

**RESPONSES TO CONSUMERS COUNCIL OF CANADA
INTERROGATORIES**

1 **INTERROGATORY 3:**
2 **Reference(s):** **Pre-Filed Evidence of THESL, p. 2**
3
4 **ISSUE(S):** **1**
5
6 Does THESL currently have applications for pole attachments from wireless service
7 providers? If so, does THESL expect to facilitate those attachments? If not, why not? If
8 so, at what price?
9
10 **RESPONSE:**
11 THESL expects to facilitate the particular wireless service provider applications currently
12 before it at a price of [REDACTED]

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1 INTERROGATORY 5:
2 Reference(s): Pre-Filed Evidence of THESL, p. 2
3

4 ISSUE(S): 1
5

6 For each year since THESL and THESI have been allowing for wireless attachments on
7 poles, please indicate how many attachments were made in each year. When was the
8 most recent attachment made? Please indicate what THESI's charges for wireless pole
9 rentals.
10

11 RESPONSE:

Year	THESL	THESI	
	Number of Attachments	Number of Attachments	Rental Rate
2006	33	90	\$22.35
2007	26	31	\$22.35
2008	0	0	-
2009	179	1	\$22.35
2010	188	0	-
2011	0	0	-
2012	2	9	
2013	7	1	
2014	0	1	

12 The most recent attachment was made on January 16, 2014.

**RESPONSES TO ONTARIO ENERGY BOARD STAFF
INTERROGATORIES**

1 **INTERROGATORY 21:**

2 **Reference(s):** **Evidence of Dr. Church, Page 10, paragraph 30**

3

4 **ISSUE(S):** **6**

5

6 THESL states:

7 “With the exception of wireless attachments for Wi-Fi, the THESL and THESI poles on
8 which there are wireless attachments, or for which applications for attachments have been
9 made, are all located outside the downtown core.”

10

11 Where are the poles with wireless attachments located (including those for which a
12 permit application has not yet been granted or been declined)?

13

14 **RESPONSE:**

15 As of February 14, 2014:

ADDRESS	DISTRICT	STATUS
64 BATHGATE DR.	SCARBOROUGH	BUILT
100 WICKSON TR.	SCARBOROUGH	BUILT
745 MEADOWVALE DR.	SCARBOROUGH	BUILT
1653 WOODBINE HEIGHTS BLVD.	EAST YORK	BUILT
175 THE WESTWAY (SIDELOT)	ETOBICOKE	BUILT
1300 SHEPPARD AVE. WEST	NORTH YORK	BUILT
1500 THE QUEENSWAY	ETOBICOKE	BUILT
	SCARBOROUGH	BUILT
126 UNDERHILL DR.	NORTH YORK	BUILT
	SCARBOROUGH	BUILT
	SCARBOROUGH	BUILT
	NORTH YORK	BUILT

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ADDRESS	DISTRICT	STATUS
	SCARBOROUGH	BUILT
	SCARBOROUGH	BUILT
47 GRIFFEN DR	SCARBOROUGH	BUILT
	NORTH YORK	BUILT
34 FOURSOME CR	NORTH YORK	BUILT
199 GRANDRAVINE DR	NORTH YORK	BUILT
	NORTH YORK	BUILT
	ETOBICOKE	BUILT
8301 SHEPPARD AVE EAST	SCARBOROUGH	CANCELLED BY APPLICANT
9 RIDGEWOOD RD	SCARBOROUGH	CANCELLED BY APPLICANT
436 WILSON HEIGHTS BLVD.	NORTH YORK	CANCELLED BY APPLICANT
746 WARDEN AVE.	SCARBOROUGH	CANCELLED BY APPLICANT
51-65 ST. GEORGE ST	TORONTO	CANCELLED BY APPLICANT
111 WELLESLEY ST W	TORONTO	CANCELLED BY APPLICANT
3 RITZ GARDEN CRT.	SCARBOROUGH	CANCELLED BY APPLICANT
ACROSS 4544 DUFFERIN ST	NORTH YORK	CANCELLED BY APPLICANT
95 STONEBRIDGE BLVD	SCARBOROUGH	DECLINED
24 LAPWORTH CRES	SCARBOROUGH	MAKE READY IN PROGRESS
52 CARNEY RD	NORTH YORK	MAKE READY IN PROGRESS
	ETOBICOKE	MAKE READY IN PROGRESS
ACROSS 671 FLEET ST	TORONTO	MAKE READY IN PROGRESS
	SCARBOROUGH	MAKE READY IN PROGRESS
	SCARBOROUGH	MAKE READY IN PROGRESS
	SCARBOROUGH	MAKE READY IN PROGRESS
	SCARBOROUGH	IN REVIEW
1 ALESSIA CIRCLE	YORK	IN REVIEW
	SCARBOROUGH	IN REVIEW
	SCARBOROUGH	IN REVIEW

**RESPONSES TO VULNERABLE ENERGY CONSUMERS
COALITION INTERROGATORIES**

1 **INTERROGATORY 12:**

2 **Reference(s):** **Pre-filed Evidence**

3

4 **ISSUE(S):** **6**

5

6 At paragraph 2, THESL states that some of its street lighting poles can, if modified or
7 replaced, accommodate wireless attachments.

8

9 a) Please provide a range for the costs per pole of such modification or replacement.

10 b) Please provide similar estimates for THESI's poles, if different from THESL.

11

12 **RESPONSE:**

13 a) The costs to modify or replace a street lighting pole depend on the specifications and
14 requirements of the wireless attachment. The street lighting poles that THESL has
15 granted access to for wireless attachments that have specifically required the pole to
16 be replaced with a modified pole assembly, have ranged in cost from \$12,500 to
17 \$15,000. These costs are charged back to the attacher as a make-ready cost.

18

19 b) The estimates are not different for THESI's poles.

RESPONSES TO ENERGY PROBE RESEARCH FOUNDATION INTERROGATORIES

1 **INTERROGATORY 18:**

2 **Reference(s):** **THESL Prefiled Evidence Page 3, Para 16 and 17**

3

4 **ISSUE(S): 9**

5

6 16. As a result of the Decision and Order of the Ontario Energy Board dated March 7,
7 2005, THESL is authorized to charge \$22.35 for each pole attachment. That
8 figure is intended to cover THESL's direct and indirect costs. THESL's direct
9 and indirect costs for pole attachments are higher than that.

10 17. THESL proposes to charge a competitive rate for wireless attachments to its
11 poles. Doing so will improve THESL's ability to recover its true costs, and
12 provide a benefit to its ratepayers and to its shareholder.

13

14 a) Does the \$22.35/yr rate/charge apply to wireless only or to cable or other attached
15 utilities? Please clarify and provide any other rates/charges for other types of
16 attachments/connections.

17 b) Please provide a breakdown of THESL's costs and contribution to revenue
18 requirement for the existing services/attachments.

19 c) Provide 2013 revenue and calculate the cost recovery ratio(s) for each type of
20 Attachment/connection.

21 d) Discuss the Issue of cross subsidy and how this will change under forbearance.

22 e) Please List # 2013 applicants/customers renting attachments under the THESL OEB
23 rate \$22.35/yr. Provide 2013 revenues and costs.

24 f) Please provide # (NO NAMES) 2013 applicants /customers renting attachments from
25 THESI (specify rate(s)). Provide aggregate revenue

26

Panel: THESL

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1 **RESPONSE:**

3 a) Unless otherwise noted, the \$22.35/yr rate applies to all Canadian carriers as defined
4 by the *Telecommunications Act* and all cable companies that operate in the Province
5 of Ontario. Please also see THESL’s confidential response to OEB Staff
6 interrogatory 22 (Tab F, Schedule 1-22).

7
8 b) THESL is only able to provide a breakdown of its costs in respect of
9 telecommunications attachments (i.e., wireline and wireless) on a typical 40’
10 distribution pole; please see THESL’s response to CCC interrogatory 16 (Tab J,
11 Schedule 2-16) for this breakdown. The estimated contribution to revenue
12 requirement of these types of attachments in 2013 was approximately \$4M (estimated
13 \$6M cost less \$2M revenue).

14
15 c) In 2013, the revenues for both types of attachments were as follows:

Type of Attachment	2013 Revenues
Telecommunication Wireline Attachments	\$1,950,000
Telecommunication Wireless Attachments	\$100,000

17 In accordance with THESL’s response to part b), above, the cost recovery ratios can
18 only be provided for telecommunications attachments on typical 40’ distribution
19 poles: 0.33 (\$2M revenue divided by \$6M cost).

20
21 d) It is clear that wireless attachers are currently receiving a benefit or subsidy from the
22 distribution system to the extent that the cost of providing the attachment or
23 maintaining an attachment exceeds the current regulated rate of \$22.35. Under
24 THESL’s application, the rate for wireless attachments would be a negotiated rate,

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- 1 and in the unlikely event that that negotiated rate falls below the cost of providing the
2 attachment or maintaining it, the attachment would not be permitted.
3
- 4 e) In 2013, eight customers leased attachments at the \$22.35 rate. These customers
5 were: Allstream, Astral Media, Beanfield, Bell, Blink Communications, Cogeco,
6 Rogers, and Telus. The 2013 revenues from these attachments were approximately
7 \$1,950,000. Based on the cost model detailed in THESL’s response to CCC
8 interrogatory 16 (Tab J, Schedule 2-16), THESL estimates that the total indirect and
9 direct costs to accommodate these attachments were approximately \$6,000,000.
10
- 11 f) [REDACTED]
[REDACTED]

**RESPONSES TO CONSUMERS COUNCIL OF CANADA
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1 **INTERROGATORY 16:**

2 **Reference(s):** none provided

3

4 **ISSUE(S):** 10

5

6 The evidence indicates that the current authorized rate for pole attachments is \$22.35 and
7 that it is intended to cover direct and indirect costs. In addition, the evidence indicates
8 that THESL’s direct and indirect costs for pole attachments are higher than that. Provide
9 a schedule setting out all of the direct and indirect costs associated with pole attachments.
10 If THESL were to develop a cost-based rate what would that rate be?

11

12 **RESPONSE:**

13 The table below sets out the estimated direct and indirect costs associated with
14 telecommunications pole attachments on a typical 40’ distribution pole.¹ This table is
15 followed by a narrative that explains the input of each direct and indirect cost. The
16 model was developed in accordance with the methodology approved by the OEB in RP-
17 2003-0249 (the “CCTA Decision”).

18

19 Based on the information available at this time,² if THESL were to develop a cost-based
20 rate for telecommunications pole attachments, that rate is estimated to be least \$67.61 per
21 pole, per year.

¹ THESL’s distribution system contains various different pole configurations; the costs may vary depending on the type of pole asset to which an attachment is made.
² THESL would like to preserve its right to undertake any additional analyses or studies that may be required to determine its costs, should the OEB set a cost-based rate in this proceeding or in any future proceeding.

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Item	Type of cost	Cost	Explanation
DIRECT COST			
A	Administration Costs	\$10.69	2013 estimate
B	Loss in Productivity	\$ 5.66	2013 estimate= \$9.10 and divided between 1.61 pole attachers
C	Total Direct Costs	\$ 16.34	A + B
INDIRECT COST			
D	Net Embedded Cost per pole	\$1,646.31	2013 data
E	Depreciation Expense	\$ 48.88	2013 data
F	Pole Maintenance Expense	\$ 5.26	2013 data
G	Capital Carrying Cost	\$ 114.25	Pre-tax weighted average cost of capital 6.94% applied to net embedded cost per pole (D)
H	Total Indirect Costs per Pole	\$ 168.40	E+F+G
I	Allocation Factor	30.4%	Allocation based on 1.61 attachers
J	Indirect Costs Allocated	\$51.27	H x I
K	Estimated Annual Cost	\$67.61	Total Direct + Indirect Costs (C + J)

2 **DIRECT COSTS**
3 Direct costs represent the on-going costs that are directly attributable to the third party’s
4 presence on the pole. For greater clarity, the direct costs do not include any one-time or
5 non-recurring costs, such as any make-ready costs incurred by THESL to accommodate
6 an attachment on its pole. These non-recurring costs depend on the particular
7 circumstances relating to the attachment (i.e., type of attachment and field conditions),
8 and are recovered from the third party through a one-time charge.

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A. Administration Costs

The administration costs represent the estimated operational costs of managing and administering third party attachments and licensed occupancy on THESL's distribution plant. These costs capture the following operational expenditures:³

- **Payroll Costs** – expenditures related to compensation of internal employees;
- **Vehicle Costs** – expenditures related to vehicle/fleet usage and maintenance;
- **Inventory & Direct Purchases** – expenditures for materials issued and used;
- **Invoicing/Billing Costs** (direct labour and mailing costs) – expenditures related to processing of customer invoices;
- **Support Costs** (utility communications, office supplies, employee expenses) – expenditures related to electricity usage, water and gas usage, telecommunications, cellular phone and radio charges, postage, courier and freight & duties, computer supplies, photocopy and stationary supplies, printing expenses, and internal employees expenditures required for their employment such as professional dues, membership fees, transportation, parking, conferences and seminars, education fees and subscriptions; and
- **Usage Charges** (IT Equipment, Facilities) – expenditures related to using technology assets such as computers, networks and phones and expenditures related to using office and work space within THESL.

³ The following shared service costs have not been included in the administration costs as they are not readily quantifiable at this time: Legal, Regulatory, Finance, Accounting, Human Resources, and Environmental Health and Safety.

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1 **B. Loss in Productivity**

2 The loss in productivity costs reflect the additional expenditures that THESL incurs in
3 carrying out its regular activities, as a result of third party attachers' presence on its poles.
4 These costs include:

- 5 • **Pole Replacements** – When THESL replaces an old pole with a new pole that has
6 telecommunications attachment(s) on it, the old pole cannot be removed until the
7 telecommunications attachment(s) are transferred from the old pole to the new
8 pole. As a result, THESL crews have to make an additional site visit to replace
9 these poles. At the first visit, the crew installs the new pole, and at the second
10 visit, after the attachment(s) have been transferred, the crew removes the old pole.
11 The cost of the additional site visit is based on the estimate of two hours for a
12 typical crew complement; this includes travel time to the worksite, worksite set
13 up, worksite breakdown, and travel time back to the work centre.
- 14 • **Pole Inspection Program (Third Party Portion)** – These costs include the
15 additional expenditures incurred by THESL to carry out the Pole Inspection
16 Program due to the presence of the third party attachments. The estimated
17 percentage of the costs that are attributable to third party attachments was based
18 on the total number of data inputs related to third party attachments divided by the
19 total number of data inputs captured through the Pole Inspection Program.

21 **C. Total Direct Costs**

22 The total direct costs are the sum of the administration costs (A) and the loss in
23 productivity costs (B), explained above [i.e., $C=A+B$].

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1 **INDIRECT COSTS**

2 Indirect costs represent THESL's fixed costs associated with pole ownership and
3 maintenance. THESL incurs these costs whether or not a third party's attachments are
4 present on its poles.

6 **D. Net Embedded Cost per pole**

7 The net embedded cost per pole is calculated by dividing the net book value of the pole
8 assets, as per THESL's 2013 accounting record, by the total number of poles. Net book
9 value of the pole assets is calculated by subtracting accumulated depreciation from the
10 original cost of the pole assets.

12 **E. Depreciation Expense**

13 The depreciation expense per pole is calculated by dividing the pole asset class
14 depreciation expense, as per THESL's 2013 accounting records, by the total number of
15 poles. The depreciation expense represents the monthly amortization of the original costs
16 of the pole assets over their useful life calculated on a straight line basis.

18 **F. Pole Maintenance Expense**

19 The Pole Maintenance expense captures the cost of various activities undertaken by
20 THESL for the purposes of maintaining the structural integrity of its distribution poles.
21 To arrive at this cost, the expenditures incurred by THESL in 2013 with respect to each
22 program listed below were divided by the total number of poles to determine the cost per
23 pole of executing each program. The costs per pole of each program were then added to
24 derive the total pole maintenance expense per pole in 2013.

- 25 • **Wood Pole Inspection & Treatment** – Scheduled wood pole inspection for
26 decay reduces the risk of exposure, enhances the reliability of the system and

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1 balances the expenditure of capital replacement. Poles are assessed every ten
2 years, using a variety of visual and non-destructive inspection techniques. The
3 structural integrity of the pole is determined, and treatment is applied based on the
4 size and condition of the pole. A treated pole will generally maintain its structural
5 integrity for a longer period of time, thus reducing the risk of failure.

- 6 • **Pole Inspection Program (Hydro Portion)** – The pole inspection program
7 captures data for the purposes of updating records, assessing the condition of
8 overhead assets, and identifying deficiencies. The program applies to all
9 overhead assets, including third party attachments, and is generally carried out on
10 a three year cycle. The costs of the pole inspection program do not include the
11 loss in productivity costs incurred by THESL due to the presence of the third
12 party attachments. Those costs have been captured above under item B.

14 **G. Capital Carrying Cost**

15 This cost was calculated by applying the most recent OEB-Approved (2011) weighted
16 average cost of capital (WACC) rate of 6.94% to the net embedded cost per pole.

18 **H. Total Indirect Costs per Pole**

19 The total indirect costs are the sum of the depreciation expense (E), the pole maintenance
20 expense (F) and the capital carrying cost (G) [i.e., $H=E+F+G$].

22 **I. Allocation Factor**

23 The allocation factor determines the percentage of the indirect costs attributable to
24 THESL and to the telecommunications attachers, based on the usage of the pole. To
25 calculate the allocation factor, a typical 40' distribution pole is divided into five defined
26 spaces, as explained below, and as shown in the figure that follows the explanation. Each

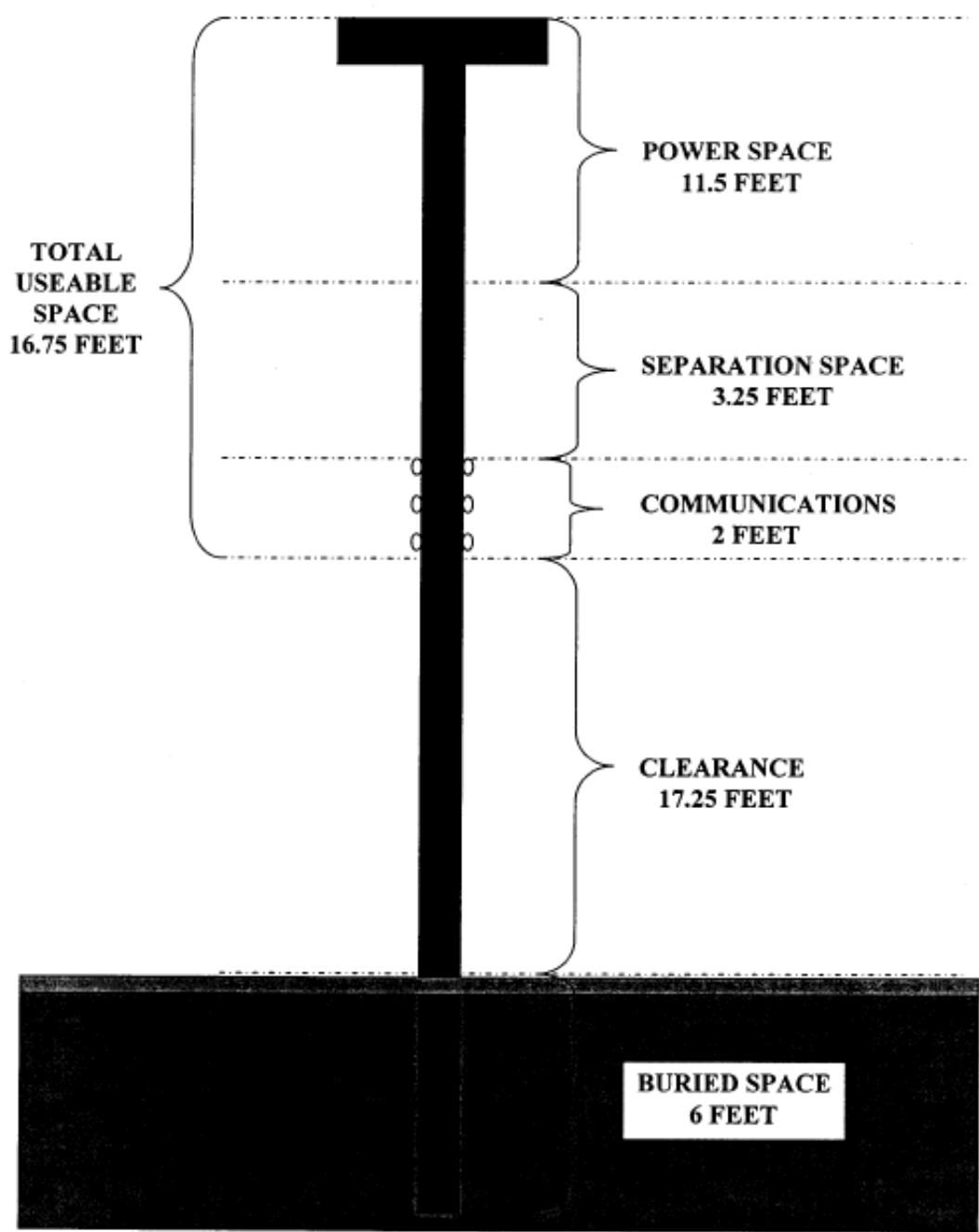
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- 1 defined space is then allocated to THESL and/or the telecommunications attachers based
2 on the proportionate usage of space on the pole.
- 3 • **Buried depth (6')** – This space provides foundational support for the pole, and is
4 allocated to both THESL and telecommunications attachers.
 - 5 • **Clearance (17.25')** – This space is allocated to THESL and telecommunications
6 users because both parties can use the space for their equipment.
 - 7 • **Communication Space (2')** – This space is used only by telecommunications
8 attachers, and is allocated solely to these parties.
 - 9 • **Separation Space (3.25')** – This space is required to maintain a minimum
10 clearance from the lowest distribution wire (secondary or neutral) to the highest
11 telecommunications attachment. This space is allocated solely to the
12 telecommunications users because the separation space is required to
13 accommodate their attachments on the pole and provide a safe working space for
14 the telecommunications worker.
 - 15 • **Power Space (11.5')** – This space is allocated solely to THESL as
16 telecommunication users are not able to attach their equipment to this space.

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SPACE ALLOCATION ON A TYPICAL 40 FOOT POLE



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1 The allocation factor is calculated by dividing each defined space by the total number of
2 users of that space. Where the space is jointly allocated between THESL and
3 telecommunications, THESL is considered to be one user, and telecommunications is
4 considered to be 1.61 users, based on the average number⁴ of third party users per pole.
5 Therefore, in total, the allocation factor assumes an average of 2.61 users per pole.
6
7 This model yields an allocation of 51% for THESL and 49% for telecommunications. To
8 obtain the telecommunications allocation per user, the telecommunications allocation
9 (49%) is divided by the average number of telecommunications users (1.61), which
10 produces a telecommunications allocation factor of 30.4%.
11

Space Classification	Space Allocation		Power Allocation		Communication Allocation Total		Communication Allocation Per User	
	[ft]	[%]	[ft]	[%]	[ft]	[%]	[ft]	[%]
Buried Depth	6	15.0%	2.30	5.8%	3.70	9.2%	2.30	5.8%
Clearance	17.25	43.1%	6.61	16.5%	10.64	26.6%	6.61	16.5%
Communication Space	2	5.0%	0.00	0.0%	2.00	5.0%	1.24	3.1%
Separation Space	3.25	8.1%	0.00	0.0%	3.25	8.1%	2.02	5.1%
Power Space	11.5	28.8%	11.50	28.8%	0.00	0.0%	0.00	0.0%
Total	40	100.0%		51.0%		49.0%		30.4%

13 **J. Allocated Indirect Costs**

14 The allocated indirect costs are calculated by applying the allocation factor of 30.4% (I)
15 to the total indirect costs per pole (H) [i.e., **J=H * I**]
16

⁴ Calculated by dividing the total number of third party users (based on data from THESL’s Pole Inspection Program), by the total number of poles with third party attachments.

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- 1 **K. Estimated Annual Cost**
- 2 The estimated annual cost is the sum of the total direct costs (C), and the allocated
- 3 indirect costs (J) [i.e., **$K=C+J$**].

**RESPONSES TO SCHOOL ENERGY COALITION
INTERROGATORIES**

1 **INTERROGATORY 7:**

2 **Reference(s):** **none provided**

3

4 **ISSUE(S):** **11**

5

6 Please provide the annual revenue from attachments to THESL polls [sic] of wireless
7 telecommunication attachments for each from 2008-2013. Please forecast the expected
8 revenue per year under the existing regulated rate for 2014-2019.

9

10 **RESPONSE:**

11 From 2008 to 2013, the approximate annual revenues from wireless telecommunications
12 attachments on THESL’s poles were as follows:

Year	Total Revenue
2008	\$4,000.00
2009	\$4,000.00
2010	\$7,000.00
2011	\$12,000.00
2012	\$57,000.00
2013	\$89,000.00

13 THESL has not forecasted the expected revenues for wireless attachments for 2014 to
14 2019.