

## HISTORICAL INVESTMENTS BY PROJECT

This schedule provides descriptions of actual capital project spending from 2007 to 2011. E2/T4/S3/Att1 presents annual summaries of capital spending by project and account. E2/T4/S4/Att1 is the OEB Appendices 2A that list the projects greater than materiality of \$50k, and listed in detail below:

### Capital Additions for 2007

Account Description	USA Acct	Total
Land Rights	1806	
Building	1808	
Distribution Stations	1820	
Poles, Towers & Fixtures	1830	\$ 83k
Overhead Conductors & Devices	1835	\$ 120k
Underground Conduit	1840	\$ 25k
Underground Conductors & Devices	1845	\$ 226k
Line Transformers	1850	\$ 275k
Services	1855	\$ 179k
Meters	1860	\$ 32k
Office Furniture	1915	
Computer Hardware	1920	
Computer Software	1925	
Transportation Equipment	1930	
Misc. Tools & Equipment	1940	
Communication Equipment	1955	
Load Mgt Equip – Customer Premise	1970	
System Supervisory Equip	1980	
Contributed Capital	1995	-\$138k
<b>TOTAL</b>		<b>\$ 803k</b>

### Project Description: #2007 – 600 General

**Need:** THI uses Project 600 to replace old and deteriorated assets in order to maintain a stable and reliable distribution system. These enhancements are part of THI's obligation to meet the safety standards of Reg 22/04.

1 **Scope:** Determined on a site specific basis throughout the year.

2 **Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$ 5k
#1835 Overhead Conductors & Devices	\$7k
#1840 Underground Conduit	\$ -
#1845 Underground Conductors & Devices	\$7k
#1850 Line Transformers	\$30k
#1855 Services	\$46k
#1860 Meters	\$32k
#1995 Contributions and Grants – Credit	\$ -139
<b>Total</b>	<b>\$-12k</b>

3

4 **Project Description: #2007 – 20 M8 Feeder Egress**

5 **Need:** To supply a dedicated feeder to an existing industrial park after new development  
 6 exceeded the prior design.

7

8 **Scope:** Supply and installation of new feeder line extension, and rearrangement of  
 9 transformers and existing circuits

10 **Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$6k
#1835 Overhead Conductors & Devices	\$2k
#1840 Underground Conduit	\$2k
#1845 Underground Conductors & Devices	\$11k
# 1995 Contributed Capital	\$-
<b>Total</b>	<b>\$21k</b>

11

1 **Project Description: #2007 – 935 Cambdon Court Conversion**

2 **Need:** The next step in THI's ongoing conversion of old Hydro One 4.8kV acquired  
 3 assets to 16kV assets including the relocation of backyard poles and assets to the  
 4 fronting Municipal Right-of-Way.

5  
 6 **Scope:** Build new 16kV assets along Cambdon Court and relocate services to the new  
 7 before removing old 4.8kV assets from rear yards.

8 **Capital Costs:**

Account & Description	Amount
#1835 Overhead Conductors & Devices	\$5k
#1845 Underground Conductors & Devices	\$92k
#1850 Line Transformers	\$46k
#1855 Services	\$114k
#1860 Meters	\$-
<b>Total</b>	<b>\$257k</b>

9  
 10 **Project Description: #2007 – 936 Baldwin Place Poles**

11 **Need:** Relocation of poles and conductors from former Railway corridor as requested by  
 12 a developer

13  
 14 **Scope:** Relocate poles into the Municipal Right-of-Way and rearrange conductor

15 **Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$3k
#1835 Overhead Conductors & Devices	\$6k
#1840 Underground Conduit	\$10k
#1845 Underground Conductors & Devices	\$40k
# 1850 Line Transformers	\$-
<b>Total</b>	<b>\$59k</b>

1 **Project Description: #2007 – 937 Newell Road**

2 **Need:** Upgrading the poles and conductors along Newell Road to accommodate new M8  
3 feeder and relocation of assets from former Railway corridor as requested by a  
4 developer.

5  
6 **Scope:** Supply and Place new larger poles and conductors to meet the upcoming  
7 requirements.

8 **Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$35k
#1835 Overhead Conductors & Devices	\$65k
#1855 Services	\$-
Total	\$100k

9

10 **Project Description: #2007 – 947 Fox Alley Joseph Block**

11 **Need:** A continuing phase of THI's ongoing conversion of existing 4.16kV to 27.6kV  
12 assets

13

14 **Scope:** Supply and place new poles and conductors and replace existing transformation  
15 with new pad mounted transformers and aerial transformers.

1 **Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$1k
#1835 Overhead Conductors & Devices	\$1k
#1845 Underground Conductors & Devices	\$14k
#1850 Line Transformers	\$36k
#1855 Services	\$4k
<b>Total</b>	<b>\$56k</b>

2

3 **Project Description: #2007 – 948 Fox Alley Heath's Block**

4 **Need:** A continuing phase of THI's ongoing conversion of existing 4.16kV to 27.6kV  
 5 assets

6

7 **Scope:** Supply and place new poles and conductors and replace existing transformation  
 8 with new pad mounted transformers and aerial transformers.

9 **Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$1k
#1835 Overhead Conductors & Devices	\$-
#1845 Underground Conductors & Devices	\$15k
#1850 Line Transformers	\$49k
#1855 Services	\$2k
<b>Total</b>	<b>\$67k</b>

10

11 **Project Description: #2007 – 963 Factory Plaza**

12 **Need:** In order to build the proposed M8 feeder it was identified the existing 4.16Kv  
 13 circuit that serviced this building must be converted and relocated.

14

15 **Scope:** Supply and place new poles and conductors and replace existing transformation  
 16 with new pad mounted transformers.

1 **Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$11k
#1835 Overhead Conductors & Devices	\$7k
#1845 Underground Conductors & Devices	\$6k
#1850 Line Transformers	\$29k
#1855 Services	\$-
<b>Total</b>	<b>\$53k</b>

2

3 **Project Description: #2007 – Miscellaneous**

4 **Need:** THI uses Miscellaneous for all projects which do not meet or exceed our  
 5 materiality threshold to replace old and deteriorated assets on miscellaneous conversion  
 6 projects which are generally unscheduled in order to maintain a stable and reliable  
 7 distribution system. These enhancements are part of THI's obligation to meet the safety  
 8 standards of Reg 22/04.

9

10 **Scope:** Replacement of poles, transformers, conductors and service wires necessary to  
 11 complete small scale projects.

12 **Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$ 21k
#1835 Overhead Conductors & Devices	\$28k
#1840 Underground Conduit	\$ 14k
#1845 Underground Conductors & Devices	\$41k
#1850 Line Transformers	\$ 85k
#1855 Services	\$13k
#1860 Meters	
#1995 Contributions and Grants – Credit	
<b>Total</b>	<b>\$202k</b>

1

### Capital Additions for 2008

Account Description	USA Acct	Total
Building	1808	
Distribution Stations	1820	
Poles, Towers & Fixtures	1830	\$ 55k
Overhead Conductors & Devices	1835	\$ 74k
Underground Conduit	1840	\$ 49k
Underground Conductors & Devices	1845	\$ 312k
Line Transformers	1850	\$ 300k
Services	1855	\$ 114k
Meters	1860	\$ 14k
Computer Hardware	1920	
Computer Software	1925	
Transportation Equipment	1930	
Misc. Tools & Equipment	1940	
Communication Equipment	1955	
System Supervisory Equip	1980	
Contributed Capital	1995	-\$769k
<b>TOTAL</b>		<b>\$ 149k</b>

2

### 3 Project Description: #2008 – 600 General

4 **Need:** THI uses Project 600 to replace old and deteriorated assets in order to maintain  
 5 a stable and reliable distribution system. These enhancements are part of THI's  
 6 obligation to meet the safety standards of Reg 22/04.

7

8 **Scope:** Determined on a site specific basis throughout the year.

1

### Capital Costs:

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$ 4k
#1835 Overhead Conductors & Devices	\$13k
#1840 Underground Conduit	\$ 2k
#1845 Underground Conductors & Devices	\$3k
#1850 Line Transformers	\$ 8k
#1855 Services	\$27k
#1860 Meters	\$14k
#1995 Contributions and Grants – Credit	-\$769k
<b>Total</b>	<b>-\$698k</b>

2

### 3 Project Description: #2008 – 904 Park Place Residential Subdivision

4 **Need:** Supply new residential development and scattered services that was requested  
 5 by a local developer.

6

7 **Scope:** Relocate one pole for placement of new road and then supply and install primary  
 8 and secondary cables and transformers

9

### Capital Costs:

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$4k
#1840 Underground Conduit	\$8k
#1845 Underground Conductors & Devices	\$32k
#1850 Line Transformers	\$36k
<b>Total</b>	<b>\$80k</b>

10

### 11 Project Description: #2008 – 913 Oak Park 2007 Residential Subdivision

12 **Need:** Supply new residential development and scattered services that was requested  
 13 by a local developer.

14

15 **Scope:** Supply and install primary and secondary cables and transformers



1 **Capital Costs:**

Account & Description	Amount
#1840 Underground Conduit	\$4k
#1845 Underground Conductors & Devices	\$42k
#1850 Line Transformers	\$28k
Total	\$74k

2

3 **Project Description: #2008 – 914 OAKS Residential Subdivision**

4 **Need:** Supply new residential development and scattered services that was requested  
 5 by a local developer.

6

7 **Scope:** Supply and install primary and secondary cables and transformers

8 **Capital Costs:**

Account & Description	Amount
#1840 Underground Conduit	\$16k
#1845 Underground Conductors & Devices	\$98k
#1850 Line Transformers	\$66k
#1855 Services	\$1k
Total	\$181k

9

10 **Project Description: #2008 – 915 Baldwin Place Phase 8 Residential**  
 11 **Subdivision**

12 **Need:** Supply new residential development and scattered services that was requested  
 13 by a local developer.

14

15 **Scope:** Supply and install primary and secondary cables and transformers

1 **Capital Costs:**

Account & Description	Amount
#1840 Underground Conduit	\$14k
#1845 Underground Conductors & Devices	\$82k
#1850 Line Transformers	\$46k
<b>Total</b>	<b>\$142k</b>

2

3 **Project Description: #2008 – 940 Fairview Pumping Station**

4 **Need:** Supply new servicing to the proposed County of Oxford Water Treatment plant  
 5 and Booster Station.

6

7 **Scope:** Connect large service requirements within the existing residential servicing.

8 **Capital Costs:**

Account & Description	Amount
#1835 Overhead Conductors and Devices	\$6k
#1845 Underground Conductors & Devices	\$16k
#1850 Line Transformers	\$29k
<b>Total</b>	<b>\$51k</b>

9

10 **Project Description: #2008 – 946 Fox Alley South Block**

11 **Need:** A continuing phase of THI's ongoing conversion of existing 4.16kV to 27.6kV  
 12 assets

13

14 **Scope:** Supply and place new poles and conductors and replace existing transformation  
 15 with new pad mounted transformers and aerial transformers.

1 **Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$29k
#1835 Overhead Conductors & Devices	\$29k
#1850 Line Transformers	\$17k
#1855 Services	\$20k
<b>Total</b>	<b>\$95k</b>

2

3 **Project Description: #2008 – 947 Fox Alley Joseph Block**

4 **Need:** A continuing phase of THI's ongoing conversion of existing 4.16kV to 27.6kV  
 5 assets

6

7 **Scope:** Supply and place new poles and conductors and replace existing transformation  
 8 with new pad mounted transformers and aerial transformers.

9 **Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$-
#1835 Overhead Conductors & Devices	\$1k
#1840 Underground Conduit	\$1k
#1845 Underground Conductors & Devices	\$1k
#1850 Line Transformers	\$9k
#1855 Services	\$43k
<b>Total</b>	<b>\$55k</b>

10

11 **Project Description: #2008 – Miscellaneous**

12 **Need:** THI uses Miscellaneous for all projects which do not meet or exceed our  
 13 materiality threshold to replace old and deteriorated assets on miscellaneous conversion  
 14 projects which are generally unscheduled in order to maintain a stable and reliable  
 15 distribution system. These enhancements are part of THI's obligation to meet the safety  
 16 standards of Reg 22/04.

17

- 1 **Scope:** Replacement of poles, transformers, conductors and service wires necessary to
- 2 complete small scale projects.

3

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#### Capital Costs:

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$ 18k
#1835 Overhead Conductors & Devices	\$25k
#1840 Underground Conduit	\$ 4k
#1845 Underground Conductors & Devices	\$38k
#1850 Line Transformers	\$63k
#1855 Services	\$23k
#1860 Meters	
#1995 Contributions and Grants – Credit	
<b>Total</b>	<b>\$171k</b>

1

### Capital Additions for 2009

Account Description	USA Acct	Total
Building	1808	
Distribution Stations	1820	
Poles, Towers & Fixtures	1830	\$ 153k
Overhead Conductors & Devices	1835	\$ 208k
Underground Conduit	1840	\$ 5k
Underground Conductors & Devices	1845	\$ 30k
Line Transformers	1850	\$ 216k
Services	1855	\$ 101k
Meters	1860	\$ 12k
Computer Hardware	1920	\$11k
Computer Software	1925	\$297k
Transportation Equipment	1930	
Misc. Tools & Equipment	1940	
Communication Equipment	1955	
System Supervisory Equip	1980	
Contributed Capital	1995	-\$92k
<b>TOTAL</b>		<b>\$ 929k</b>

2

### 3 Project Description: #2009 – 600 General

4 **Need:** THI uses Project 600 to replace old and deteriorated assets in order to maintain  
 5 a stable and reliable distribution system. These enhancements are part of THI's  
 6 obligation to meet the safety standards of Reg 22/04.

7

8 **Scope:** Determined on a site specific basis throughout the year.

1

### Capital Costs:

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$ -
#1835 Overhead Conductors & Devices	\$5k
#1840 Underground Conduit	\$ -
#1845 Underground Conductors & Devices	\$1k
#1850 Line Transformers	\$ 10k
#1855 Services	\$21k
#1860 Meters	\$12k
#1920 Computer Hardware	\$12k
#1925 Computer Software	\$296k
#1995 Contributions and Grants – Credit	-\$91k
<b>Total</b>	<b>\$266k</b>

2

### 3 Project Description: #2009 – 917 Coon Alley Bridge to London

4 **Need:** A continuing phase of THI's ongoing conversion of existing 4.16kV to 27.6kV  
 5 assets

6

7 **Scope:** Supply and place new poles and conductors and replace existing transformation  
 8 with new pad mounted transformers and aerial transformers.

9

### Capital Costs:

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$63k
#1835 Overhead Conductors & Devices	\$103k
#1840 Underground Conduit	\$
#1845 Underground Conductors & Devices	\$4k
#1850 Line Transformers	\$91k
#1855 Services	\$42k
<b>Total</b>	<b>\$303k</b>

10

### 11 Project Description: #2009 – 919 Edgewood Drive

12 **Need:** A continuing phase of THI's ongoing conversion of existing 4.16kV to 27.6kV  
 13 assets

**Scope:** Supply and place new poles and conductors and replace existing transformation with new aerial transformers.

**Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$17k
#1835 Overhead Conductors & Devices	\$21k
#1840 Underground Conduit	\$
#1845 Underground Conductors & Devices	\$2k
#1850 Line Transformers	\$22k
#1855 Services	\$7k
<b>Total</b>	<b>\$69k</b>

**Project Description: #2009 – 921 Wolfe Street**

**Need:** A continuing phase of THI's ongoing conversion of existing 4.16kV to 27.6kV assets

**Scope:** Supply and place new poles and conductors and replace existing transformation with new aerial transformers.

**Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$9k
#1835 Overhead Conductors & Devices	\$15k
#1840 Underground Conduit	\$3k
#1845 Underground Conductors & Devices	\$11k
#1850 Line Transformers	\$43k
#1855 Services	\$19k
<b>Total</b>	<b>\$100k</b>

**Project Description: #2009 – 024a Computer Hardware**

**Need:** Upgrade of technology

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**Scope:** Dedicated server for new CIS

**Capital Costs:**

Account & Description	Amount
#1920 Computer Hardware	\$11k

**Project Description: #2009 – 024b Computer Software – CIS System**

**Need:** Old system was no longer supported. Upgrade to software mandatory.

**Scope:** Engineering and CIS product upgrades

**Capital Costs:**

Account & Description	Amount
#1925 Computer Software	\$297k

**Project Description: #2009 – Miscellaneous**

**Need:** THI uses Miscellaneous for all projects which do not meet or exceed our materiality threshold to replace old and deteriorated assets on miscellaneous conversion projects which are generally unscheduled in order to maintain a stable and reliable distribution system. These enhancements are part of THI's obligation to meet the safety standards of Reg 22/04.

**Scope:** Replacement of poles, transformers, conductors and service wires necessary to complete small scale projects.



1

**Capital Costs:**

<b>Account &amp; Description</b>	<b>Amount</b>
#1830 Poles, Towers & Fixtures	\$ 61k
#1835 Overhead Conductors & Devices	\$59k
#1840 Underground Conduit	\$ 1k
#1845 Underground Conductors & Devices	\$10k
#1850 Line Transformers	\$49k
#1855 Services	\$11k
#1860 Meters	
#1995 Contributions and Grants – Credit	
<b>Total</b>	<b>\$191k</b>

2

1

### Capital Additions for 2010

Account Description	USA Acct	Total
Building	1808	
Distribution Stations	1820	
Poles, Towers & Fixtures	1830	\$ 145k
Overhead Conductors & Devices	1835	\$ 87k
Underground Conduit	1840	\$ 47k
Underground Conductors & Devices	1845	\$ 72k
Line Transformers	1850	\$ 246k
Services	1855	\$ 84k
Meters	1860	\$ 8k
Computer Hardware	1920	
Computer Software	1925	
Transportation Equipment	1930	
Misc. Tools & Equipment	1940	
Communication Equipment	1955	
System Supervisory Equip	1980	
Contributed Capital	1995	-\$90k
<b>TOTAL</b>		<b>\$ 599k</b>

2

### 3 Project Description: #2010 – 600 General

4 **Need:** THI uses Project 600 to replace old and deteriorated assets in order to maintain  
 5 a stable and reliable distribution system. These enhancements are part of THI's  
 6 obligation to meet the safety standards of Reg 22/04.

7

8 **Scope:** Determined on a site specific basis throughout the year.

1

### Capital Costs:

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$ -
#1835 Overhead Conductors & Devices	\$ -
#1840 Underground Conduit	\$ -
#1845 Underground Conductors & Devices	\$1k
#1850 Line Transformers	\$ 6k
#1855 Services	\$14k
#1860 Meters	\$8k
#1995 Contributions and Grants – Credit	- \$90k
<b>Total</b>	<b>-\$61k</b>

2

### 3 Project Description: #2010 – 922 Concession Street

4 **Need:** A continuing phase of THI's ongoing conversion of existing 4.16kV to 27.6kV  
 5 assets

6

7 **Scope:** Supply and place new poles and conductors and replace existing transformation  
 8 with new pad mounted transformers and aerial transformers.

9

### Capital Costs:

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$82k
#1835 Overhead Conductors & Devices	\$58k
#1840 Underground Conduit	\$45k
#1845 Underground Conductors & Devices	\$68k
#1850 Line Transformers	\$178k
#1855 Services	\$38k
<b>Total</b>	<b>\$469k</b>

10

### 11 Project Description: #2010 – 924 Parkwood Drive

12 **Need:** A continuing phase of THI's ongoing conversion of existing 4.16kV to 27.6kV  
 13 assets

14

1 **Scope:** Supply and place new poles and conductors and replace existing transformation  
 2 with new aerial transformers.

3 **Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$32k
#1835 Overhead Conductors & Devices	\$8k
#1850 Line Transformers	\$33k
#1855 Services	\$4k
<b>Total</b>	<b>\$77k</b>

4 **Project Description: #2010 – Miscellaneous**

5 **Need:** THI uses Miscellaneous for all projects which do not meet or exceed our  
 6 materiality threshold to replace old and deteriorated assets on miscellaneous conversion  
 7 projects which are generally unscheduled in order to maintain a stable and reliable  
 8 distribution system. These enhancements are part of THI's obligation to meet the safety  
 9 standards of Reg 22/04.

10  
 11 **Scope:** Replacement of poles, transformers, conductors and service wires necessary to  
 12 complete small scale projects.

15 **Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$ 32k
#1835 Overhead Conductors & Devices	\$21k
#1840 Underground Conduit	\$ 2k
#1845 Underground Conductors & Devices	\$3k
#1850 Line Transformers	\$29k
#1855 Services	\$28k
#1860 Meters	
#1995 Contributions and Grants – Credit	
<b>Total</b>	<b>\$115k</b>

16

1

### Capital Additions for 2011

Account Description	USA Acct	Total
Building	1808	
Distribution Stations	1820	
Poles, Towers & Fixtures	1830	\$ 155k
Overhead Conductors & Devices	1835	\$ 78k
Underground Conduit	1840	\$ 108k
Underground Conductors & Devices	1845	\$ 88k
Line Transformers	1850	\$ 207k
Services	1855	\$ 153k
Meters	1860	\$ 32k
Computer Hardware	1920	
Computer Software	1925	
Transportation Equipment	1930	
Misc. Tools & Equipment	1940	
Communication Equipment	1955	
System Supervisory Equip	1980	
Contributed Capital	1995	-\$173k
<b>TOTAL</b>		<b>\$ 648k</b>

2

### 3 Project Description: #2011 – 600 General

4 **Need:** THI uses Project 600 to replace old and deteriorated assets in order to maintain  
 5 a stable and reliable distribution system. These enhancements are part of THI's  
 6 obligation to meet the safety standards of Reg 22/04.

7

8 **Scope:** Determined on a site specific basis throughout the year.

1

### Capital Costs:

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$ -
#1835 Overhead Conductors & Devices	\$2k
#1840 Underground Conduit	\$
#1845 Underground Conductors & Devices	\$3k
#1850 Line Transformers	\$ 13k
#1855 Services	\$30k
#1860 Meters	\$31k
#1995 Contributions and Grants – Credit	- \$173k
<b>Total</b>	<b>-\$94k</b>

2

3 **Project Description: #2011 – 912 Heritage Phase 1 New Residential**  
 4 **Development**

5 **Need:** Supply new residential developments and scattered services including extending  
 6 aerial servicing to limit of subdivision

7

8 **Scope:** Install primary and secondary cables and transformers

9

### Capital Costs:

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$28k
#1835 Overhead Conductors & Devices	\$17k
#1840 Underground Conduit	\$25k
#1845 Underground Conductors & Devices	\$10k
#1850 Line Transformers	\$40k
#1855 Services	\$10k
<b>Total</b>	<b>\$130k</b>

10

11 **Project Description: #2011 – 922 Concession Street**

12 **Need:** A continuing phase of THI's ongoing conversion of existing 4.16kV to 27.6kV  
 13 assets

14

15 **Scope:** Supply and place new poles and conductors and replace existing transformation  
 16 with new pad mounted transformers and aerial transformers.

1

### Capital Costs:

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$10k
#1835 Overhead Conductors & Devices	\$10k
#1840 Underground Conduit	\$7k
#1845 Underground Conductors & Devices	\$6k
#1850 Line Transformers	\$31k
#1855 Services	\$2k
<b>Total</b>	<b>\$66k</b>

2

### 3 Project Description: #2011 – 930 Brock Street E

4 **Need:** A continuing phase of THI's ongoing conversion of existing 4.16kV to 27.6kV  
 5 assets

6

7 **Scope:** Supply and place new poles and conductors and replace existing transformation  
 8 with new aerial transformers.

9

### Capital Costs:

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$65k
#1835 Overhead Conductors & Devices	\$32k
#1840 Underground Conduit	\$36k
#1845 Underground Conductors & Devices	\$63k
#1850 Line Transformers	\$104k
#1855 Services	\$45k
<b>Total</b>	<b>\$345k</b>

10

### 11 Project Description: #2011 – Miscellaneous

12 **Need:** THI uses Miscellaneous for all projects which do not meet or exceed our  
 13 materiality threshold to replace old and deteriorated assets on miscellaneous conversion  
 14 projects which are generally unscheduled in order to maintain a stable and reliable  
 15 distribution system. These enhancements are part of THI's obligation to meet the safety  
 16 standards of Reg 22/04.

**Scope:** Replacement of poles, transformers, conductors and service wires necessary to complete small scale projects.

**Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$ 52k
#1835 Overhead Conductors & Devices	\$18k
#1840 Underground Conduit	\$ 39k
#1845 Underground Conductors & Devices	\$6k
#1850 Line Transformers	\$20k
#1855 Services	\$66k
#1860 Meters	
#1995 Contributions and Grants – Credit	
<b>Total</b>	<b>\$201k</b>



EB-2012-0168

Exhibit 2

Tab 4

Schedule 3

Attachment 1

Historical Capital Project Tables

## Historical Capital Projects

Project	2007	2008	2009	2010	2011
600 - General	(\$12,045)	(\$697,560)	(\$30,990)	(\$61,430)	(\$93,729)
24 - CIS System			\$296,643		
904 - Park Place	--	\$79,565	--	--	--
912 - Heritage Phase 1	--		--	--	\$130,065
913 - Oak Park 2007	--	\$73,509	--	--	--
914 - Oaks Subd	--	\$180,857	--	--	--
915 - Baldwin Place #8	--	\$141,898	--	--	--
917 - Coon Alley - Bridge to Ldn	--	--	\$303,198	--	--
919 - Edgewood Dr	--	--	\$69,365	--	--
921 - Wolfe St	--	--	\$99,939	--	--
922 - Concession St	--	--	--	\$468,585	\$66,173
924 - Parkwood	--	--	--	\$76,951	--
930 - Brock St E	--	--	--	--	\$344,703
935 Cambdon Crt	\$256,864	--	--	--	--
936 - Baldwin Place Poles	\$58,740	--	--	--	--
937 - Newell Rd	\$100,180	--	--	--	--
940 - Fairvw Pmp Stn	--	\$50,897	--	--	--
946 - FoxAlley South	--	\$94,570	--	--	--
947 - FoxAlley - Joseph	\$56,410	\$54,786	--	--	--
948 - FoxAlley - Heaths	\$67,035	--	--	--	--
963 - Factory Plaza	\$53,082	--	--	--	--
Miscellaneous	\$222,865	\$170,708	\$190,824	\$115,266	\$201,254
<b>Total</b>	<b>\$803,131</b>	<b>\$149,230</b>	<b>\$928,979</b>	<b>\$599,372</b>	<b>\$648,466</b>

Note: projects above the materiality threshold of \$50k are listed in detail above. Projects under the threshold are grouped into Miscellaneous.

## FORECAST INVESTMENTS BY PROJECT

This schedule provides descriptions of capital project spending for 2012 and 2013. E2/T4/S4/Att1 presents annual summaries of capital spending by project and account.

### Capital Additions for 2012

Account Description	USA Acct	Total
Building	1808	
Distribution Stations	1820	
Poles, Towers & Fixtures	1830	\$ 152k
Overhead Conductors & Devices	1835	\$ 100k
Underground Conduits	1840	\$ 78k
Underground Conductors & Devices	1845	\$ 70k
Line Transformers	1850	\$ 181k
Services	1855	\$ 72k
Meters	1860	\$ 28k
Computer Hardware	1920	
Computer Software	1925	
Transportation Equipment	1930	
Supervisory Control and Data Acquisition	1980	
Contributed Capital	1995	-\$ 12k
<b>Total</b>		<b>\$ 669k</b>

### Project Description: #2012 – 933 Frances Street

**Need:** A continuing phase of THI's ongoing conversion of existing 4.16kV to 27.6kV assets

**Scope:** Supply and place new poles and conductors and replace existing transformation with new aerial transformers.

1 **Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$23k
#1835 Overhead Conductors & Devices	\$17k
#1840 Underground Conduit	\$17k
#1845 Underground Conductors & Devices	\$12k
#1850 Line Transformers	\$35k
#1855 Services	\$12k
<b>Total</b>	<b>\$116k</b>

2

3 **Project Description: #2012 – 935 Queen St Apartments**

4 **Need:** A continuing phase of THI's ongoing conversion of existing 4.16kV to 27.6kV  
 5 assets

6

7 **Scope:** Supply and place new poles and conductors and replace existing transformation  
 8 with new pad mount transformers.

9 **Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$17k
#1835 Overhead Conductors & Devices	\$12k
#1840 Underground Conduit	\$28k
#1845 Underground Conductors & Devices	\$23k
#1850 Line Transformers	\$35k
#1855 Services	\$-
<b>Total</b>	<b>\$115k</b>

10

11 **Project Description: #2012 – 939 Queen Street**

12 **Need:** A continuing phase of THI's ongoing conversion of existing 4.16kV to 27.6kV  
 13 assets

14

15 **Scope:** Supply and place new poles and conductors and replace existing transformation  
 16 with new pad mount and aerial transformers.

1 **Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$18k
#1835 Overhead Conductors & Devices	\$13k
#1840 Underground Conduit	\$9k
#1845 Underground Conductors & Devices	\$13k
#1850 Line Transformers	\$32k
#1855 Services	\$4k
<b>Total</b>	<b>\$89k</b>

2

3 **Project Description: #2012 – 940 Durham Street and Ebert Alley**

4 **Need:** A continuing phase of THI's ongoing conversion of existing 4.16kV to 27.6kV  
 5 assets

6

7 **Scope:** Supply and place new poles and conductors and replace existing transformation  
 8 with new aerial transformers.

9 **Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$32k
#1835 Overhead Conductors & Devices	\$25k
#1840 Underground Conduit	\$6k
#1845 Underground Conductors & Devices	\$6k
#1850 Line Transformers	\$38k
#1855 Services	\$19k
<b>Total</b>	<b>\$126k</b>

10

11 **Project Description: #2012 – 942 Clarke Street**

12 **Need:** A continuing phase of THI's ongoing conversion of existing 4.16kV to 27.6kV  
 13 assets

14

15 **Scope:** Supply and place new poles and conductors and replace existing transformation  
 16 with new aerial transformers.

1

**Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$28k
#1835 Overhead Conductors & Devices	\$28k
#1840 Underground Conduit	\$14k
#1845 Underground Conductors & Devices	\$14k
#1850 Line Transformers	\$37k
#1855 Services	\$21k
<b>Total</b>	<b>\$142k</b>

2

3

## Capital Additions for 2013

Account Description	USA Acct	Total
Land	1805	
Building	1808	
Distribution Stations	1820	
Poles, Towers & Fixtures	1830	\$ 174k
Overhead Conductors & Devices	1835	\$ 156k
Underground Conduit	1840	\$ 44k
Underground Conductors & Devices	1845	\$ 55k
Line Transformers	1850	\$ 223k
Services	1855	\$ 77k
Meters	1860	
Furniture	1915	
Computer Hardware	1920	\$ 11k
Computer Software	1611	\$ 54k
Transportation Equipment	1930	
Tools & Equipment	1940	
Communications Equipment	1955	
System Supervisory Equipment	1980	
Contributed Capital	1995	-\$ 133k
<b>Total</b>		<b>\$ 661k</b>

### Project Description: #2013 – North Street Trailer Park

**Need:** A continuing phase of THI's ongoing conversion of existing 4.16kV to 27.6kV assets

**Scope:** Supply and place new poles and conductors and replace existing transformation with new pad mount and aerial transformers.

1 **Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$10k
#1835 Overhead Conductors & Devices	\$7k
#1840 Underground Conduit	\$7k
#1845 Underground Conductors & Devices	\$3k
#1850 Line Transformers	\$36k
#1855 Services	\$7k
<b>Total</b>	<b>\$70k</b>

2

3 **Project Description: #2013 – Delevan Cres, Queen Street N.**

4 **Need:** A continuing phase of THI's ongoing conversion of existing 4.16kV to 27.6kV  
 5 assets

6

7 **Scope:** Supply and place new poles and conductors and replace existing transformation  
 8 with new aerial transformers.

9 **Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$46k
#1835 Overhead Conductors & Devices	\$27k
#1840 Underground Conduit	\$7k
#1845 Underground Conductors & Devices	\$
#1850 Line Transformers	\$40k
#1855 Services	\$13k
<b>Total</b>	<b>\$133k</b>

10

11 **Project Description: #2013 – Lisgar Ave.**

12 **Need:** A continuing phase of THI's ongoing conversion of existing 4.16kV to 27.6kV  
 13 assets

14

15 **Scope:** Supply and place new poles and conductors and replace existing transformation  
 16 with new aerial transformers.



1 **Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$30k
#1835 Overhead Conductors & Devices	\$20k
#1840 Underground Conduit	\$5k
#1845 Underground Conductors & Devices	\$
#1850 Line Transformers	\$25k
#1855 Services	\$20k
<b>Total</b>	<b>\$100k</b>

2

3 **Project Description: #2013 – Fourth Street**

4 **Need:** A continuing phase of THI's ongoing conversion of existing 4.16kV to 27.6kV  
 5 assets

6

7 **Scope:** Supply and place new poles and conductors and replace existing transformation  
 8 with new aerial transformers.

9 **Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$21k
#1835 Overhead Conductors & Devices	\$17k
#1840 Underground Conduit	\$3k
#1845 Underground Conductors & Devices	\$-
#1850 Line Transformers	\$17k
#1855 Services	\$10k
<b>Total</b>	<b>\$68k</b>

10

11 **Project Description: #2013 – Tillson Ave and Cranberry Road**

12 **Need:** A continuing phase of THI's ongoing conversion of existing 4.16kV to 27.6kV  
 13 assets

14

15 **Scope:** Supply and place new poles and conductors and replace existing transformation  
 16 with new aerial transformers.

1 **Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	\$34k
#1835 Overhead Conductors & Devices	\$21k
#1840 Underground Conduit	\$4k
#1845 Underground Conductors & Devices	\$
#1850 Line Transformers	\$17k
#1855 Services	\$ 9k
<b>Total</b>	<b>\$85k</b>

2 **Project Description: #2013 – A New Residential Development (Annandale)**

3 **Need:** Service of new residential developments

4

5 **Scope:** Installation of underground conductors and transformers

6 **Capital Costs:**

Account & Description	Amount
#1830 Poles, Towers & Fixtures	
#1835 Overhead Conductors & Devices	
#1840 Underground Conduit	\$8k
#1845 Underground Conductors & Devices	\$40k
#1850 Line Transformers	\$32k
#1855 Services	
#1995 Contributed Capital	-\$80k
<b>Total</b>	<b>\$0</b>

7 **Project Description: #2013 – 3 Commercial Developments**

8 **Need:** Service of new commercial developments

9

10 **Scope:** Installation of poles, conductor and transformers

1

### Capital Costs:

Account & Description	Amount
#1835 Overhead Conductors & Devices	\$5k
#1840 Underground Conduit	\$3k
#1845 Underground Conductors	\$8k
#1850 Line Transformers	\$32k
#1855 Services	\$5k
#1995 Contributed Capital	-\$53k
<b>Total</b>	<b>\$-</b>

2

3

### 4 Project Description: #2013 – Customer Information System Upgrade

5 **Need:** Update technology

6

7 **Scope:** Upgrade to new version of software to allow use in a Windows 7 environment.

8

### Capital Costs:

Account & Description	Amount
#1920 Computer Hardware	\$11k
#1611 Computer Software	\$54k
<b>Total</b>	<b>\$65k</b>

9

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## Appendix 2-A Capital Projects Table

Projects	2007	2008	2009	2010	2011	2012 Bridge Year	2013 Test Year
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS
<b>Project 600 - General</b>							
1830 - Poles, Towers and Fixtures	5,051	4,075	814	223	368		
1835 - Overhead Conductors & Devices	6,527	12,752	4,755	883	1,579		
1840 - Underground Conduit	84	2,292		60			
1845 - Underground Conductors & Devices	6,963	2,758	1,087	587	3,035		
1850 - Line Transformers	29,563	7,868	9,676	5,521	12,652		
1855 - Services	45,770	27,268	20,532	13,514	29,626		
1860 - Meters	32,382	13,884	12,461	8,107	31,804		
1920 - Computer Hardware			11,532				
1925 - Computer Software							
1995 - Contributions and Grants - Credit	-138,385	-768,457	-91,847	-90,325	-172,793		
<b>Sub-Total</b>	<b>-12,045</b>	<b>-697,560</b>	<b>-30,990</b>	<b>-61,430</b>	<b>-93,729</b>	<b>0</b>	<b>0</b>
<b>Project 24 CIS System</b>							
1830 - Poles, Towers and Fixtures							
1835 - Overhead Conductors & Devices							
1840 - Underground Conduit							
1845 - Underground Conductors & Devices							
1850 - Line Transformers							
1855 - Services							
1860 - Meters							
1920 - Computer Hardware			296,643				
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
<b>Sub-Total</b>	<b>0</b>	<b>0</b>	<b>296,643</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Project 904 Park Place</b>							
1830 - Poles, Towers and Fixtures		3,593					
1835 - Overhead Conductors & Devices							
1840 - Underground Conduit		7,603					
1845 - Underground Conductors & Devices		31,569					
1850 - Line Transformers		36,800					
1855 - Services							
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
<b>Sub-Total</b>	<b>0</b>	<b>79,565</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Project 912 Heritage Phase 1</b>							
1830 - Poles, Towers and Fixtures					27,808		
1835 - Overhead Conductors & Devices					17,111		
1840 - Underground Conduit					25,380		
1845 - Underground Conductors & Devices					9,698		
1850 - Line Transformers					39,827		
1855 - Services					10,241		
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
<b>Sub-Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>130,065</b>	<b>0</b>	<b>0</b>

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## Appendix 2-A Capital Projects Table

Projects	2007	2008	2009	2010	2011	2012 Bridge Year	2013 Test Year
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS
Project 913 Oak Park 2007							
1830 - Poles, Towers and Fixtures							
1835 - Overhead Conductors & Devices							
1840 - Underground Conduit		3,778					
1845 - Underground Conductors & Devices		42,205					
1850 - Line Transformers		27,526					
1855 - Services							
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
Sub-Total	0	73,509	0	0	0	0	0
Project 914 Oaks Subd							
1830 - Poles, Towers and Fixtures							
1835 - Overhead Conductors & Devices							
1840 - Underground Conduit		16,024					
1845 - Underground Conductors & Devices		97,357					
1850 - Line Transformers		66,010					
1855 - Services		1,466					
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
Sub-Total	0	180,857	0	0	0	0	0
Project 915 Baldwin Place #8							
1830 - Poles, Towers and Fixtures							
1835 - Overhead Conductors & Devices							
1840 - Underground Conduit		13,565					
1845 - Underground Conductors & Devices		82,665					
1850 - Line Transformers		45,668					
1855 - Services							
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
Sub-Total	0	141,898	0	0	0	0	0
Project 917 Coon Alley - Bridge to Ldn							
1830 - Poles, Towers and Fixtures			62,785				
1835 - Overhead Conductors & Devices			103,438				
1840 - Underground Conduit							
1845 - Underground Conductors & Devices			4,067				
1850 - Line Transformers			90,714				
1855 - Services			42,194				
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
Sub-Total	0	0	303,198	0	0	0	0

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## Appendix 2-A Capital Projects Table

Projects	2007	2008	2009	2010	2011	2012 Bridge Year	2013 Test Year
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS
Project 919 Edgewood Dr							
1830 - Poles, Towers and Fixtures			17,160				
1835 - Overhead Conductors & Devices			20,725				
1840 - Underground Conduit							
1845 - Underground Conductors & Devices			2,061				
1850 - Line Transformers			22,196				
1855 - Services			7,223				
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
Sub-Total	0	0	69,365	0	0	0	0
Project 921 Wolfe St							
1830 - Poles, Towers and Fixtures			8,615				
1835 - Overhead Conductors & Devices			15,327				
1840 - Underground Conduit			3,479				
1845 - Underground Conductors & Devices			10,715				
1850 - Line Transformers			42,674				
1855 - Services			19,129				
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
Sub-Total	0	0	99,939	0	0	0	0
Project 922 Concession St							
1830 - Poles, Towers and Fixtures				81,630	9,728		
1835 - Overhead Conductors & Devices				57,649	9,871		
1840 - Underground Conduit				45,366	7,481		
1845 - Underground Conductors & Devices				67,756	5,886		
1850 - Line Transformers				178,152	30,981		
1855 - Services				38,032	2,226		
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
Sub-Total	0	0	0	468,585	66,173	0	0
Project 924 Parkwood							
1830 - Poles, Towers and Fixtures				31,748			
1835 - Overhead Conductors & Devices				7,577			
1840 - Underground Conduit							
1845 - Underground Conductors & Devices							
1850 - Line Transformers				33,800			
1855 - Services				3,826			
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
Sub-Total	0	0	0	76,951	0	0	0

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## Appendix 2-A Capital Projects Table

Projects	2007	2008	2009	2010	2011	2012 Bridge Year	2013 Test Year
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS
Project 930 Brock St E							
1830 - Poles, Towers and Fixtures					65,115		
1835 - Overhead Conductors & Devices					32,148		
1840 - Underground Conduit					36,301		
1845 - Underground Conductors & Devices					62,898		
1850 - Line Transformers					103,592		
1855 - Services					44,649		
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
Sub-Total	0	0	0	0	344,703	0	0
Project 933 Frances St							
1830 - Poles, Towers and Fixtures						23,112	
1835 - Overhead Conductors & Devices						17,334	
1840 - Underground Conduit						17,334	
1845 - Underground Conductors & Devices						11,556	
1850 - Line Transformers						34,668	
1855 - Services						11,556	
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
Sub-Total	0	0	0	0	0	115,560	0
Project 935 Cambdon Crt							
1830 - Poles, Towers and Fixtures							
1835 - Overhead Conductors & Devices	4,880						
1840 - Underground Conduit							
1845 - Underground Conductors & Devices	92,061						
1850 - Line Transformers	45,809						
1855 - Services	114,070						
1860 - Meters	44						
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
Sub-Total	256,864	0	0	0	0	0	0
Project 935 Queen St Apmts							
1830 - Poles, Towers and Fixtures						17,262	
1835 - Overhead Conductors & Devices						11,508	
1840 - Underground Conduit						28,770	
1845 - Underground Conductors & Devices						23,016	
1850 - Line Transformers						34,524	
1855 - Services							
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
Sub-Total	0	0	0	0	0	115,080	0

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## Appendix 2-A Capital Projects Table

Projects	2007	2008	2009	2010	2011	2012 Bridge Year	2013 Test Year
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS
<b>Project 936 Baldwin Place Poles</b>							
1830 - Poles, Towers and Fixtures	2,516						
1835 - Overhead Conductors & Devices	5,529						
1840 - Underground Conduit	9,640						
1845 - Underground Conductors & Devices	40,919						
1850 - Line Transformers	136						
1855 - Services							
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
<b>Sub-Total</b>	58,740	0	0	0	0	0	0
<b>Project 937 Newell Rd</b>							
1830 - Poles, Towers and Fixtures	35,456						
1835 - Overhead Conductors & Devices	64,592						
1840 - Underground Conduit							
1845 - Underground Conductors & Devices							
1850 - Line Transformers							
1855 - Services	132						
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
<b>Sub-Total</b>	100,180	0	0	0	0	0	0
<b>Project 939 Queen St</b>							
1830 - Poles, Towers and Fixtures						17,856	
1835 - Overhead Conductors & Devices						13,392	
1840 - Underground Conduit						8,928	
1845 - Underground Conductors & Devices						13,392	
1850 - Line Transformers						31,248	
1855 - Services						4,464	
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
<b>Sub-Total</b>	0	0	0	0	0	89,280	0
<b>Project 940 Durham &amp; Ebert Alley</b>							
1830 - Poles, Towers and Fixtures						31,560	
1835 - Overhead Conductors & Devices						25,248	
1840 - Underground Conduit						6,312	
1845 - Underground Conductors & Devices						6,312	
1850 - Line Transformers						37,872	
1855 - Services						18,936	
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
<b>Sub-Total</b>	0	0	0	0	0	126,240	0



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## Appendix 2-A Capital Projects Table

Projects	2007	2008	2009	2010	2011	2012 Bridge Year	2013 Test Year
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS
Project 940 Fairvw Pmp Stn							
1830 - Poles, Towers and Fixtures							
1835 - Overhead Conductors & Devices		5,636					
1840 - Underground Conduit							
1845 - Underground Conductors & Devices		16,269					
1850 - Line Transformers		28,992					
1855 - Services							
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
Sub-Total	0	50,897	0	0	0	0	0
Project 942 Clarke St							
1830 - Poles, Towers and Fixtures						28,440	
1835 - Overhead Conductors & Devices						28,440	
1840 - Underground Conduit						14,220	
1845 - Underground Conductors & Devices						14,220	
1850 - Line Transformers						35,550	
1855 - Services						21,330	
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
Sub-Total	0	0	0	0	0	142,200	0
Project 946 FoxAlley South							
1830 - Poles, Towers and Fixtures		28,732					
1835 - Overhead Conductors & Devices		29,135					
1840 - Underground Conduit							
1845 - Underground Conductors & Devices							
1850 - Line Transformers		16,569					
1855 - Services		20,134					
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
Sub-Total	0	94,570	0	0	0	0	0
Project 947 FoxAlley Joseph							
1830 - Poles, Towers and Fixtures	1,280	478					
1835 - Overhead Conductors & Devices	748	1,245					
1840 - Underground Conduit		1,248					
1845 - Underground Conductors & Devices	14,065	1,228					
1850 - Line Transformers	36,681	9,156					
1855 - Services	3,637	41,431					
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
Sub-Total	56,410	54,786	0	0	0	0	0

**File Number:** EB-2012-0168  
**Exhibit:** 2  
**Tab:** 4  
**Schedule:** 4  
**Attachment:** 1

**Date:** 28-Sep-12

## Appendix 2-A Capital Projects Table

Projects	2007	2008	2009	2010	2011	2012 Bridge Year	2013 Test Year
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS
<b>Project 948 FoxAlley Heaths</b>							
1830 - Poles, Towers and Fixtures	844						
1835 - Overhead Conductors & Devices	346						
1840 - Underground Conduit							
1845 - Underground Conductors & Devices	14,804						
1850 - Line Transformers	48,858						
1855 - Services	2,182						
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
<b>Sub-Total</b>	67,035	0	0	0	0	0	0
<b>Project 963 Factory Plaza</b>							
1830 - Poles, Towers and Fixtures	11,240						
1835 - Overhead Conductors & Devices	7,472						
1840 - Underground Conduit							
1845 - Underground Conductors & Devices	5,966						
1850 - Line Transformers	28,139						
1855 - Services	265						
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
<b>Sub-Total</b>	53,082	0	0	0	0	0	0
<b>Nort St - Trailer</b>							
1830 - Poles, Towers and Fixtures							10,440
1835 - Overhead Conductors & Devices							6,960
1840 - Underground Conduit							6,960
1845 - Underground Conductors & Devices							3,480
1850 - Line Transformers							34,800
1855 - Services							6,960
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
<b>Sub-Total</b>	0	0	0	0	0	0	69,600
<b>Deleven Cres, Queen St</b>							
1830 - Poles, Towers and Fixtures							46,550
1835 - Overhead Conductors & Devices							26,600
1840 - Underground Conduit							6,650
1845 - Underground Conductors & Devices							
1850 - Line Transformers							39,900
1855 - Services							13,300
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
<b>Sub-Total</b>	0	0	0	0	0	0	133,000

**File Number:** EB-2012-0168  
**Exhibit:** 2  
**Tab:** 4  
**Schedule:** 4  
**Attachment:** 1

**Date:** 28-Sep-12

## Appendix 2-A Capital Projects Table

Projects	2007	2008	2009	2010	2011	2012 Bridge Year	2013 Test Year
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS
<b>Lisgar Ave</b>							
1830 - Poles, Towers and Fixtures							29,940
1835 - Overhead Conductors & Devices							19,960
1840 - Underground Conduit							4,990
1845 - Underground Conductors & Devices							
1850 - Line Transformers							24,950
1855 - Services							19,960
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
<b>Sub-Total</b>	0	0	0	0	0	0	99,800
<b>Fourth St</b>							
1830 - Poles, Towers and Fixtures							20,340
1835 - Overhead Conductors & Devices							16,950
1840 - Underground Conduit							3,390
1845 - Underground Conductors & Devices							
1850 - Line Transformers							16,950
1855 - Services							10,170
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
<b>Sub-Total</b>	0	0	0	0	0	0	67,800
<b>Tillson Ave, Cranberry</b>							
1830 - Poles, Towers and Fixtures							34,120
1835 - Overhead Conductors & Devices							21,325
1840 - Underground Conduit							4,265
1845 - Underground Conductors & Devices							
1850 - Line Transformers							17,060
1855 - Services							8,530
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							
<b>Sub-Total</b>	0	0	0	0	0	0	85,300
<b>Annandale Phase 7 Stage 2</b>							
1830 - Poles, Towers and Fixtures							
1835 - Overhead Conductors & Devices							
1840 - Underground Conduit							8,000
1845 - Underground Conductors & Devices							40,000
1850 - Line Transformers							32,000
1855 - Services							
1860 - Meters							
1920 - Computer Hardware							
1925 - Computer Software							
1995 - Contributions and Grants - Credit							-80,000
<b>Sub-Total</b>	0	0	0	0	0	0	0

**File Number:** EB-2012-0168  
**Exhibit:** 2  
**Tab:** 4  
**Schedule:** 4  
**Attachment:** 1

**Date:** 28-Sep-12

## Appendix 2-A Capital Projects Table

Projects	2007	2008	2009	2010	2011	2012 Bridge Year	2013 Test Year
Reporting Basis	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	CGAAP	MIFRS
Miscellaneous							
1830 - Poles, Towers and Fixtures	27,083	17,962	61,920	31,583	52,202	33,930	32,940
1835 - Overhead Conductors & Devices	29,982	25,493	58,653	21,308	17,679	4,302	64,215
1840 - Underground Conduit	15,767	4,282	1,132	1,954	39,066	1,980	9,580
1845 - Underground Conductors & Devices	51,291	37,908	10,073	3,333	6,146	1,218	11,415
1850 - Line Transformers	86,186	61,682	48,541	28,767	20,118	8,514	56,840
1855 - Services	12,556	23,381	10,505	28,321	66,043	15,456	18,210
1860 - Meters						28,000	
1920 - Computer Hardware							11,000
1925 - Computer Software							54,000
1995 - Contributions and Grants - Credit						-12,360	-52,500
Sub-Total	222,865	170,708	190,824	115,266	201,254	81,040	205,700
<b>Total</b>	<b>803,132</b>	<b>149,230</b>	<b>928,979</b>	<b>599,372</b>	<b>648,466</b>	<b>669,400</b>	<b>661,200</b>

**Notes:**

- 1 Please provide a breakdown of the major components of each capital project. Please ensure that all projects below the materiality threshold are included
- 2 Amounts should be reported on a MIFRS basis for the adoption year and any subsequent years, only.

EB-2012-0168

Exhibit 2

Tab 4

Schedule 5

Asset Management Plan

## **Tillsonburg Hydro Inc's Asset Management and Condition Assessment Strategy**

### **Executive Summary**

Tillsonburg Hydro Inc's (THI) Asset Management (AM) plan provides an overview of the fundamentals of an asset management plan based upon best management practices obtained from other municipalities, utilities and jurisdictions. THI's AM plan has typically been linked to our 4.16 to 27.6 KV conversion projects, identified in the Elecsar Report E2/T1/S1/Att2 . Other betterment requirements are reviewed on an annual basis as part of the capital budgeting process. Currently THI shares an Asset Management Technologist with the Town of Tillsonburg. Duties performed by the Asset Management Technologist for THI have included:

- Primary collection of THI assets in our GIS program
- Continual review and correcting of collected assets.
- Formulate data so that accurate life cycling can be projected.

The size of THI and the relatively small service area allows staff to have a good understanding of the status and condition of the hydro distribution network and the plans to maintain the system in the most reliable and safe way. The AM plan as presented here is a systematic process that allows for the maintenance, upgrading/refurbishment and operating of our physical hydro assets in a cost effective manner. Through this AM plan; THI can meet new demands in a fiscally responsible and an environmentally sustainable framework while preserving the quality of life.

### **Discussion**

#### **Asset Management Plan – What is it?**

The International Infrastructure Management Manual defines an Asset Management Plan as; "a plan developed for the management of one or more infrastructure assets that combines multi-disciplinary management techniques (including technical & financial) over the life cycle of the asset in the most cost effective manner to provide a specific level of service."

## **Tillsonburg Hydro Inc's Asset Management and Condition Assessment Strategy**

THI's and other utilities' asset management plans are similar to the description provided above. The plan refers to the hydro infrastructure that shares a common location within a utility corridor such as roads, curbs, gutters, sewer and water systems. Each asset is assigned different lifecycles which results in the need for the technical and financial experts, based upon the condition and composition of each asset, to determine the need for replacement or rehabilitation. An old or faulty conductor that requires replacing drives the need to review the condition of the poles, transformers, switches and/or any other appurtenances associated with the objects of interest.

An AM Plan also incorporates the existing preventative maintenance and risk management programs to preclude the risk of failure. The preventative maintenance component ensures that the day-to-day wear and tear on the asset is dealt with to ensure that the asset can reach its expected lifecycle. The risk management component ensures that staff manages the risk through due diligence. THI is owned by the Town of Tillsonburg and is governed by our local Hydro Board. This promotes cooperation between the stakeholders, and through an exchange of information, facilitates better planning and coordination of activities within the utility and construction industries. This in turn creates better transparency and communication throughout every level of the utility.

### **Asset Management Plan – What are the benefits?**

THI has determined the specific benefits associated with an AM Plan are:

- Facilitates the establishment and subsequent implementation of policy objectives and measures the related performance;
- Assists in avoiding problems and potential crises;
- Leads to providing a consistent level of service to the public;
- Leads to more effective communications with ratepayers, elected officials, financial rating organizations and regulatory agencies;
- Identifies and reduces lifecycle costs;
- Allows for better decision making regarding resource allocation;
- Reduces risk to the utility;
- Allows for more effective financial planning;
- Leads to more efficient data management;
- Results in positive institution change.

## **Tillsonburg Hydro Inc's Asset Management and Condition Assessment Strategy**

### **Asset Management Plan – What are the key principles?**

The THI AM plan can be characterized by the following key principles:

- A strategic approach to data collection that places a premium on the information, collaboration and interdisciplinary management in a proactive manner;
- A comprehensive long-term view of infrastructure performance and cost;
- A transparent approach that requires effective communication among all stakeholders;

### **Asset Management Plan – What are the essential components?**

In order for an AM Plan to fulfill the principles of Asset Management, the following essential components must be determined and contained in the overall plan:

#### **1. Asset Value:**

THI recognizes that all electrical infrastructure assets have a monetary value that is constantly depreciating. Administration has determined the actual capital value for the majority of the assets. Future collaboration between the finance department and operations will result in an inspection study that will determine the actual value of the assets based on a capital cost analysis. It is anticipated that from this report a standard will be created for a process of identification and tracking of capital assets in the future.

#### **2. Lifecycle Management:**

All assets have a limited life expectancy. To some degree the rate of deterioration or depreciation can be estimated. A decision made at any point in time in the lifecycle of an asset has an effect on the remaining life, and may have operational implications and related costs.



## **Tillsonburg Hydro Inc's Asset Management and Condition Assessment Strategy**

### **3. Sustainability:**

In terms of Asset Management, sustainability should be defined as a plan that meets the needs of the present generation without compromising the ability of the future generations. The Asset Management Plan needs to identify a financial plan over the long term to ensure that sufficient resources are available. These resources are required to operate, rehabilitate, and ultimately replace the asset at the optimal time with the intention of achieving the lowest lifecycle cost.

It was identified early on in discussions that an asset that receives no preventative maintenance, and has no associated Asset Management plan will require full replacement (at a much higher cost) well before it reaches the end of its life cycle. The plan helps justify, prove and provide evidence for the current rates or any changes to the cost of service.

### **4. Integration of Technical and Financial Plans:**

The technical plan must examine and minimize lifecycle costs for the infrastructure while maintaining an adequate level of service at the lowest possible level of risk. The financial plan must identify the financial investment required per year for each asset over the long term, including any larger than normal expenditures to meet the requirements of the technical plan. There should be thorough communication between each other these departments so the relationship between the level of service and the cost can be quantified and managed. The technical and financial relationship may change from time to time depending on the outcome of the condition surveys.

## **Tillsonburg Hydro Inc's Asset Management and Condition Assessment Strategy**

### **5. Risk Assessment:**

Risk should be managed in any decision making process. The owner of the assets should analyze and document acceptable risk tolerance. In THI's' case, the probability of failure is taken into account while the condition of the asset is being analyzed. The condition survey leads to determining the rate of failure and the consequences of such failure. Risk factors can include financial, environmental, regulatory/legal and public health and safety.

### **6. Performance Measurement:**

To optimize the Asset Management Plan, performance of the assets and rehabilitation strategies should be monitored regularly and adjustments made at the appropriate stage in the asset lifecycle to achieve an acceptable balance between cost and the performance (level of service). THI expects to take on such performance measurements within the next 4 years before our next Cost of Service. These benchmarks will be compiled into a comprehensive database that can be easily accessed as necessary to determine the performance of the asset.

## **Current Initiatives**

THI and the asset management technologist have been reviewing and correcting existing assets through the use of GIS software, aerial imagery and an advanced GPS. Specifically, the main focus has been on correcting and collecting proper locations and nomenclature of hydro poles, transformers, switches and conductors so that proper and accurate life cycling and sustainable development can be determined. Regarding the underground portion of the hydro network, THI and the asset management technologist have created and started a maintenance program to help determine the essential asset management components listed above. The overhead portion of the network will be completed in subsequent years.

## **Tillsonburg Hydro Inc's Asset Management and Condition Assessment Strategy**

### **Other Initiatives**

Another undertaking of THI is the implementation of advanced GIS software used for the collection, archiving, mapping and management of hydro infrastructure assets. This software assists with the overall administration of the asset management plans described within this report. The GIS software allows the asset management technologist access to accurate and precise information regarding all aspects of the hydro distribution system. The software also provides an interface and solution to map

and model the entire hydro network into a dynamic system, complete with topology rules and relationships.

The secure database also ensures the integrity and uniformity of the data that would be used in analysis. The end result is that capital projects can be better planned, and the long term planning associated with the asset management plan can be better managed with the intention of maximizing the life of the asset.

### **Conclusion**

The AM plan as presented in this report is a systematic process that allows for the maintenance, upgrading and the operating of physical hydro assets in a cost effective manner and that by implementing an AM Plan, THI can meet the new demands within a fiscally responsible and environmentally sustainable framework while preserving our quality of life. We have included three main categories of assets below in which asset condition assessments were done, using the principles described in this report. THI is committed to continue deployment of the advanced GIS software, to build and enhance the functionality of the distribution system and provide us with accurate purchase, installation and inspection dates plus financial evaluation and forecasting models.

## TREATMENT OF STRANDED ASSETS RELATED TO SMART METER DEPLOYMENT

Guideline G-2011-0001, Smart Meter Funding and Cost Recovery – Final Disposition, dated December 15, 2011, provides two options to distributors regarding the accounting treatment for stranded meters related to the installation of smart meters:

- Leave them recorded in Account 1860, Meters; or
- Record them in “Sub-account Stranded Meter Costs” of Account 1555.

THI will continue to let stranded meter assets reside in Account 1860 – Meters and depreciate them until the end of 2012. At the end of 2012, the net book value of these assets is \$89k. This value was placed into the Board’s Appendix 2-S in the contributed capital column as a 2012 item so that the schedule continued to calculate correctly.

Appendix 2-S of the Board’s Appendices (E9/T4/S1/Att2) presents the value of THI’s stranded smart meters:

Year	Notes	Gross Asset Value	Accumulated Amortization	Contributed Capital (Net of Amortization)	Net Asset
		(A)	(B)	(C)	(D) = (A) - (B) - (C)
2006		\$ 708,071	\$ 492,163		\$ 215,907
2007		\$ 712,374	\$ 515,966		\$ 196,408
2008		\$ 712,452	\$ 538,925		\$ 173,527
2009		\$ 712,821	\$ 561,264		\$ 151,557
2010		\$ 712,821	\$ 582,526		\$ 130,295
2011		\$ 712,821	\$ 603,137		\$ 109,684
2012		\$ 712,821	\$ 623,476		\$ 89,345

Appendix 2-S requests that utilities complete the following information relating to the treatment of the utility’s stranded meters:

1. A description of the accounting treatment followed by the applicant on stranded meter costs for financial accounting and reporting purposes.

1 Thus far, stranded meters were included in account 1860 and therefore  
2 were treated in accordance with CGAAP with the same accounting rules  
3 as standard meters.

4 As the installation of smart meters was completed in December 2011, THI  
5 intends to transfer net balances to 1555 in 2013, without any further  
6 amortization. The amount of stranded meter assets to be transferred is  
7 \$89k.

- 8 2. *The amount of the pooled residual net book value of the removed from*  
9 *service stranded meters, less any contributed capital (net of accumulated*  
10 *amortization), and less any net proceeds from sales, as of December 31,*  
11 *2010.*

12 THI has assumed that the requested date should have been December  
13 31, 2012. The amount of pooled residual net book value as of December  
14 31, 2012 is \$89k

- 15 3. *A statement as to whether or not the recording of depreciation expenses*  
16 *continued in order to reduce the net book value through accumulated*  
17 *depreciation. If so, provision of the total (cumulative) depreciation expense for*  
18 *the period from the time that the meters became stranded to December 31,*  
19 *2010.*

20 Smart meters were fully installed by the end of 2011. The 2012  
21 depreciation expense was \$20k.

- 22 4. *If no depreciation expenses were recorded to reduce the net book value of*  
23 *stranded meters through accumulated depreciation, the total (cumulative)*  
24 *depreciation expense amount that would have been applicable for the period*  
25 *from the time that the meters became stranded to December 31, 2010.*

26 N/A Please see question #3 above.

- 27 5. *The estimated amount of the pooled residual net book value of the removed from*  
28 *service meters, less any net proceeds from sales and contributed capital, at the*  
29 *time when smart meters will have been fully deployed. If the smart meters have*  
30 *been fully deployed, please provide the actual amount.*

1 The estimated net amount at end of 2012 of stranded meter assets was  
 2 \$89k

3 6. A description as to how the applicant intends to recover in rates the costs for  
 4 stranded meters, including the proposed accounting treatment, the proposed  
 5 disposition period and the associated bill impacts.

6 THI intends to recover the cost of the Stranded Meters through a Rate  
 7 Rider. The proposed recovery period is 4 years. Calculations of the  
 8 proposed rate rider are:

9 **Table 2 Stranded Meter Rate Rider (E2/T4/S6/Att1)**

<b>Variance Account Balance</b>	<b>\$ 89,345</b>	
Balance Date:	31-Dec-12	41,274
<b>Total for Recovery</b>		<b>89,345</b>
Recovery Period (years)	<b>4</b>	
<b>Annual Recovery</b>		<b>22,336</b>

		Billing Determinant:		Volumetric		
Refresh		kWh's	% share	Annual \$	Volume	Rate per
Customer Class						
Residential		49,718,289	67.6%	15,092	49,718,289	\$0.0003 kWh
General Service < 50 kW		22,374,916	30.4%	6,792	22,374,916	\$0.0003 kWh
General Service > 50 to 499 kW					115,448	kW
General Service > 500 to 1499 kW					87,241	kW
General Service > 1,500 kW					70,544	kW
<b>TOTAL</b>		<b>73,585,655</b>	<b>100.0%</b>	<b>22,336</b>		

10

11 THI has selected a 4 year disposition period to minimize bill impact.

12 7. Distributors should also provide the Net Book Value per class of meter as of  
 13 December 31, 2010 as well as the number of meters that were removed /  
 14 stranded. In preparing this information, distributors should review the Board's  
 15 letter of January 16, 2007 Stranded Meter Costs Related to the Installation of  
 16 Smart Meters which stated that records were to be kept of the type and number  
 17 of each meter to support the stranded meter costs. Table 3 shows THI's net book  
 18 value by customer class.

1

**Table 3: Net Book Value by class**

<u>Class</u>	<u>Meters</u>	<u>NBV</u>
Residential	6011	\$79k
GS<50 kW	658	\$10k

2

EB-2012-0168

Exhibit 2

Tab 4

Schedule 6

Attachment 1

Calculation of Stranded Meter Rate Rider



# Tillsonburg Hydro Inc. (ED-2003-0026)

2013 EDR Application (EB-2012-0168) version: 1

August 31, 2012

## Stranded Meter Rate Rider

### Variance Account Balance

Balance Date:	\$ 89,345	
	31-Dec-12	41,274
<b>Total for Recovery</b>		<b>89,345</b>
Recovery Period (years)	4	
<b>Annual Recovery</b>		<b>22,336</b>

Billing Determinant: Volumetric

Customer Class	kWh's	% share	Annual \$	Volume	Rate	per
Residential	49,718,289	67.6%	15,092	49,718,289	\$0.0003	kWh
General Service < 50 kW	22,374,916	30.4%	6,792	22,374,916	\$0.0003	kWh
General Service > 50 to 499 kW				115,448		kW
General Service > 500 to 1499 kW				87,241		kW
General Service > 1,500 kW				70,544		kW
<b>TOTAL</b>	<b>73,585,655</b>	<b>100.0%</b>	<b>22,336</b>			

1       **GREEN ENERGY PLAN CAPITAL EXPENDITURES**

2       Tillsonburg Hydro Inc is not proposing any capital expenditures with respect to the  
3       Green Energy Plan. Tillsonburg Hydro Inc. does not anticipate significant uptake in our  
4       territory for large scale FIT projects. Based on the anticipated uptake of the program and  
5       our assessment of our systems capabilities, Tillsonburg Hydro Inc. is forecasting  
6       sufficient capacity to accommodate the anticipated connections. Tillsonburg Hydro Inc.  
7       will however undertake an annual review of the anticipated renewable generation  
8       connection project schedule as well as related costs.

## **HARMONIZED SALES TAX**

1

2 THl has ensured that all capital and OM&A costs contained in the application test year  
3 excludes all impacts of PST previously embedded in costs for historical years ended in  
4 2010. When the 2010 and 2011 budgets were formulated, certain expense lines were  
5 reduced by the estimated impact of PST. For the 2012 and 2013 budgets, THl already  
6 had a full prior year of actual historical information that excluded PST. From July 1,  
7 2010 to April 30, 2013, a variance account will be credited with the estimated HST  
8 savings and an expense recorded. For the 2013TY, no expense was reflected since the  
9 new rates are based on costs that already exclude PST.

Exhibit 2: Rate Base

---

**Tab 5 (of 7): Allowance for Working Capital**

## DERIVATION OF WORKING CAPITAL ALLOWANCE

The Working Capital Allowance has been derived by applying the Board's deemed Working Capital factor to projected eligible expenses, which consist of power supply expenses and controllable expenses for Operations, Maintenance and Administration ("OM&A").

E2/T1/S1/Att1 shows the calculation of the Working Capital Allowance by account, for the 2012BY & 2013TY MIFRS and preceding years since the previous Board-Approved amount from the 2009 EDR under CGAAP. E2/T1/S1/Att2 shows the calculation of the Working Capital Allowance by account for the 2012BY & 2013TY and preceding years since the previous Board-Approved amount from the 2009 EDR under CGAAP.

### **2013TY vs. 2012BY MIFRS**

The projected Working Capital Allowance of \$2,591k is \$275k lower than 2012BY MIFRS. The lower Working Capital Allowance results from the Working Capital Factor decreasing to 13% from 15% applied against higher distribution expenses and increased power supply cost. The higher distribution expenses are due to higher employee costs and higher rate application costs. The increase power supply costs reflect higher commodity prices and lower volumes.

### **2012BY MIFRS vs. 2012BY CGAAP**

The projected Working Capital Allowance of \$2,866k is \$21k higher than 2012BY CGAAP. Distribution expenses are higher due to costs that were previously capitalized under CGAAP.

### **2012BY CGAAP vs. 2011 actual**

The projected Working Capital Allowance of \$2,845k is \$Nil lower than 2011. The Working Capital Allowance results from higher distribution expenses and lower power supply costs. The higher distribution expenses are due to labour that was capitalized in 2011 and increased indirect labour and rent costs determined by the transfer pricing

1 study (E4/T2/S2/Att1). The decrease in power supply costs mainly reflects lower  
2 commodity prices.

3  
4 **2011 actual vs. 2010 actual**

5 The Working Capital Allowance of \$2,845k is \$205k higher than 2010. The higher  
6 Working Capital Allowance results from higher distribution expenses and higher power  
7 supply costs. The higher distribution expenses are due to labour that was capitalized in  
8 2010 and increased total labour costs offset by one-time costs incurred in 2010 not  
9 repeated in the current year. The increase in power supply costs mainly reflects higher  
10 commodity prices.

11  
12 **2010 actual vs. 2009 actual**

13 The Working Capital Allowance of \$2,640k is \$83k higher than 2009. The higher  
14 Working Capital Allowance results from higher distribution expenses and higher power  
15 supply costs. The higher distribution expenses are due to higher labour costs and  
16 decreased management fee capitalization. The increase in power supply costs reflects  
17 higher volumes and lower commodity price.

18  
19  
20 **2009 actual vs. 2009 Board-Approved**

21 The Working Capital Allowance of \$2,557k is \$113k higher than 2009 Board-Approved.  
22 The higher Working Capital Allowance results from higher distribution expenses and  
23 higher power supply costs. The higher distribution expenses are due to higher labour  
24 costs offset by higher capitalization of labour. The increase in power supply costs  
25 reflects higher commodity price and lower volumes.

Exhibit 2: Rate Base

---

## **Tab 6 (of 7): Service Quality and Reliability Performance**

1

## **SERVICE QUALITY**

2 THl reports its service quality indicators (SQI) annually to the Ontario Energy Board. The  
3 SQIs are defined in Chapter 7 of the Distribution System Code. THl has met the  
4 minimum standards for all SQIs each year, as indicated in E2/T6/S1/Att1



EB-2012-0168

Exhibit 2

Tab 6

Schedule 1

Attachment 1

Service Quality Indicators

## SERVICE QUALITY INDICATORS

Service Quality Indicator	Minimum Standard	2009	2010	2011
Connection of New Services – Low Voltage	90%	100	100	100
Connection of New Services – High Voltage	90%	N/A	N/A	N/A
Appointment Scheduling	90%	100	100	100
Appointments Met	90%	100	100	100
Rescheduling of missed appointment	100%	N/A	N/A	N/A
Telephone Accessibility	65%	97.90	97.90	84.50
Telephone Call Abandon Rate	10%	1	1	5
Written Responses to Enquiries	80%	N/A	N/A	N/A
Emergency Response Urban	80%	100	100	100
Emergency Response Rural	80%	N/A	N/A	N/A
Reconnection Performance Standard	85%	***	***	100

\*\*\* New reporting standard as of 2011

## RELIABILITY PERFORMANCE

Service reliability indices measure system outage statistics.

System Average Interruption Duration Index (SAIDI): SAIDI is an indicator of system reliability that expresses the length of outage customers experience in the year on average. All Planned and unplanned interruptions of one minute or more should be used to calculate this index. It is defined as the total hours of power interruptions normalized per customer served.

System Average Interruption Frequency Index (SAIFI): SAIFI is an indicator of the average number of interruptions each customer experiences. All planned and unplanned interruptions of one minute or more should be used to calculate this index. It is defined as, the number of interruptions normalized per customer served.

Customer Average Interruption Duration Index (CAIDI): CAIDI is an indication of the speed at which power is restored. All planned and unplanned interruptions of one minute or more should be used to calculate this index. It is defined as, the average duration of interruption in the year.

Tillsonburg Hydro Inc. reports its reliability performance annually to the Ontario Energy Board. THI has met the minimum standards for all SQIs each year, as indicated in E2/T6/S2/Att1

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Exhibit 2

Tab 6

Schedule 2

Attachment 1

Reliability Performance Measures

1

## RELIABILITY PERFORMANCE MEASURES

2

Reliability Metrics caused by Loss of Supply	Minimum Standard	2008	2009	2010	2011	2012 Estimate
SAIDI – System Average Interruption Duration Index	Within the range of 3 years historical performance	4.46	.33	4.10	2.62	2.88
SAIFI – System Average Interruption Frequency Index	Within the range of 3 years historical performance	2.93	1.01	6.93	3.62	3.62
CAIDI – Customer Average Interruption Duration Index	Within the range of 3 years historical performance	1.52	.33	.59	.72	.79
Reliability Metrics excludes Loss of Supply	Minimum Standard	2008	2009	2010	2011	2012 Estimate
SAIDI – System Average Interruption Duration Index	Within the range of 3 years historical performance	3.97	.21	1.17	1.79	1.79
SAIFI – System Average Interruption Frequency Index	Within the range of 3 years historical performance	2.17	.28	.78	.68	.98
CAIDI – Customer Average Interruption Duration Index	Within the range of 3 years historical performance	1.83	.75	1.49	2.63	1.68

3

Exhibit 2: Rate Base

---

**Tab 7 (of 7): Green Energy Plan**



**Basic GEA Plan  
Application  
EB-2012-0168**

**Rates Effective: May 1, 2013**

**Date Filed: September 28, 2012**

**Tillsonburg Hydro Inc.  
10 Lisgar Ave.  
Tillsonburg, ON  
N4G 5A5**



File Number: EB-2012-0168

Date Filed: September 28, 2012

# **Exhibit 1**

## **ADMINISTRATION**





File Number: EB-2012-0168

Date Filed: September 28, 2012

## Exhibit 1

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Tab 1 of 5

Summary



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Basic GEA Plan Tillsonburg Hydro Inc. Application					



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## Foreword

---

Tillsonburg Hydro has prepared a Basic GEA Plan.

A Detailed GEA Plan is required if the total capital costs of all of the distributor's planned projects related to the connection of renewable generation and/or the development of the smart grid in any one year are more than \$100,000 and exceed 3% of the distributor's distribution rate base; or exceed \$5M; or the total capital costs of all a distributor's planned projects related to the connection of renewable generation and/or development of the smart grid are more than \$100,000 and exceed 6% of the distributor's distribution rate base, or exceed \$10M.

Tillsonburg Hydro Inc. ("Tillsonburg") has reviewed the requirements as described above for preparing a detailed GEA Plan above and confirms that Tillsonburg's current one year plans and proposed five year plans do not exceed the above noted thresholds. Tillsonburg therefore files this Basic GEA Plan.



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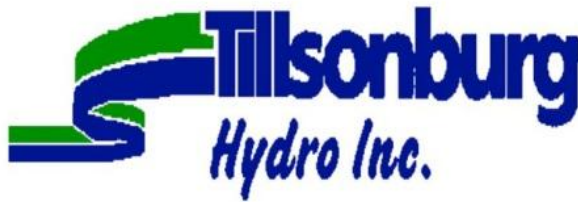
Date Filed: September 28, 2012

# Liability Disclaimer

The information and statements made in this Basic GEA Plan are prepared on the assumptions, projections, and forecasts made by Tillsonburg Hydro Inc. and represents Tillsonburg's intentions and opinions at the date of preparation.

Circumstances will change, assumptions and forecasts may prove to be wrong, events may occur that were not predicted, and Tillsonburg may, at a later date, decide to take different actions from those it currently intends to take as expressed in this Basic GEA Plan.

Tillsonburg cannot be held liable for any loss, injury, or damage arising directly or indirectly as a result of use or reliance on any information contained within this Basic GEA Plan.



## Executive Summary

Tillsonburg is a local energy distributor that services approximately 6733 customers throughout the Town of Tillsonburg and is licensed by the Ontario Energy Board ("OEB"). As part of the submission to fulfill the OEB Filing Requirements for the Conditions of License, Tillsonburg has prepared a Basic Green Energy Act (GEA) Plan. The GEA Plan contains a description of the current undertakings to enable renewable generation, as well as future initiatives and planned expenditures to continue to allow for connection of new projects.

Tillsonburg has connected a number of renewable generation installations under the Feed-In-Tariff ("FIT") program. As of the end of the July 2012, Tillsonburg has connected and settles a total of:

- 12 MicroFIT installations totaling 117.50 kW of generation capability
- 1 FIT installation totaling 75 kW of generation capability

Following the government's "Two-Year Review" of the FIT Program, the government has signaled continued commitment to the program. As a result, Tillsonburg anticipates demand for the program to be steady and therefore will require future capital expenditures in order to continue to connect renewable generation projects, as is required by the OEB Distribution System Code. Tillsonburg has a series of projects planned involving system expansion and refurbishment, and will consider the impact in enabling renewable generation within the prioritization mix. There are also potential required investments for system expansion to connect renewable generation that will come via the Offer-To-Connect process.

Known constraints exist on the Tillsonburg system by the upstream transmitter, Hydro One, which will limit renewable generation connection. Tillsonburg intends to continue its strong



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- 1 working relationship with its transmitter and will work with it to help resolve, if possible, any
- 2 issues as they arise.



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## Exhibit 1

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Background



## Background

---

In May of 2009, the Green Energy and Green Economy Act, 2009 was formally passed into Ontario law. The FIT Program is the cornerstone of the Act, and is North America's first comprehensive guaranteed pricing structure for renewable electricity production. The Ontario Power Authority (OPA) is responsible for implementing the program and offers stable prices under long-term contracts for energy generated from renewable sources, including:

- Solar photovoltaic
- On-shore and off-shore wind
- Biomass
- Biogas
- Landfill gas
- Waterpower

This Basic GEA plan focuses on two main areas, namely:

1. Current assessment of the distributor's system; and
2. Planned development of the system to accommodate renewable generation connection.

The GEA Plan, may also include preliminary work for the development of a smart grid, if the distributor is seeking to recover smart grid related costs. Tillsonburg is not seeking smart grid funding. Tillsonburg will continue to monitor advancing technologies and new market developments.





Background  
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1 Tillsonburg's GEA Plan is based on current information and presents both a short-term and  
2 a near-term perspective of Tillsonburg plans for its distribution system with respect to  
3 accommodating new connections of renewable generation facilities.

4  
5 It is anticipated that the connection of small-scale inverter-based renewable generation will  
6 not impose limitations, but that over time a larger concentration of renewable generators on  
7 the same distribution feeder may have a noticeable impact on the distribution system and  
8 upstream elements. Tillsonburg does not anticipate a sufficient number of small-scale  
9 projects to reach our level of constraint in the near term of this GEA Plan.

10  
11 Large scale projects can have an immediate impact and will require a detailed study and  
12 analysis to understand the impact of the proposed connection. As the rules for FIT 2.0 were  
13 just finalized on July 12, 2012 it is not possible to predict with certainty the potential for large  
14 scale projects to be located in our territory. In any event, those constraints would not likely  
15 relate to Tillsonburg-owned equipment. Furthermore, the typical planning process for larger  
16 projects generally provides Tillsonburg an adequate timeframe to plan any required  
17 expansions to accommodate any new mid-sized load or large generation additions.



# Impact of CDM on System Capacity

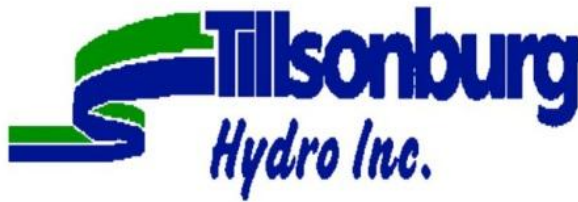
The Board requires that conservation and demand management ("CDM") programs and related costs not be included in Tillsonburg's GEA Plan, although the effects of CDM programs on system capacity should be considered in preparing the GEA Plan.

Table 1 below shows Tillsonburg's licence prescribed CDM target for December 31, 2014. Tillsonburg confirms it will endeavor to include consideration of the impact of CDM on system capacity should any expansions or renewable enabling improvement projects be considered or mandated.

Tillsonburg Hydro Inc.	MW	MWh
<b>CDM Target Prescribed by Licence</b>	<b>2.29</b>	<b>10.25</b>
80% of Target Achievement	1.83	8.20
100% of Target Achievement	2.29	10.25
150% of Target Achievement	3.44	15.38

**Table 1 CDM Target Achievement**

Achieving the CDM targets at 80%, 100% and 150% of the provincial targets will not have any significant impact on Tillsonburg Hydro's current system capacity.



# Consultation

## Consultation with Transmitter

Tillsonburg has a strong working relationship with its upstream transmitter, Hydro One, and has consulted with Hydro One on a series of issues raised by the FIT Program.

Tillsonburg intends to continue to maintain the strong working relationship it has with Hydro One by working collaboratively through these issues as well as new issues as they arise.

Tillsonburg requested a LDC Threshold Connection Impact Assessment ("TCIA") from Hydro One to connect up to 1.4 MW of Inverter Based Solar PV, connected to the 27.6 kV Bus at Tillsonburg TS. The TCIA expires after six months. Hydro One granted the extension of the initial connection for an additional six months to September 29, 2012. Please see Appendix One for a copy of the executive summary to the TCIA and correspondence from Hydro One to Tillsonburg.

Tillsonburg sent a letter with a copy of the draft GEA Plan to Hydro One for comment on Tillsonburg's renewable generation connection and planned system investments to accommodate the forecast connections. This letter was delivered on July 25, 2012 and to date has received no formal reply comments. However informal communication has indicated the following:

*"The is a problem in responding to the Tillsonburg GEA plan. HON DX is investigation the supply matter.*

*The limitation is transmission circuit W8T and Tillsonburg will still be Restricted. Since Hydro One has already given 1.4 MW of capacity in the Threshold CIA, we have yet to determine if Tillsonburg Hydro can use any unused capacity in the threshold.*



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1        *If no changes are made to the Threshold, then Tillsonburg Hydro WILL NOT be able to*  
2        *connect any MicroFITs, BUT still be able to connect CAEs. This is not a good situation*  
3        *because bigger generators might be able to connect while smaller ones would be*  
4        *denied.*

5        *We may wish to explore the idea of making an agreement with Tillsonburg Hydro to*  
6        *enable them to use the Threshold capacity for MicroFITs.”*

7  
8        **Consultation with Embedded or Host Distributors**

9  
10       Tillsonburg confirms that there are no embedded or host distributors in our distribution system  
11       service territory, hence no other consultation is necessary.

12  
13       **Consultation with OPA**

14  
15       A letter was sent to the OPA with our GEA Plan. This letter was sent out on July 25, 2012 and  
16       received on August 17, 2012 as appended in Appendix Two. The OPA found that Tillsonburg  
17       Hydro Inc.'s GEA Plan is reasonably consistent with the OPA's information regarding renewable  
18       energy generation applications to date.



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## Exhibit 1

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LDC Distribution System



## FIT and microFIT

---

Tillsonburg has traditionally distributed power from Hydro One transformer stations to its customers either directly from the sub transmission system or through its distribution system. With the implementation of the FIT Program, Tillsonburg has now evolved into a multifaceted distributor of power from both Hydro One transformer stations and embedded generators within the Tillsonburg system.

The Tillsonburg service territory is mainly an urban setting with a mix of residential and, industrial/commercial. Presently, the main type of renewable generation found within Tillsonburg service territory is photovoltaic from roof mounted solar panel installations. The majority of MicroFIT projects have been installed on the rooftops of residential customers; however there are a few commercial MicroFIT installations as well. One industrial facility located in Tillsonburg service territory operates a mid-size photovoltaic FIT system.

The table below provides a summary of the renewable energy projects connected as of the end of June 30, 2012. A complete listing of all connected projects in the Tillsonburg system is contained in the following tables. It should be noted that CDM programs are not included in this GEA Plan as is stipulated in the OEB Filing Requirements EB-2009-0397.



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<b>microFIT Projects</b>	
Total Applications Submitted	41
Total Contracts Issued	12
Applications Terminated	7
Pending Connection*	4
Submitted	11
Pending LDC Offer to Connect	4
Info Received	1
Connection Completed- Information Requested	2

**Table 1** microFIT Projects connected as of June 30, 2012

<b>FIT Projects</b>	
Applications which require performance of DAT testing	0
Applications which have completed DAT testing	0
Applications which are undergoing TAT	3
Applications which require an ECT	0
Applications for which a Connection Assessment has been requested	0
Applications that have been issued contracts	1
Applications which are Capacity Allocation Exempt	5

**Table 2** FIT Projects as of June 30, 2012

Distribution systems, including monitoring and protection elements were planned, designed and constructed to serve loads. The traditional distribution system was never intended to accommodate the connection of a large number of embedded generators. As such, the amount of generation capacity to be connected to Tillsonburg's distribution system could be constrained by a variety of engineering factors, such as:

- a. Feeder ampacity;
- b. Feeder loading;
- c. Short circuit capacity;
- d. Power quality (i.e. harmonics); and



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e. Limits on reverse power flow and short circuit capability (at transformers and substations).

These factors are considered in totality in determining any possible limitations on the distribution system prior to connecting any new generation.

In order to forecast the anticipated demand for renewable generation connections, Tillsonburg has looked to previous uptake for the FIT program. To date, there have been 41 microFIT applications and 5 FIT applications submitted. Of those applications, we have connected 14 Micro-FIT projects and 1 FIT project to-date. Given that the FIT program has been in existence for three years and that the annual connection rate is approximately 5 Micro-FIT and 1 FIT application per year, and therefore the forecast is expected to remain the same until 2017.

Application Type	2012	2013	2014	2015	2016	2017
Forecast microFIT Connections	5	5	5	5	5	5
Forecast FIT Connections	2	1	1	1	1	1

**Table 3 microFIT and FIT Projects Forecast as of June 30, 2012**

Project applications that are less than 10 kW and small capacity allocation exempt ("CAE") under the FIT/microFIT program typically have capacities less than the building load. Peak generation for solar projects of this size will tend to coincide with peak building energy use. Tillsonburg expects these connections to be accommodated with standard metering and connection techniques.

With respect to large scale projects (1MW to 10 MW in size), we anticipate that the distribution system and/or the customer connections will require upgrading. Tillsonburg does not anticipate significant uptake in our territory for large scale projects. In the event these projects do materialize, they generally have sufficient lead time to allow an appropriate response by Tillsonburg and Hydro One.





FIT and microFIT  
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1  
2 Projects will be prioritized to align with the intent of the OPA FIT and microFIT programs.  
3 Prioritization of FIT projects is based on project application dates and the ongoing status of the  
4 new development. Tillsonburg intends to prioritize and expedite renewable generation projects  
5 that are ready to connect to the distribution system. To date, project timeline information has not  
6 been made available and as such Tillsonburg has not prioritized any of the proposed projects.  
7  
8 In conclusion, based on the anticipated uptake of the program and our assessment of our  
9 systems capabilities, Tillsonburg is forecasting sufficient capacity to accommodate the  
10 anticipated connections with the need to prioritize the projects.



# Expansions and Renewable Enabling Improvements (REI's)

There is no proposed budget with respect to connection of renewable generation under the FIT program. Tillsonburg will undertake an annual review of the anticipated renewable generation connection project schedule as well as related costs.

Tillsonburg is therefore not proposing that any of its costs incurred to make eligible investments for the purpose of enabling the connection of renewable electricity generation be recovered from provincial ratepayers rather than solely from Tillsonburg's ratepayers. It is therefore not necessary to calculate the direct benefits accruing to Tillsonburg customers.



## Other Limitations of the Distribution System

---

Only one project thus far has been connected to the Tillsonburg system without limitation. Three new proposals have recently been submitted for assessment by Hydro One. Thus Tillsonburg has not experienced any limitations with respect to renewable generation facility connections. Tillsonburg is aware that the upstream transmitter, Hydro One, has restrictions on their transformer station feeders based on the thermal ratings and the short circuit capacity of the relevant equipment in accordance with limits set forth in the Transmission System Code ("TSC"). To determine if capacity is available on a given Hydro One transformer station feeder, the Hydro One "Station & Feeder Capacity Calculator" is used. Hydro One has requested that all LDCs comply with this standard and Tillsonburg has committed to doing so.



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## Exhibit 1

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Development of Smart Grid



Summary Discussion  
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# Summary Discussion

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While Tillsonburg currently has no plans for doing smart grid activities, should Tillsonburg engage in any activities in the future, Tillsonburg will prepare and file with the Board, pursuant with Board filing requirements, an evaluation of activities to ensure the benefits of the activities are shared.



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## Exhibit 1

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Appendices



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## Appendix 1 of 2

### Appendix One - HONI TCIA Report



483 Bay St., Toronto, Ontario M5G 2P5

## **THRESHOLD CONNECTION IMPACT ASSESSMENT**

**Tillsonburg Hydro Inc  
Tillsonburg TS, BY Bus (Feeder M5, M6, M7, M8)  
1.4 MW Inverter Based Generation  
ID 15,450**

***March 1, 2011***

**Generation Connections Department  
Distribution Business Development Division**

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## 2.0 Executive Summary

This Threshold CIA considered only the impact of 1.4MW cumulative generation connection of Inverter based CAE projects on the Hydro One's Tillsonburg TS BY Bus where the Distributed Generator is LDC connected, and LDC is transmission connected.

The following issues were discovered during the Threshold CIA and shall be addressed to facilitate interconnection of the Generator(s) to the Hydro One Transmission System.

- For all DG Facilities  $\geq 250\text{kW}$ , Full Monitoring is required. Additional monitoring is required for islanding protection/transfer trip. Additionally, for all DG Facilities  $< 250\text{kW}$ , Provision of monitoring is required.
- Transfer Trip and Distributed Generator End Open (DGEO) shall be determined in Tillsonburg Hydro Inc's CIA as the DG facilities are within the service territory of Tillsonburg Hydro Inc and are connected to a feeder that is wholly owned by Tillsonburg Hydro Inc.
- Feeder Relay Directioning shall be determined in Tillsonburg Hydro Inc's CIA as the DG facilities are within the service territory of Tillsonburg Hydro Inc and are connected to a feeder that is wholly owned by Tillsonburg Hydro Inc.
- Feeder metering bi-directioning shall be determined in Tillsonburg Hydro Inc's CIA as the DG facilities are within the service territory of Tillsonburg Hydro Inc and are connected to a feeder that is wholly owned by Tillsonburg Hydro Inc.
- By no later than five (5) business days following the CIA Expiry Date and at any time upon the request of Hydro One, the customer agrees to provide Hydro One with the list of CAE Facilities that have been or will be connected to the Feeder(s) using the Threshold Allocated Capacity.

Hydro One Networks Inc.  
Business Customer Centre  
185 Clegg Road  
Markham, Ontario L6G 1B7



March 29, 2012

Sebastian Fardella  
Tillsonburg Hydro Inc  
10 Lisgar Ave  
Tillsonburg, ON, N4G 5A5  
[sfardella@tillsonburg.ca](mailto:sfardella@tillsonburg.ca)

Re: Tillsonburg Hydro Inc – Tillsonburg TS BY-Bus, ID # 15,450

Dear Mr. Fardella,

Hydro One has received your request for a six month extension to the capacity allocation under TCIA 15,450. The capacity allocation is covered by the original Threshold Connection Impact Assessment ("TCIA") that was sent on March 29, 2011 and studied for a total inverter-based generating capacity of 1.4 MW, connected to the 27.6 kV BY Bus at Tillsonburg TS.

After review, Hydro One has approved the request for an extension. Your TCIA ID number will remain in the listing for Tillsonburg TS in the Hydro One Application List until September 29, 2012. This list is updated monthly and can be found at:

[http://www.hydroone.com/Generators/Documents/HONI\\_LA.pdf](http://www.hydroone.com/Generators/Documents/HONI_LA.pdf)

Please note that all projects are listed based on the complete application received date.

For additional information on distribution-connected generation, please visit our website at <http://www.hydroone.com/Generators/Pages/Distribution-connected.aspx>.

For any further questions or inquiries, please call the Business Customer Centre at 1-877-447-4412 or email us at [dxgenerationconnections@HydroOne.com](mailto:dxgenerationconnections@HydroOne.com).

Yours truly,

A handwritten signature in black ink, appearing to be "John Fuerth", written over a horizontal line.

John Fuerth  
HYDRO ONE NETWORKS INC

**Date:** 20/03/2012 (dd / mm / yyyy)

## LDC Threshold Connection Impact Assessment Application Form

This application form is used for a Distributor ("LDC") application to Hydro One for a **Threshold** Connection Impact Assessment ("Threshold CIA"). A Threshold CIA is used to study an allocation of 1 MW or more of embedded generation for a single transformer station ("TS") bus, provided that:

- The generator(s) fall under the DSC definition of "capacity allocation exempt small embedded generation facility", and
- The generator(s) are interfaced to the LDC's distribution system through an inverter, and
- The LDC is transmission-connected to the Hydro One Transformer Station or supplied by a Hydro One "Express" feeder (i.e. a feeder serving no other load other than your LDC), and
- The LDC has at least one CAE application for the TS and can provide proof of such by submitting a copy of the signed and stamped LDC's Form B for that proponent.

### **IMPORTANT:**

1. A request may be made for a Threshold CIA allocation greater than 1 MW with appropriate rationale.
2. A Threshold CIA expires after six months from the date the CIA was sent to the LDC. An extension to the six month period may be applied for using this same application form. The extension request must include submission of the generator connection status in the attached Schedule B.
3. **Applicants and Generators are cautioned NOT to incur major expenses until Hydro One approves to connect the proposed generation.**

If you have any questions please e-mail Hydro One's Business Customer Centre at [dxgenerationconnections@hydroone.com](mailto:dxgenerationconnections@hydroone.com) or call 1-877-447-4412 (Option # 2 8:30 am to 5:00 pm Mon to Fri).

**Please return the completed form including a copy of the LDC Form B for the first CAE project, and other required documents by mail to:**

Hydro One Networks Inc.  
Attn: Business Customer Centre  
Generation Connection Application  
185 Clegg Road  
Markham, Ontario L6G 1B7

All fields below are mandatory, except where noted. Incomplete applications may be returned by Hydro One Networks Inc. ("Hydro One"). Please ensure you fill in the date on the first page of this form.

Application Type: ☐ New Application  
☒ Revision/Extension (Original Threshold CIA #15,450)

1. Initial OPA CAE Project #: FIT-FK45E0S LDC Form B attached ☒

2. Requested allocation (check one):

☐ This application is for 1MW only. (The actual allocated amount may differ if the TS has restricted available capacity.)

☒ This application is for a total of 1.4 MW. (If greater than 1 MW, please provide justifications for the total size of requested allocation.) More than 1 MW is required because initial TCIA approved 1.4MW.

3. Contact Information:

Legal Name of LDC	Tillsonburg Hydro Inc
Contact Person	Sebastian Fardella
Street, Post Office Box	10 Lisgar Ave
City, Province, Postal Code	Tillsonburg, ON, N4G5A5
Telephone	519-842-9200 x2226
Cell	
Fax	519-688-0759
E-mail	sfardella@tillsonburg.ca

Preferred method of communication with Hydro One: ☒ E-mail ☒ Telephone ☐ Mail ☐ Fax

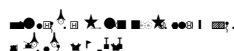
4. Connection to Hydro One Transformer Station:

- Feeder voltage: 27.6 kV
- Transformer Station: Tillsonburg TS
- LV Bus Designation: B/Y
- Feeder Designation(s): M5,M6,M7,M8

5. Existing Generator information

If any part of the LDC's distribution system that is downstream from the above TS includes existing or proposed queue generators, the LDC must provide details of that generation in the attached Appendix A.

## CHECKLIST



Please ensure the following items are completed prior to submission. Your application will NOT be processed if any part is omitted or incomplete:

- ☐ Original FIT CAE application number
- ☐ Copy of the original FIT CAE Form B signed and stamped by the proponent
- ☐ Listing of existing generation (Appendix A)
- ☐ Listing of CAE project status (Appendix B) if this is a renewal application

**Appendix A: Existing and Queued Generation Listing**  
**(Generation > 10 kW supplied from the TS)**

**TS (associated with this Threshold CIA): (Tillsonburg TS)**

Generator Name	TS Feeder	Generation Type	Nameplate Capacity (kW)	Comments
1596101 Ontario Inc	M6	Inverter Based Solar PV	75KW	Connected Aug 25, 2011

**Appendix B: Listing of CAE Inverter based projects associated with this Threshold CIA****TS Name: Tillsonburg TS**

Generator Name	FIT Application #	TS Feeder	Generation Type	Nameplate Capacity (kW)	Status
OZZ Solar	FIT-FU9YZI7	M7	Rooftop Solar PV	250	Undergoing CIA
OZZ Solar	FIT-F75YS8A	M7	Rooftop Solar PV	150	Undergoing CIA
OZZ Solar	FIT-F8826RX	M7	Rooftop Solar PV	150	Undergoing CIA
OZZ Solar	FIT-FBIIH5U	M8	Rooftop Solar PV	500	Undergoing CIA
Real-Flex Business Parks		M8	Rooftop Solar PV	250	Investigation stage



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## Appendix 2 of 2

### Appendix Two - OPA Letter of Comment

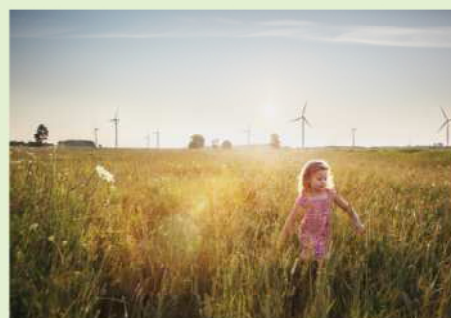


OPA Letter of  
Comment:

Tillsonburg Hydro  
Inc.

Basic Green  
Energy Act Plan

August 17, 2012



**ONTARIO**  
POWER AUTHORITY



## Introduction

On March 25, 2010, The Ontario Energy Board (“the OEB”) issued its Filing Requirements for Distribution System Plans. As a condition of Licence, Ontario Distributors are required to file a Green Energy Act Plan as part of their cost of service application.

The Filing Requirements distinguish between Basic and Detailed Green Energy Act Plans (“Plan” or “GEA Plan”) and outline the specific information and level of detail which must be provided for each type of Plan. Recognizing the importance of coordinated planning in achieving the goals of the *Green Energy and Green Economy Act, 2009* (the “GEA”), distributors must consult with embedded and host distributors, upstream transmitters and the OPA in preparing their Plans. For both Basic and Detailed Plans, distributors are required to submit as part of the Plan, a letter of comment from the OPA.

The OPA will review distributors’ Basic Plans to ensure consistency with regard to FIT and microFIT applications received, as well as with integrated Plans for the region or the system as a whole.

### **Tillsonburg Hydro Inc. - Basic Green Energy Act Plan**

The OPA has reviewed the Basic GEA Plan from Tillsonburg Hydro Inc. (“Tillsonburg”) dated July 25, 2012, and has provided its comments below.

#### *OPA FIT/microFIT Applications Received*

Tillsonburg’s GEA Plan indicates that to date 12 microFIT projects totaling approximately 0.118 MW of capacity, and 1 FIT project totaling 0.075 MW have been connected in Tillsonburg Hydro Inc.’s service territory. This information is shown in the Executive Summary of the plan.

To date, the OPA has processed 29 microFIT applications totalling approximately 0.279 MW of capacity in Tillsonburg Hydro Inc.’s service territory. Of these, approximately 0.132 MW have been offered a contract as of July 2012. Additionally, the OPA has received and offered contracts to 5 capacity allocation exempt FIT applications, totalling approximately 1.125 MW that have identified themselves as connecting within Tillsonburg Hydro Inc.’s service territory. All of the applications remained active as of July 2012.

#### *Upstream Transmission Constraints*

Tillsonburg Hydro Inc.’s GEA Plan indicates that Tillsonburg has committed to complying with Hydro One’s “Station & Feeder Capacity Calculator” to determine if capacity is available on a given Hydro One transformer station feeder.

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The updated Transmission Availability Table for Small FIT 2012 available on the OPA's FIT website as follows: <http://fit.powerauthority.on.ca/sites/default/files/TAT%20Table%20Final%20-%20April%205%20for%20posting.pdf>. This table shows that Tillsonburg TS is limited by known upstream transmission constraints.

#### *Economic Connection Test*

The OPA received a directive dated April 5, 2012 from the Minister of Energy with respect to the Feed-in Tariff Program Review. The directive states that “[g]iven the transmission projects planned through the Long Term Energy Plan and changes to the FIT Program, the OPA shall not run the Economic Connection Test “. A link to the full directive is provided on the OPA's website: <http://www.powerauthority.on.ca/sites/default/files/page/FIT-ReviewApril-2012.pdf>

#### *Opportunities for Integrated Solutions*

There are no known corresponding expansions among neighbouring LDCs that could be addressed through integrated transmission solutions at this time.

#### **Conclusion**

The OPA finds that Tillsonburg Hydro Inc.'s GEA Plan is reasonably consistent with the OPA's information regarding renewable energy generation applications to date.

The OPA appreciates the opportunity to comment on Tillsonburg Hydro Inc.'s Basic GEA Plan.