RESPONSES TO CONSUMERS COUNCIL OF CANADA INTERROGATORIES

INTERROGATORY 16:

Reference(s): **none provided**

ISSUE(S): 10

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

RESPONSE:

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

Based on the information available at this time,[2] if THESL were to develop a cost-based rate for telecommunications pole attachments, that rate is estimated to be least $69.87 per /U 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	$ 15.32	2013 estimate	/U
	B	Loss in Productivity	$ 5.66	2013 estimate = $9.10 and divided between 1.61 pole attachers	
	C	**Total Direct Costs**	**$ 20.98**	**A + B**	/U
		INDIRECT COST			
**	D	Net Embedded Cost per pole	$ 1,533.68	2013 Data	/U
	E	Depreciation Expense	$ 48.88	2013 Data	
	F	Pole Maintenance Expense	$ 5.26	2013 Data	
	G	Capital Carrying Cost	$ 106.44	Pre-tax weighted average cost of capital 6.94% applied to net embedded cost per pole (D)	/U
	H	Total Indirect Costs per Pole	$ 160.58	E+F+G	/U
	I	Allocation Factor	30.4%	Allocation based on 1.61 attachers	
	J	**Indirect Costs Allocated**	**$ 48.89**	**H x I**	/U
	K	**Estimated Annual Cost**	**$ 69.87**	**Total Direct + Indirect Costs (C+J)**	/U

* Updated to include estimates of shared service costs previously excluded, as described in former footnote 3, with consequential effects on total direct cost (C) and estimated annual cost (K).

** Updated to reflect 2013 audited financial statements, with consequential effects on capital carrying cost (G), total indirect costs per pole (H) and estimated annual cost (K).

Item	Type of cost	Cost	Explanation
	DIRECT COST		
A	Administration Costs	$ 15.32	2013 estimate
B	Loss in Productivity	$ 5.66	2013 estimate = $9.10 and divided between 1.61 pole attachers
C	Total Direct Costs	$ 20.98	A + B

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	INDIRECT COST		
D	Net Embedded Cost per pole	$ 1,533.68	2013 Data
E	Depreciation Expense	$ 48.88	2013 Data
F	Pole Maintenance Expense	$ 5.26	2013 Data
G	Capital Carrying Cost	$ 106.44	Pre-tax weighted average cost of capital 6.94% applied to net embedded cost per pole (D)
H	Total Indirect Costs per Pole	$ 160.58	E+F+G
I	Allocation Factor	$ 0.30	Allocation based on 1.61 attachers
J	Indirect Costs Allocated	$ 48.89	H x I
K	Estimated Annual Cost	$ 69.87	Total Direct + Indirect Costs (C+J)

DIRECT COSTS

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

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: /U

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- **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.

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B. Loss in Productivity

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

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

C. Total Direct Costs

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

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INDIRECT COSTS

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

D. Net Embedded Cost per pole

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

E. Depreciation Expense

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

F. Pole Maintenance Expense

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

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

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

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

G. Capital Carrying Cost

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

H. Total Indirect Costs per Pole

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

I. Allocation Factor

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

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defined space is then allocated to THESL and/or the telecommunications attachers based on the proportionate usage of space on the pole.

- **Buried depth (6') –** This space provides foundational support for the pole, and is allocated to both THESL and telecommunications attachers.
- **Clearance (17.25') –** This space is allocated to THESL and telecommunications users because both parties can use the space for their equipment.
- **Communication Space (2') –** This space is used only by telecommunications attachers, and is allocated solely to these parties.
- **Separation Space (3.25') –** This space is required to maintain a minimum clearance from the lowest distribution wire (secondary or neutral) to the highest telecommunications attachment. This space is allocated solely to the telecommunications users because the separation space is required to accommodate their attachments on the pole and provide a safe working space for the telecommunications worker.
- **Power Space (11.5') –** This space is allocated solely to THESL as telecommunication users are not able to attach their equipment to this space.

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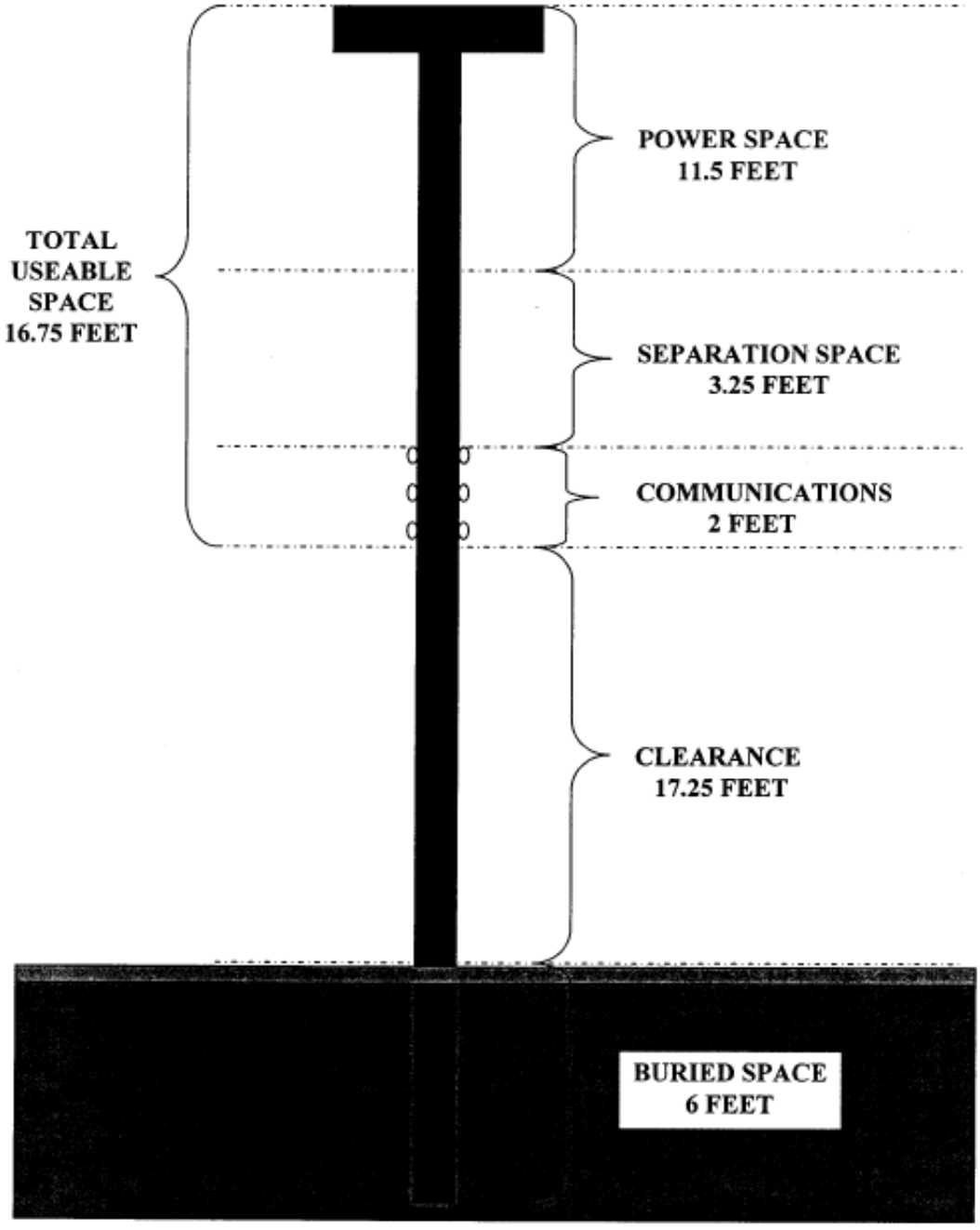
SPACE ALLOCATION ON A TYPICAL 40 FOOT POLE



Panel: THESL

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The allocation factor is calculated by dividing each defined space by the total number of users of that space. Where the space is jointly allocated between THESL and telecommunications, THESL is considered to be one user, and telecommunications is considered to be 1.61 users, based on the average number[3] of third party users per pole. Therefore, in total, the allocation factor assumes an average of 2.61 users per pole.

This model yields an allocation of 51% for THESL and 49% for telecommunications. To obtain the telecommunications allocation per user, the telecommunications allocation (49%) is divided by the average number of telecommunications users (1.61), which produces a telecommunications allocation factor of 30.4%.

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%

J. Allocated Indirect Costs

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

[3] 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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K. Estimated Annual Cost

The estimated annual cost is the sum of the total direct costs (C), and the allocated indirect costs (J) [i.e., **K=C+J**].