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## RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	INTERROGATORY 1:	
2	Reference(s): Exhibit 1B, Tab 2, Schedule 7, Appendix B and Exhibit 2B	3
3		
4		
5	Please identify the differences, if any, between the capital spending plan presented i	n the
6	customer engagement workbook and the capital plan ultimately filed as part of this	
7	application. Please show these differences by listing all projects, the forecast budge	t
8	presented in the engagement workbook, the budget value presented in this application	n,
9	and the variance.	
10		
11		
12	RESPONSE:	
13	For the purposes of the customer engagement workbook, and in advance of complet	ing
14	detailed planning for the purposes of the DSP contained in this Application, Toronto	)
15	Hydro mapped a high-level preliminary list of potential DSP programs to high-level	
16	spending categories using language that was more accessible to customers and the p	ublic
17	Toronto Hydro then presented each of these categories as a percentage of the overal	l five
18	year capital expenditure plan to provide a proxy for customers to assess the types of	
19	investments that the utility planned to undertake. (For reference, please see page 31	of
20	the "Workbook Appendices" in Exhibit 1B, Tab 2, Schedule 7, Appendix B.)	
21		
22	The following table includes the original percentages for each category in the works	ook,
23	as well as updated percentages that reflect the capital expenditure plan ultimately fil	ed in
24	Exhibit 2B. Please note that Toronto Hydro's DSP was being developed in parallel	with
25	the customer engagement workbook. The updated percentages below represent Tor-	onto

Panel: Planning and Strategy

## RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

- 1 Hydro's best effort to map the final suite of DSP programs to the original workbook
- 2 categories.

Workbook Investment Categories	Percentage of Total CapEx Budget in Workbook	Percentage of Total CapEx Budget in Filing	Variance (percentage points)
Replacing Aging and Obsolete Equipment	47.1%	54.1%	+7.0
Connecting Customers	11.2%	14.5%	+3.3
Updating IT Infrastructure	7.8%	8.9%	+1.1
Expanding Capacity for Long- term Growth	14.3%	7.8%	-6.5
Maintaining and Upgrading Customer Meters	1.9%	3.3%	+1.4
Building Maintenance	1.3%	3.2%	+1.9
Improving Reliability by Reconfiguring Circuits	8.0%	2.8%	-5.2
Modernizing the Grid	3.2%	2.5%	-0.7
Accommodating Renewable Generation	0.9%	1.1%	+0.2
Accommodating Construction Projects in the City	3.3%	0.9%	-2.5
Vehicles and Equipment for Crews	0.7%	0.8%	+0.1
Accommodating Electric Vehicles	0.1%	0.0%	-0.1

Panel: Planning and Strategy

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#### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

#### **INTERROGATORY 2:** 1 Exhibit 1B, Tab 2, Schedule 5, Page 24 **Reference(s):** 2 3 THESL states that it "maintains a comprehensive framework of Key Performance 5 Indicators ("KPIs") that is integrated with the utility's performance pay program and is a 6 part of a Balanced Corporate Scorecard." Please provide THESL's scorecards with 7 targets and results for 2011, 2012, 2013, and 2014YTD. 8 9 10 **RESPONSE:** 11

Please find the requested information attached as Appendix A to this response.

Panel: Planning and Strategy

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Key Performance Indicator (KPI)	2011 Target	2011 Results
Safety - My Goal is Zero	4.50	2.49
Safety Leadership	95%	107%
Attendance (# days)	7.75	7.09
Operating Expenses (\$M)	\$259.9	\$243.6
Net Income (\$M)	\$73.0	\$95.9
Distribution Plant Capital Per Unit (\$K)	\$1.18	\$0.99
SAIDI	82	85.8
SAIFI	1.70	1.63
Worst Performing Feeders (WPF)	37	35
Call Centre Service Index	83%	83%

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Key Performance Indicator (KPI)	2012 Target	2012 Results
Safety - Total Recordable Injury Frequency (TRIF)	3.40	2.15
Employee Engagement	8.0	10.7
Net Income (\$M)	\$89.1	\$113.8
SAIDI	93.7	61.7
SAIFI	1.76	1.40
Worst Performing Feeders (WPF)	40	29
THESL Regulated Capital (\$M)	\$240.0	\$261.3
Conservation Demand Management (CDM)	49.0	53.2
Enhanced Customer Engagement (ECE)	110%	125%
Call Centre Service Response	70%	78%

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Key Performance Indicator (KPI)	2013 Target	2013 Results
Safety - Total Recordable Injury Frequency (TRIF)	2.98	2.26
Employee Engagement	8.0	11.1
Net Income (\$M)	\$106.6	\$121.2
THESL Regulated Capital (\$M)	\$335.1	\$393.2
Worst Performing Feeders (WPF)	38	33
SAIDI	82.5	68.6
SAIFI	1.61	1.44
Conservation Demand Management (CDM)	45.0	54.5
Enhanced Customer Engagement (ECE)	120%	129%
Call Centre Service Response	76%	82%

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Key Performance Indicator (KPI)	2014 Target	2014 Results
Enhanced Customer Engagement (ECE)	214,000	N/A
First Call Resolution	78%	N/A
Safety - Total Recordable Injury Frequency (TRIF)	2.58	N/A
Attendance	5.75	N/A
SAIFI	1.53	N/A
SAIDI	72.5	N/A
Key Accounts - Worst Performing Feeders (KAWPF)	49	N/A
Productivity - Fleet Utilization	663	N/A
Productivity - Facilities - Occupied SqFt. Reduction	3,930	N/A
Productivity - Operating Expenses	\$260.2	N/A

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Key Performance Indicator (KPI)	2014 Target	2014 Results	
Net Income	\$103.5	N/A	/C
THESL Regulated Capital	\$395.0	N/A	/C

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#### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE **OF ONTARIO INTERROGATORIES**

1	INTERROGATO	ORY 3:
2	<b>Reference(s):</b>	Exhibit 1B, Tab 2, Schedule 3
3		
4		
5	In THESL's PCI f	ormula, do the 2016-2019 years assume a stable customer/load forecast
6	based on the rebas	ing projections for 2015? If so, has THESL considered incorporating a
7	variable to accoun	t for the growth/decline of customers/load into its PCI formula over
8	2016-2019? If not	t, why not?
9		
10		
11	<b>RESPONSE:</b>	
12	Please see Toronto	Hydro's reply to interrogatory 1B-OEBStaff-5.

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## RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	IN'	TERROGATORY	4:	
2	Re	ference(s):	Exhibit 1B, Tab 2, Schedule 5, Appendix B, page 5	
3				
4				
5	The	e PSE Benchmarkin	g report states that "Both samples show Toronto Hydro	o has been
6	bel	ow its total cost ben	chmark values, and this persists through the projected	years, albeit
7	wit	th a convergence tow	vards benchmark costs."	
8	a)	What are the reason	ns for this convergence?	
9	b)	Does THESL view	this convergence as a negative (i.e., undesirable) trend	l (in terms of
10		reflecting a declining	ng level of relative productivity)?	
11				
12				
13	RE	ESPONSE:		
14	a)	This convergence to	owards the total cost benchmark is due to the required	higher
15		capital spending for	recast by Toronto Hydro.	
16				
17	b)	Given that the major	or driver behind the convergence observed by PSE is T	oronto
18		Hydro's capital pro	gram, the utility views this convergence as a necessary	y
19		consequence of its	completed, ongoing and planned future capital work.	Please see
20		Exhibit 2B, Distrib	ution System Plan for an in-depth discussion of the dri	vers behind
21		Toronto Hydro's ca	apital work program and the planning approach underly	ying the
22		proposed investmen	nts. Moreover, the projected convergence in future year	ars may be a
23		function of the proj	ections of other utilities' costs relying on past trends.	These past

trends may materially change in the future, as more utilities ramp up their capital

generation and integrate new technologies. Should this trend persist and/or increase

spending to refurbish and replace aging infrastructure, accommodate renewable

Panel: Productivity and Performance

24

25

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## RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

- among the utilities examined in PSE's study, Toronto Hydro believes that its position
- relative to the model-predicted benchmark could improve over the plan term.

Panel: Productivity and Performance

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## RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	INTERROGATO	ORY 5:
2	<b>Reference(s):</b>	Exhibit 2A, Tab 4, Schedule 1
3		
4		
5	In THESL's Smar	Meter Clearance Application (EB-2013-0287), in response to Board
6	Staff Interrogatory	12, THESL estimated the value of its stranded meters as \$13.04
7	million. In this ap	plication, the value is presented as \$15.8 million. Please explain the
8	variance between t	hese two forecasts.
9		
10		
11	<b>RESPONSE:</b>	
12	The differences in	the forecasted stranded meters net book value between the response to
13	Board Staff Interro	ogatory 12 (EB-2013-0287) and Exhibit 2A, Tab 4, Schedule 1 are a
14	result of an increas	se in the identified quantity of stranded meters between the two
15	applications. The	response to Board Staff Interrogatory 12 (EB-2013-0287) provided a
16	forecast value base	ed on the best available information at that time. Exhibit 2A, Tab 4,
17	Schedule 1 incorpo	orates subsequent actual information, resulting in an identified increase
18	in the quantity of s	tranded meters.

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## RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	INTERROGATORY 6:	
2	Reference(s): Exhibit 2A, Tab 5, Schedule 1, page 4	
3		
4		
5	With regard to the transfer price of the Streetlighting Assets, THESL states that "At the	at
6	time an Agreement of Purchase and Sale (the "Sale Agreement") was executed betwee	n
7	the parties which initially provided for a transfer price of \$28.5 million, subject to a	
8	detailed analysis of the NBV of the transferred assets, which analysis would then	
9	underpin an adjustment to the transfer price, if necessary." Does THESL believe that t	he
10	OEB decision allows for an "adjustment to the transfer price"?	
11		
12		
13	RESPONSE:	
14	Please refer to Toronto Hydro's response to interrogatory 2A-OEBStaff-30 part a	

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## RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	INTERROGATORY 7:
2	Reference(s): Exhibit 2A, Tab 5, Schedule 1, page 17
3	
4	
5	With regard to the value of the Streetlighting Assets, THESL states "However, it is still
6	the case that the proxy value of \$28.9 million provided at the time was the result of two
7	simplifying assumptions that had to be made due to the lack of more precise
8	information."
9	
10	Did THESL at any time prior to this application indicate to the OEB that the \$28.9 was
11	intended only as a "proxy value" that would require subsequent adjustment? If not, why
12	not?
13	
14	RESPONSE:
15	In its Additional Evidence Regarding the Transfer of Streetlighting Assets, Toronto
16	Hydro indicated to the OEB that, <sup>1</sup>
17	
18	should the Board approve the transaction as described herein, and subject to
19	obtaining all necessary approvals, the Applicants intend to proceed with a
20	transaction which is substantially similar to the transaction evidenced in the Initia
21	Applications, except that the Asset Purchase Agreement will be updated, amended
22	and restated to, among other matters, exclude all non-distribution assets, and the
23	purchase price for the assets will be revised as described herein.
24	
25	Please also refer to Toronto Hydro's response to interrogatory 2A-OEBStaff-30 part a.

Panel: Revenue Requirements, Rates and Deferral and Variance Accounts

 $<sup>^{\</sup>rm 1}$  EB-2009-0180 et al., Application and Evidence (January 31, 2011), at pages 20-21.

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## RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	IN	TERROGATORY	Y 8:
2	Re	eference(s):	Exhibit 2A, Tab 5, page 4
3			
4			
5	As	part of the Aug 3,	2011 Decision (EB-2009-0180) the OEB accepted a transfer value
6	of	\$28.9 million, stati	ng "THESL proposed to pay \$29.418 million in return for the
7	tra	nsfer of the SEL S	ystem Assets classified as distribution assets" and concluding that
8	"th	ne Board finds the p	proposed transfer price of \$28.938 to be reasonable". In its EB-
9	20	11-0144 rate applic	eation (which was ultimately dismissed), THESL relied on the
10	ori	ginal OEB decision	n and "proposed a slightly lower transfer price for the assets of
11	\$2	8.46 million, reflec	ting the forecast evolution of the assets (principally additions and
12	dej	preciation) over 20	11" (Exhibit 2A, Tab 5, Page 4)
13	a)	Please explain wh	y THESL accepted the OEB's Decision on the valuation of the
14		streetlighting asse	ets as part of its EB-2011-0144 filing, but finds it necessary to
15		present an alterna	tive valuation as part of this proceeding.
16	b)	Please explain wh	y THESL did not complete "the detailed analysis of the NBV of the
17		transferred assets'	'(Exhibit 2A, Tab 5, Page 5) prior to the original OEB valuation
18		decision.	
19			
20			
21	RE	ESPONSE:	
22	a)	The detailed analy	ysis that resulted in the updated value of the assets on February 2012
23		was completed af	ter Toronto Hydro submitted its pre-filed evidence in EB-2011-
24		0144.	

Panel: Revenue Requirement, Rates and Deferral and Variance Accounts

25

26

b) As noted at page 18 of the pre-filed evidence (Exhibit 2A, Tab 5, Schedule 1),

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#### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1

2

3

5

11

It was necessary for Toronto Hydro to perform the detailed analysis resulting in the revised valuation in order to properly implement the OEB's Valuation Decision, and provide an accurate basis for Toronto Hydro's and TH Energy's ongoing accounting and financial reporting obligations. 6 7 As noted above, Toronto Hydro performed the detailed analysis in order to properly implement the OEB's Decisions and provide an accurate basis for Toronto Hydro's 8 9 and TH Energy's ongoing accounting and financial reporting obligations. It would have been premature for Toronto Hydro to conduct the detailed analysis while the 10 Board's Decision was still outstanding, since Toronto Hydro could not anticipate the content of that Decision. 12

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## RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	INTERROGATOR	Y 9:
2	<b>Reference(s):</b>	Exhibit 2B
3		
4		
5	For all the capital pro	ograms being proposed for completion in 2015-2019 (Sections E5-
6	E8), on a best efforts	basis, please provide a table showing the amount that was spent or
7	similar work that was	s undertaken in each year from 2011 through 2014 (forecast to year
8	end). Please also sho	ow the corresponding 2015 through 2019 amounts in the same table
9		
10		
11	<b>RESPONSE:</b>	
12	Please refer to Exhib	it 2A Tab 6 Schedule 2 OEB Appendix 2-AA

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## RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	INTERROGATO	ORY 10:	
2	<b>Reference</b> (s):	Exhibit 2B	
3			
4			
5	With the assumpti	on that most, if not all, capital investments will improve reliability to	
6	some extent, pleas	e identify which specific projects directly contribute to reduce	
7	restoration times f	ollowing outages. Would the answer generally be the same for	
8	restoration times f	ollowing major outages caused by storms?	
9			
10			
11	<b>RESPONSE:</b>		
12	The following pro	grams may contribute to reducing restoration times following an	
13	outage. Their relat	outage. Their relative effect on restoration times caused by major storms will vary	
14	depending on the	nature of the storm (e.g., whether the storm results in flooding affecting	
15	the underground s	ystem, or wind damage affecting the overhead system, etc.).	
16			
17	Box Const	ruction Conversion	
18	<ul> <li>Contingend</li> </ul>	cy Enhancement	
19	• Customer	Owned Station Protection	
20	• Design En	hancement	
21	<ul> <li>Distributio</li> </ul>	n System Communication Infrastructure	
22	<ul> <li>Downtown</li> </ul>	Contingency	
23	• Feeder Au	tomation	
24	<ul> <li>Legacy Ne</li> </ul>	twork Equipment Renewal (ATS & RPB)	
25	<ul> <li>Load Dem</li> </ul>	and	

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#### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	•	Metering	)

- Network Circuit Reconfiguration
- Network Unit Renewal
- Overhead Circuit Renewal
- Overhead Infrastructure Relocation
- Overhead Momentary Reduction
- PILC Piece-outs and Leakers
- Power Transformer Renewal
- Rear Lot Conversion
- SCADAMATE R1 Renewal
- Station Expansion
- Stations Control & Monitoring
- Stations DC Battery Renewal
- Underground Circuit Renewal
- Underground Legacy Infrastructure

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# RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	INT	ERROGAT	ORY 11:	
2	Refe	erence(s):	Exhibit 2B	
3				
4				
5	Sum	mer switchin	g restrictions/operational constraints appear to be a program execution	
6	risk	for a large nu	mber of programs (see for example Network Unit Renewal, Section	
7	E6.1	0.5.1, Legac	Network Equipment Renewal, Section E6.11.5.2, Network Circuit	
8	Reco	onfiguration,	Section E6.12.5.2, etc).	
9	a) I	Please list all	programs for which summer switching restrictions apply.	
10	b) I	Has THESL p	erformed an analysis to ensure that even under normal expected	
11	C	perating con	ditions it can complete the planned programs slated for completion in	
12	2	2015 and bey	and without the programs competing with one another for offloading	
13	C	capacity (i.e.,	in developing the forecasts for the capital plan, have summer switching	3
14	r	estrictions be	en considered to the entirety of the proposed capital plan as a whole?)	
15				
16				
17	RES	SPONSE:		
18	a) 7	The following	programs are impacted by summer switching restrictions:	
19	•	E6.2 Pape	r-Insulated Lead Covered (PILC) Piece-outs & Leakers	
20	•	E6.3 Und	erground Legacy Infrastructure	
21	•	E6.9 Netv	ork Vault Rebuild Program	
22	•	E6.10 Net	work Unit Renewal Program	
23	•	E6.11 Leg	acy Network Equipment Replacement (ATS & RPB)	
24	•	E6.12 Net	work Circuit Reconfiguration	

Panel: Distribution Capital and System Maintenance

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#### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

b) As part of the Investment Planning process as described in Section D3.1.1.3, technical due diligence is conducted in a cross-functional manner between asset planners and system operations to ensure that each program – in particular those programs that fall within similar geographical territories – can be executed under normal operating conditions. As part of the Project Scheduling & Execution process as described in Exhibit 2B, Section E2.3, individual projects are scheduled based upon discrete system requirements, including feeder availability and seasonal restrictions, such as summer switching restrictions. Multiple projects will be scheduled and paced

accordingly where they will likely impact the same or similar feeders.

#### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1		ERROGATORY 12:
2	Re	erence(s): Exhibit 2B, Section E6-6
3		
4		
5	a)	Please explain the notable decrease in proposed spending on the Rear Lot program
6		From ~\$17-24 million in 2012 through 2015 to only ~\$8-\$13 million between 2016
7		hrough 2019. Given the many problems presented by THESL with regard to rear lot
8		ines, and the justification and urgency for the program presented by THESL in its
9		CM evidence, why is THESL not proposing a more accelerated conversion (to match
10		he 2012-2015 pace), to potentially eliminate all rear lot lines over a shorter
11		imeframe?
12	b)	What would be the total investment required to eliminate all rear lot lines over the
13		2015-2019 period?
14		
15		
16	RF	SPONSE:
17	a)	Toronto Hydro has proposed a five-year investment program that balances significant
18		capital renewal needs in multiple programs with other critical investments that are
19		expected to enhance customer value. This capital plan also strikes a balance between
20		aggregate capital needs and practical limitations, including execution constraints and
21		customer expectations regarding bill impacts. The pacing of the Rear Lot Conversion
22		program within the 2016-2019 period is a result of the need to balance and prioritize
23		numerous investments program needs within an overall paced execution strategy.
24		
25		The primary factors limiting Rear Lot Conversion spending within this context are (i)

the need to balance resources between programs and (ii) city moratorium restrictions.

Panel: Distribution Capital and System Maintenance

#### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

- Rear lot Conversion projects, despite their notable benefits, require a significant amount of resources. As a result, Toronto Hydro has put forward what it believes is the appropriate level of investment in this program in order to maintain a balanced DSP that delivers value for money. Furthermore, many areas not included in the 2015-2019 program are subject to city road moratoriums, which in any case would have prevented their completion during this period.
- b) A high-level estimate of the investment required to eliminate all rear lot distribution within Toronto Hydro's distribution system over 2015-2019 would be approximately \$286.5 million.

Rear Lot Areas	Cost (\$M)
Remaining Rear Lot Zones	227.2
2015-2019 Planned Rear Lot Zones	59.3
Total	286.5

Panel: Distribution Capital and System Maintenance

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## RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	INTERROGATORY 13:		
2	<b>Reference</b> (s):	Exhibit 2B, Section E5-4, Table 1, page 7	
3			
4			
5	Why is bus A1-2 at	Charles TS considered for load transfer if the loading is currently	
6	only at 86%?		
7			
8			
9	<b>RESPONSE:</b>		
10	There is a typo in ev	ridence referenced. The loading at A1-2CS is actually 43 MVA out	
11	of 45 MVA which is	s 96%. The other data for the A1-2CS bus is consistent with the data	
12	for the A3-4CS bus	in the row below.	

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#### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

#### **INTERROGATORY 14:** 1 **Reference(s):** Exhibit 2B, Section E6-9, pages 26-27 2 3 4 Please explain why 2014 and 2015 spending on vault repairs is relatively low (\$0.93M 5 and \$3.95M) compared to the 2013 and 2016-2019 spending (~\$10M per year)? Please 6 identify the details behind the "resource constraints" cited. 7 8 9 **RESPONSE:** 10 Please refer to the response to Interrogatory 2B-SEC-35. 11

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## RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	IN	TERROGATORY 15:
2	Re	ference(s): Exhibit 2B
3		
4		
5	a)	What percentage of the capital spending proposed as part of this application is similar
6		in nature to the projects proposed and/or approved in THESL's 2012-2014 ICM rate
7		application?
8	b)	Please subdivide all capital projects in this application into those that are directly
9		similar to 2012-2014 ICM projects (including within materiality threshold projects),
10		and those that are materially different from the work proposed in the ICM application.
11		Please provide a table showing the project name, a brief description of the project,
12		and the budget for 2015 through 2019.
13	c)	For the work that is different from the ICM work, does THESL believe this work is
14		important enough to displace ICM-like work, or is THESL simply unable to complete
15		more nondiscretionary ICM-type work due to resource/system constraints?
16		
17		
18	RE	CSPONSE:
19	a)	Please refer to Exhibit 1B, Tab 2, Schedule 4, Table 1 on pages 3-4 for a list of DSP
20		capital programs that are continuations of OEB-Approved ICM segments. Following
21		the mapping between ICM segments and CIR programs in Table 1, approximately
22		86% of proposed spending from 2015-2019 is similar in nature to the OEB-Approved
23		ICM segments provided in this table.
24		
25	b)	Using the program-segment comparison from part a), please refer to Exhibit 1B, Tab

2, Schedule 4, Table 1 on pages 3-4 for those 2015-2019 capital investment programs

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#### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

that are directly similar to 2012-2014 ICM Segments. Please refer to Exhibit 1B, Tab 1 2, Schedule 4, Table 2 on page 5 for those 2015-2019 capital investment programs 2 that are incremental to the OEB-Approved ICM segments. Please refer to Exhibit 2B, 3 Section 00, pages 26 to 38 for descriptions and forecasts associated with these capital 5 investment programs. 6 7 c) The proposed capital programs detailed in Exhibit 1B, Tab 2, Schedule 4, Table 2 on page 5 are incremental to the OEB-Approved ICM segments, and therefore do not 8 9 displace the capital investment programs that are continuations of OEB-Approved ICM segments. Furthermore, Toronto Hydro believes that the current mix of capital 10 programs that are incremental and programs that are continuations of OEB-Approved 11

ICM segments achieves the right balance from a cost efficiency perspective.

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## RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1 INTERROGATORY 16:			
2	Re	ference(s):	Exhibit 2B, Section E6-4
3			
4			
5	a)	Please discus	s the relative merits of using concrete vs. wooden poles, specifically
6		discussing dif	ferences in: i) the cost of the pole ii) the costs of installation of the pole
7		iii) strength (i	n terms of resistance to failure during storms, resistance to impact from
8		traffic accide	nts, etc) iv) rates of deterioration v) expected lifespan vi) historic actual
9		lifespan (base	d on THESL's records/observations)
10	b)	Does THESL	have a preference (or how does THESL determine) as to which type is
11		used during it	s replacement programs?
12	c)	Has THESL o	conducted any studies or analysis as to which pole type is a more
13		efficient or ef	fective investment?
14	d)	Does THESL	to any extent consider the aesthetic value of each pole type when
15		planning repl	acement?
16			
17			
18	RI	ESPONSE:	
19	a)	The relative r	nerits of concrete vs. wooden poles are as follows:
20		• The mater	rial cost of concrete poles is approximately 1.2 to 2 times greater than
21		installing	wood poles.
22		• The cost of	of installing concrete poles can range up to 1.4 times that of installing
23		wood pole	es depending on the particular installation.
24		• The break	ing strength of concrete poles is 1.25 times greater than wood poles.
25		Wood pol	e degradation factors include feathering, internal rot, decay at ground
26		line, shell	rot, and infestation from insects and naturally occurring fungi.

#### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1 Concrete poles degrade by moisture ingress through cracks and voids and corrosion of the internal metal rebar. The rate of deterioration depends on various 2 3 factors associated with the actual operating environment of the poles such as the exposure to road salt, moisture, biological infestations, or other types of contamination. 5 The expected lifespan is 45 years for wood poles and 60 years for concrete poles. The historical actual lifespan of wood poles varies significantly depending on 7 operating environmental effects described previously above and economic reasons for proactive replacement due to high risk of failure costs. 10 b) Toronto Hydro's standard design practice for pole replacements, as part of OH 11 Circuit Renewal, is to use wood poles unless existing area by-laws require it to 12 deviate from this practice. During spot replacements or when replacing a short 13 stretch of wood or concrete poles, replacement poles are to be consistent with existing 14 streetscape in a like-for-like manner. 15 16 Wood poles are preferred as a standard design practice because they are typically less 17 costly, easier to install and remove, allow for the use of live-line procedures, are 18 versatile in that they allow for various types of framing configurations, and are less 19 conductive. 20 21 c) No. 22 23 Toronto Hydro considers aesthetic value during pole replacement when area by-laws 24

require such an assessment or in the situations described in part b) above.

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# RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	INTERROGATORY 17:	
2	2 Reference(s): Exhi	bit 2B, Section E6.6, Table 5, Page 19
3	3	
4	4	
5	5 Please confirm whether the	values for outages for "All feeders" in Table 5 is inclusive of
6	Rear Lot, or is meant to sho	w outages on all "other" feeders, specifically excluding "Rear
7	7 Lot".	
8	8	
9	9	
10	RESPONSE:	
11	The values for outages for "	'All feeders" in Table 5 is meant to show outages on all
12	"other" feeders, specifically	excluding feeders that supply the "Rear Lot" customers.

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## RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

2	<b>Reference(s):</b>	Exhibit 2B, E6.1 page 6 and
3		Exhibit 2B, E6.20 page 12
4		
5		
6	Please reconcile the d	efinition of "catastrophic failure" on page 12 of Section E6.20 and
7	that provided in the fo	potnote on page 6 of Section E6.1. Specifically, does the failure
8	have to be "large scal	e, affecting a greater number of customers" (as in E6.20) for it to be
9	considered catastroph	ic, or does it simply need to be a failure other than failure-by-design
10	in which "damage to	other equipment and/or injury to a person occurs or could occur"
11	(E6.1) regardless of the	ne scale and number of affected customers.
12		
13		
14	<b>RESPONSE:</b>	
15	The definition of a "c	atastrophic failure" in both instances specified in the question refers
16	to a failure mode other	er than a failure-by-design in which the failure may result in
17	associated collateral of	lamage to other equipment, safety, and environmental risks. A
18	failure does not need	to result in a large scale outage, affecting a greater number of
19	customers to be consi	dered catastrophic.

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**INTERROGATORY 18:** 

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## RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	INTERROGATORY 19:		
2	<b>Reference(s):</b>	Exhibit 2B	
3			
4			
5	Do any of the proposed capital programs include any CDM initiatives (or close variations		
6	of the CDM initiates) that were previously included in THESL's CDM Application in		
7	EB-2011-0011?		
8			
9			
10	<b>RESPONSE:</b>		
11	Yes, the Local Dema	and Response program includes variations of the Multi-Unit	
12	Residential Building	Demand Response (MURB DR) program and Commercial Energy	
13	Management & Load	d Control (CEMLC) program which were both included in Toronto	
14	Hydro's CDM Appl	cation EB-2011-0011. Both concepts are currently being piloted in	
15	Toronto Hydro's ser	vice region.	

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## RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	INTERROGATOR	Y 20:	
2	<b>Reference(s):</b>	Exhibit 2B, Section E7.11, page 4	
3			
4			
5	With regard to the Energy Storage program, THESL states that "The objective of the		
6	program is to enable	Toronto Hydro to address specific issues and limitations within the	
7	distribution system w	rith a prudent alternative to existing solutions and methods." Please	
8	list examples of the "	existing solutions and methods" being referenced, and further	
9	explain by way of exa	amples why an alternative to these methods needs to be employed.	
10			
11			
12	<b>RESPONSE:</b>		
13	Please refer to Exhibit	it 2B, Section E7.11.6.1 for examples of existing solutions and	
14	methods, and Section	E7.11.3 for an explanation of why an alternative to these methods	
15	needs to be employed	I.	

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# RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	INTERROGATORY 21:			
2	Re	ference(s	Exhibit 2B, Section E7.10, pages 1-2	
3				
4				
5	Wi	With regard to the Local Demand Response program, THESL states that "Using strategic		
6	loa	load balancing, the capital investment required to address bus relief that would have		
7	oth	otherwise been required in $2020$ can be delayed to approximately $2025\text{-}2026$ . Total costs		
8	for	for the Local Demand Response program are estimated to be \$4.1 million over the period		
9	of	of 2015 to 2019."		
10	a)	In the ab	osence of this project, what is the estimated cost of the bus relief investment	
11		required	in 2020?	
12	b)	With the	e benefit of this project, what is the cost of the delayed investment in 2025-	
13		2026?		
14	c)	Please ex	xplain whether and/or how THESL believes that the cost of this project is	
15		justified	by a 5-6 year delay to an investment that will nonetheless continue to be	
16		required		
17				
18				
19	RI	RESPONSE:		
20	a)	The esting	mated cost to provide load relief at Cecil TS is \$29.5 million.	
21				
22	b)	From a 7	Total Resource Cost ("TRC") perspective, the total benefit of the Local DR	
23		alternati	ve is \$15.8 million, while the total cost of the delayed investment is \$8.3	
24		million.	The TRC test measures the net costs of a demand-side management program	
25		as a reso	ource option based on the total costs of the program, including both the	

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#### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1 participants' and the utility's costs. This test is often referred to as the "total societal cost test" as it evaluates net benefits from the perspective of all stakeholders. 2 3 Toronto Hydro conducted a financial evaluation of both alternatives – the projected 4 5 station expansion in 2020 and the implementation of a local DR program that would defer the expansion work five to six years. The evaluation assessed the impact of all 6 7 affected stakeholders, including participating ratepayers and non-participating ratepayers, the Province of Ontario and Toronto Hydro. With the exception of the utility – which must seek financial compensation through a lost revenue mechanism – all stakeholders stand to benefit from the demand response alternative. The financial 10 model presents this strategy as the more cost-effective option, as it affords Toronto 11 Hydro greater flexibility in assigning limited system upgrade resources across its 12 13 service territory. In addition to the investment value of the deferral, the DR alternative is also expected to produce avoided costs with respect to energy and 14 capacity. 15 16 Though this station will ultimately require the station expansion investment in the 17 medium- to longer-term, the financial analysis presents the delayed investment as the 18 more cost-effective option, illustrated by the fact that the net present value of benefits 19 associated with the Local DR alternative is higher than the result of the more 20 immediate investment. 21

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#### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

#### **INTERROGATORY 22:** 1 **Reference(s):** Exhibit 2B Section E5.3, Page 3; Exhibit 9, Tab 1, Schedule 1 2 3 4 5 Concerning the Externally Initiated Plant project in Section E5.3, THESL states that: "Although the utility forecasts that this program will cost approximately \$119 6 7 million between 2015 and 2019, it has included only one-sixth of this amount (approximately \$20 million) in its revenue requirement, or approximately \$4.0 8 million of net Toronto Hydro costs per year. This sub-forecast amount represents a base level of spending that will be required over this term. Toronto Hydro 10 proposes to seek rates funding only for this sub-forecast base amount, with a 11 variance account to record differences from this amount." 12 13 In Exhibit 9, Tab 1, Schedule 1 THESL goes on to say that: 14 "To reconcile the variable, non-discretionary nature of the work with its resulting 15 bill impact, Toronto Hydro has intentionally included a below-forecast level of 16 Relocation Spending in the utility's Distribution System Plan ("DSP") for the 17 2015-2019 period" 18 19 a) Given that the \$4.0 million annually is less than any annual actual amount of historic 20 spending in this area since 2010, and given that THESL is actually forecasting a 21 notable increase in spending in this area over 2015-2019, please explain why THESL 22 nonetheless proposes including a "below forecast level" of spending in rates. Does 23 THESL anticipate the possibility that its forecast variances could be overstated by as 24 much as 5/6ths in each year? 25

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### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	b) Is THESL concerned that the proposed approach could result in a likely material
2	underrecovery, requiring an additional collection from customers in 2019 and
3	beyond? Why should ratepayers in 2019 and onwards be responsible for costs
4	deliberately under-recovered from 2015- 2019 ratepayer groups?

c) Would THESL consider including the full forecast amount (or some materially higher percentage of it – e.g., 90%) in its revenue requirement, subject to variance account treatment at the end of 2019? Why or why not?

#### **RESPONSE:**

a) The work contained in the Externally Initiated Plant Relocation Program (Exhibit 2B Section E5.3) is entirely driven by capital projects initiated by other agencies. As their capital programs change over time, the impact on Toronto Hydro is often uncertain. For example, \$73M out of \$119M predicted for 2015-2019 comprises large projects such as GO Transit Electrification between Union and Pearson, Eglinton Light Rail Transit ("LRT") project and other Metrolinx Transit projects such as Finch West and Sheppard LRT, for which the scopes and timing are not entirely confirmed and are subject to change.

Historically, annual spending in respect of externally-initiated plant relocation work has ranged between \$1M and \$19M. Toronto Hydro has estimated that expenditures of \$4M annually would capture the majority of the more consistently incurred small and medium size relocation projects that the utility reasonably expects over the forecast period. The proposed variance account will be used to record the cost of the additional projects and protect ratepayers from the potential that any portion of the

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### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

full forecast of third party work does not materialize due to the unpredictable nature, 1 cost and timing of externally-initiated plant relocations. 2 3 b) Toronto Hydro believes its proposed approach best balances the need for funding for 4 5 these uncertain projects with the recognition of the potential rate impacts for the 2015-19 period. Toronto Hydro's is not deliberately under-recovering any amounts. 6 7 Please see response to part (a). 8 9 c) Please see response to part (b).

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# RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	<b>INTERROGATORY 23</b>	3:
2	Reference(s): Ex	chibit 2B, Section C, page 28
3		
4		
5	Please explain why the n	umber of outages caused by defective equipment, as opposed to
6	the defective equipment	sub cause code of SAIDI and SAIFI, is being proposed as a
7	tracking measure. That i	s, why not track the SAIDI and SAIFI caused by defective
8	equipment rather than the	e absolute number of outages?
9		
10		
11	<b>RESPONSE:</b>	
12	The Number of Outages	caused by Defective Equipment as proposed by Toronto Hydro
13	is advanced as a relativel	y simple measure of the overall system renewal progress. While
14	measuring SAIDI and SA	AIFI caused by defective equipment is feasible and informative,
15	averaging out the results	by total customer base (as required to calculate system average
16	measures) introduces sign	nificant complexities that cannot be easily accounted for to
17	provide an overall plan-le	evel measure. For instance:
18	• a cable failure on	the $4kV$ system compared to the $27.6kV$ system would result in
19	significantly diffe	erent SAIFI values; and
20	• SAIDI can be ske	ewed by multiple factors such as time of day of failure, multiple
21	failures, or difficu	alty finding replacements for legacy equipment.
22		
23	Accordingly, Toronto Hy	dro submits that tracking the total instances of defective
24	equipment-caused outage	es as contemplated by the measure in question, along with
25	system-wide reliability m	neasures such as SAIDI and SAIFI, achieves an appropriate
26	balance between monitor	ring macro-level and issue-specific performance trends.

### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

#### **INTERROGATORY 24:**

2 Reference(s): Exhibit 2B, Section E5.2, Page 9

3

1

- 5 THESL states that "...the Eglinton Light Rail Transit (ELRT) line requires several
- 6 connection points to the Toronto Hydro system. Approximately 30 new LRT stations are
- 7 proposed for this line, with a total demand of approximately 90 MVA. Connecting this
- 8 many stations with such a large load will require significant expansion work over the
- 2015-2019 time frame and is the primary basis for the substantial net spend in 2017 and 2018."

11 12

Please identify the total expected costs of the ELRT expansion work.

13 14

15

#### **RESPONSE:**

- The total estimated gross and net customer connection costs for the ELRT expansion
- work are summarized in the table below:

Year	2015	2016	2017	2018	2019
Gross Costs (\$M)	2.17	6.50	15.16	13.00	6.50
Customer Contributions (\$M)	(0.00)	(0.00)	(0.58)	(2.34)	(2.92)
Net Costs (\$M)	2.17	6.50	14.58	10.66	3.58

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# RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

Reference(s): Exhibit 2B, Section E5.2, page 12, Table 4
Please explain why THESL uses two different basic connection fees for each of the
Unmetered and Streetlighting classes. Under what conditions or circumstances would
THESL apply one rate rather than the other?
RESPONSE:
For the Unmetered class, the different connection fees are charged depending on where
the customer's service mast is located. A charge of $$446.00$ is applied if the customer's
service mast is located on the same supply pole as the source connection. If the service
mast is located elsewhere, a charge of \$1011.00 is applied to account for the additional
material and effort required to provide the connection.
For the Streetlighting class, the difference in the connection fees is attributed to whether
the connection is made to Toronto Hydro's overhead or underground distribution system.
A connection to the overhead secondary bus attracts a charge of \$533.36, while a
connection to the underground secondary bus attracts a charge of \$573.97. The variance
between these charges reflects the difference in costs between each type of connection.

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**INTERROGATORY 25:** 

### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

#### **INTERROGATORY 26:**

2 Reference(s): Exhibit 2B, Section E7.3, page 1

4

3

1

- 5 With regard to Feeder Automation THESL states that "This program focuses on the
- automation of select feeders in two areas of Toronto Hydro's system: the 27.6 kV open
- looped system in the 'Horseshoe' area and the 13.8 kV underground residential
- 8 distribution systems in the Downtown area."
- a) What approximate percentage of THESL's distribution grid is comprised of these twosystems?
  - b) Are there any other notable areas within the distribution grid that THESL believes would benefit from this technology, whether now or in the future?

13

15

16

17

18

19

20

11

12

14

### **RESPONSE:**

a) The chart below lists the percentages of the two distribution systems. It should be noted that although the 27.6kV distribution system comprises of 55% of Toronto Hydro's total distribution system it also supplies municipal stations that further supply customers on 4.16kV and 13.8kV. As a result, the restoration of a 27.6kV feeder can further affect the restoration of customers on affected municipal stations.

System Type	Percentage
27.6kV Open Looped System (Horseshoe Area)	55%
13.8kV Underground Residential Distribution (Downtown Area)	3%
Remaining THESL Distribution System	42%

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### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

- b) Yes, there are other areas in the distribution grid that would benefit from this
- technology, such as the 13.8kV open looped system in the 'Horseshoe' area and
- 3 13.8kV open looped system in the downtown area.

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### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	IN'	TERROGATORY	27:
2	Re	ference(s):	Exhibit 2B, Section E7.8, page 6
3			
4			
5	Co	ncerning customer	wined substations, THESL states that "There are several instances
6	in v	which the current co	nfiguration is non-compliant with Toronto Hydro standards, either
7	bec	cause: (1) Toronto I	Hydro-owned protection devices are absent altogether or need to be
8	rep	placed; or (2) custom	er-owned protection devices do not meet required standards."
9	a)	To what extent wo	ald enforcement of compliance with standards under point (2)
10		mitigate the concer	n or need for the installation of protection devices?
11	b)	Please explain whe	ther it is THESL's intention to enforce compliance from customers
12		with its customer-o	wned protection device standards, either as part of this project or
13		through a separate	initiative. If so, please explain the steps it will take to enforce
14		compliance.	
15			
16			
17	RE	ESPONSE:	
18	a)	The customer-own	ed protection devices associated with these substations do not
19		alone offer sufficie	nt protection. The installation of the utility-owned protection
20		devices upstream f	com the customer-owned protective device is necessary to ensure
21		reliability of supply	to other customers and to limit the scope of any potential outages.
22			
23	b)	The proposed prog	ram will augment Toronto Hydro's existing Customer Advice
24		Form ("CAF") pro-	cess. If any electrical or civil deficiencies are found on equipment

on the customer's property, a CAF will be issued to the customer indicating what

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25

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### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

- deficiencies the customer is responsible to maintain, repair or replace. A reasonable
- 2 period of time will be given to the customer to address these identified deficiencies.

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### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

#### 1 **INTERROGATORY 28:**

2 Reference(s): Exhibit 2B, Section E6.3, page 4, Table C

3

- 5 Concerning Underground Legacy Infrastructure, please provide an approximate
- 6 breakdown of the proposed spending for this program by each of the six asset types
- 7 described for replacement on pages 1-2.

8

#### 10 **RESPONSE**:

- The table below shows a high level breakdown of the cost in the Underground Legacy
- 12 Infrastructure program by asset type:

	Forecasted Costs by Sub-program (\$M)							
	2018	2019						
Sachsenwerk	0.40	1.11	1.10	0.96	-			
Thorncliffe	0.69	0.92	0.91	0.91	0.91			
Transclosures	0.86	1.38	1.37	1.37	1.36			
Cable Chamber	0.11	1.56	1.54	1.54	1.54			
Covers								
Powerlite	-	1.27	1.26	1.25	1.25			
Step Transformers	-	0.46	0.46	0.46	0.45			
Total	2.06	6.69	6.64	6.48	5.52			

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### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	IN	TERROGATO	RY 29:
2	Re	ference(s):	Exhibit 2B, Section E6.3, page 16
3			
4			
5	Re	garding Cable Cl	hamber lids, THESL states that it "plans to replace a limited number
6	in 1	the first year bec	ause the new cable chamber lid must be tested for proper functionality
7	in 1	both the winter a	nd summer months to ensure they operate in the multitude of
8	coı	nditions that they	will be exposed to. If the new lid design passes the necessary testing,
9	То	ronto Hydro plar	as to replace a total of 1,475 cable chambers in the remaining four
10	yea	ars of the program	n."
11	a)	Please confirm	that the cost of replacement of the 1,475 cable chambers is included in
12		the proposed bu	dgets for this program.
13	b)	In the event that	t the necessary testing is not positive and THESL will not proceed
14		with the 1,475 c	cable chamber replacements, how will THESL spend the allocated
15		funding? Are th	nere alternative approaches that would be considered to address the
16		concerns with th	ne existing cable chambers?
17			
18			
19	RE	ESPONSE:	
20	a)	Yes, the cost of	replacing 1,475 cable chamber lids is included in the proposed budget
21		for this program	1.
22			
23	b)	If the necessary	testing is not positive, Toronto Hydro will reallocate the funding to
24		continue to inve	estigate additional lid options or other means to eliminate the potential
25		public safety ha	zard posed by the current lid design. There are multiple lid designs
26		which may solv	e the problem with the existing lid. Toronto Hydro has short-listed a

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### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

- preferred design (based on preliminary evaluation of the ease of installation and
- impact to the existing cable chamber work space), but if more thorough tests are not
- conclusively positive, then several additional lid designs will also be tested.

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# RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	IN'	TERROGATORY	<b>7 30:</b>
2	Re	ference(s):	Exhibit 3, Tab 2, Schedule 2
3			
4			
5	Re	garding Specific S	ervice Charge Revenue:
6	a)	Please explain wh	y the revenue forecast for the "Connection-Reconnection Charge"
7		remains unchange	d at \$440K for 2015 over 2014, despite the specific service charge
8		for disconnection	reconnections increasing from \$65 to \$120 as noted in Exhibit 8,
9		Tab 2.	
10	b)	Please explain wh	y \$0 revenue has been recorded for Duplicate Invoices, Income Tax
11		Letters, and Speci	al Meter Reads. Is this a materiality/rounding issue?
12	c)	Please explain wh	y \$0 revenue is expected from Temporary Service Construction and
13		Easement Letters	in 2014 and 2015.
14	d)	For additional cla	rity, please prepare a table showing all revenue received and
15		forecast from the	charges listed in Exhibit 8, Tab 2, Schedule 1, Table 1. Please show
16		2012-2014 actual	, and 2015 forecast revenue based on the new proposed service
17		charges.	
18			
19			
20	RE	<b>ESPONSE:</b>	
21	a)	The 2015 revenue	forecast for the "Connection-Reconnection Charge" was
22		incorrectly stated.	The correct amount is \$859,312. As a result, the variance between
23		2014 and 2015 sh	ows an increase to reflect the higher proposed rate, at slightly lower
24		forecast volumes.	

Panel: Revenue Requirement, Rates and Deferral and Variance Accounts

25

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### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

b) A total of \$0 revenue has been recorded for Income Tax Letters and Special Meter 1 2 Reads primarily due to materiality. Furthermore, due to electronic reading and smart meter technology, the Special Meter Reads service charge is now very rarely used. 3 The revenue from the Duplicate Invoices service charge was incorrectly included 5 together with the Retailer Service Transaction Request revenue in OEB Appendix 2H 6 (Exhibit 2, Tab 2, Schedule 2). Please refer to the response to (d) below for the 7 corrected amounts. 8 10 11 c) The Temporary Service Construction revenue was incorrectly included in the Miscellaneous Revenue category in OEB Appendix 2H (Exhibit 2, Tab 2, Schedule 12 2), but the correct amounts had been correctly shown in Table 2 of Exhibit 3, Tab 2, 13 Schedule 1. The expected revenues from Easement Letters are considered 14 immaterial. 15 16 17

d) Please see the table below:

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# RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

Specific Service Charge	Current Toronto Hydro Charge Amount	Proposed Toronto Hydro Charge Amount	2012 Actual	2013 Actual	2014 Bridge	2015 Test	F	2015 cremental Revenue 3-OEB-83)
Duplicate invoices for previous billing	\$15	\$25	\$ 7,680	\$ 4,967	\$ 5,730	\$ 2,860	-\$	2,870
Request for other billing or system information	\$0	\$25	\$ -	\$ -	\$ -	\$ 31,000	\$	31,000
Easement letter	\$15	\$25	\$ 18,800	\$ 21,400	\$ 16,800	\$ 23,101	\$	6,301
Income tax letter	\$0	\$25	\$ -	\$ -	\$ -	\$ -	\$	-
Account history	\$15	\$25	\$ -	\$ -	\$ -	\$ 6,000	\$	6,000
Returned cheque charge (plus bank charges)	\$15	\$25	\$ 81,853	\$ 68,785	\$ 75,000	\$ 113,925	\$	38,925
Account set up charge/change of occupancy charge	\$30	\$35	\$ 2,816,087	\$ 2,740,590	\$ 2,550,000	\$ 3,811,920	\$	1,261,920
Special meter reads	\$30	\$55	\$ -	\$ -	\$ -	\$ -	\$	-
Collection of account charge - no disconnection	\$30	\$55	\$ 3,026,321	\$ 3,075,543	\$ 3,299,978	\$ 4,969,096	\$	1,669,118
Disconnect/Reconnect at meter -during regular hours	\$65	\$120	\$ 260,555	\$ 306,540	\$ 280,247	\$ 498,048	\$	217,801
Install/Remove load control device - during regular hours	\$65	\$120	\$ 14,170	\$ 585	\$ 15,080	\$ 18,912	\$	3,832
Disconnect/Reconnect at meter -after regular hours	\$185	\$400	\$ 41,810	\$ 160,105	\$ 139,120	\$ 319,360	\$	180,240
Install/Remove load control device - after regular hours	\$185	\$400	\$ 3,330	\$ 370	\$ 6,660	\$ 9,920	\$	3,260
Disconnect/Reconnect at pole - during regular hours	\$185	\$300	\$ 9,250	\$ 5,365	\$ 1,233	\$ 11,152	\$	9,919
Disconnect/Reconnect at pole - after regular hours	\$415	\$820	\$ 7,055	\$ 3,735	\$ 1,660	\$ 1,920	\$	260
Meter dispute charge plus Measurement Canada fees	\$30	\$55	\$ -	\$ -	\$ -	\$ -	\$	-
Service call - customer owned equipment or customer missed appointment	Acutal Cost/\$0	\$55	\$ -	\$ -	\$ -	\$ 2,000	\$	2,000
Temporary service install & remove – overhead - no transformer	Acutal Cost	\$2,040	Note 1	Note 1	Note 1	\$ 1,011,840		Note 1
Specific Charge for Access to Power Poles (Wireline Attachments) (\$/pole/year)	\$22.35	\$80.38	\$ 2,188,788	\$ 2,034,382	\$ 2,174,650	\$ 7,512,399	\$	5,337,749

Note 1: In 2012-2014, Toronto Hydro provided the service on an actual cost basis. As such, the projected 2015 revenue is not considered incremental to total 2014 service charge revenue.

/c

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# RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	IN	TERROGATORY	31:
2	Re	eference(s):	Exhibit 4A, Tab 1, Schedule 1
3			
4			
5	TH	HESL notes that it "p	resents its Historical, Bridge and Test Year OM&A expenditures
6	as	a sum of 19 discrete	programs", but goes on to say that "OM&A plans are generally
7	pre	esented on a operatir	ng department or 'Responsibility Centre' (RC) basis".
8	a)	Please clarify whet	her THESL tracks and operates its OM&A on a program or
9		department level? l	For example, does THESL have an actual "Finance Program" or a
10		"Legal Services Pro	ogram", or is this presentation a reflection of THESL's
11		interpretation of the	e Filing Requirements?
12	b)	Please explain the	differences, if any, between THESL "programs" as presented in
13		this application and	the corresponding departments. For example, are there any
14		identifiable differen	nces between the functions and costs of the "Finance Program" and
15		the functions and c	osts of the "Finance Department" presented in prior rate
16		applications?	
17	c)	For all OM&A "pr	ograms" identified in Table 1, please identify the relevant
18		department that un	dertakes each program.
19	d)	Please provide the	OM&A budgets mapped by operating department (Responsibility
20		Centre), as reference	ced above.
21			
22			
23	RF	ESPONSE:	
24	a)	The program-based	presentation of OM&A budgets reflects Toronto Hydro's
25		interpretation of the	e OEB guidance provided in Section 2.7 of the Chapter 2 of the
26		Filing Requiremen	ts for Electricity Distributors (July 17, 2013) that mandates

Panel: Planning and Strategy

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# RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1		applicants to present their OM&A variance analysis on the basis of outcome-based
2		programs. For internal purposes, Toronto Hydro tracks its OM&A expenditures at a
3		departmental level.
4		
5	b)	As explained and produced in response to part (c) below, in a number of instances
6		Toronto Hydro's OM&A programs as presented in this application are overseen by
7		several different departments. For example, Preventative and Predictive Maintenance
8		program encompasses the work performed by the Engineering and Construction and
9		Electrical Operations and Procurement divisions. In other cases (e.g., Customer
10		Care), the program-based presentation corresponds to a single departmental budget.
11		For a further discussion of program-based presentation of OM&A Costs, please see
12		Toronto Hydro's responses to interrogatory 4A-CCC-30 and interrogatory 4A-
13		OEBStaff-63.
14		
15	c)	Please see Appendix A to this Schedule.
16		
17	d)	Please see response to (c) above.

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4A-SIA-31 Appendix A

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### Appendix A: Historical, Bridge and Test Year OM&A Expenditures by Program and Department

*In millions of dollars; Rounding variances may exist.* 

(\$M) Prorgram	Department	2011 Actual	2012 Actual	2013 Actual	2014 Bridge	2015	Test
Preventative & Predictive Maintenance	·						
Freventative & Fredictive Maintenance	Engineering & Construction	2.7	3.8	3.5	3.7		5.1
	Electric Operations & Procurement	11.0	12.1	9.3			14.9
Sub-total Preventative & Predictive Maintenance	Electric Operations & Procurement	13.7	16.0	12.8			20.1
Corrective Maintenance		15.7	10.0	12.0	10.1		20.1
Corrective Maintenance	Engineering & Construction	1.3	1.9	1.7	2.1		2.6
	Electric Operations & Procurement	24.5	19.6	15.3			19.6
Sub-total Corrective Maintenance	Electric Operations & Frocurement	25.8	21.5	17.0			22.2
Emergency Response	Electric Operations & Procurement	13.3	13.9	26.3			15.3
Disaster Preparedness Management	Electric Operations & Procurement  Electric Operations & Procurement	0.9	0.0	20.5	10.2		2.4
Control Centre	Electric Operations & Procurement	8.4	8.3	8.9	8.2		8.4
Customer-Driven Work	Electric Operations & Procurement	0.4	6.3	0.9	0.2		0.4
Customer-Driven Work	Engineering & Construction	1.9	1.3	2.2	2.3		2.0
	Electric Operations & Procurement	4.1	4.6				8.1
Sub-total Customer-Driven Work	Electric Operations & Procurement	6.0	5.9	7.0			10.1
Planning		0.0	5.9	7.0	0.2		10.1
Flaming	Engineering & Construction	9.0	9.0	11.5	10.2		12.6
	Electric Operations & Procurement	9.0	9.0	0.0			0.3
Sub-total Planning	Electric Operations & Procurement	9.0	9.0		-		12.9
Work Program Execution Management and Support	Engineering & Construction	5.0	5.5	5.6			6.1
Work Program Execution	Engineering & Construction	3.0	5.5	3.0	3.0		0.1
Work Flogram Execution	Engineering & Construction	10.9	9.1	9.7	10.9		11.9
	Electric Operations & Procurement	4.0	4.7	3.4			3.2
Sub-total Work Program Execution	Electric Operations & Frocurement	14.9	13.8	13.0			15.2
Fleet and Equipment Services	Electric Operations & Procurement	8.7	8.5	8.7			8.9
Facilities Management	Electric Operations & Procurement  Electric Operations & Procurement	24.6	23.5	24.2	27.2		27.5
Supply Chain Services	Electric Operations & Procurement	7.1	6.6	9.0			9.9
Customer Care	Customer Care	41.9	37.5	39.7	42.2		46.1
Human Resources and Safety	Human Resources and Safety	13.7	13.2	15.3			16.1
Finance	Finance	16.1	14.7	15.7	17.0		17.9
Information Technology	Information Technology & Risk Management	30.3	28.5	31.0			34.9
Rates and Regulatory Affairs	Regulatory Affairs and General Counsel	7.2	7.8	8.4	6.4		8.4
Legal Services	Regulatory Affairs and General Counsel	5.5	4.3	4.5			5.5
Charitable Donations (LEAP)	Customer Care	0.7	0.7	0.7	0.7		0.8
Common Costs and Adjustments	Corporate-wide	5.7	(6.0)	0.7			1.0
Allocations and Recoveries	Corporate-wide	(19.9)	(17.4)	(13.3)			(20.2)
Restructuring Costs	Corporate-wide	(19.9)	27.7	(13.3)	(13.3)		(20.2)
Total OM&A	Ooi poi ate-wide	238.6	243.5	246.4	246.6		269.5

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# RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	INTERROGATOR	Y 32:
2	<b>Reference(s):</b>	Exhibit 4A, Tab 1, Schedule 2
3		
4		
5	Please reproduce Ap	pendix 2K by breaking out the "Non-management" category into
6	"Union" and "Non-U	Inion" sub-categories separately. In addition, please provide average
7	per-employee values	for all compensation categories (e.g. "Average Total Salary and
8	Wages" per Manager	ment/Union/Non-Union, etc).
9		
10		
11	<b>RESPONSE:</b>	
12	Please refer to Apper	ndix A to this response.

Panel: Planning and Strategy

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		2011 Actuals		2012 Actuals		2013 Actuals	- :	2014 BRIDGE	2015 TEST
Number of Employees (FTEs including Part-Time) <sup>1</sup>	umber of Employees (FTEs including Part-Time) <sup>1</sup>								
Management (including executive)		61.8		53.0		55.2		55	55
Non-Management (Non-Union)		462.4		442.9		458.5		509	534
Non-Management (Union)		1,212.8		1,104.9		1,013.7		973	975
Total		1,737.0		1,600.8		1,527.4		1,537	1,564
Total Salary and Wages (including overtime and incentive pay	)								
Management (including executive)	\$	11,503,925	\$	10,484,857	\$	10,916,952	\$	11,357,809	\$ 11,676,362
Non-Management (Non-Union)	\$	48,004,982	\$	47,222,946	\$	48,661,644	\$	54,545,454	\$ 58,152,615
Non-Management (Union)	\$	117,596,782	\$	102,500,089	\$	99,308,906	\$	97,986,475	\$ 99,602,175
Total	\$	177,105,689	\$	160,207,891	\$	158,887,502	\$	163,889,738	\$ 169,431,152
Average Total Salary and Wages (including overtime and ince	ntive	pay)							
Management (including executive)	\$	186,024	\$	197,889	\$	197,735	\$	208,400	\$ 212,297
Non-Management (Non-Union)	\$	103,815	\$	106,614	\$	106,129	\$	107,099	\$ 109,002
Non-Management (Union)	\$	96,965	\$	92,769	\$	97,969	\$	100,726	\$ 102,156
Total	\$	101,959	\$	100,079	\$	104,025	\$	106,659	\$ 108,367
Total Benefits (Current + Accrued)									
Management (including executive)	\$	3,700,705	\$	3,207,397	\$	3,497,371	\$	3,622,390	\$ 3,586,525
Non-Management (Non-Union)	\$	15,372,984	\$	15,506,703	\$	17,144,667	\$	18,400,258	\$ 18,485,032
Non-Management (Union)	\$	38,398,376	\$	36,651,732	\$	37,288,451	\$	34,651,697	\$ 33,794,760
Total	\$	57,472,066	\$	55,365,832	\$	57,930,489	\$	56,674,344	\$ 55,866,316
Average Total Benefits (Current + Accruec)									
Management (including executive)	\$	59,842	\$	60,536	\$	63,347	\$	66,466	\$ 65,210
Non-Management (Non-Union)	\$	33,245	\$	35,009	\$	37,392	\$	36,129	\$ 34,649
Non-Management (Union)	\$	31,661	\$	33,172	\$	36,785	\$	35,621	\$ 34,661
Total	\$	33,086	\$	34,586	\$	37,927	\$	36,883	\$ 35,732
Total Compensation (Salary, Wages, & Benefits)									
Management (including executive)	\$	15,204,630	\$	13,692,253	\$	14,414,323	\$	14,980,199	\$ 15,262,887
Non-Management (Non-Union)	\$	63,377,966	\$	62,729,649	\$	65,806,311	\$	72,945,712	\$ 76,637,647
Non-Management (Union)	\$	155,995,158	\$	139,151,820	\$	136,597,357	\$	132,638,172	\$ 133,396,935
Total	\$	234,577,755	\$	215,573,723	\$	216,817,992	\$	220,564,082	\$ 225,297,468
Average Total Compensation (Salary, Wages, & Benefits)									
Management (including executive)	\$	245,866	\$	258,425	\$	261,082	\$	274,866	\$ 277,507
Non-Management (Non-Union)	\$	137,060	\$	141,623	\$	143,521	\$	143,227	\$ 143,651
Non-Management (Union)	\$	128,626	\$	125,941	\$	134,754	\$	136,347	\$ 136,817
Total	\$	135,045	\$	134,665	\$	141,952	\$	143,542	\$ 144,098

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# RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	INTERROGATORY	33:
2	Reference(s):	Exhibit 4A, Tab 4, Schedule 6, page 1
3		
4		
5	The THESL Compensa	ation and Benefit Review states that "Following Towers Watson's
6	advice, benchmark role	es – selected to reflect the wide range of positions at Toronto
7	Hydro – were identified	d to support the compensation analysis. Balanced selection criteria
8	were applied to ensure	functional or level based bias did not disproportionately skew the
9	analyses. Benchmark r	roles covered 66% of Toronto Hydro's employee population (well
10	within the range (50%	- 75%) typically suggested for this type of analysis)."
11		
12	Please explain why all	job positions were not included in this benchmarking effort? Does
13	the exclusion of 1/3 of	positions result in material efficiency gains in the production
14	cost/time of the Benefit	t Review?
15		
16		
17	<b>RESPONSE:</b>	
18	Toronto Hydro did not	include all positions in the benchmarking exercise because it was
19	not practical or feasible	e to do so in light of the amount of time, effort, and cost required to
20	benchmark all employr	ment positions. The exclusion of 1/3 of positions allowed Toronto
21	Hydro to incur reasona	ble costs and expend reasonable time and effort to produce a data
22	set that was within the	range suggested by its expert consultant, Towers Watson.

Panel: Planning and Strategy

### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

#### 1 **INTERROGATORY 34:**

2 Reference(s): Exhibit 4A, Tab 2, Schedule 4, Appendix A

3

- 5 Please provide a breakout of the length of time customers were without power during the
- 6 ice storm in 12 hour intervals. (i.e. # of customers without power 0-12 hours, 12-24
- 7 hours, etc).

8

#### 10 **RESPONSE**:

11 Please see table below:

Duration (hours)	Number of Customers Interrupted
0 - 12	80,033
12 - 24	64,886
24 - 36	49,319
36 - 48	44,633
48 - 60	29,755
60 - 72	32,688
72 - 84	11,608
84 - 96	13,727
94 - 108	6,833
108 - 120	6,585
120 - 132	858
132 - 144	4,477
144 - 156	6,031
156 - 168	9,233
168 - 180	8,859

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# RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

Duration (hours)	Number of Customers Interrupted
180 - 192	7,266
192 - 396	4,316

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# RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	INTERROGATOR	Y 35:
2	<b>Reference(s):</b>	Exhibit 4A, Tab 2, Schedule 4, Appendix A
3		
4		
5	Did the experiences	of the ice storm lead THESL to identify the need for any changes in
6	maintenance policies	and/or capital standards? If not, why not?
7		
8		
9	<b>RESPONSE:</b>	
10	The findings from the	e Independent Review Panel Report on Toronto Hydro's response to
11	the storm prepared by	y Davies Consulting (Exhibit 4A, Table 2, Schedule 4, Appendix A)
12	were among the factor	ors that led Toronto Hydro to propose expanded Vegetation
13	Management activitie	es during the filing period to improve system reliability and reduce
14	the damage sustained	during severe weather events. Toronto Hydro is also in joint
15	discussions with the	City of Toronto to address the tree canopy growth and areas of
16	conflict with Toronto	Hydro's overhead distribution system. Toronto Hydro has not yet
17	identified any require	ed changes to its Construction Standards due to the impact of the ice
18	storm; there were mi	nimal failures of any particular component of the overhead primary
19	distribution system.	The majority of the failures were caused by large tree branches
20	falling on overhead of	listribution assets.

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### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

#### **INTERROGATORY 36:**

2 Reference(s): Exhibit 4A, Tab 2, Schedule 4, Appendix A, page 8

3

1

- 5 The Report on the December 2013 Ice Storm states that "The IRP identified 25
- 6 recommendations for consideration by Toronto Hydro management".

7

- 8 Please list the 25 recommendations and describe THESL's status as to implementing any
- 9 of them. Additionally, if THESL is not planning to implement any of the 25
- recommendations, please explain the rationale and reasoning.

11 12

13

#### **RESPONSE:**

- The 25 recommendations are listed below. The recommendations are currently being
- reviewed, assessed and evaluated for possible implementation. As this process has not
- been completed, at this time Toronto Hydro is unable to identify the status of
- implementation and cannot identify any recommendations that it does not plan to
- implement.

EPP-1	Reaffirm and communicate emergency management vision and strategy throughout
	the Company
EPP-2	Continue to inculcate the ICS-based approach to emergency response
EPP-3	Enhance centralized emergency management group resources to support full
	implementation and sustainment of ICS and ongoing relationships with key
	stakeholders
EPP-4	Dedicated grid operations emergency management resources

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# RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

EPP-5	Update the Emergency Response Plan to improve comprehensiveness and usability
RA-1	Adopt a resource management strategy that provides for deployment of all available
	resources, seamless integration and coordination of crews, and optimal supervisory span of control
RA-2	Create a comprehensive, scalable logistics plan as part of the Emergency Response Plan
DAP-1	Institute a damage assessment process that defines the required approach,
	procedures and competencies to establish situational awareness planning inputs
	within the specified timeframe (e.g. Develop a process to establish (calculate) timely
	and accurate ETRs within 48 hrs)
DAP-2	Develop a process to establish (calculate) timely and accurate ETRs
DAP-3	Establish standard work planning processes and procedures; train and exercise
	response personnel to drive consistency across central and local commands
RE-1	Pre-determine best restoration approach for each level (e.g., 1-4)
RE-2	Eliminate centralized mutual assistance and contractor Local Incident Command
	Centres and encompass those resources within three geographic LICCs
CCC-1	Secure capacity (people and technology) to support timely customer contact during
	an incident
CCC-2	Improve the process for ensuring accurate and uniform outage status messages
	across every mode of communication to customers (e.g., IVR, web, mobile
	application, low tech channels)
CCC-3	Employ outbound calling/texting to inform customers of outage status and other
	pertinent information
CCC-4	Work with City of Toronto to evaluate options for using 311 capabilities
COS-1	Develop a process to communicate timely and accurate ETRs at different levels of
	specificity
COS-2	In collaboration with the City of Toronto, develop an education program to improve
	stakeholder literacy of: restoration process, customer responsibility and
	preparedness

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# RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

COS-3	Expand liaison role to address education, communication and coordination with key community stakeholders (e.g., elected leaders, public safety) during major events
COS-4	Formalize process for developing, approving and disseminating key messages
IT-1	Include IT/OT technologies that provide real or near real-time intelligence in the technology strategic roadmap
VMSH-1	Evaluate all viable options to improve distribution system resilience during major weather events, including converting lines to underground for sections of circuits where it will enhance the reliability of services to critical infrastructure and facilities
VMSH-2	Gain support from key stakeholders on the level of resilience required and related funding
TH-C1	Strengthen emergency management coordination between City of Toronto and Toronto Hydro
TH-C2	In collaboration with City of Toronto (Urban Forestry), updated related urban forestry plans to ensure adequate line clearances to withstand major events.

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# RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

2	Reference(s):	xhibit 4A, Tab 2, Schedule 1, page 48	
3			
4			
5	THESL states that its "i	nspection cycle is moving from a ten-year cycle to an eight-	year
6	cycle, resulting in the ne	eed to execute 1,350 cable chamber inspections in 2015 as	
7	opposed to 1,100 in 201	4. "Please explain the basis for the decision to increase the	
8	frequency of inspections	s.	
9			
10			
11	<b>RESPONSE:</b>		
12	The Kinectrics audit of	Toronto Hydro's Asset Condition Assessment ("ACA") tool	l
13	(Exhibit 2B, Section D,	Appendix A) identifies cable chambers as having a 35% sar	nple
14	size for the purposes of	calculating the Health Index ("HI"), as compared to 24% in	2012
15	Based on an increased s	ample size of approximately 11%, the overall HI of the	
16	population dropped by 8	8% (Very Good to Good / Fair). This represents a significan	ıt
17	change, and a potentiall	y significant impact on Toronto Hydro's capital programs fo	or the
18	renewal of civil infrastru	ucture; an increased sample size is important to ensure that t	he
19	current HI score accurat	ely represents the condition of the asset population.	
20			
21	Cable chambers have a	useful life range of 50 to 80 years, with a typical life of 60 y	ears;
22	cable chamber roofs have	ve a useful life range of 20 to 30 years, with a typical life of	25
23	years (Kinectrics Repor	t K-418021-RA-0001-R002 – Toronto Hydro-Electric Syste	m
24	Limited Useful Life of	Assets). Based on these criteria, 62% of all cable chamber re	oofs
25	will reach their end of li	fe by 2015, growing to 78% by 2019 without intervention.	While
26	age alone is not the sole	determining criterion in the useful life of assets, other facto	rs

Panel: Distribution Capital and System Maintenance

**INTERROGATORY 37:** 

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### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

- 1 (mechanical loading effects, exposure to corrosive salts, etc.) require an inspection to
- 2 assess their impact. Due to their locations within public roadways, many of Toronto
- 3 Hydro's cable chambers, present an immediate and significant safety hazard to the public
- 4 in the event of a structural failure. The risks increase as chambers, and particularly their
- 5 roofs, approach end-of-life. Inspecting these assets on a shorter cycle is expected to
- 6 mitigate risks and provide Toronto Hydro a more accurate picture of the rate of
- deterioration of the cable chamber population by increasing the sample size of units
- 8 measured in Toronto Hydro's ACA tool. This would, in turn, allow Toronto Hydro to
- 9 better prioritize and plan the required capital work, while minimizing the impact on the
- maintenance program budget and executability.

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### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	INTERROGATOR	RY 38:
2	<b>Reference</b> (s):	Exhibit 4A, Tab 2, Schedule 1, page 61
3		
4		
5	THESL states that it	t "maintains 850 Customer Substations". Do customers or THESL
6	pay for the maintena	ance costs of these customer-owned substations?
7		
8		
9	<b>RESPONSE:</b>	
10	Toronto Hydro own	s all primary electrical distribution equipment at the 850 Customer
11	Substations referred	to in this exhibit and pays for all associated maintenance costs. The
12	customer owns the c	civil infrastructure and pays for all associated maintenance costs.
13	Please see Exhibit 4	A, Table 2, Schedule 1, page 60 for more information.

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# RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

2	<b>Reference</b> (s):	Exhibit 4A, Tab 2, Schedule 6, page 17	
3			
4			
5	THESL states that it	"manages vault access and customer isolation activities by assigning	
6	them, to the degree p	ossible, to field workers affected by injuries." Please explain why?	
7	Do customer isolatio	n activities involve a less strenuous level of work that can be	
8	performed by "field	workers affected by injuries"?	
9			
10			
11	<b>RESPONSE:</b>		
12	As discussed in page	s 14 and 15 of the above-reference Exhibit 4A, Tab 2, Schedule 6,	/C
13	Toronto Hydro mana	ages vault access and customer isolation activities by assigning them	
14	to field workers affect	cted by injuries. The activities assigned to each accommodated	
15	worker are determine	ed on a case-by-case basis in consideration of each employee's	
16	particular circumstan	nces and the scope of requisite tasks.	

Panel: Distribution Capital and System Maintenance

**INTERROGATORY 39:** 

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# RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1 INTERROGATORY 40:		
2	<b>Reference(s):</b>	Exhibit 4A, Tab 2, Schedule 17
3		
4		
5	Please prepare a tab	ble showing the total costs of this CIR application, broken out into its
6	major subcategories	s (e.g., Legal, Consultants, Reports, etc.) that THESL is proposing to
7	amortize over the 2	015-2019 period. Please present these amounts broken out by the
8	year in which they	were incurred.
9		
10		
11	<b>RESPONSE:</b>	
12	Please refer to Toro	onto Hydro's response to interrogatory 4A-CCC-38 part (b).

Panel: Planning and Strategy

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# RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	INTERROGATORY 41:		
2	Re	eference(s):	Exhibit 4A, Tab 2, Schedule 17, page 9 of 9
3			
4			
5	TH	HESL states "For the	e purposes of determining the Rates and Regulatory Affairs
6	operating budget to be included in 2015 Revenue Requirement, Toronto Hydro proposes		
7	to amortize the costs incurred over the 2013-2015 period associated with the CIR		
8	application costs over the 2015-2019 rate period, as well as the costs associated with the		
9	Wireless Forbearance (Wireless) application."		
10	a)	How are the costs	of this current application and the wireless forbearance application
11		different than any	other application that THESL filed during 2011-2014 and for
12		which it is not see	king cost recovery (e.g. 2012 COS, 2012-2014 ICM, Smart Meter
13		Clearance, etc). T	that is, why is historical cost recovery requested only for these two
14		particular applicat	ions?
15	b)	In the absence of a	a deferral account, did THESL at any time in any past application
16		apply for and/or re	ecover any application costs incurred in historic years over the
17		applied for test yes	ar.
18	c)	Please explain und	ler what authority THESL believes it to be appropriate to recover
19		out-of period costs	s (i.e., the 2013 and 2014 portion of the application costs) in an
20		application for 20	15 rates (particularly in the absence of an approved deferral or
21		variance account).	
22			

Panel: Planning and Strategy

23

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### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

#### **RESPONSE:** 1 2 a) Toronto Hydro requests historical recovery for the CIR Application, in accordance with section 2.7.3.5 of the OEB's Filing Requirements (July 17, 2013) which states 3 that: 4 The applicant must provide a breakdown of the <u>actual and anticipated</u> 5 regulatory costs, including OEB cost assessments and expenses for the 6 current application such as legal fees, consultant fees, costs awards, 7 etc. .... <u>In addition, the applicant must identify how such costs are to</u> 8 be recovered (i.e., over what period the costs are proposed to be 9 <u>recovered</u>). For distributors, the recovery period would normally be 10 the duration of the expected cost of service plus IRM term under the 11 12 4th generation option. [emphasis added] 13 Please refer to Toronto Hydro's response to Interrogatory 4A-SEC-44 for an 14 explanation of why Toronto Hydro believes that it is appropriate to request cost 15 recovery for the Wireless Forbearance Proceeding. 16 17 b) No. Please see response to part (a). 18

Panel: Planning and Strategy

c) Please see Toronto Hydro's response to part (a)...

19

20

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# RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1	INTERROGATORY 42:			
2	Re	ference(s):	Exhibit 4A, Tab 2, Schedule 17, page 9 of 9	
3				
4				
5	In	the current appl	ication, with regard to CIR and Wireless Forebearance application	
6	cos	costs, THESL states that "None of these costs were included in setting rates in the last		
7	20	11 cost of service	ce application, which formed the basis for distribution rates over the	
8	2011-14 period."			
9				
10	Но	owever, in its 20	11 rate application (EB-2010-0142, Exhibit F2, Tab 6, Schedule 1)	
11	THESL noted that "Regulatory Affairs develops THESL's positions on defined issues,			
12	prepares regulatory filings and rate applications, and makes submissions in regulatory			
13	proceedings.", suggesting that general application costs are included within the			
14	Regulatory Affairs budgets. In Exhibit R1, Tab 1, Schedule 30, Appendix A of the same			
15	proceeding THESL noted that "Operating costs associated with the preparation and			
16	defense of applications is comingled with the Business Unit operating budgets."			
17				
18	a)	Please reconci	le these statements.	
19	b)	What level of	costs for the filing and processing of applications was	
20		assumed/embe	dded in the Regulatory Affairs budget in THESL's 2011 rate	
21		application?		
22	c)	Please scale th	e amount in b) above by the total percentage OM&A reduction as a	
23		result of the 20	011 Settlement Agreement.	
24	d)	If approval for	historic cost recovery is granted in this application, should the	
25		amortized amo	ounts (i.e. the costs of the CIR and Forbearance applications) not be	

Panel: Planning & Strategy

### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

1 calculated as net of any amounts currently embedded in rates (as calculated in c) above)? If not, why not? 2 3 4 5 **RESPONSE:** a) Toronto Hydro's position is that the Wireless Forebearance and the CIR Application 6 7 costs are incremental to the costs included as part of the approved Regulatory Affairs budget in its last rebasing application (EB-2010-0142). Toronto Hydro also notes that it incurred costs over the 2012-2014 period related to its 2012 Cost of Service and 2012-14 IRM/ICM applications, among others. 10 11 b) In Exhibit R1, Tab 1, Schedule 30, Appendix A (EB-2010-0142), Toronto Hydro 12 13 identified its forecast 2011 Regulatory Affairs costs as including \$359,625 in intervenor and application costs, \$195,225 in expert witness costs, \$513,750 in legal 14 costs, and \$430,934 in consultant costs, for a total of \$1.5M. 15 16 c) Toronto Hydro's Settlement Agreement in EB-2010-0142 resulted in a reduction in 17 OM&A of 4.8% (\$226.8M Filed vs. \$216M Approved through Settlement). Scaling 18 the amounts in b) above by a factor of 95.2% (i.e., 100% - 4.8%) would result in an 19 amount of \$1.4M. 20 21 d) As noted in part (a), Toronto Hydro's position is that the requested amounts are 22 incremental to the amounts approved in the 2011 Regulatory Affairs budget. 23

Panel: Planning & Strategy

### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

#### **INTERROGATORY 43:**

2 Reference(s): Exhibit 4B, Tab 2, Schedule 1, page 1

3

1

- 5 THESL claims that "Where it can, Toronto Hydro takes advantage of available tax
- 6 deductions and tax credits, such as research and development tax credits, to minimize its
- 7 tax burden."

8

9 Please identify the amount of R&D credits claimed in each year from 2011-2014.

10 11

#### 12 **RESPONSE:**

13 Please see table below:

	2011	2012	2013	2014
Federal R&D Credit	\$2,101,495	\$1,664,433	\$1,255,767	N/A - not yet filed
Ontario R&D Credit	\$495,117	\$392,144	\$295,861	N/A - not yet filed
Total R&D Credits	\$2,596,612	\$2,056,577	\$1,551,628	N/A - not yet filed

Panel: Revenue Requirement. Rates & Deferral and Variance Accounts

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### RESPONSES TO SUSTAINABLE INFRASTRUCTURE ALLIANCE OF ONTARIO INTERROGATORIES

#### **INTERROGATORY 44:** 1 **Reference(s):** Exhibit 9, Tab 1, Schedule 1, page 13, Table 5 2 3 4 Please explain the sizeable variance between the forecast gains for the sale of 175 5 Goddard (\$7.14 million) and the actual after tax gains (\$2.47 million). 6 7 8 **RESPONSE:** 9 Please see response to interrogatory 9-OEBStaff-88. 10