614	\$1,456	\$641	\$24,791		
2026	\$42,779	2.412896798	\$17,729	\$342,702		2026		\$26,970	\$0	\$41	\$3,732	\$30,743	2.412896798	\$12,741	\$416,355	\$1,339	\$555	\$25,346		
2027	\$42,779	2.563934525	\$16,685	\$359,387		2027		\$26,970	\$0	\$38	\$3,803	\$30,810	2.563934525	\$12,017	\$428,372	\$1,232	\$481	\$25,827		
2028	\$42,779	2.724426613	\$15,702	\$375,089		2028		\$26,970	\$0	\$35	\$3,874	\$30,878	2.724426613	\$11,334	\$439,706	\$1,134	\$416	\$26,243		
2029	\$42,779	2.894964866	\$14,777	\$389,866		2029		\$26,970	\$0	\$32	\$3,944	\$30,946	2.894964866	\$10,689	\$450,395	\$1,043	\$360	\$26,603		
2030	\$42,779	3.076178134	\$13,906	\$403,772		2030		\$26,970	\$0	\$29	\$4,014	\$31,013	3.076178134	\$10,082	\$460,477	\$960	\$312	\$26,915		
2031	\$42,779	3.268734631	\$13,087	\$416,859		2031		\$26,970	\$0	\$27	\$4,085	\$31,081	3.268734631	\$9,509	\$469,986	\$883	\$270	\$27,185		
2032	\$42,779	3.473344398	\$12,316	\$429,176		2032		\$26,970	\$0	\$25	\$4,155	\$31,150	3.473344398	\$8,968	\$478,954	\$812	\$234	\$27,419		
2033	\$42,779	3.690761921	\$11,591	\$440,767		2033		\$26,970	\$0	\$23	\$4,225	\$31,218	3.690761921	\$8,458	\$487,412	\$747	\$202	\$27,622		
2034	\$42,779	3.921788914	\$10,908	\$451,675		2034		\$26,970	\$0	\$21	\$4,295	\$31,286	3.921788914	\$7,978	\$495,390	\$687	\$175	\$27,797		
2035	\$42,779	4.167277278	\$10,265	\$461,940		2035		\$26,970	\$0	\$19	\$4,366	\$31,355	4.167277278	\$7,524	\$502,914	\$632	\$152	\$27,949		
2036	\$42,779	4.428132234	\$9,661	\$471,601		2036		\$26,970	\$0	\$18	\$4,436	\$31,423	4.428132234	\$7,096	\$510,010	\$582	\$131	\$28,080		
Per Section 3.2.20 of the Distribution System Code effective Jan 23, 2007						CCA Tax Shield on Gross Capital													\$28,080	
																			\$481,930	

▶ -\$10,329

If negative, there is a Shortfall between the NPV of the Revenues and the NPV of the Total Costs and the PV of the Revenues at cell E30 is used to calculate the Expansion Deposit otherwise the PV of the Costs at cell P32 is used.  
This is an interim value since if negative the impact of the Capital contribution has to be reflected in the CCA Tax Shield and the Capital Tax which is originally calculated on the Gross Capital.  
The final Capital Contribution amount is calculated on worksheet "Contribiuton CCA and Cap Tax".

Year	Revenue	Capital	O&M	Municipal Tax	Capital Tax	Income Taxes	After Tax Cash Flow	PV Factor utilizing mid year discounting	PV of After Tax Cash Flow	CCA Tax Shield	Cumulative Net Present Value
2012	\$8,556	\$182,135	\$5,394	\$0	\$131	-\$849	-178,255	1.031298	-172,846		-172,846
2013	\$17,112	\$0	\$10,788	\$0	\$121	\$119	6,084	1.095853	5,552		-167,294
2014	\$25,667	\$0	\$16,182	\$0	\$111	\$1,086	8,288	1.164449	7,118		-160,176
2015	\$34,223	\$0	\$21,576	\$0	\$102	\$2,054	10,491	1.237339	8,479		-151,697
2016	\$42,779	\$0	\$26,970	\$0	\$94	\$3,021	12,694	1.314792	9,655		-142,042
2017	\$42,779		\$26,970	\$0	\$86	\$3,092	12,630	1.397092	9,040		-133,002
2018	\$42,779		\$26,970	\$0	\$80	\$3,164	12,565	1.484545	8,464		-124,538
2019	\$42,779		\$26,970	\$0	\$73	\$3,236	12,500	1.577471	7,924		-116,613
2020	\$42,779		\$26,970	\$0	\$67	\$3,307	12,435	1.676215	7,418		-109,195
2021	\$42,779		\$26,970	\$0	\$62	\$3,378	12,369	1.781139	6,944		-102,251
2022	\$42,779		\$26,970	\$0	\$57	\$3,449	12,303	1.892631	6,500		-95,750
2023	\$42,779		\$26,970	\$0	\$52	\$3,520	12,236	2.011102	6,084		-89,666
2024	\$42,779		\$26,970	\$0	\$48	\$3,591	12,170	2.136989	5,695		-83,971
2025	\$42,779		\$26,970	\$0	\$44	\$3,662	12,103	2.270756	5,330		-78,641
2026	\$42,779		\$26,970	\$0	\$41	\$3,732	12,036	2.412897	4,988		-73,653
2027	\$42,779		\$26,970	\$0	\$38	\$3,803	11,968	2.563935	4,668		-68,985
2028	\$42,779		\$26,970	\$0	\$35	\$3,874	11,901	2.724427	4,368		-64,617
2029	\$42,779		\$26,970	\$0	\$32	\$3,944	11,833	2.894965	4,088		-60,529
2030	\$42,779		\$26,970	\$0	\$29	\$4,014	11,765	3.076178	3,825		-56,705
2031	\$42,779		\$26,970	\$0	\$27	\$4,085	11,697	3.268735	3,579		-53,126
2032	\$42,779		\$26,970	\$0	\$25	\$4,155	11,629	3.473344	3,348		-49,778
2033	\$42,779		\$26,970	\$0	\$23	\$4,225	11,561	3.690762	3,132		-46,646
2034	\$42,779		\$26,970	\$0	\$21	\$4,295	11,493	3.921789	2,930		-43,715
2035	\$42,779		\$26,970	\$0	\$19	\$4,366	11,424	4.167277	2,741		-40,974
2036	\$42,779		\$26,970	\$0	\$18	\$4,436	11,356	4.428132	2,564	-28,080	-10,329



# Expansion - CHEC Economic Evaluation Model

## Mid Year Present Value Factor Calculations

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Equity %	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%
Debt % Long Term	56.00%	56.00%	56.00%	56.00%	56.00%	56.00%	56.00%	56.00%	56.00%	56.00%
Debt % Short Term	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Cost of Equity	9.85%	9.85%	9.85%	9.85%	9.85%	9.85%	9.85%	9.85%	9.85%	9.85%
Cost of Debt - Long Term	5.63%	5.63%	5.63%	5.63%	5.63%	5.63%	5.63%	5.63%	5.63%	5.63%
Cost of Debt - Short Term	2.07%	2.07%	2.07%	2.07%	2.07%	2.07%	2.07%	2.07%	2.07%	2.07%
Tax Rate	28.31%	28.31%	28.31%	28.31%	28.31%	28.31%	28.31%	28.31%	28.31%	28.31%
Cost of Capital after tax	3.13%	6.26%	6.26%	6.26%	6.26%	6.26%	6.26%	6.26%	6.26%	6.26%
Discount Factor	1.0313	1.0959	1.1644	1.2373	1.3148	1.3971	1.4845	1.5775	1.6762	1.7811

2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%	40.00%
56.00%	56.00%	56.00%	56.00%	56.00%	56.00%	56.00%	56.00%	56.00%	56.00%	56.00%	56.00%
4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
9.85%	9.85%	9.85%	9.85%	9.85%	9.85%	9.85%	9.85%	9.85%	9.85%	9.85%	9.85%
5.63%	5.63%	5.63%	5.63%	5.63%	5.63%	5.63%	5.63%	5.63%	5.63%	5.63%	5.63%
2.07%	2.07%	2.07%	2.07%	2.07%	2.07%	2.07%	2.07%	2.07%	2.07%	2.07%	2.07%
28.31%	28.31%	28.31%	28.31%	28.31%	28.31%	28.31%	28.31%	28.31%	28.31%	28.31%	28.31%
6.26%	6.26%	6.26%	6.26%	6.26%	6.26%	6.26%	6.26%	6.26%	6.26%	6.26%	6.26%
1.8926	2.0111	2.1370	2.2708	2.4129	2.5639	2.7244	2.8950	3.0762	3.2687	3.4733	3.6908

2034	2035	2036
40.00%	40.00%	40.00%
56.00%	56.00%	56.00%
4.00%	4.00%	4.00%
9.85%	9.85%	9.85%
5.63%	5.63%	5.63%
2.07%	2.07%	2.07%
28.31%	28.31%	28.31%
6.26%	6.26%	6.26%
3.9218	4.1673	4.4281

# Capital & CCA Tax Effect of Capital Contribution Netting

	Total Additions	%	CCA rate
18350 OH Conductors & Devices	158,898	87.2%	8.0%
18400 U/G Conduit	0	0.0%	8.0%
18450 U/G Conductors & Devices	0	0.0%	8.0%
18500 Transformers	0	0.0%	8.0%
18550 Services	0	0.0%	8.0%
0	0	0.0%	8.0%
0	0	0.0%	8.0%
0	0	0.0%	8.0%
LDC Upstream Costs	0	0.0%	8.0%
LDC Non-Contestable Amounts	23,237	12.8%	8.0%
Land	0	0.0%	0.0%
Total	182,135	100.0%	8.0%

## Capital Tax

	Opening UCC	CCA	Closing UCC	Tax Rate	Tax Impact	PV Factor	PV	Rate	Amount	PV
2012	-\$10,329	-\$413	-\$9,916	28.31%	(\$117)	1.031298	(\$113)	0.0750%	-\$8	(\$8)
2013	-\$9,916	-\$793	-\$9,123	28.31%	(\$225)	1.095853	(\$205)	0.0750%	-\$7	(\$7)
2014	-\$9,123	-\$730	-\$8,393	28.31%	(\$207)	1.164449	(\$177)	0.0750%	-\$7	(\$6)
2015	-\$8,393	-\$671	-\$7,722	28.31%	(\$190)	1.237339	(\$154)	0.0750%	-\$6	(\$5)
2016	-\$7,722	-\$618	-\$7,104	28.31%	(\$175)	1.314792	(\$133)	0.0750%	-\$6	(\$4)
2017	-\$7,104	-\$568	-\$6,535	28.31%	(\$161)	1.397092	(\$115)	0.0750%	-\$5	(\$4)
2018	-\$6,535	-\$523	-\$6,013	28.31%	(\$148)	1.484545	(\$100)	0.0750%	-\$5	(\$3)
2019	-\$6,013	-\$481	-\$5,532	28.31%	(\$136)	1.577471	(\$86)	0.0750%	-\$5	(\$3)
2020	-\$5,532	-\$443	-\$5,089	28.31%	(\$125)	1.676215	(\$75)	0.0750%	-\$4	(\$2)
2021	-\$5,089	-\$407	-\$4,682	28.31%	(\$115)	1.781139	(\$65)	0.0750%	-\$4	(\$2)
2022	-\$4,682	-\$375	-\$4,307	28.31%	(\$106)	1.892631	(\$56)	0.0750%	-\$4	(\$2)
2023	-\$4,307	-\$345	-\$3,963	28.31%	(\$98)	2.011102	(\$49)	0.0750%	-\$3	(\$2)
2024	-\$3,963	-\$317	-\$3,646	28.31%	(\$90)	2.136989	(\$42)	0.0750%	-\$3	(\$1)
2025	-\$3,646	-\$292	-\$3,354	28.31%	(\$83)	2.270756	(\$36)	0.0750%	-\$3	(\$1)
2026	-\$3,354	-\$268	-\$3,086	28.31%	(\$76)	2.412897	(\$31)	0.0750%	-\$3	(\$1)
2027	-\$3,086	-\$247	-\$2,839	28.31%	(\$70)	2.563935	(\$27)	0.0750%	-\$2	(\$1)
2028	-\$2,839	-\$227	-\$2,612	28.31%	(\$64)	2.724427	(\$24)	0.0750%	-\$2	(\$1)
2029	-\$2,612	-\$209	-\$2,403	28.31%	(\$59)	2.894965	(\$20)	0.0750%	-\$2	(\$1)
2030	-\$2,403	-\$192	-\$2,211	28.31%	(\$54)	3.076178	(\$18)	0.0750%	-\$2	(\$1)
2031	-\$2,211	-\$177	-\$2,034	28.31%	(\$50)	3.268735	(\$15)	0.0750%	-\$2	(\$1)
2032	-\$2,034	-\$163	-\$1,871	28.31%	(\$46)	3.473344	(\$13)	0.0750%	-\$2	(\$0)

2033	-\$1,871	-\$150	-\$1,721	28.31%	(\$42)	3.690762	(\$11)	0.0750%	-\$1	(\$0)
2034	-\$1,721	-\$138	-\$1,584	28.31%	(\$39)	3.921789	(\$10)	0.0750%	-\$1	(\$0)
2035	-\$1,584	-\$127	-\$1,457	28.31%	(\$36)	4.167277	(\$9)	0.0750%	-\$1	(\$0)
2036	-\$1,457	-\$117	-\$1,340	28.31%	(\$33)	4.428132	(\$7)	0.0750%	-\$1	(\$0)
							<u>(\$1,592)</u>			<u>(\$56)</u>

Capital Contribution, before tax impacts due to netting	10,329
Add: PV of CCA impact	1,592
Less: PV of Capital Tax impact	(56)
<b>Capital Contribution after CCA impact</b>	<b>\$11,865</b>

**Orangeville Hydro Limited  
Application for Service Area Amendment  
Board File # EB-2012-0181  
Response to Hydro One Networks Inc. Interrogatoires**

**1. On page 2 of its Application, the Applicant states that the Development Lands include Part of Lot 8, Block 6, Registered Plan 33A in the former Village of Grand Valley ("Lot 8"). The Applicant also states that Lot 8 is part of OHL's service territory.**

**a) Regarding the anticipated housing lots of the new subdivision referred to in the Application, are any of the said housing lots proposed to be built within the boundaries of Lot 8?**

As described in the Application (Section 7.1.2, page 4), Lot 8 is "a small portion of the Development" that "connects the subject area with Grand Valley and an existing subdivision in OHL's service territory that runs parallel to the eastern boundary of the Development Lands." None of the anticipated homes in the proposed Development are proposed to be built within the boundaries of Lot 8.

**b) Does OHL's Application propose the installation of electrical services within the boundaries of Lot 8?**

Lot 8 will not contain any electricity distribution services within this stage of the proposed development. Please refer to OHL's response to the Board Staff Interrogatories No. 1(b) for further discussion on this point.

**2. HONI's Offer to Connect is for 115 lots, whereas OHL's Offer to Connect is based on 154 lots.**

**a) Please contact the developer to confirm whether it is 115, or 154, lots that are to be energized in the current phase of the Development.**

OHL has an updated *Request for Electrical System Connection Form* signed by the developer dated February 13, 2012. This form states 99 Single Dwelling Lots and 55 Town Home Lots. The sum of these residential designs is 154 lots. A copy of this *Request for Electrical System Connection Form* is attached to these responses.

It is OHL's understanding that HONI received a *HYDRO ON SUBDIVISION DATA FORM* that is signed by the developer's engineering firm dated January 5, 2012. This form states 99 Single Family Lots, 39 Townhouse Condominium Lots and 16 Townhouse Freehold Lots. The sum of these residential lots is 154. A copy of this *HYDRO ON SUBDIVISION DATA FORM* is attached to these responses.

OHL has been in regular contact with the developer and OHL understands that HONI has indicated that it will treat this phase as two “stages” due to a concern that some details regarding 39 townhome condominium lots at the north of the proposed Development may change. Accordingly, Hydro One has provided costs regarding 115 lots only. However, the developer and the Mayor of East Luther Grand Valley have both confirmed that the proposed Development is being registered as one subdivision with 154 lots. This issue is also discussed in response to Board Staff’s Interrogatories No. 4.

- b) If the developer’s response to OHL is that the developer proposes 115 lots to be energized in the current phase please provide more details than are included in Schedule K regarding what OHL’s costing would be to connect the 115 lots, and also provide a revised Economic Evaluation including all inputs and assumptions***

Please see the responses to Hydro One’s Interrogatories 2(a) above.

Despite OHL’s understanding that the final subdivision will have 154 lots, OHL has prepared an economic evaluation model reflecting 115 lots for the purposes of comparing the two distributors’ connection plans. Please see the responses to Board Staff’s Interrogatories No. 4 for further discussion on this matter and a copy of the revised economic evaluation model reflecting 115 lots.

- c) What detailed design information did OHL use in estimating the cost to connect the 39 condominium units?***

OHL received CAD and hard copy drawings from the developer’s engineering firm. As for all 154 lots in the proposed Development, OHL received the proposed lot location for the 39 condominium units.

Since the developer selected the alternative bid process, the contestable and civil costs were provided directly from the developer’s engineering firm for all 154 lots. OHL’s non-contestable costs were estimated using information provided by the developer’s engineering firm.

- 3. On page 8, section 7.1.5 of its Application, the Applicant states the peak load is 600 kW, but it appears that 299.4kW was used in the financial analysis. Which number is correct?***

For the purposes of the offer to connect and to conduct the financial analysis, a realistic peak load of 299.4kW was used. However, the 600 kW peak demand stated within Section 7.1.5 of the application is a conservative “worst case” estimate used by OHL’s engineering department for system planning purposes. This value was not utilized for financial analysis. Accordingly, both peak loads are correct for their respective purposes.

4. ***As noted on page 11, section 7.2.5, there are relocation and removal costs that would be chargeable to the developer to relocate the existing HONI assets on the subject property that are servicing existing HONI customers, but it appears that OHL has not included these costs in its Offer to Connect. HONI estimates these costs to be \$175,853.80. If the OEB determines that these costs should be included in the total costs to service the subdivision, what would be the impact on OHL's Application?***

The relocation and removal costs that would be chargeable to the developer to relocate the existing Hydro One assets on the subject property are between Hydro One and the Developer. OHL is not directly involved with estimating these costs. Accordingly, at the time of submission of the Application, these costs were not available to OHL. However, it is OHL's understanding that the developer is aware of these relocation costs and the developer has determined that OHL is still the preferred supplier (as indicated in the email from the developer to Hydro One dated April 25, 2012 and attached to the Application as Schedule H).

In the event that the OEB determines that the costs of this relocation and removal of assets should be included in the total cost to service the subdivision, OHL submits that its connection costs will still be less than Hydro One's based on the comparison table set forth in response to Board Staff Interrogatories No. 4.

5. ***On page 6 point 8 of the Application, the Applicant states that it is providing water billing for Grand Valley customers and implies that granting the Application will avoid customer confusion. Given 71(1) of the OEB Act, 1998, prohibits a distributor from carrying on business activity other than distribution of electricity except through an affiliated corporation, on what authority does the Applicant rely to enable it to provide water billing for water customers in Grand Valley?***

Like many distributors in Ontario (including the applicant in EB-2011-0085), OHL provides water billing on its electricity bills. OHL accounts for the water/sewer billing in a Board-approved manner based on the USoA Accounting Procedures Handbook. OHL uses account 4375 for the revenues which are offset by account 4380 expenses. This activity is considered revenue offsets in OHL's rates. OHL employs the fully-allocated cost method in undertaking these activities. Given that OHL reports water/sewer billing to the Board as described above, OHL submits that this should not be an issue for the Board in the context of this SAA hearing.



**6. On page 5, item #4 of the Application, the Applicant states that adding the proposed Development to OHL's system will provide OHL with the opportunity to provide an additional internal loop feed.**

**a) Does the current OHL design for this phase of the subdivision as provided to the developer with the Offer to Connect include an internal loop feed?**

Please see OHL's responses to Board Staff Interrogatories No. 2(a) and 2(b).

**b) Have the costs of the internal loop feed been included in OHL's costs for this phase?**

Please see OHL's responses to Board Staff Interrogatories No. 2(a) and 2(b).

**7. On page 15 and 16, section 7.5.4 of the Application, the Applicant has stated that Schedule K attempts to provide an apples-to-apples comparison between HONI's and OHL's costs for 115 houses.**

**a) How have the costs in Schedule K been calculated for the comparison for 115 houses?**

In order to attempt to compare connection plans on an apples-to-apples basis based on 115 lots, OHL applied estimated contestable costs of \$158,898 (provided by the developer's engineer for 115 lots) to both OHL and Hydro One given the developer's indication that it wished to proceed via alternative bid. Please refer to the response to Board Staff Interrogatories No. 4 for a further discussion of how these costs have been calculated. Also included in response to Board Staff Interrogatories No. 4 is a new table that attempts to deal with discrepancies between the two distributors' treatment of contestable, non-contestable and civil costs in an effort to present a clearer comparison of two parties' connection plans and related costs.

**b) What components are included in each of the categories for each utility, specifically the contestable (developer costs) and the non-contestable costs above?**

Schedule A of Hydro One's offer to connect provides the descriptions of the contestable and non-contestable work. OHL has provided the descriptions of the contestable and non-contestable costs in the table below:

	ORANGEVILLE HYDRO
Contestable (Developers)	<ul style="list-style-type: none"> <li>- Supply and install padmount transformers</li> <li>- Supply and install 1 – primary three phase junction</li> </ul>

	<ul style="list-style-type: none"> <li>- Supply and install secondary c/w marking tape and sand cover</li> <li>- Supply and install primary cable in duct c/w marking tape and sand cover</li> <li>- Supply and install primary and secondary terminations</li> </ul>
Non- contestable	<ul style="list-style-type: none"> <li>- Engineering and Design</li> <li>- Supply and install 1 – Span OH line and primary dip termination</li> <li>- Inspection and energization of all Developer installed equipment</li> <li>- Inspection and connection of residential lots</li> </ul>

**c) How did the contestable developer cost of \$399,080 for 154 houses get reduced to \$158,898 for 115 houses, given that the 39 houses removed were condominium townhomes?**

The contestable developer cost of \$399,080 includes all contestable and civil work costs to for the developer for 154 connections. These costs were provided directly from the developer.

To provide a comparison, OHL removed the civil costs and reduced the remaining contestable costs to reflect the 115 lots. A large portion of the reduction relates to the removal of the civil costs. The remaining amount of \$158,898 is consistent with the revised amount provided by the developer's engineer for 115 lots.

**8. On the second page of OHL's Economic Evaluation, under Upstream Cost Calculation, \$0 is shown. The table shows loads for 2012 of 60.28 kW growing each year by that amount (based on adding 31 customers per year) and in 2016 it grows at 58.33 kW. OHL's Application states that OHL will supply this load from the F2 feeder out of Grand Valley DS. For supply out of Grand Valley DS, OHL is charged \$0.668 per kW per month, which is HONI's Facility Charge for connection to Common ST Lines, and \$1.944 per kW per month, which is HONI's Facility Charge for connection to Low Voltage Distribution Station.**

**It is HONI's understanding that, if these costs were to be included in OHL's Economic Evaluation, the charges would be based on the calculations below:**

Facility Charge for Connection to Common ST Lines (44kV to 13.8kv)	\$0.668	per kW per month
Family 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

***From page 2 of OHL's Economic Evaluation:***

	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Monthly kW Load Per Customer	1.94	1.94	1.94	1.94	1.94
Number of Connections Residential	31	31	31	31	30
Annual kW of New Customer Load	60.28	60.28	60.28	60.28	60.28

***Using this information produces the following charges:***

	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
New Cumulative Load	60.28	120.56	180.84	241.12	299.45
Total ST Charges from Above	\$31.344	\$31.344	\$31.344	\$31.344	\$31.344
Applied to New Load	\$1,889.42	\$3,778.83	\$5,668.25	\$7,557.67	\$9,385.96

***After 2016 the \$9,385.96 charge remains constant until 2036***

***If the OEB determines that these charges should be included in the economic evaluation, it is HONI's understanding that these charges would have a material impact on OHL's Economic Evaluation. Please provide an updated Economic Evaluation with the above charges included.***

***Please also revise Schedule K (115 lot comparison) to include the charges above, adjusted for 115 lots.***

OHL maintains that these are low voltage ("LV") costs and, as such, they should not be included in the economic evaluation. LV costs are treated the same manner as transmission service costs and other costs associated with the cost of power pass-through. As LV charges are grouped with the sale of electricity in the Board's Accounting Procedure Handbook, these charges are grouped with all other power costs. A Board-approved rate is determined by rate class for all OHL customers during the cost of service rate filing based on the same allocation methodology as the transmission service charges. Accordingly, OHL will not recalculate its economic evaluation model to include these charges.

***9. Schedule I of the Application, which is OHL's Offer to Connect, states: "DRAFT FOR REFERENCE ONLY".***

***a) Is there a finalized Offer to Connect?***

The finalized offer to connect has been delivered to the developer.

***b) If there is a finalized Offer, does it differ from the draft Offer, and if so, how?***

The finalized offer to connect does not differ from the draft offer to connect.

***c) If there is no finalized Offer to Connect, what is the margin of error in OHL's draft Offer?***

Not applicable. Please refer to the responses to Hydro One Interrogatories Nos. 9(a) and 9(b).

***10. Section 3.2.9 of the Distribution System Code states that the Offer to Connect should include the cost of overheads and administration.***

***a) What is the amount of overhead and administration costs, for both contestable and non-contestable work, that has been included in OHL's Offer to Connect, and in what line item do they appear in the Economic Evaluation?***

The overhead and administration costs included in OHL's non-contestable cost estimate are \$7,762.27. Given that the developer is proceeding with an alternative bid and OHL will not be

providing contestable work, there are no overhead and administration costs related to contestable work in OHL's offer to connect.

The overhead and administration costs included in OHL's non-contestable cost estimate are embedded in OHL's economic evaluation within the value of *Capital Cost Inputs – LDC Non-Contestable*.

- b) *If no costs have been included, please state why not and what the impact of including these charges would be.***

Not applicable. Please refer to the response to Hydro One Interrogatory No. 10(a).

- 11. *Please confirm that substantially the same property and developer that is the subject of the current application was also the subject of OHL's previous SAA application (EB-2011-0213) that was withdrawn.***

Confirmed. Please refer to response to Board Staff Interrogatory Nos. 1(a) and 1(b) for additional discussion on this point.

- b) *Please state when OHL informed the developer that the developer was required to request that HONI provide an Offer to Connect, either as part of the previous SAA application or the current one. In responding, please confirm whether OHL received a letter from the OEB dated July 22, 2011, informing OHL that its previous application was incomplete and that additional information, including an Offer to Connect from HONI, was required.***

When it submitted its previous application (EB-2011-0213), the consultant previously advising OHL on the SAA process did not inform them of the requirement to provide an incumbent distributor with an opportunity obtain an offer to connect. OHL and its previous consultant did receive a letter from the Board dated July 22, 2011 informing them of the need for a "comparison of the economic and engineering efficiency for OHL and Hydro One to serve the area that is the subject of the application". Despite this letter, OHL did not realize, and its previous consultant did not advise OHL, that the onus was on the developer to request an offer to connect from Hydro One. OHL retained legal counsel on December 19, 2011 to assist them with filing a new SAA application for the subject area. OHL was informed of the requirement to request an offer to connect from Hydro One on that date. OHL then advised the developer of the need to request an offer to connect from Hydro One. On January 5, 2012, the developer's engineer formally submitted this request to Hydro One.

# Request for Electrical System Connection Form

(Applicant needs to Complete  
Parts 1 thru 10 & submit to LDC)

## PART 1 Development Info:

Development Name:

Mayberry Hill Subdivision

Site Plan Identification

MO 02 2445

## PART 2 Contact Info:

Developer Name:

Thomasfield Homes Ltd.

Mailing Address:

P.O. Box 1112, 295 Southgate Drive

Town:

Guelph

Postal Code:

N1G 3M5

## PART 3 Connection Info:

Requested Connection Date:

December 2012

Multi-Phase Development ?

☒ YES or ☐ NO

< (Circle one)

If YES - Applicable Phase #'s  
involved with this application?

Phase 1 (out of 2)

## PART 4 Customer Class & Number of Connections:

Class Description

Total Connections

Residential Class:

154

Commercial Class:

0

Industrial Class:

0

## PART 5 Estimated Average Monthly Consumption:

Per Unit - Winter

Per Unit - Summer

Kwh's

Kwh's

Kwh's

Kwh's

Kwh's

Kwh's

## PART 6 Specific Unit Info:

Residential Dwelling Design:

Town Homes Average Unit Size

(55 units)

Semi-Detached Homes:

0

< 1,500 Sq Ft Single Dwellings

0

>1,500 <3,500 Sq Ft Single Dwellings

99

> 3,500 Sq Ft Single Dwellings

0

(If Applicable) Comm. & Ind.

Describe Location ( )

0

## PART 7 Connection Forecast:

Connection Horizon Info:

(Starting when system is energized)

Year 1 Estimated connections in 1st year

30

Year 2 Estimated connections in 2nd year

30

Year 3 Estimated connections in 3rd year

30

Year 4 Estimated connections in 4th year

30

Year 5 Estimated connections in 5th year

30

## PART 8 Construction Cost:

Estimated Electrical System  
Cost Breakdown:

Components: Installed Overhead Wire

Installed Underground Wire Cost:

Installed Transformer Cost:

Total Distribution Infrastructure Cost:

Upstream and/or Additional Costs

OHL Engineering Estimate for above

YES or NO

Internal Use Only

## PART 9 Construct Option:

Choose Construction Option:

Developer to Construct in regards to all  
applicable Contestable Costs:

☒ YES or ☐ NO

< (If NO please  
see Note below)

## PART 10 Closing Info:

Date Submitted:

Feb 13 2012.

Submitted By: (please print)

Paul Heitshu

Signature:



NOTE: If Developer indicates on this form for the LDC to construct then when the LDC makes its' Offer to Connect the developer will still have the choice to seek alternative bids for construction by non-LDC resources. This form only provides an indication of the developer's plans so that proper planning steps can be taken if LDC is constructing.

For LDC Internal Use: Date Received:

Name:

**HYDRO ONE SUBDIVISION DATA FORM***MUST* be Completed Prior to Commencement of Design

Rev Oct 19, 2011

<b>Subdivision Name:</b> Taylor/Richie/Beam Subdivision				<b>Internal Subdivision Hydro Lines to be:</b> <input checked="" type="checkbox"/> Underground <input type="checkbox"/> Overhead			
<b>Name of Developer:</b> Thomasfield Homes LTD.				<b>Developer Entity Type:</b> <input type="checkbox"/> Individual <input type="checkbox"/> Corporation <input checked="" type="checkbox"/> Ltd. Partnership			
Name Of Contact Person: Paul Heitshu							
Mailing Address of Developer: P.O. Box 1112, 295 Southgate Drive, Guelph, N1G 3M5							
Business Phone Number: 519-836-4332				Business Fax Number: 519-836-2119			
Email Address: paulh@thomasfield.com							
<b>Civil Consultants Name</b> Gamsby and Mannerow Limited				<b>Electrical Consultants Name</b>			
Name of Contact Person: Chris Sims				Name of Contact Person: Shak Banerjee			
Civil Consultants Address: 650 Woodlawn Road West, Block C, Unit 2. Guelph, On N1K 1B8				Electrical Consultants Address: 650 Woodlawn Road West, Block C, Unit 2. Guelph, On N1K 1B8			
Business Phone Number: 519-824-8150				Business Phone Number: 519-823-1012			
Business Fax Number: 519-824-8089				Business Fax Number: 519-824-8089			
Email Address: csims@gamsby.com				Email Address: csims@gamsby.com			
<b>Developer's Solicitor Firm:</b> Miller Thomson LLP				<b>Lawyer Name:</b> Scott Galajda			
Phone: 519-780-4615		Email: sgajda@millerthomson.com			Fax: 519-822-1583		
<b>For the Complete Development</b>		<b>Number of Phases</b> 2		<b>Number of Lots</b> 240 lots + 81 townhouses			
<b>Number of Lots/Phases - This Request</b>		<b>Phase No.</b> 1		<b>Lots</b> 99 lots + 55 townhouses			
<b>Location: Lot</b> 29,30/29,30	<b>Concession</b> 3,3/2,2		<b>Twp. (Include Pre-Amalgamation)</b> East Luther Grand Valley		<b>County</b> Dufferin		
<b>Type Of Lots and Quantity</b>	<b>Single Family</b> 99	<b>Semi</b> -	<b>Quad</b> -	<b>Townhouse (Condominium)</b> 39	<b>Townhouse (Freehold)</b> 16	<b>Industrial/Commercial</b> -	
<b>House Size (Square Feet)</b> 2400		<b>Service Size Standard</b> 200A or		<b>Townhouse Metering</b> <input type="checkbox"/> Individual <input checked="" type="checkbox"/> Gang <input type="checkbox"/> Stacked Meter Centre			
<b>Building Setbacks</b>		<b>Gas Heat</b> ✓	<b>Electric Heat</b>	<b>A/C</b> ✓	<b>Electric Water Heater</b> ✓	<b>Other</b>	
<b>Additional Service Requirements</b> i.e. Schools; Commercial; Sewage or Water Pumps Identify Lot Numbers			<b>Service Size</b> N/A		<b>Pump HP</b> N/A		
<b>The Latitude/Longitude and or UTM co-ordinates of Centre Line at the Entrance to Subdivision</b>							
<b>Latitude (i.e. DD MM SS - 44 25 73)</b>				<b>UTM (i.e. 1337806,12009952)</b>			
<b>Longitude (i.e. DD MM SS- 76 21 28)</b>				<b>554573, 4860766</b>			
<b>Joint Use</b>	<input checked="" type="checkbox"/> Telephone, CATV			<input type="checkbox"/> Joint Use (Telephone, CATV,GAS)			
<b>Street lighting for Overhead Subdivisions ONLY</b>				<b>Span Restriction</b>		<b>Attachment Height</b>	
<b>Developers Projected In-Service Date ( dd/mm/yr):</b> November, 2012							

I certify that the information provided above is accurate. It is understood that Hydro One Network Inc. will design the electrical distribution system from this information. Changes to the above information or engineering plans, necessitating revisions to the design, will be chargeable to the developer/consultant.

Signature: Chris Sims Date: Jan 5/12