

Hydro One Networks Inc.

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**BY EMAIL AND RESS**

December 16, 2022

Ms. Nancy Marconi  
Registrar  
Ontario Energy Board  
Suite 2700, 2300 Yonge Street  
P.O. Box 2319  
Toronto, ON M4P 1E4

Dear Ms. Marconi,

**EB-2022-0234 – s.74 (SAA) – Application for Hydro One Networks Inc. to Connect One Industrial Customer located at 626 Principale St. in Casselman – Interrogatory Responses**

In accordance with Procedural Order 2, issued November 30, 2022, please find enclosed Hydro One Networks Inc's interrogatory responses.

A copy of this cover letter and the enclosed interrogatory responses have been filed in text-searchable electronic form through the Ontario Energy Board's Regulatory Electronic Submission System.

Sincerely,



Joanne Richardson

C/ Intervenors of record (electronic only)

**OEB STAFF INTERROGATORY - 04**

**Reference:**

Hydro One Networks Inc. – Supplemental Evidence, November 7, 2022  
Hydro One Networks Inc. – Interrogatory Responses, November 11, 2022

**Interrogatory:**

a) Please confirm the supplemental evidence has no impacts on the Offer to Connect (OTC) provided to the Customer. If not, please provide a revised OTC.

Hydro One states (Ref. 1, p. 2 of 4) that

[s]hould a determination be made by the OEB that a second 8.32kV circuit needs to be accommodated on this pole line for Hydro Ottawa to serve 626 Principale Street, a new pole line will need to be redesigned, replaced, and potentially relocated, contingent on the requirements of the MTO.

b) Please confirm that the “new pole line” mentioned in this sentence would be constructed instead of and not in addition to the “Joint Use Project” identified on p. 1 of 4.

Hydro One states (Ref. 1, p. 2 of 4) that

...addressing [Hydro Ottawa’s request to upgrade Hydro One’s pole line] may increase the cost of the high-level estimate provided to Hydro Ottawa because of the redesign, replacement and potential relocation of the poles that will be necessitated by the addition of a second 8.32kV circuit on this pole line.

c) Please provide an estimate of the cost of the pole line alterations that would be allocated to Hydro Ottawa to accommodate the connection of 626 Principale Street customer.

Hydro One states (Ref. 1, p. 2.of 4) that

...the Customer has not yet been connected on a permanent basis. The new expected connection date is early December.” Hydro One further states in response to OEB Staff-3 (b) (Ref. 2, Exhibit 1, Tab. 1, Schedule 3, p. 1 of 2) that “[a]ll preparatory work that Hydro One can undertake prior to connection has been executed.

d) Please indicate the (estimated) percentage of the connection cost value of \$7,877.82 that Hydro One had expended as of November 30, 2022.

1 **Response:**

2 a) Confirmed.

3  
4 b) Not confirmed. The Joint Use Project is a request from the local internet service  
5 provider (ISP) (the Existing Joint Use Tenant) to supply internet to the Subject Area.  
6 Delaying the Joint Use Project until finalizing all required permits, designs and  
7 executing all the works required to complete Hydro Ottawa's requested upgrade, i.e.,  
8 the new pole line, and waiting until the determination of this service area amendment,  
9 would preclude the ISP from offering the Subject Area internet services to the  
10 detriment of the development and the ISP. The ISP has requested an as soon as  
11 possible connection date and construction will commence once cable locates are  
12 refreshed in the area.

13  
14 Since this ISP already has facilities on these poles, only the poles that did not meet  
15 the requirements for this attachment require replacement. Importantly, the ISP already  
16 has an existing permit from the MTO for this crossing thus only minor modifications to  
17 the existing permit were needed, not a new permit. Consequently, aside from  
18 accommodating any Hydro Ottawa joint use requests that have not been i.) formally  
19 submitted to Hydro One, ii) underpinned by a detailed design, and iii.) paid for to study  
20 and assess the joint use connection, there is no need to delay the Joint Use Project.

21  
22 Hydro One's understanding is that Hydro Ottawa installing a new circuit whether onto  
23 Hydro One's poles, or via a separate stand-a-lone pole line on the opposite side of the  
24 road, would require a *new* MTO permit because these facilities are not currently  
25 crossing the highway. The new permit would result in the requirement to comply with  
26 current MTO standards which would necessitate the relocation of Hydro One's existing  
27 poles 80 m west of the current centre-line. If the OEB were to determine that it is in  
28 the public interest for Hydro Ottawa to serve the Subject Area "the new pole line work"  
29 would then be initiated by further developing current Hydro Ottawa high-level designs  
30 and seeking the new MTO permit requirement. Once the new MTO permit requirement  
31 is obtained and all other development activities such as finalized drawings and joint  
32 use agreements have been documented appropriately, the physical works of removing  
33 and relocating the previously installed Joint Use Project would commence such that  
34 the Hydro Ottawa requested upgrade can then be completed.

35  
36 Therefore, both the Joint Use Project and the "New Line" Project will be required if the  
37 Service Area Amendment is granted to Hydro Ottawa.

1 c) Please refer to part b). Given the lack of detail provided for the Hydro Ottawa upgrade  
2 request, documented in Exhibit I, Tab 2, Schedule 4, Hydro One cannot accurately  
3 allocate the cost responsibility split at this time for the separate works that would need  
4 to be undertaken. However, for context, Hydro One understands that, in accordance  
5 with the OEB principles set out in the RP-2003-0044 Decision, the incremental costs  
6 of the individual connections, irrespective of the who funds the work, is what is  
7 pertinent to the OEB's assessment of a service area amendment application. This  
8 would be no different than how the OEB treats capital contributions from an individual  
9 customer.

10  
11 The Board considers that economic efficiency comprises the concept of the  
12 most effective use of existing distribution resources. It is a concept that  
13 involves an objective assessment of the efficiencies attendant upon the  
14 connection of a customer by a distribution utility. The assessment involves  
15 a consideration of the distribution assets available for the connection, their  
16 proximity to the proposed point of connection, and the other costs  
17 necessary to effect the connection. Where new assets must be developed  
18 to effect the connection, a comparison of the costs associated with such  
19 development will inform the assessment of economic efficiency.

20  
21 **In all instances, the costs associated with the connection should be**  
22 **the fully loaded costs, which capture all of the relevant indirect and**  
23 **direct costs reasonably associated with the project at issue, not**  
24 **merely the price of connection quoted to the prospective connection**  
25 **customer.** Costs developed with respect to other connection projects  
26 which are not contested will serve as a guide in assessing the authenticity  
27 of costs associated with a contested project (emphasis added) <sup>1</sup>.

28  
29 Given the information included in this response, Hydro One suggests that an indirect  
30 incremental cost was missed in the costs attributed to the Hydro Ottawa proposed  
31 connection documented in the original filing of Table 1 of Exhibit I, Tab 1, Schedule 1.  
32 That Table should be updated to reflect the forecast incremental cost of installing the  
33 Joint Use Project and its subsequent removal. The incremental cost associated with  
34 the Existing Joint Use Tenant requested work and its subsequent removal is only  
35 applicable to the Hydro Ottawa connection alternative because Hydro One does not  
36 require any use of these poles for the purposes of connecting 626 Principale Street.

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<sup>1</sup> RP-2003-0044 - Decision with Reasons – February 27, 2004 – Paragraphs 235-236

1                                   **Updated Table 1 Provided in Exhibit I, Tab 1, Schedule 1 -**  
 2                                   **Hydro Ottawa Estimated Incremental Capital Cost Including Estimate Volatility**

Hydro Ottawa Estimate		Estimate Range	
Item	Estimated Cost	High	Low
Pole Upgrade	\$600,000	+50%	-50%
Additional Hydro Ottawa Work	\$100,000	Undefined <sup>1</sup> (Assumed to be +30%/-20% akin to Hydro One connection estimate below)	
Installation & Subsequent Removal of Existing Joint Use Customer Requested Facilities	\$137,000 <sup>2</sup>	+10%	-10%
Estimate Volatility Adjustments	N/A	\$343,700	(\$333,700)
Capital Contribution <sup>2</sup>	\$15,000	\$15,000	\$15,000
Total (Pre Tax)	\$852,000	\$1,195,700	\$518,300
<b>Total (Incl. Tax)</b>	<b>\$962,760</b>	<b>\$1,351,141</b>	<b>\$585,679</b>

3  
 4 d) As of November 30, 2022, the percentage of costs incurred for the permanent  
 5 connection of the Customer is approximately 40% of the estimate. Hydro One  
 6 highlights that the permanent connection of the Customer can now be complete given  
 7 that final ESA permits are secured by the Customer and all other customer owned  
 8 equipment is available. The expectation is that the Customer's final connection will be  
 9 complete by the end of the calendar year with final incremental capital costs forecast  
 10 to be no more than **\$3,200** in total<sup>3</sup>. This compares to the **\$962,760** estimate provided  
 11 in Table 1 for Hydro Ottawa's connection that could be as low as **\$585,679** or as high  
 12 as **\$1,351,141**.

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<sup>2</sup> For simplicity purposes, Hydro One has used the \$137,000 estimate provided for the installation of the facilities alone, as documented in the November 7, 2022 Supplemental Evidence, to reflect installation and removal costs. It's probable that removal costs could add additional incremental costs and this has not been reflected in the table.

<sup>3</sup> Reduced from the earlier estimate of approximately \$8,000.

1                                   **HYDRO OTTAWA LIMITED INTERROGATORY - 19**

2  
3                   **Reference:**

4                   Hydro One's supplemental evidence 20221107 - Hydro One Pole Line Upgrade  
5                   Email exchange from June 9, 2021, as provided in response to HONI-7, Attachment B

6  
7                   **Preamble:**

8                   On June 9, 2021 Hydro Ottawa informed Hydro One of the customer connection request  
9                   at 626 Principale St, Casselman and indicated Hydro Ottawa's ability to service on the  
10                  8kV system, noting a system expansion and upgrade of Hydro One poles would be  
11                  needed. Furthermore, Hydro Ottawa enquired as to who the contact at Hydro One should  
12                  be to discuss the request. Also on June 9, a Hydro One staff member stated they would  
13                  look into the request. Hydro One provided Hydro Ottawa with a high level cost estimate  
14                  for upgrading this pole line on July 11, 2022 at a cost of **\$600k which is +/- 50%**.

15  
16                  **Interrogatory:**

- 17                  a) Why did Hydro One not inform Hydro Ottawa when it was approached by Existing Joint  
18                  Use Tenant ("Existing Joint Use Tenant") customer in March, 2022 to upgrade the pole  
19                  line, when Hydro One was aware that Hydro Ottawa would require this pole line to  
20                  accommodate Hydro Ottawa's circuit, as indicated in the June 9, 2021 email?  
21  
22                  b) Why did Hydro One not include the height requirements in its pole line upgrade design  
23                  needed to allow Hydro Ottawa the ability to provide a Hydro Ottawa circuit, as indicated  
24                  in the June 9, 2021 email and reflected in Hydro One's high level cost estimate  
25                  provided to Hydro Ottawa in the July 11, 2022 email?  
26  
27                  c) When Hydro One was informed of the requirements of the Ministry of Transportation  
28                  (MTO) for increased circuits and height in August, 2022, why did Hydro One not  
29                  engage Hydro Ottawa to discuss the requirements and options, since Hydro One was  
30                  aware that Hydro Ottawa was interested in bringing in a second feeder?  
31  
32                  d) Please provide all responses to Hydro Ottawa's request to attach to Hydro One's poles  
33                  in June 2021.

34  
35                  **Response:**

- 36                  a) Hydro One does not agree with the preamble of this interrogatory. Hydro One was not  
37                  aware of what or how Hydro Ottawa was considering serving the customer until Hydro  
38                  Ottawa filed their submissions in this proceeding on September 2, 2022. Hydro Ottawa  
39                  sought a high-level cost-estimate for a joint use connection from Hydro One for this  
40                  connection on July 11, 2022, with limited information and a non-descript drawing.

1 Please refer to Exhibit I, Tab 2, Schedule 4 Attachment 1 for a copy of the Hydro  
2 Ottawa request. The Hydro Ottawa joint use email request does not comply with the  
3 procedures and forms of the existing Hydro Ottawa and Hydro One Joint Use  
4 Agreement (Existing HOL & HONI Joint Use Agreement), specifically Exhibit 1 –  
5 Request for Licenced Occupancy of Poles Form. Hydro One informed Hydro Ottawa  
6 of this which was documented by Hydro Ottawa in their July 11, 2022 request. These  
7 processes and procedures are in place to ensure that Hydro One has a line of sight to  
8 all joint use requests in an area given the multitude of joint use requests received each  
9 year<sup>1</sup>. Nonetheless, in the spirit of the principles and values articulated in Schedule A  
10 of the Existing HOL & HONI Joint Use Agreement, Hydro One responded to Hydro  
11 Ottawa's high-level request for a joint use cost estimate on the same day as the  
12 request was made, July 11, 2022. This is documented in Attachment 10 of the Hydro  
13 One SAA application filed on August 18, 2022.

14  
15 Importantly, after providing Hydro Ottawa an estimate for the joint use work, Hydro  
16 Ottawa did not agree to proceed with this joint use connection estimate. Specifically,  
17 section 4.2 of Exhibit 4 of the Existing HOL & HONI Agreement entitled Invoices and  
18 Cost Information reads as follows:

19  
20 The Party carrying out any work in relation to Joint Use for the other Party  
21 shall provide the other Party with an estimate of the project cost prior to  
22 commencing the work and **shall only be obligated to perform the work**  
23 **if agreed to by the other Party**. The Party that has carried out the work  
24 for the other Party shall issue an invoice to the other Party upon completion  
25 of the work and shall provide a written explanation to the other Party in the  
26 event that the amount payable pursuant to the invoice is in excess of % of  
27 the estimate (emphasis added).

28  
29 Given that Hydro Ottawa did not agree to the joint use cost estimate or agree to  
30 proceed with the joint use work, there was no further obligation on Hydro One to inform  
31 Hydro Ottawa with respect to the proposed joint-use connection.

32  
33 b) Please refer to part a) above and Exhibit I, Tab 2, Schedule 4.

34  
35 c) Please refer to part a)

36  
37 d) Any relevant written correspondence between the two utilities since the initial  
38 interaction of this potential connection in June 2021 has been documented throughout  
39 this proceeding to date. As discussed in part a) of this interrogatory response, Hydro  
40 Ottawa's informal request for a joint use connection estimate was not received until

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<sup>1</sup> This is further described in Exhibit I, Tab 2, Schedule 24.

1 July 11, 2022 and Hydro One responded on the same day. This is documented in  
2 Attachment 10 of the Hydro One pre-filed evidence. Hydro Ottawa has not agreed to  
3 the estimate and provided no response to the estimate offered.



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1                                   **HYDRO OTTAWA LIMITED INTERROGATORY - 20**  
2

3                   **Reference:**

4                   Hydro One's supplemental evidence 20221107 - Hydro One Pole Line Upgrade  
5

6                   **Preamble:**

7                   Hydro One indicated that, in order to service future adjacent loads, a 44kV line may be  
8                   required.  
9

10                  **Interrogatory:**

11                 a) Does Hydro One's plan to upgrade its pole line to accommodate a future 44kV circuit,  
12                 as part of the pole upgrade being driven by the telecom, take into account forecasted  
13                 load growth?  
14

15                 b) If so, is forecasted load growth being prioritized over the ability to support Hydro  
16                 Ottawa's requested circuit?  
17

18                 c) Is the MTO's concern and potential relocation of the pole line being driven by the pole  
19                 height, with the assumption of accommodating the existing Hydro One 8kV and  
20                 proposed Hydro Ottawa 8kV circuits, or does it also include space for a Hydro One  
21                 44kV circuit?  
22

23                 d) Did Hydro One request or have discussion with the MTO to use the pole line to  
24                 accommodate a 44kV line?  
25

26                  **Response:**

27                 a) Please refer to Exhibit I, Tab 1, Schedule 1 for information on the Hydro One proposal  
28                 to the Customer to extend the 44kV to the Subject Area. This proposal would have  
29                 had an incremental capital cost comparable to the Hydro Ottawa 8.32 kV connection  
30                 option and would have provided the Customer the cheapest monthly rate. The  
31                 customer did not want this solution and have requested and continue to support the  
32                 Hydro One 8.32kV solution. Given this, and that there is no other current need for 44  
33                 kV facilities, Hydro One is not planning to upgrade the entire pole line to accommodate  
34                 the 44kV circuit.  
35

36                 b) Please refer to Exhibit I, Tab 2, Schedule 19, part a). Hydro One is not prioritizing load  
37                 growth over Hydro Ottawa's request. Hydro Ottawa as part of its obligations under the  
38                 Existing HOL & HONI Joint Use Agreement has not yet formally submitted an  
39                 application to Hydro One for joint use nor accepted the cost estimate provided on July  
40                 11, 2022. Hydro Ottawa has submitted a high-level request to Hydro One, which is

- 1 missing all of the relevant information that is generally submitted in an application for  
2 Hydro One to review the request.  
3
- 4 c) The MTO's concern is when new or modified requests for encroachments for the use  
5 of MTO's roadway are received, that encroachment must comply with current MTO  
6 standards. The MTO has become increasingly restrictive to overhead lines being  
7 installed near any interchanges on divided highways. The existing pole line in its  
8 current location does not meet the new approach as required by the MTO, however  
9 since Hydro One and the Existing Joint Use Tenant are already installed in this  
10 location, increasing the ground clearance of the existing pole line was permitted.  
11
- 12 d) Yes, very preliminary discussions with the MTO about future expansion of the 44kV  
13 circuit were had should the need ever arise.

1                                   **HYDRO OTTAWA LIMITED INTERROGATORY - 21**

2  
3                   **Reference:**

4                   Hydro One's supplemental evidence 20221107 - Pole Upgrade Request by Existing Joint  
5                   Use Tenant, page 1, lines 19 to 31

6  
7                   **Preamble:**

8                   Hydro One states that

9  
10                   In August of 2022, the MTO informed Hydro One that to accommodate the  
11                   additional request from the Existing Joint Use Tenant, the existing poles  
12                   would need to be increased in size to maintain necessary height clearances  
13                   at the Principale Street and Highway 417 interchange. Hydro One has been  
14                   working with the Existing Joint Use Tenant and MTO to establish a design  
15                   and apportion cost responsibilities for the new poles. On September 27,  
16                   2022, an agreement in principle was reached by all parties on the design  
17                   and cost responsibilities. Discussions amongst the impacted parties and  
18                   coordination activities are ongoing, including, the sourcing of materials to  
19                   meet the Existing Joint Use Tenant's request and install their requested  
20                   equipment. As Hydro Ottawa is not a joint use tenant on this pole line, the  
21                   Existing Joint Use Tenant-initiated and MTO-driven work should not have  
22                   any impact on the operations of Hydro Ottawa, however, as a courtesy,  
23                   Hydro Ottawa will be notified of the implementation schedule of the Joint  
24                   Use Project when established.

25  
26                   Hydro One and Hydro Ottawa have a joint use agreement.

27  
28                   **Interrogatory:**

- 29                   a) What is the timeline required by the joint use tenant for the completion of Hydro One's  
30                   pole line upgrade?
- 31  
32                   b) Does Hydro One's Joint Use Agreement include provisions for the prioritization of pole  
33                   attachment requests when they are received from more than one party?
- 34  
35                   c) Does Hydro One prioritize existing tenants on poles over other joint use requests by  
36                   other parties with existing joint use agreements that are submitted regardless of  
37                   timing?
- 38  
39                   d) Does Hydro One prioritize telecom joint use requests over LDC requests for joint use  
40                   on the pole?

- 1 e) If there are no prioritization provisions, please confirm how Hydro One prioritizes  
2 requests from multiple third parties for pole attachments.  
3
- 4 f) When other joint use parties request use of Hydro One poles, can distributors rely on  
5 Hydro One to provide access to their poles?  
6
- 7 g) If a distributor requests access to a Hydro One pole in order to connect a customer  
8 and subsequently a telecommunication company, either a current tenant or not,  
9 requests access to the pole, is the distributor's request at risk?  
10
- 11 h) Please provide a current version of Hydro One's Joint Use Agreement with Hydro  
12 Ottawa.  
13
- 14 i) Please explain how the Existing Joint Use Tenant and MTO work should not have any  
15 impact on the operations of Hydro Ottawa?  
16
- 17 j) What is the typical timeframe for Hydro One to answer a joint use request on its poles  
18 to other distributors?  
19
- 20 k) How does Hydro One's statement in the preamble to this question align with the OEB's  
21 position on joint use poles?  
22
- 23 l) Please confirm that no work would be required on the poles discussed in Hydro One's  
24 supplemental evidence 20221107, if the Existing Joint Use Tenant's request had not  
25 been made.  
26
- 27 m) Please confirm that Hydro One has no other projects or project requests related to the  
28 poles Hydro Ottawa has requested joint use of in relation to the connection of 626  
29 Principale St, Casselman.  
30

31 **Response:**

- 32 a) The Existing Joint Use Tenant has requested the work be completed as soon as  
33 possible.  
34
- 35 b) Hydro One's Joint Use Agreements do not create a hierarchy or provide advantages  
36 to one company over another. Due to the number of Joint Use Agreements which  
37 Hydro One has over its service territory, each request received is treated on a first  
38 come first served basis, provided that the application is in line with the requirements  
39 of the applicable Joint Use Agreement as between the requester and Hydro One.

- 1 c) Please refer to part b)  
2  
3 d) Please refer to part b)  
4  
5 e) Please refer to part b). Hydro One manages each request one at a time, if multiple  
6 requests are submitted for the same poles than the second request would be reviewed  
7 after the first request.  
8  
9 f) Yes, there a multitude of scenarios throughout the province where distributors and  
10 other joint use tenants share pole space on Hydro One distribution poles  
11  
12 g) The specifics of what may or may not put a joint use connection request at risk are  
13 precisely that, connection-specific. As documented at page 1 of the Hydro One and  
14 Hydro Ottawa Joint Use Agreement, "...the conditions determining the desirability of  
15 Joint Use depend in each case upon the respective requirements of each of the Parties  
16 for safety, service, and economy, and each Party is to be the sole judge as to whether  
17 these requirements are best met by Joint Use in respect of its own poles".  
18  
19 h) Please refer to Attachment 1 of this response.  
20  
21 i) The planned Existing Joint Use Tenant work does not impact any Hydro Ottawa  
22 facilities within the area of the work or cause any planned outage to any Hydro Ottawa  
23 customers.  
24  
25 j) Specific to this proceeding, Hydro One provides that Hydro One responded to Hydro  
26 Ottawa's request for a high-level estimate to be a joint use tenant on these specific  
27 pole lines on the same day the request was received despite Hydro Ottawa not  
28 following the agreed to process or providing detailed information for the request.  
29 Please refer to Attachment 10 of Hydro One's pre-filed evidence as well as Exhibit I,  
30 Tab 2, Schedule 4.  
31  
32 k) Hydro One's approach to addressing joint use requests is consistent with the OEB's  
33 well established principles that where a party controls essential facilities, it is important  
34 that non-discriminatory access be granted to other parties. In order to support the only  
35 existing tenant affixed to Hydro One's poles, Hydro One focused its efforts to support  
36 the needs of its tenant which is the only application, estimate and approved works  
37 received to date for the time period material to this proceeding for the use of the poles  
38 along Principale Street.

39  
40 Hydro One has not rejected Hydro Ottawa's request for joint use access despite:

- 1       ▪ the cost difference in incremental capital costs to serve the Subject Area that are
- 2       approximately 300x more expensive for the Hydro Ottawa solution<sup>1</sup>,
- 3       ▪ Hydro Ottawa not following the process outlined in the Existing HOL & HONI Joint
- 4       Use Agreement as documented in Exhibit I, Tab 2, Schedule 19;
- 5       ▪ Hydro Ottawa not providing pertinent information for the further study of the Hydro
- 6       Ottawa requested upgrade as documented in Exhibit I, Tab 2, Schedule 4; and
- 7       ▪ Hydro Ottawa not agreeing to proceed with the work provided in the estimate on
- 8       July 11, 2022, as documented in Exhibit I, Tab 2, Schedule 19.

9

10       Hydro One submits that it accommodated Hydro Ottawa's request and exceeded its  
11       requirements in the Existing HOL & HONI Joint Use Agreement. Hydro One provided  
12       Hydro Ottawa non-discriminatory access to these poles consistent with the OEB's  
13       position on joint use pole access.

14

15       l) Not confirmed if the Hydro Ottawa connection is pursued. The current make ready  
16       work on the poles discussed in the Hydro One Supplemental Evidence is due to the  
17       request received by the Existing Joint Use Tenant. However, as documented on page  
18       1 of the Hydro One Supplemental Evidence, these are the same poles that Hydro  
19       Ottawa is relying on in this proceeding to become a new joint use tenant. Therefore, if  
20       the determination of the OEB is that Hydro Ottawa should serve the Subject Area, then  
21       the described pole work is needed regardless of the joint use tenant. Absent the joint  
22       use requests of either the Existing Joint Use Tenant and Hydro Ottawa, then there  
23       would be no work on these poles; any incremental capital costs would be avoided and  
24       the Subject Area would be served via Hydro One's cost-effective lies-along 8.32kV  
25       proposal.

26

27       m) Confirmed, save and except, as it relates to the third-party driven work already  
28       described in this proceeding from the Existing Joint Use Tenant.

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<sup>1</sup> Please refer to Exhibit I, Tab 1, Schedule 4 for differences in incremental cost of connection.

**AGREEMENT FOR  
LICENCED OCCUPANCY OF POWER UTILITY DISTRIBUTION POLES**



**THIS AGREEMENT FOR LICENSED OCCUPANCY OF POWER UTILITY DISTRIBUTION POLES**  
made in duplicate this 1<sup>st</sup> day of January, 2005 (the "Effective Date").

**BETWEEN:**

**HYDRO OTTAWA LTD**

**OF THE FIRST PART,**

**-AND-**

**HYDRO ONE NETWORKS INC.**

**OF THE SECOND PART.**

**WHEREAS** the Parties hereto desire to establish Joint Use of their respective poles when and where Joint Use is of mutual advantage, in accordance with the principles and values outlined in Schedule "A" attached hereto;

**AND WHEREAS** the conditions determining the desirability of Joint Use depend in each case upon the respective requirements of each of the Parties for safety, service, and economy, and each Party is to be the sole judge as to whether these requirements are best met by Joint Use in respect of its own poles.

**NOW THEREFORE** in consideration of the mutual covenants, agreements, terms and conditions herein and other good and valuable consideration, the receipt and sufficiency of which is hereby irrevocably acknowledged, the Parties agree as follows:

## **ARTICLE 1 - TERRITORY AND SCOPE OF AGREEMENT**

- 1.1 This Agreement shall cover all such poles and Attachments for the purpose of overhead power distribution of each Party now existing or hereafter erected as may be brought under this Agreement in accordance with the Joint Use procedures hereinafter provided which are the subject of this Agreement.

## **ARTICLE 2 - DEFINITIONS**

For the purposes of this Agreement, the following terms, when used herein, unless the context indicates otherwise, shall have the following meanings:

- 2.1 "Agreement" means this Agreement for Licensed Occupancy of Power Utility Distribution Poles between the Parties and shall include Schedules "A" and "B" attached hereto and any amendments to the body of this Agreement or to the Schedules.
- 2.2 "Anchorage" means all the physical components and their association, one with the other, used for anchoring the Joint Use Pole.
- 2.3 "Attach(ing)" means the placing of Attachments directly on or supported by the Joint Use Poles.
- 2.4 "Attachment" means any Electrical Equipment, but for greater certainty does not include Telecommunications Attachments.
- 2.5 "Contract Administration Guide" ("CAG") means the administrative and operating practices and processes outlined in Schedule "B" attached hereto.
- 2.6 "CPI" means the Consumer Price Index for August for Ontario in a given year as determined by Statistics Canada, for use commencing January 1 of the following year.
- 2.7 "Customer" shall mean a Person to which a Party distributes electricity.
- 2.8 "Electrical Equipment" shall have the meaning ascribed to it in the Ontario *Electrical Safety Code*, as amended.
- 2.9 "Emergency" means a situation in which there is an imminent or existing interruption of electrical service, the condition of the Joint Use Poles and/or Attachments on the Joint Use Poles pose an imminent danger or threat to the safety, property, security or welfare of an individual or the public or the environment, and/or a situation declared as such by a public safety government authority.
- 2.10 "Governing Body" means a government authority having jurisdiction over highways or other public places, including municipalities, acting under legislative authority to carry out duties in maintaining and improving public highways or other public places.
- 2.11 "Hazardous Condition" means a structural/mechanical or electrical condition that has the potential to cause harm or injury to persons or property and which requires specific work methods to be carried out for the condition to be removed.
- 2.12 "Joint Anchorage" means a common anchoring system to which guy wires of either Party are attached, each guy wire providing guying for one Party's conductors and related equipment including Attachments on a Joint Use Pole.
- 2.13 "Joint Use" means the use or intended use for support on a Joint Use Pole that is owned by either Party of the Attachments of both Parties.
- 2.14 "Joint Use Pole" means a pole which supports, or is intended to support, the Attachments of both Parties.

- 2.15 “Licensee” means the Party making or applying for permission to make, Joint Use of the Owner’s pole.
- 2.16 “Line Clearing” means the provision of adequate clearance from all vegetation for all Attachments carried on or supported by Joint Use Poles and includes items such as underbrush control, tree removals, cabling or guying of trees, pruning or trimming, treatment of cuts and disposal of debris.
- 2.17 “Make Ready Work” means (i) work that is necessary and required solely for the purpose of accommodating the Licensee’s Attachments that the Licensee wishes to attach to the Owner’s poles and includes, but is not limited to, initial Line Clearing, any changes or additions to or Rearrangement of the Owner’s poles or the Owner’s Attachments and (ii) work on the Owner’s poles or Attachments which the Owner decides to carry out in advance of the Owner’s schedule to carry out such work as a result of the Licensee’s desire to place its Attachments on the Owner’s poles and “Make Ready” shall have the corresponding meaning. Without restricting the generality of the foregoing, Make Ready Work does not include the costs of repairing any pole such that it meets the Standard prior to permitting the Licensee to place its Attachments on the said Joint Use Pole.
- 2.18 “Normal Pole” has the meaning ascribed to it in Schedule “B”, Exhibit 2, Clause 1.1.
- 2.19 “Owner” means the Party having sole ownership of a pole in respect of which application for Joint Use is made by the other Party.
- 2.20 “Party” and “Parties” means and includes, respectively, only a Party or Parties to this Agreement.
- 2.21 “Permit” means the approved Request for Licensed Occupancy of Poles form as evidenced by the signature of a duly authorized employee or designate of the Owner.
- 2.22 “Permit Fee” means the annual fee paid by the Licensee for the privileges granted by the Owner in accordance with the terms and conditions of this Agreement.
- 2.23 “Person” means a natural person, corporation, firm, partnership, limited liability company, joint venture or other form of association or entity.
- 2.24 “Pole Line Location” means a line of poles generally paralleling a roadway or laneway, and the location of said line shall comprise the space between the centre line of the road and the limit of the road allowance as it may exist now or at any time in the future.
- 2.25 “Primary Conductor” means a conductor operating in excess of 750 volts.
- 2.26 “Qualified Contractor” means a worker who is competent and has the requisite certification, licensing, training, education, experience and familiarity with the safety rules, procedures and hazards associated with high voltage electrical systems.
- 2.27 “Rearrange(ing)” means the removal of Attachments from one position on a Joint Use Pole and the placing of the same Attachments in another position on the same Joint Use Pole.
- 2.28 “Request for Licensed Occupancy of Poles” means the written application in the form attached hereto as Exhibit 1 to Schedule “B”, the format of which may be revised from time to time and in the sole and absolute discretion of the Owner, to be completed and submitted to the Owner by the Licensee in order to obtain permission to place its Attachments onto the Owner’s poles.
- 2.29 “Residual Value” means the monetary value ascribed to a pole at the time it is removed, as determined by Table 1, of Exhibit 4 of Schedule “B” attached to this Agreement.
- 2.30 “Secondary Conductor” means a conductor operating at 750 volts or less.

- 2.31 "Standard" means the Canadian Standards Association (CSA) Standard CAN/CSA - C22.3 No. 1, "Overhead Systems".
- 2.32 "Telecommunications Attachments" means any material, apparatus, equipment or facility used for the purpose of providing Telecommunications Service.
- 2.33 "Telecommunications Service" has the meaning ascribed to it in the *Telecommunications Act* (Canada).
- 2.34 "Third Party" means a Person who is not a party to this Agreement.
- 2.35 "Transfer(ring)" means the removal of Attachments from one Joint Use Pole and the placing of the same Attachments on another Joint Use Pole.

### **ARTICLE 3 - ESTABLISHING JOINT USE OF POLES**

- 3.1 Whenever the Licensee desires to place or alter the number, size or nature of its Attachments on poles, it shall make application to the Owner in accordance with Schedule "B" attached hereto and the Owner shall reply to such application in the manner specified in Schedule "B" attached hereto within 30 days after receipt of said application.
- 3.2 The Licensee may, due to Emergency situations and without prior application to the Owner, place or Rearrange its Attachments on the poles of the Owner. When said Attachment(s) is on a non-Joint Use Pole, application for Joint Use shall be made within 30 days after the placing or Rearranging of said Attachments, subject to the terms of this Agreement.

### **ARTICLE 4 – STANDARDS**

- 4.1 The Licensee represents and warrants that on the Effective Date the Attachments which form the subject of Existing Permits (as defined in clause 16.2 below) comply with the Standard and all other applicable laws, statutes, regulations, by-laws, standards, and codes, including, without limitation, Ontario Regulation 22/04 passed under the *Electricity Act*, 1998, as amended and that the Attachments which form the subject of Permits that are not Existing Permits shall, at the time the Joint Use is established for said Attachments, comply with the then current Standard or the Owner's then current Distribution Standards, whichever is more stringent, as well as all other applicable laws, statutes, regulations, by-laws, standards and codes, including, without limitation, Ontario Regulation 22/04 passed under the *Electricity Act*, 1998, as amended. Subject to the foregoing, the Licensee represents and warrants and covenants that at the Licensee's sole risk and expense, during the Term of this Agreement, the Attachments which form the subject of Existing Permits (as defined in clause 16.2 below) shall comply with the Standard and all other applicable laws, statutes, regulations, by-laws, standards and codes, including, without limitation, Ontario Regulation 22/04 passed under the *Electricity Act*, 1998, as they may be amended from time to time and the Attachments which form the subject of Permits that are not Existing Permits shall comply with the then current Standard or the Owner's then current Distribution Standards, whichever is more stringent, as well as all other applicable laws, statutes, regulations, by-laws, standards and codes, including, without limitation, Ontario Regulation 22/04 passed under the *Electricity Act*, 1998, as they may be amended from time to time.

### **ARTICLE 5- RIGHT OF WAY FOR LICENSEE'S ATTACHMENTS**

- 5.1 The Licensee shall be responsible for obtaining any and all easements, rights of way, licenses, privileges, authorizations, permissions, or other land rights from Third Parties, including but not limited to, authorization or permission to locate on municipal or provincial road allowances or any other applicable authorization or permission required from any municipal, provincial or federal government or any agency, body or board thereof having jurisdiction, as may be necessary for the placement, operation, maintenance, Line Clearing and removal of its Attachments upon and along the Joint Use Poles provided for in a Permit (individually "Right of Way", collectively "Rights of Way") and if the Licensee fails to comply with the provisions of this clause, subject to clause 18.2 below, it shall indemnify the Owner from and against any and all claims or demands or other liability resulting from such failure.

- 5.2 The Owner gives no warranty of permission from property owners, municipalities or others for the use of the Owner's poles by the Licensee, and if objection is made thereto and the Licensee is unable to remedy the matter satisfactorily within thirty (30) days, the Owner may then, by notice in writing at any time, require the Licensee to remove its Attachments from the Joint Use Poles involved, and the Licensee shall, at its own expense, remove its Attachments from such Joint Use Poles within ninety days (90) days after receipt of said notice unless the Licensee is legally required to remove its Attachments by a shorter time period in which case the Licensee shall remove its Attachments from such Joint Use Poles during such shorter period of time.
- 5.3 Nothing in this Article shall be deemed to confer on the Licensee any authority to maintain its Attachments on the Owner's poles for the said period of ninety (90) days, or any portion thereof, or otherwise to infringe upon any legal rights of such property owners, municipalities or other Third Parties.
- 5.4 If both Parties agree, one Party may obtain any required Right of Way for both Parties. Upon such agreement, each Party shall share equally the cost of obtaining the Right of Way, including reasonable compensation paid to the property owner.

#### **ARTICLE 6 - MAINTENANCE OF JOINT USE POLES AND ATTACHMENTS**

- 6.1 Each Party shall maintain its Joint Use Poles and its Attachments on Joint Use Poles in a safe and serviceable condition, in accordance with the placement and safety practices and specifications set out in the CAG, all applicable laws, statutes, regulations, by-laws, guidelines and codes of every governmental authority which may be applicable including, without limitation, the Work Protection Code and good work practices.
- 6.2 Each Party will be responsible for installing and maintaining its own separate anchoring system. Where mutually agreeable, Joint Anchorages may be considered but such installations should not be construed as the normal practice.
- 6.3 Subject to clause 6.5 below, the Owner shall replace any of its Joint Use Poles that it deems defective and the costs of any such replacements shall not be considered as Make Ready costs for new Joint Use. The Licensee shall replace its Attachments on Joint Use Poles as soon as they deteriorate or become defective or unsafe.
- 6.4 In the event that the Owner determines that there is a Hazardous Condition posed by its Joint Use Poles or its Attachments thereon, which includes, but is not limited to, deteriorated or defective Joint Use Poles, the Owner shall (i) notify the Licensee in writing of the potential safety risk and the nature of the Hazardous Condition as soon as reasonably possible, (ii) mark or band the Joint Use Poles where the Hazardous Condition exists in accordance with the CAG and (iii) correct the Hazardous Condition as soon as possible after discovering the Hazardous Condition, but in any event not later than 30 days after discovering the Hazardous Condition. Until such time that the Owner has remedied the Hazardous Condition, the Owner shall offer protection to the Licensee, its employees and contractors and its equipment at no cost.
- 6.5 Both Parties acknowledge and agree that if the Licensee proceeds to work on its Attachments located on the applicable Joint Use Pole(s) where a Hazardous Condition exists after receiving such notification by the Owner pursuant to clause 6.4 and prior to the Owner having rectified, replaced or provided adequate protection from the said Hazardous Condition, the Licensee shall do so at its own risk and shall assume all risk of damage, loss or injury to its Attachments, to the Owner's Attachments and to Attachments of Third Parties and to its employees, servants, agents, representatives, contractors and other persons acting on its behalf in performing the work and to any other Person.

- 6.6 In the event that the Licensee determines that there is a Hazardous Condition posed by any Joint Use Poles or by its Attachments on the Joint Use Poles, the Licensee shall (i) notify the Owner in writing of the potential safety risk and the nature of the Hazardous Condition as soon as reasonably possible, (ii) mark or band the Joint Use Poles where the Hazardous Condition exists in accordance with Section 9.0 of the CAG and (iii) if the Hazardous Condition relates to the Licensee's Attachments, correct the Hazardous Condition as soon as possible after discovering the Hazardous Condition, but in any event not later than 30 days after discovering the Hazardous Condition. If the Hazardous Condition relating to the Licensee's Attachments is not so corrected by the Licensee, the Owner may remove the Licensee's Attachments at the Licensee's sole expense and risk of damage to the Licensee's Attachments and the Owner shall be reimbursed by the Licensee for the said costs of removal within thirty (30) days of issuance of an invoice by the Owner. Until such time that the Licensee has remedied the Hazardous Condition relating to the Licensee's Attachments, the Licensee shall offer protection to the Owner, its employees and contractors and its equipment at no cost.
- 6.7 In the event that either the Owner or the Licensee suspects a problem with any Joint Use Poles or any Attachments thereon, such Party shall notify the other of said problem. If the Owner is of the opinion that said problem does not constitute a potential or actual Hazardous Condition, it shall so notify the Licensee, following which any remedial work associated with the said suspected problem that the Licensee wishes the Owner to provide to the Licensee for purposes of the Licensee working on its Attachments on any said Joint Use Pole shall be at the sole cost and risk of the Licensee except as otherwise specified in any applicable law.

#### **ARTICLE 7 - PLANNED REMOVAL OF ATTACHMENTS – TERMINATION OF THE JOINT USE OF POLES**

- 7.1 Nothing in this Agreement shall be considered as a restriction upon the right of either Party to remove at any time any of its Attachments, except Joint Anchorages, from Joint Use Poles. Such Joint Anchorages shall automatically become the property of the Owner of the Joint Use Poles when said Attachments have been removed.
- 7.2 If the Owner desires, or is required, to discontinue the use of a Joint Use Pole, the Owner shall give the Licensee notice in writing of the cancellation of the Joint Use. Provided that the Owner would not be in breach of a provision in a prior agreement with a Third Party, the Owner shall give the Licensee an option to either purchase the said Joint Use Pole in accordance with the Residual Value Table 1 of Exhibit 4 of Schedule "B" or remove the Licensee's Attachments within 90 days after receipt of notification of the removal or abandonment unless the Parties agree to such other time. In the case where the Licensee decides to purchase the said Joint Use Pole, existing rights of Third Parties will continue to be respected per Article 11.
- 7.3 The Licensee may at any time abandon the use of a Joint Use Pole by removing therefrom all its Attachments, except Joint Anchorages or common neutrals, and by giving due notice thereof in writing to the Owner. The Licensee shall in such case pay to the Owner the full Permit Fee for each Attachment on said Joint Use Pole for the then current year ending on the last day of December of the said year.
- 7.4 When either Party has discontinued or abandoned the use of a Joint Use Pole(s), the Permit for occupation of the said Joint Use Pole(s) shall be cancelled, in accordance with the procedure set out in Section 4.0 of Schedule "B".

#### **ARTICLE 8 – LINE CLEARING**

- 8.1 Subject to the provisions of this Article 8 and Exhibit 3 of Schedule "B" and provided the Licensee complies with its obligations in clause 5.1 above, the Owner is responsible for carrying out Line Clearing (whether Make Ready Line Clearing or maintenance Line Clearing) on its Joint Use Poles.

- 8.2 In performing Line Clearing, the Owner shall:
- a) provide vegetation clearances for both Parties where new Joint Use Pole lines are constructed; and
  - b) provide that clearances are maintained around the Attachments of both Parties in accordance with the Standard.
- 8.3 Where the Licensee wishes to establish new Joint Use and the Owner is agreeable to such new Joint Use, the Owner shall determine if any Make Ready Line Clearing is required pursuant to clause 1.1 of Exhibit 3 to Schedule "B" and if so, the Owner shall notify the Licensee of the required Make Ready Line Clearing and the costs thereof. The Licensee shall pay for the costs of such required Make Ready Line Clearing before the Owner is obligated to provide the Make Ready Line Clearing.
- 8.4 Emergency Line Clearing required due to storm damage or unforeseen trees falling onto either Party's Attachments shall be the responsibility of each Party and shall be at that Party's sole risk and expense.

**ARTICLE 9 - ANNUAL PERMIT FEES AND RATES**

- 9.1 The Licensee shall, during the Term of this Agreement, pay to the Owner, the applicable Permit Fee per Licensee Attachment on each Joint Use Pole in accordance with the terms and conditions herein.
- 9.2 During the first quarter of each year, an invoice shall be prepared by the Owner to the Licensee indicating the amounts payable for the calendar year immediately preceding, in accordance with Schedule "B", Clause 3.1.
- 9.3 Any Attachment that has been placed on or removed from any Joint Use Pole during the course of the year shall be charged the full Permit Fee for the full year.
- 9.4 In October of each year, the Owner will calculate the amounts for the forthcoming calendar year using the formula set forth in Clause 9.5 below.
- 9.5 Subject to clause 9.6 below, the following formula shall be used by the Owner in each year of the Term of this Agreement to determine the Permit Fee payable by the Licensee for the following calendar year:

$$R_t = R_{t-1} * 1 + \left[ \frac{CPI_{t-1} - CPI_{t-2}}{CPI_{t-2}} \right]$$

Where:

- $R_t$  is the Permit Fee for the next year
- $R_{t-1}$  is the Permit Fee for the current year
- $CPI_{t-1}$  is the Consumer Price Index for Ontario for August of the current year
- $CPI_{t-2}$  is the Consumer Price Index for Ontario for August of the previous year

Notes:

- 1. CPI is based on "all items for Ontario".

- 9.6 The formula specified in clause 9.5 shall apply for purposes of determining the Permit Fees payable after 2005 only. The Parties agree that the applicable Permit Fee payable by the Licensee for the year 2005 is \$28.61 unless the OEB mandates a different rate or rate methodology. Such mandated rate or rate methodology shall automatically apply as soon as it has been implemented by the OEB without any need for an amendment to this Agreement.

- 9.7 If the Owner, acting reasonably, determines that the Licensee has not had a previous satisfactory business relationship with the Owner, the Owner may, in its sole and absolute discretion, require that the Licensee deposit with the Owner, security in an amount and in a form satisfactory to the Owner, securing the due performance of the obligations of the Licensee as provided for in this Agreement. The security shall be maintained in good standing by the Licensee for a period of three years from the date that it is first placed with the Owner; provided, however, that it shall be maintained for a longer period if the Owner, acting reasonably, determines that the business relationship with the Licensee requires the continuation of the security.

#### **ARTICLE 10 - INVOICES AND PAYMENT FOR WORK**

- 10.1 Upon completion of work performed by one Party, the expense of which is to be borne wholly or in part by the other Party as specified in this Agreement, the Party performing such work shall, after its completion, render to the other Party an itemized invoice for labour, materials and other expenses in accordance with Exhibit 4 of Schedule "B". Payment of such invoices shall be made by the Party owing same within thirty (30) days after the invoice has been rendered.
- 10.2 Whenever under this Agreement it is considered advisable by both Parties, in the interest of economy, to use unit charges as representing the cost of certain operations, nothing in the foregoing terms of this Article shall preclude the practice of so doing.
- 10.3 All Third Party requests for moving, removing, or altering a Joint Use Pole or for the Transferring or Rearranging of Attachments thereon are to be governed by Exhibit 2, Schedule "B". Notwithstanding the provisions of Section 2.0 of Exhibit 2, Schedule "B" to this Agreement, whenever a Third Party requires the moving, removing or altering of a Joint Use Pole, or the Transferring or Rearranging of Attachments thereon, and the said Third Party is to bear all or any part of the expenses incurred as a result thereof, each of the Parties shall conclude its own arrangements with the Third Party in regard to payment for the alterations involving its Joint Use Pole or Attachments. Reconstruction or Rearrangements shall not proceed without concurrence of both Parties.
- 10.4 Except where expressly provided in this Agreement, both Parties acknowledge and agree that the costs involved in erecting, placing, maintaining and otherwise dealing with the Joint Use Poles and Attachments in specified circumstances shall be borne by each Party or divided between the Parties respectively as outlined in Exhibit 2 of Schedule "B" attached hereto.
- 10.5 In the event that the Licensee fails to pay any amount payable hereunder when due, such unpaid amount shall bear interest from the payment due date until the date the Owner receives such payment at a rate of 1.5% per month compounded monthly (19.56 per cent per year).

#### **ARTICLE 11 - RIGHTS OF THIRD PARTIES**

- 11.1 If the Owner has granted rights or privileges to a Third Party to use poles not covered by this Agreement, then nothing herein contained shall be construed as affecting such rights or privileges, if and when this Agreement is made applicable to such poles. The Owner shall have the right to continue and extend such existing rights or privileges, it being expressly understood, however, that for the purpose of this Agreement, the attachments of any such Third Party shall be treated as Attachments of the Owner.
- 11.2 Nothing in this Agreement shall prevent or limit the Owner of any Joint Use Pole from permitting the affixing of Third Party attachments to such Joint Use Poles.
- 11.3 Where the Licensee acquires ownership of Joint Use Poles, it shall also assume those existing obligations of the Owner under this Agreement vis-à-vis Third Parties.



## ARTICLE 12 - ASSIGNMENT OF RIGHTS

- 12.1 Except as otherwise provided in this Agreement, the Licensee shall not assign this Agreement, or any of its rights, obligations or interests hereunder to any Person without the prior written consent of the Owner. Notwithstanding the foregoing, nothing herein contained shall prevent or limit the right of either Party to make a general mortgage or any sale of any or all of its property, rights, privileges and franchises or to enter into any merger or consolidation, and, in the case of the foreclosure of such mortgage or sale under power of sale contained therein, or in the case of such lease, transfer, assignment, merger or consolidation, the Party shall cause its rights and obligations hereunder to pass to and be acquired and assumed by the mortgagee on foreclosure or the purchaser at such sale, or the transferee, lessee, assignee or the merged or consolidated company, as the case may be. Subject to the foregoing, this Agreement shall extend to, be binding upon and to the benefit of the Parties hereto and their respective successors and permitted assigns.

## ARTICLE 13 - WAIVER OF TERMS AND PROVISIONS

- 13.1 The failure of either Party hereto to enforce at any time any of the provisions of this Agreement or to exercise any right, power or option which is herein provided shall in no way be construed to be a waiver of such provision or any other provision nor in any way affect the validity of this Agreement or any part hereof or the right of either Party to enforce thereafter each and every provision and to exercise any right or option. The waiver of any breach of this Agreement shall not be held to be a waiver of any other or subsequent breach. Nothing shall be construed as or have the effect of a waiver except an instrument in writing signed by a duly authorized officer of the Party which expressly waives a right, power or option under this Agreement.

## ARTICLE 14 – CONTRACTORS

- 14.1 Only Qualified Contractors may be used by the Parties to do any work in connection with their respective Attachments on the Joint Use Poles. Each Party is responsible for retaining its own Qualified Contractors and for ensuring compliance by the Qualified Contractors with the terms and conditions set out in this Agreement, including the CAG.
- 14.2 Each Party shall ensure that its employees, agents, representatives, contractors, Qualified Contractors and subcontractors in the performance of the said Party's obligations and the exercise of the said Party's rights under this Agreement:
- a) comply with the Standard and all applicable laws, statutes, regulations, by-laws, guidelines and codes of every governmental authority which may be applicable and as well as the requirements of the Electrical Safety Authority;
  - b) comply with the placement, safety practices and specifications set out in the CAG;
  - c) are competent and qualified to deal with electrical hazards in accordance with the requirements of the *Occupational Health & Safety Act* (Ontario) as amended and all applicable regulations thereunder including, without limitation, Construction Projects – O. Reg. 213/91 or Part 11 of the Canada Labour Code, R.S.C. 1985, c. L.2, as amended and all applicable regulations thereunder, whichever is more stringent.
- 14.3 Neither Party shall direct or supervise the employees, agents, representatives, contractors, Qualified Contractors or subcontractors of the other Party. Notice of violation or non-compliance given to a contractor, subcontractor or Qualified Contractor shall also be provided at the same time or as soon as possible thereafter to an authorized representative of the Party responsible for the contractor, subcontractor or Qualified Contractor, as the case may be.
- 14.4 The Owner may request the Licensee to provide, and within 30 days after receipt of such request, the Licensee shall provide, to the Owner, documentation in respect of processes and procedures that the Licensee and its Qualified Contractors, contractors and subcontractors have in place to ensure that work on the Joint Use Poles is completed in a competent and safe manner.

- 14.5 The Party engaging a contractor or Qualified Contractor is entirely responsible for ensuring, and if necessary, for providing to the contractor or Qualified Contractor, as the case may be, electrical hazards awareness training necessary to demonstrate the appropriate level of skill and competence to work in proximity to an electrical environment.

#### **ARTICLE 15 - SERVICE OF NOTICES**

- 15.1 Any notice or other writing required or permitted to be given under this Agreement or for the purpose of it shall be in writing and shall be deemed to have been properly given on the date of actual delivery if delivered by hand, five business days after dispatch by registered or certified mail, one day after dispatch by facsimile transmission, addressed to the Party to whom it was sent at the address, or facsimile number, of such Party set forth below or at such other address or facsimile number as the Party shall subsequently designate to the other Party by notice given in accordance with this paragraph.

To: Hydro Ottawa LTD  
P.O. Box 8700, 3025 Albion Road North  
Ottawa, ON, K1G 3S4

Attn: Mr. Casey Malone  
Fax:

To: Hydro One Networks Inc.  
185 Clegg Road,  
Markham Ontario. L6G 1B7

Attn: Joint Use Manager  
Fax: (905) 946-6215

#### **ARTICLE 16 – TERM**

- 16.1 Subject to the provisions of Article 20 hereof and the termination rights in this clause 16.1, this Agreement shall be of full force and effect for an initial period of five (5) years from January 1, 2005 (the “Initial Term”) and shall thereafter be automatically renewed for successive periods of one (1) year each (the Initial Term and renewal periods collectively referred to as the “Term”); provided, however that either Party may terminate this Agreement effective at any time after the expiration of the Initial Term by providing the other Party with six (6) months’ prior written notice.
- 16.2 The Parties acknowledge and agree that any permits or authorizations that were previously in force prior to the Effective Date and which authorize Joint Use, whether in the form of a Permit or otherwise, including without limitation, verbal authorizations or permissions (collectively, “Existing Permits”), shall, except for purposes of clause 4.1, be deemed to be Permits under the terms and conditions of this Agreement.

#### **ARTICLE 17 - RESOLUTION PROCESS**

- 17.1 Any controversy, dispute, difference, question or claim arising between the Parties in connection with the interpretation, performance, construction or implementation of this Agreement that cannot be resolved by a director or manager from each of the said Parties (collectively “Dispute”) shall be settled in accordance with this clause. The aggrieved Party shall send the other Party written notice identifying the Dispute, the amount involved, if any, and the remedy sought, and invoking the procedures of this Clause. The Presidents of the Parties shall confer in an effort to resolve the Dispute. If the Presidents are unable to resolve the Dispute within 5 business days after receipt of the written notice of the Dispute, then the Parties may submit the Dispute to mediation. If the Parties submit the Dispute to mediation and are unable to resolve the said Dispute through mediation, the Parties may pursue any other remedies available to them at law.

## ARTICLE 18 - LIABILITY AND INDEMNIFICATION AND INSURANCE

### A. Liability and Indemnification

18.1 The Licensee hereby assumes all risk of damage to or loss of its Attachments howsoever caused, and does for itself and its successors and assigns hereby release and forever discharge the Owner of the Joint Use Poles on which the Licensee's Attachments are placed, its successors and assigns, its employees and agents from all claims and demands with respect thereto, except to the extent that such loss and damage are caused by the Owner's negligence. The Licensee hereby agrees to fully release, indemnify and save harmless the Owner, its successors and assigns, its employees and agents, of, from and against all damage, loss or injury to persons or property which may be suffered or which may hereafter be sustained or incurred by reason of, or in any way relating to, arising from, or based upon the exercise by the Licensee of the rights and other permissions herein granted and/or the performance of or purported performance of or non-performance of the Licensee of any of its obligations or covenants in this Agreement, and all manner of claims, charges, expenses, liabilities, obligations and demands in connection therewith, including, but not limited to, claims from the Licensee or from Third Parties, arising out of power outages or fluctuations that would not have occurred but for the presence of the Licensee's Attachments on the Joint Use Poles, except to the extent that any of the foregoing are caused by the Owner's negligence.

18.2 Notwithstanding anything else in this Agreement,

- (a) the Owner shall not be liable to the Licensee for any claims or demands that may be made against the Licensee by a Third Party insofar as the said claims or demands are for losses and damages that the Licensee, because of section 2.2.2 of Ontario's *Distribution System Code*, is not liable to pay to the said Third Party; and
- (b) where no claim is made against the Licensee by a Third Party but the Licensee suffers damages to its assets or business under circumstances in which the Owner would, because of clause 18.1 of this Agreement, be liable to the Licensee, the Owner shall not be liable to the Licensee for any of the categories of losses and damages that are enumerated in section 2.2.2 of Ontario's *Distribution System Code*.

18.3 The Parties acknowledge and agree that this Article 18 (A) shall survive termination or expiry of this Agreement.

### B. Insurance

18.4 The Licensee shall, during the Term of this Agreement, procure and maintain in full force and effect with financially responsible insurance carriers, insurance policies in which the Owner is named as an additional insured in the amount of Five Million Dollars (\$5,000,000.00) against liability due to damage to the Owner's property or property of any other person or persons and against liability due to injury to or death of any person or persons in any one instance. Such policies of insurance shall:

- a) contain a severability of interest clause and cross liability clause between the Licensee and the Owner;
- b) be non-contributing with, and shall apply only as primary and not excess to any other insurance available to the Owner;
- c) provide that it shall not be cancelled or amended so as to reduce or restrict coverage except upon thirty (30) days' prior notice (by registered mail) to the Owner.

18.5 The Licensee shall, upon the Owner's request, provide the Owner with a certificate of insurance completed by a duly authorized representative of the Licensee's insurer certifying that coverages required pursuant to clause 18.4 above are in effect.

18.6 The Licensee agrees that the insurance described in clause 18.4 herein does not in any way limit the Licensee's liability pursuant to the indemnity provisions of this Agreement.

## **ARTICLE 19 - FORCE MAJEURE**

- 19.1 Except for the payment of any monies required hereunder, neither Party shall be deemed to be in default of this Agreement where the failure to perform or the delay in performing any obligation is due wholly or in part to a cause beyond its reasonable control, including but not limited to an act of God, act of any federal, provincial, municipal or government authority, civil commotion, strikes, lockouts and other labour disputes, fires, flood, sabotage, earthquake, storm, epidemic, and an inability due to causes beyond the control of the Party. The Party subject to such an event of force majeure shall promptly notify the other Party of its inability to perform or of any delay in performing due to an event of force majeure and shall provide an estimate as soon as practicable when the obligation will be performed. The time for performing the obligation shall be extended for a period equal to the time during which the Party was subject to the event of force majeure. Both Parties shall explore all reasonable avenues available to avoid or resolve events of force majeure in the shortest possible time, but this requirement shall not oblige the Party suffering a strike, lockout or labour dispute to compromise its position in such strike, lockout or labour dispute.

## **ARTICLE 20 - SUSPENSION OR TERMINATION FOR DEFAULT**

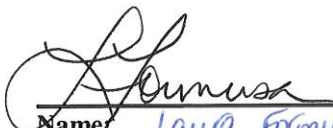
- 20.1 The permission granted by any Permit may be terminated by the Owner: (i) if the Joint Use Pole(s) designated by such Permit is abandoned by the Owner; or (ii) if the Owner desires or must discontinue the use of the Joint Use Pole(s), and in either case the Licensee does not wish to purchase the said Joint Use Pole in accordance with clause 7.2 above and in either case of termination, the Owner shall provide the Licensee with at least ninety (90) days prior written notice thereof. If the Joint Use Pole(s) designated by such Permit(s) is sold, the Owner may not transfer any Joint Use Pole unless as a condition of transfer the purchaser agrees to continue to allow the Licensee's Attachment(s) thereon for the remainder of the Term.
- 20.2 If the Licensee defaults at any time in the payment of the Permit Fee or fails to or neglects at any time to fully perform, observe and comply with all the terms, conditions and covenants herein, then the Owner shall as soon as practicable after becoming aware of the default, notify the Licensee in writing of such default and the Licensee shall correct such default to the Owner's satisfaction within thirty (30) days of the issuance of such notice or within a longer time period if agreeable to the Owner, failing which the Owner may forthwith terminate this Agreement and the privileges herein granted in respect of the Permits affected by the default.
- 20.3 The Owner shall be entitled, at its option, to terminate this Agreement immediately upon written notice to the Licensee upon the Licensee becoming bankrupt or insolvent or upon the Licensee ceasing to carry on business.
- 20.4 The termination of a Permit approved pursuant to this Agreement shall not be deemed to be termination of this Agreement unless such Permit is the last remaining or only Permit approved pursuant to this Agreement in which case the termination of the Permit shall be deemed to be termination of this Agreement.
- 20.5 Upon the termination of this Agreement or of a Permit approved pursuant to this Agreement, the Licensee shall at its sole expense and at the request of the Owner, remove from the Joint Use Poles its Attachment(s) covered by this Agreement or by the terminated Permit respectively within ninety (90) days after receipt of notice thereof or within a shorter period of time in case of an Emergency as may be determined by the Owner, failing which the Owner may, at the Licensee's risk of damage to the Licensee's Attachment(s) and at the expense of the Licensee, remove such Attachment(s). Upon the removal of such Attachment(s) by the Owner, the Owner shall have the right to retain the Attachment(s) so removed until the Licensee pays the cost of removal thereof and if the Licensee fails to pay such costs within thirty (30) days of invoicing then the Owner shall have the further right to sell the Attachment(s) so removed and apply the amount so received against the costs of removing the Attachment(s).

**ARTICLE 21 - MISCELLANEOUS**


- 21.1 This Agreement, together with the Schedules attached hereto, constitutes the entire agreement between the Parties with respect to the matter herein and supersedes all prior oral or written representations and agreements concerning the subject matter of this Agreement.
- 21.2 This Agreement shall be construed and enforced in accordance with, and the rights of the Parties shall be governed by, the laws of the Province of Ontario and the federal laws of Canada applicable therein, and the courts of Ontario shall have exclusive jurisdiction to determine all disputes arising out of this Agreement.
- 21.3 Article headings are not to be considered part of this Agreement and are included solely for convenience of reference only. They are not intended to be a full or accurate description of the content thereof.
- 21.4 Schedules "A" and "B" attached hereto are to be read with and form a part of this Agreement.
- 21.5 Nothing in this Agreement creates the relationship of principal and agent, employer and employee, partnership or joint venture between the Parties. The Parties agree that they are and will at all times remain independent and are not and shall not represent themselves to be the agent, employee, partner or joint venturer of the other. No representations will be made or acts taken by either Party which could establish any apparent relationship of agency, employment, joint venture or partnership and no Party shall be bound in any manner whatsoever by any agreements, warranties or representations made by the other Party to any other person nor with respect to any other action of the other Party.
- 21.6 If any provision of this Agreement is declared invalid or unenforceable by any competent authority such provision shall be deemed severed and shall not affect the validity or enforceability of the remaining provisions of this Agreement, unless such invalidity or unenforceability renders the operation of this Agreement impossible.
- 21.7 This Agreement may be executed in counterparts and the counterparts together shall constitute an original.
- 21.8 No amendment, modification or supplement to this Agreement shall be valid or binding unless set out in writing and executed by the Parties with the same degree of formality as the execution of this Agreement.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed, as of the date first written above, by their respective representatives duly authorized in that behalf.

**HYDRO ONE NETWORKS INC.**

  
\_\_\_\_\_  
Name: *Laura Formosa*  
Title: *Secretary*  
I have the authority to bind the corporation.

**HYDRO OTTAWA LTD**

  
\_\_\_\_\_  
Name: *ND FRASER*  
Title: *VP, Operations*  
I have the authority to bind the corporation.

## **SCHEDULE "A"**

### **PRINCIPLES AND VALUES**

This Agreement is based on the mutual desire by both Parties to work together to their respective benefit, and to ensure that Joint Use is planned and implemented where appropriate because it is the right thing to do for each Party's Customers that it serves, its employees and stakeholders.

This Agreement has been put in place to encourage communication between both Parties and to formalize their respective obligations related to Joint Use.

Recognizing that all situations cannot be covered in detail, the following set of Principles and Values has been created to facilitate the creation of new procedures and problem resolution. These Principles and Values are the fundamental framework for the Joint Use relationship and form an essential part of this Agreement, or any modification that may be required from time to time.

#### **Trust**

Trust is the most critical success factor in achieving our joint mission. We must be competent, open and trustworthy in our dealings with each other.

#### **Safety and Standards**

Our actions and decisions will be based upon a respect for each other's safety and technical standards.

#### **Win/Win**

The Joint Use relationship requires understanding of each other's perspective and subsequently choosing actions of mutual benefit.

#### **Reciprocity**

Reciprocity is an important consideration in the development and application of this Agreement recognizing that each and every transaction will not necessarily be mutually beneficial.

#### **Value Added**

We will emphasize doing the "right things right" and eliminate processes that do not add value to our respective business and the community we serve.

#### **Pride in Partnership**

As both Parties are committed to excellence, we take pride in the way we work together and share our resources for the benefit of the communities we serve.

#### **Customer Focus**

Our actions and decisions will be driven by the needs of the communities and respective Customers that we both serve.

#### **Environmental Responsibility**

Our actions and decisions will be based on respect for each Party's environmental initiatives and concerns.

#### **Empowered Teams**

Our agreement will enable frontline teams to make operational decisions consistent with these principles and values.

#### **Continuous Improvement**

We will continuously strive to improve all aspects of our working relationships.

**SCHEDULE "B"**

**CONTRACT ADMINISTRATION GUIDE**

**1.0 GENERAL**

- 1.1 For purposes of this CAG, capitalized words or expressions, unless otherwise defined in this CAG, shall have the meaning given to them in the Agreement for Licensed Occupancy of Power Utility Distribution Poles to which this CAG is attached and of which this CAG forms a part ("the Agreement").
- 1.2 The procedures and forms detailed herein have been prepared to outline, in general, the requirements for authorizing Joint Use under the Agreement.
- 1.3 Each of the Parties have authorized the respective designated representative identified in Clause 15.1 of the Agreement to sign Permits on its behalf. Each Party may change their respective designated representative, or add other designated representatives, by notice in writing to the other Party.
- 1.4 Where practical, field visits shall be made jointly by the Parties to determine the most practical and economical solution for both Parties. However, the Licensee, subject to clause 3.2 of the Agreement, shall not place any Attachments onto the Owner's poles without first obtaining approval in the form of a signed Permit.

**2.0 APPLICATION BY THE LICENSEE FOR JOINT USE OF THE OWNER'S POLES**

- 2.1 Whenever the Licensee wishes to place its attachments, or alter the number, size or nature of its Attachments, on the Owner's poles, it shall complete and submit a Request for Licenced Occupancy of Poles form and the Owner shall reply to such form in the manner specified herein. In addition, as part of its application, the Licensee shall submit such other information or material required by the Owner for purposes of the Owner assessing the feasibility of the Licensee placing, affixing or attaching its attachments onto the Owner's poles, including the ability of the Owner to comply with all applicable laws, statutes, regulations, by-laws, standards, and codes in respect of its poles.
- 2.2 Where the Owner deems it necessary, the Owner's representative shall arrange for a joint field visit. At this time, the Owner's representative shall form an opinion as to the feasibility and desirability of the proposed Joint Use.
- 2.3 Notwithstanding any provision herein or in the body of the Agreement, the Owner may in its sole and absolute discretion refuse to grant the permission requested. In such an instance, the Owner will state in writing its reasons for refusing to grant the permission requested. If the Licensee can satisfy the Owner's concerns, then the Licensee may make a new application and resubmit for approval by the Owner.
- 2.4 If the proposed Joint Use is acceptable to both Parties, the Owner's representative will, if necessary, prepare an estimate of Make Ready costs stipulating the cost to be paid by the Licensee should Make Ready Work be required to accommodate the proposed Joint Use. The signed original estimate and one signed copy will be forwarded to the Licensee's representative.
- 2.5 After receipt of the Owner's estimate and provided the Licensee finds the estimate acceptable, the Licensee's representative will arrange for signing in accordance with the Licensee's authorization practices after which the original estimate shall be signed and returned to the Owner's representative and the copy shall be signed and retained by the Licensee for its records.

- 2.6 After the signed cost estimate form has been returned to the Owner, the Request for Licensed Occupancy of Poles form attached as Exhibit 1 hereto, shall be prepared by the Licensee's representative and signed by the Licensee's representative. The Licensee is required to specify the location, size, number and nature of the proposed Attachments. Two copies shall be prepared and signed by the Licensee's representative and both copies shall be forwarded to the Owner's representative for approval.
- 2.7 If satisfactory, the Owner's representative will sign both copies of the Request for Licensed Occupancy of Poles form and return the original to the Licensee's representative, thus authorizing the Joint Use.
- 2.8 The Owner will then proceed with the Make Ready Work necessary to accommodate the proposed Joint Use and forward the invoice to the Licensee for the costs of the said Make Ready Work.
- 2.9 The Owner shall, at its sole cost, ensure that its poles and Attachments meet the Standard prior to permitting the Licensee to place any of its Attachments onto the said poles.

### **3.0 ANNUAL INVOICING AND AUDITS**

- 3.1 During the first quarter (1/4) of each year, each Owner shall prepare a summary invoice indicating the total number of Licensee Attachments on each Joint Use Pole and amount owing including the applicable taxes, in accordance with the provisions of Article 9 of the Agreement.
- 3.2 (a) In order to ensure the accuracy and completeness of existing Joint Use Permits, a joint field inspection shall be made at least once every six years during the Term of the Agreement (the six-year period commencing on the year of the Effective Date) at a time and day to be mutually agreed upon. Audit costs shall be equally borne by both Parties. If the Parties cannot agree on a time and day with a minimum of 3 months' advance notice for an audit, then the Owner shall conduct the audit and the audit costs shall be equally borne by both Parties. If the Parties agree to a time and day for an audit and one of the Parties cannot or does not attend, then the other Party can carry out the audit and the audit costs shall be equally borne by both Parties. Any discrepancies will be corrected and new Permits cancelling or superseding the previous Permits shall be signed by both Parties within 30 days after the relevant Joint Use inspection to reflect the actual Joint Use pole count. If at any time during the Term of the Agreement an Attachment(s) is attached to any of the Owner's poles or Joint Use Poles without a Permit(s) being approved by or on behalf of the Owner for such Attachment(s), the Licensee shall remove the said unauthorized Attachment(s) as requested by the Owner. In the event the Licensee fails to remove the said unauthorized Attachment(s), the Owner shall have the right to forthwith remove any and all unauthorized Attachment(s) placed on its poles or Joint Use Poles and to charge the Licensee for all costs incurred by the Owner as a result of the removal of such unauthorized Attachment(s). Where it is determined by the Owner, in its sole and absolute discretion, to be feasible to do so, the Licensee may submit a revised or new Request for Licensed Occupancy of Poles form to reflect the Attachment(s). In the event the revised or new Request for Licensed Occupancy of Poles form is approved by the Owner, the said Attachment(s) become(s) authorized and may remain on the poles or Joint Use Poles subject to the terms and conditions of the Agreement.
- b) In addition to the Permit Fees and other applicable fees payable for authorized Attachment(s) and the costs identified in clause 3.2(a) above, the Licensee agrees to pay to the Owner the total Permit Fees for any unauthorized Attachment(s) for the years during which the unauthorized Attachment(s) are placed on the poles or Joint Use Poles or for a period of five years, whichever amount is less, or (ii) for a period of five years where the date upon which the unauthorized Attachment(s) are placed on the poles or Joint Use Poles cannot be established, the total Permit Fees being calculated by using the Permit Fee for the current year in which the calculation is being made. The Parties agree that the total Permit Fees herein provided shall be deemed to be fair and just in the circumstances and shall be treated as liquidated damages and not as a penalty. Should the number of unauthorized Attachment(s) exceed 2% of the number of Attachments for which Permits have been granted, the Licensee



will also pay to the Owner its labour costs associated with the audit inspection wherein the Owner discovered the unauthorized Attachment(s).

#### **4.0 REVISION AND CANCELLATION OF PERMITS**

- 4.1 For changes in the number or nature of a Licensee Attachment(s) already on the Owner's Joint Use Pole, a "Superseding" Permit is required to be approved by the Owner before the change can be made. A revised Permit shall be prepared by the Licensee in a manner similar to that for "New" Joint Use as outlined in Section 2 above and the Licensee shall ensure that the existing Permit number that is being "Superseded" is shown in the appropriate block and that the new number of Joint Use Poles is shown in the "Rental Poles" block.
- 4.2 For the termination or cancellation of any Permits, a new Permit number is not required. The word "Cancellation" or "Termination" will be typed in the space normally used for the Permit number and the Permit number to be "Cancelled" shall be shown in the "Location" block noting the reason for cancellation.

#### **5.0 PURCHASE/SALE OF EXISTING JOINT USE POLES**

- 5.1 a) When the Owner discontinues the use of a Joint Use Pole(s) and the Licensee has agreed to purchase the said pole(s), as per Article 7, Clause 7.2 of the Agreement, the sale/purchase price for each Joint Use Pole shall be calculated as follows:

$$P = R - C$$

Where:

$$P = \text{Sale/Purchase Price}$$

R = Residual Value from Exhibit 4 hereto, Table 1

C = Cost of Pole Removal from Exhibit 4 hereto, Table 2 For the individual Joint Use Pole to be sold, where the cost of removal exceeds the Residual Value of the said Joint Use Pole, a nominal price of \$1.00 will apply.

- b) The act of purchasing installed Joint Use Poles does not transfer a Right of Way, therefore, it will be the responsibility of the new Owner to ensure that any required Rights of Way are first obtained pursuant to Article 5 of the Agreement in order for the purchase of poles to be effective.

#### **6.0 NOTIFICATION OF NEW LINES**

- 6.1 Whenever either Party is intending to reconstruct its existing Joint Use Poles, extend its services in the vicinity of existing Joint Use Poles or in such other situations where the other Party might reasonably be affected, notice shall be provided to the other Party stating the location of such new work. The other Party shall reply within 14 days as to whether or not Joint Use will be desirable. Should the Licensee desire space on the new poles, a new Request for Licensed Occupancy of Poles form must be submitted by the Licensee to the Owner for approval pursuant to Section 2.0 of this CAG.

#### **7.0 REBUILD, REPLACEMENT OR RELOCATION OF POLES**

- 7.1 If, at any time, the Owner deems it necessary to remove, replace or change the location of any Joint Use Pole designated by a Permit as supporting Attachments of the Licensee, the Owner shall notify the Licensee in writing, including conceptual pole plans, as far in advance of the start of

work as is possible but in any event not less than 90 days in advance of the start of work by the Owner. Once the Owner's work is completed, the Licensee shall be informed of the requirement to remove or relocate its Attachments within a further 60 days. If, due to the complexity or timing of the Licensee's work, the 60 day period cannot reasonably be met, a mutually agreed to completion time period will be negotiated and confirmed in writing by both Parties. In both cases, the Licensee's completion period shall commence from the date written notification from the Owner to the Licensee is given. Within this time, the Licensee shall, at its sole risk and expense, remove its Attachments from the relevant Joint Use Pole and, except when the notice specifies to the contrary, may Transfer the Attachments to the Joint Use Pole in the new location or to the new pole, as the case may be. In either case, the terms and conditions of the Agreement shall continue to apply to the Attachments so Transferred.

- 7.2 The Licensee agrees to Rearrange (or remove) temporarily and at its sole risk and expense any of its Attachments placed on Joint Use Poles of the Owner, whenever notified to do so by the Owner for purposes of the Owner carrying out work on its Joint Use Poles within a time limit to be determined mutually by the two Parties, failing which by no later than 60 days after the date of the notice from the Owner.
- 7.3 In case of Emergency, the Owner may give such shorter notice as the Owner deems expedient regarding removal, Rearrangement, replacement or Transfer of the Licensee's Attachments, and the notice may be given orally or by fax.
- 7.4 In instances where plant adjustments are initiated as a result of work being done by a municipality or other Governing Body in Ontario pursuant to the *Public Service Works on Highways Act*, as amended, all conditions of notification and scheduling of work indicated in clause 7.1, and 7.2 above shall be superseded and dictated by the requirements of the municipality or Governing Body in Ontario, where such requirements exist.
- 7.5
- a) If the Licensee fails to comply with a notice given pursuant to any of clauses 7.1, 7.2, or 7.3 above, then the Owner, unless agreement is reached with the Licensee with regard to an alternative method of compliance, shall be entitled to a delayed removal charge of \$100 per Joint Use Pole per month commencing on the month during which the Licensee was to comply with the Owner's notice, until such time as the Licensee has fully complied with the Owner's notice.
  - b) If the Owner fails to comply with the notification periods or mutually agreed to completion periods, as the case may be, pursuant to any of the clauses 7.1, 7.2 or 7.3 above, the Owner shall not be entitled to a delayed removal charge until notification according to paragraph 7.1 is executed.
  - c) The Owner and the Licensee will consider opportunities to perform work operations for each other to minimize delays and costs associated with the rebuild, replacement and relocation of Joint Use Poles. The Licensee will initiate discussion regarding alternatives at the initial time of notification.

## **8.0 POLE LINE LOCATIONS**

- 8.1 Neither Party shall place a pole in a Pole Line Location already occupied by a pole or pole line of the other Party, regardless of whether the existing pole or pole line is Joint Use or not, without the written consent of the owner of the existing pole or pole line.
- 8.2 Neither Party shall add, remove or replace a pole in a pole line belonging to the other Party without the written consent of the other Party. Any such pole so placed shall become the property of the other Party. All costs incurred by the other Party associated with a pole so placed or replaced by the first Party will be the responsibility of the first Party.
- 8.3 Pole markings shall be placed on all of the Owner's Joint Use Poles to clearly indicate ownership, placement year, and pole test and treatment date as shown in the diagram below or

some other mutually acceptable practice. The Joint Use Poles may also be marked with pole tag insignia to denote pole number, switch number, transformer location and other information. Any additional markings desired by the Licensee must be first approved by the Owner. It should be noted the dating nails are installed at or near the brand height. For Joint Use Poles 55 ft (16.8M) or less, the brand is 10ft (3M) from the butt. For Joint Use Poles over 55 ft, the brand is 14 ft (4 M) from the butt.



Note: Top diagram depicts nail with treatment year. Bottom diagram depicts nail with installation year.



## 9.0 MARKING AND CORRECTION OF HAZARDOUS CONDITIONS

9.1 When either Party discovers a Hazardous Condition on a Joint Use Pole, it shall notify the other Party and shall mark the Joint Use Pole as follows:

- a) Electrical hazards: Red belted tag holder with tag
- b) Structural hazards: 2 Yellow bands for emergency or where the pole will be changed within 6 months;

### **2 yellow bands mean any one or more of the following:**

- ½ inch or less shell remaining of sound wood at each of the test drill locations.
- The shell rot at ground-line is greater than 1 1/4 inch average all around the pole.
- Within the first 6 feet above ground, a “chunk” greater than 30% of the cross section is missing. (This would normally be the result of an impact from a snow plow or farm equipment.)
- The pole is in a condition considered to be a severe and immediate risk to public safety. (Example, a broken pole, or a pole leaning severely with a transformer attached to it.)

A single yellow band if pole change will be done in subsequent planned work releases)

### **1 yellow band indicates any one or more of the following:**

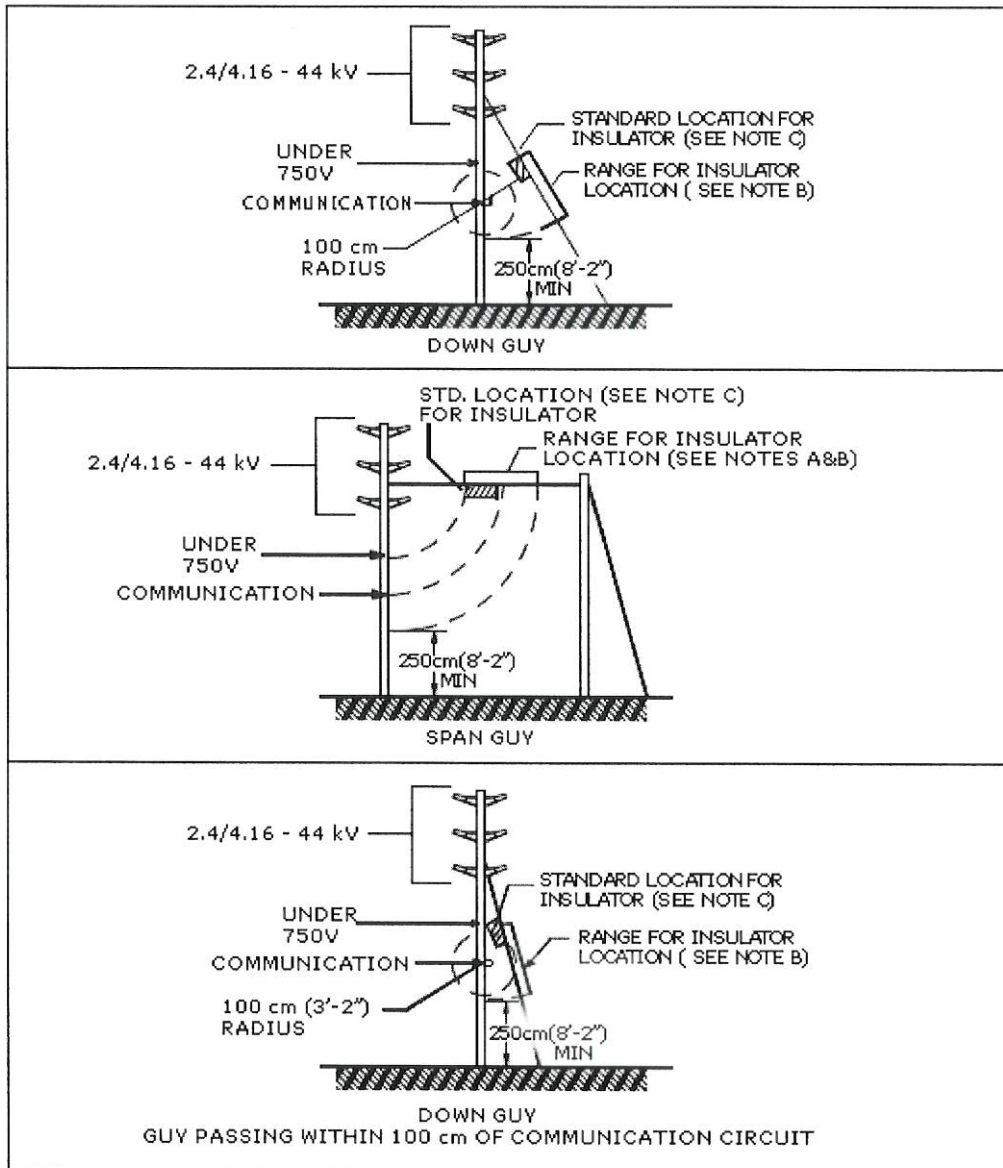
- If the pole has less than 2 inches average shell thickness, or has "SEVERE" damage, or both,
- bands to be placed (4 feet to 5 feet above ground line.)

9.2 In the event that either Party has marked a Joint Use Pole with a red belted tag holder for work protection, under no circumstances shall anyone work above the red band.

## 10.0 STRAIN INSULATORS

10.1 Strain insulators of the appropriate mechanical strength and voltage rating shall be installed on all down guys. The location of the guy strain insulator on Networks guys is specified in the diagram below. Strain insulators on the Licensee's guys must be installed between 2.5m and 3.5 metres (8 to 12 feet) above ground by the Licensee. The Licensee's insulators must be maintained in safe working condition at all times.

Location of Strain Insulators



**NOTES**

- (A) A SECOND INSULATOR IS REQUIRED IF POWER CIRCUIT OF A SEPARATE LINE IS CROSSING ABOVE OR BELOW SPAN GUY. THIS SECOND INSULATOR SHOULD BE LOCATED SO AS TO ISOLATE THE SECTION OF THE SPAN GUY WHICH IS EXPOSED TO THE CROSSING CIRCUIT.
- (B) THE INSULATOR SHOULD FALL BELOW ALL POWER ATTACHMENTS (INCLUDING NEUTRAL) UNDER BROKEN GUY CONDITIONS AND IT SHOULD BE A MINIMUM OF 200cm (WHERE POSSIBLE) FROM THE POLE ATTACHMENT
- (C) IF COMMUNICATION (TELEPHONE OR CABLE T.V.) CONNECTIONS ARE ON POLE, GUY INSULATOR MUST BE IN THE STANDARD LOCATION AS SHOWN.

Notes:

Primary Phase conductor is defined in the Standard as a circuit having phase to phase voltage above 750 Volts.

The insulator shall be located below all primary and neutral conductors under broken guy conditions and should be a minimum of 2.0 meters (6 feet), where possible from the point of attachment at the Owner's Joint Use Pole.

One insulator may be used to meet both requirements, provided it is located below all primary and neutral conductors and it insulates or isolates the section of guy that is within 1.0 metre of the Licensee's Attachment from the top portion of the guy.

**11.0 GUYING AND ANCHORING:**

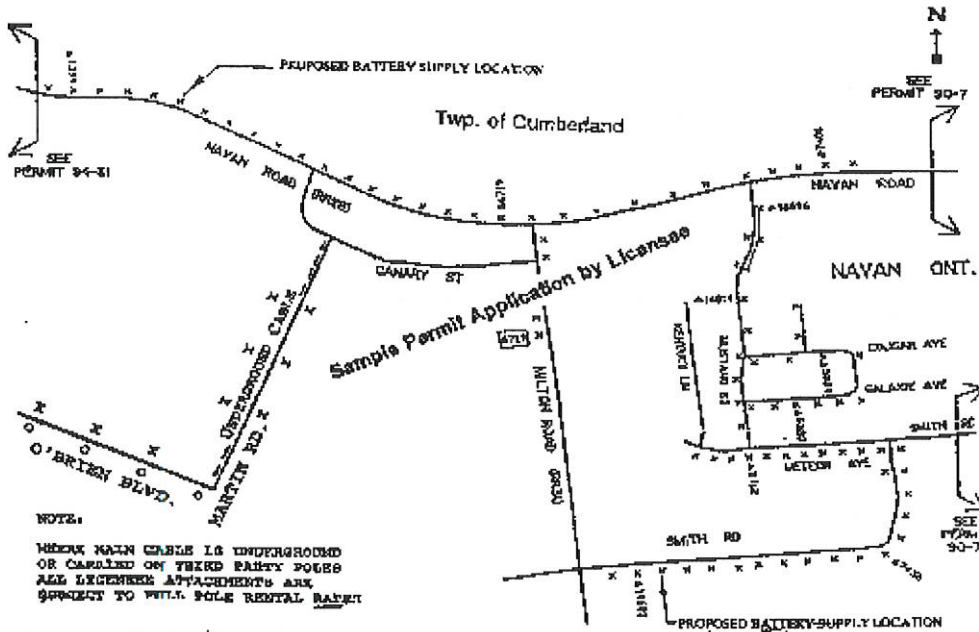
- 11.1 Each Party shall provide guys and anchors with sufficient capacity to support its own Attachments and shall ensure that any such guys (except those used to support Attachments that form the subject of Existing Permits) are a minimum 3/8 of an inch thick.
- 11.2 Suitable anchoring and guying that is required to accommodate unbalanced or additional loads due to the Licensee's Attachments, shall be installed by the Licensee at the Licensee's expense.
- 11.3 Should the Licensee be unable to supply and install a suitable anchor, the Owner may, at the Licensee's request and expense, act as contractor for the Licensee to install an anchor.
- 11.4 The Licensee's anchors must be placed with a minimum separation of 1.5 metres (5 feet) from the Owner's anchor.
- 11.5 Where separate anchoring is undesirable, the Parties may cooperate to jointly study the feasibility of and, if agreeable to the Owner, implement Joint Anchorage. If the Owner agrees to such Joint Anchorage, the Owner will install such Joint Anchorage at the Licensee's expense.
- 11.6 When adding or changing guys and anchors, the installing Party shall not affect the existing tension on the other Party's guys or disturb existing anchors.
- 11.7 Crossing guy wires is undesirable, however, where it is unavoidable, the minimum clearance between crossing guys (the point at which two guys cross) shall be 80 millimetres (3 inches).

**EXHIBIT 1 – REQUEST FOR LICENSED OCCUPANCY OF POLES FORM**

**APPLICATION FOR LICENSED OCCUPANCY OF POLES  
(draft completed example)**

\*Please complete all boxes above the dotted line.

To be attached to and form part of the Agreement effective:		Licensee's project name/refer #	
		Supercedes Permit No. , "New" or "Cancel" <b>90-12</b>	
Permission is requested by <b>Name of company</b>	Signature:  <b>(by authorized company rep)</b>	Print Name and Title:	
To place attachments as follows: (note specific quantity, size and nature of proposed attachment(s))			
<b>Detail # of conductors, Size, &amp; associated hardware</b> <b>Note, sketch should show any transformers, reclosures, switches etc.</b>			
Company Division		External Permit #	
Lot no. (in or between) <b><u>Lots 7 - 11</u></b>	Conc./Street or Road Names <b><u>Con. 9 &amp; 10</u></b>	Township/village or town of <b><u>Village of Navan</u></b>	County/Municipality <b><u>Ottawa-Carleton</u></b>



\* Please orient sketch to the north, show occasional Owner transformer numbers and adjacent Permit numbers

**For Internal Use Only**

Approved Signature (Owner)	Legend <b>O = Third Party Pole</b> <b>X = Joint Use Pole</b>	No. of full rental poles <b>95</b>
Name and Title (please print)		
Operations manager or designate <b>Operations/ Front Line Manager</b>		
Operations Centre <b>Winchester SC</b>	Permit no. <b>97-1</b>	
Date	Other internal project <b>YES</b>	<b>NO</b>

## APPLICATION FOR LICENSED OCCUPANCY OF POLES

\*Please complete all boxes above the dotted line.

To be attached to and form part of the Agreement effective:		Licensee's project name/refer #	
		Supercedes Permit No., "New" or "Cancel"	
Permission is requested by	Signature:	Name and Title: (please print)	
To place attachments as follows: (note specific quantity, size and nature of proposed attachment(s))			
Company Division		External Permit Number	
Lot no. (in or between)	Conc./Street or Road names	Township/Village or town of	County/Municipality

\* Please orient sketch to the north, show occasional Owner transformer numbers and adjacent Permit numbers

**For Internal Use Only**

Approved Signature (Owner)	Legend	No. of full rental poles
Name and Title (please print)		
Operations manager or designate		
Operations Centre	Permit no.	
Date	Other internal project	

## EXHIBIT 2 - DIVISION OF COSTS

### **1.0 POLE COSTS**

- 1.1 A Normal Pole shall be a pole having length of up to and including 15.2 m (50 feet) and having other dimensions, which meet the strength and other requirements for Joint Use in accordance with the Standard.

The space which each Party will utilize on a Normal Pole shall be considered as follows:

Power Space: All that space above the separation space.

Separation Space: The space between the Power Space and the Telecommunication Space, a minimum 1.0 m (40 in.) measured at the pole.

Telecommunication Space: Any 0.6 m space above the Clearance Space that adheres to the clearance specifications in the Standard having regard to sag considerations.

Clearance Space: Height of Telecommunications Attachments, including conductors and other related equipment, that adheres to the clearance specifications in the Standard having regard to sag considerations.

Variations in the above space allotments may be adopted in any location where shorter poles can be economically used for Joint Use. In-span clearances between Telecommunications Attachments and the Attachments subject to the Agreement will, as a minimum, adhere to the Standard.

- 1.2 When a pole taller than 15.2m is required by one Party, that Party shall pay the extra height costs as outlined in Table 2 of Exhibit 4 in addition to the Residual Value of the existing 15.2 m pole determined in the Residual Cost Table 1 of Exhibit 4.

When the extra height is due to the requirements of both Parties, such as grading, the Licensee shall pay the Owner a sum equal to one half of the Residual Value of the existing pole as outlined in the Residual Value Table 1 of Exhibit 4 and one half of the extra height costs as outlined in Table 2 of Exhibit 4.

- 1.3 When a pole or Joint Use Pole is erected to replace another, solely because such other pole is insufficient in size and strength to provide for the Licensee's requirements, the Licensee shall pay to the Owner, the Residual Value of the existing pole as determined by Table 1 of Exhibit 4 and extra height costs for pole above 15.2 (50feet) as outlined in Table 2 of Exhibit 4. The cost of removing the replaced pole or Joint Use Pole shall be borne by the Owner and ownership of the replaced pole or Joint Use Pole shall be retained by the Owner.

- 1.4 When an existing pole in a pole line requires replacement to provide for a common pole crossing or guying facility of the other Party, such pole shall be replaced by the Owner, and the Licensee shall pay to the Owner a sum of money equal to the Residual Value of the replaced pole as determined by Table 1 of Exhibit 4, plus the incremental costs for extra pole height as outlined in Table 2 of Exhibit 4.

- 1.5 Where an additional pole must be erected in the existing pole line of the Owner to provide means for a common pole crossing or guying facility of the Licensee, the total cost for such a pole shall be paid by the Licensee. Notwithstanding any other provision of the Agreement, such additional poles may be sold to the Licensee at the nominal charge of \$1.00 each, if the Owner abandons its pole line in this location.

- 1.6 The cost of maintaining or replacing deteriorated or defective Joint Use Poles shall be borne by the Owner of the Joint Use Poles. In such cases each Party shall be responsible for the costs of Transferring its Attachments.



**2.0 TRANSFER, ATTACHING AND REARRANGEMENT COSTS**

- 2.1 Where the Owner, in order to establish new Joint Use or adding to existing Joint Use on the pole, is required to Transfer or Rearrange its Attachments on the pole, then the cost of such Transfer or Rearrangement shall be borne by the Licensee.
- 2.2 Where Transferring or Rearranging involves the replacement of existing Joint Use Poles to provide additional height or strength to meet the requirements of the Licensee, the Licensee shall pay the costs of Transferring or Rearranging the Attachments of the Owner. Payment for additional height shall be made as described in Table 2 of Exhibit 4. This payment must be noted on the Permit to avoid future incremental costs for additional height.
- 2.3 Where a change in the pole line required by the Owner of the poles causes the Licensee to remove or make a change to its Attachments, the Licensee shall bear all of its own costs involved whether or not a pole is replaced.
- 2.4 Where a change to the Attachments by the Licensee on Joint Use Poles causes the Owner to make a change to its Attachments or Joint Use Poles, the Licensee shall bear the cost of the changes incurred by the Owner whether or not a pole is replaced.
- 2.5 Each Party shall bear its own costs where Transferring or Rearranging is required due to the replacement of a Joint Use Pole in the same location for maintenance necessary in the opinion of the Joint Use Pole Owner.
- 2.6 Where Transferring or Rearranging involves the replacement of a Joint Use Pole requested by a property owner or Governing Body, each Party hereto shall be responsible for its own costs of Transferring or Rearranging its Attachments. Each Party shall, at its option, be responsible for recovering all or part of its costs from the initiating Third Party. Reconstruction of the existing Joint Use Pole line shall not proceed without the approval of both Parties.
- 2.7 Where Attaching, Transferring or Rearranging is required to accommodate the Attachments of a Third Party, such costs shall be identified and borne by the Third Party and recovered by the Joint Use Pole Owner.
- 2.8 Where the Transferring or Rearranging of Attachments on an existing non-Joint Use Pole line is required to accommodate an overbuild in the same Pole Line Location by the other Party, the original Party's Transfer costs and Residual Value costs will be the responsibility of the other Party overbuilding the existing non-Joint Use Pole line in the manner specified in clauses 8.1 and 8.2 of this CAG.

## EXHIBIT 3 – LINE CLEARING & INSULATOR WASHING

### Line Clearing:

#### **1.0      GENERAL**

- 1.1      Line Clearing on all Joint Use Pole lines will be carried out in accordance with the Standard and the specifications provided in Section 3.0 below.
- 1.2      The costs for maintenance Line Clearing are part of the Permit Fee payable by the Licensee and which Permit Fee is subject to escalation as per Article 9, Clause 9.5 of the Agreement.
- 1.3      One Party may engage the other Party to perform Line Clearing as required and share the costs as agreed.

#### **2.0      RATIONALE**

The costs for maintenance Line Clearing embedded in the Permit Fee are based upon and recognizes the following:

- The Owner's incremental costs to manoeuvre in and around the Licensee's Attachments as part of routine Line Clearing of Joint Use Pole lines
- Benefits, in the context of avoided costs, derived by the Licensee through costs incurred by the Joint Use Pole Owner in clearing around its Attachments in the upper position on the Joint Use Pole.
- Maintenance Line Clearing reduces subsequent Line Clearing costs for new or added installations and reduces both Parties' exposure to Third Party liability.

#### **3.0      SPECIFICATION FOR MAINTENANCE LINE CLEARING**

- 3.1      Where trees exist near supply line conductors, they shall be trimmed, where practicable, so that neither the movement of the trees nor the swinging or increased sagging of the conductors in the wind, in ice storms, or at high temperatures will result in contact between the conductors and the trees. Where trimming is impracticable, the conductors shall be protected as necessary to prevent damage and electrical hazards.
- 3.2      If the Licensee's Attachments are in particular conflict with sensitive Third Party -owned vegetation, then the Licensee shall address the issue with the Third Party.
- 3.3      All pruner and saw cuts are to be performed to a professional standard.
- 3.4      All side or overhanging limbs, including dead wood, that could come into contact with conductors either by wind or by the weight of ice or snow, shall be shortened or removed.
- 3.5      All danger trees, where possible, shall be removed.
- 3.6      The Party performing Line Clearing will obtain any required municipal or private property approvals and be accountable for any damage or liability claims resulting from its operations and endeavor to manage public relations issues appropriately.
- 3.7      The Party conducting Line Clearing is responsible for clean up, removal of debris, and restoration of the site.

**Insulator Washing:**

**4.0 General**

- 4.1 The Parties shall meet once a year during the Term of the Agreement to discuss insulator washing of insulators located on Joint Use Poles with a view to coordinating insulator washing of their respective insulators for the coming year.
- 4.2 Subject to any agreed coordination of the Parties' respective insulator washing programs, each Party shall be responsible for washing its own insulators located on Joint Use Poles as often as the said party determines necessary, but in any event not less than once a year during the Term of the Agreement.
- 4.3 The Licensee may retain the Owner to carry out insulator washing of the Licensee's insulators on Joint Use Poles subject to mutually agreed terms and conditions. Except as otherwise agreed, any fees payable by the Licensee for such insulator washing shall be invoiced separately by the Owner.

## EXHIBIT 4 - INVOICES AND COST INFORMATION

### **1.0 GENERAL**

- 1.1 Engineering charges shall not be charged by either Party for matters relating to Joint Use of poles under the Agreement provided that work is started within 6 months after the engineered charges are approved by a Permit. In the event no Permit is submitted or the project is cancelled, the applicant will be responsible for engineering costs incurred.
- 1.2 The Residual Value Table 1 and the Unit Transfer or Rearrangement Costs Table 2, both of which are attached to this Exhibit 4 shall be updated by the Owner annually using 100% of the change in the CPI for August for Ontario, for use commencing January 1 of the following year.

### **2.0 RESIDUAL VALUE TABLE**

- 2.1 The Residual Values specified in Table 1 to this Exhibit 4 represent the value in place of a pole in accordance with the age of the pole. These costs are based on a class 3-pole strength in all soil conditions.
- 2.2 Table 1 attached to this Exhibit 4 may be used to determine the Residual Value where a pole is replaced prematurely or when a pole is sold. A deduction shall be allowed for a previous payment made for extra height where noted on existing Permits.

### **3.0 UNIT TRANSFER OR REARRANGEMENT COSTS TABLE**

- 3.1 In accordance with Clause 10.2 of the Agreement, flat rate charges outlined in the Unit Transfer or Rearrangement Costs Table 2 to this Exhibit 4 may be used in invoicing between the Parties. Accordingly, an invoice may be prepared, using the unit costs outlined in Table 2.
- 3.2 The attached Unit Transfer or Rearrangement Costs Table 2 represents the average cost of Transferring Attachments from an existing Joint Use Pole to a new pole. This Table represents an average of all costs that could be incurred when Transferring or Rearranging excluding material unless otherwise noted. If there is an instance where costs are not defined in the Table, then actual costs shall be used.
- 3.3 Table 2 attached to this Exhibit 4 may be used for estimating purposes and invoicing.
- 3.4 The Unit Transfer or Rearrangement Costs Table 2 may be used where the work involves only Attaching or only removing a Joint Use Pole, by taking 50% of the amount indicated. For purposes of the Agreement, the value indicated in the Residual Value Table attached to this Exhibit shall be used to determine additional height charges for each 1.5m (5ft) difference in pole height to 50 feet. The amount determined shall be used for charges to the Licensee for height in excess of a Normal Pole. E.g only. (figures used are not from tables). The Licensee requests a 55' pole. Value of a 50' pole is \$2101, Value of a 55' pole is \$2795, Subtract the difference, the Licensee pays additional height charges of \$694.00. (Calculations will be done using the Tables attached to this Exhibit 4)

**4.0 INVOICING FOR JOINT USE WORK**

- 4.1 The Parties agree that the costs charged for any work carried out in relation to Joint Use shall be those specified in Table 2 to this Exhibit 4 where applicable and shall contain the following:
- a) total cost of labour, together with transport and work equipment, plus overhead in accordance with the practices of the Party carrying out the work; and
  - b) other miscellaneous expenses, such as Make Ready Line Clearing, advertising, Permit Fees, special work equipment, switching or contract work.
- 4.2 The Party carrying out any work in relation to Joint Use for the other Party shall provide the other Party with an estimate of the project cost prior to commencing the work and shall only be obligated to perform the work if agreed to by the other Party. The Party that has carried out the work for the other Party shall issue an invoice to the other Party upon completion of the work and shall provide a written explanation to the other Party in the event that the amount payable pursuant to the invoice is in excess of 10% of the estimate.

**EXHIBIT 4**

**TABLE 1 – RESIDUAL VALUE TABLE**

<b>BLENDED (60% ROCK 40% EARTH) ROCK DRILLED SET POLES</b>									
<i>Revised/Issued: January 2005</i>									
<b>AGE</b>	<b>CONDITION</b>	<b>30 FT</b>	<b>35 FT</b>	<b>40 FT</b>	<b>45 FT</b>	<b>50 FT</b>	<b>55 FT</b>	<b>60 FT</b>	<b>65 FT</b>
0	100.00%	\$ 1,303	\$ 1,327	\$ 1,511	\$ 1,675	\$ 1,806	\$ 2,505	\$ 3,197	\$ 3,476
1	98.00%	\$ 1,277	\$ 1,300	\$ 1,481	\$ 1,642	\$ 1,770	\$ 2,455	\$ 3,133	\$ 3,406
2	96.00%	\$ 1,251	\$ 1,274	\$ 1,451	\$ 1,608	\$ 1,734	\$ 2,405	\$ 3,069	\$ 3,337
3	94.00%	\$ 1,225	\$ 1,247	\$ 1,420	\$ 1,575	\$ 1,698	\$ 2,355	\$ 3,005	\$ 3,267
4	92.00%	\$ 1,199	\$ 1,221	\$ 1,390	\$ 1,541	\$ 1,662	\$ 2,305	\$ 2,941	\$ 3,198
5	90.00%	\$ 1,173	\$ 1,194	\$ 1,360	\$ 1,508	\$ 1,625	\$ 2,255	\$ 2,877	\$ 3,128
6	88.00%	\$ 1,147	\$ 1,168	\$ 1,330	\$ 1,474	\$ 1,589	\$ 2,204	\$ 2,813	\$ 3,059
7	86.00%	\$ 1,121	\$ 1,141	\$ 1,299	\$ 1,441	\$ 1,553	\$ 2,154	\$ 2,749	\$ 2,989
8	84.00%	\$ 1,095	\$ 1,115	\$ 1,269	\$ 1,407	\$ 1,517	\$ 2,104	\$ 2,685	\$ 2,920
9	82.00%	\$ 1,068	\$ 1,088	\$ 1,239	\$ 1,374	\$ 1,481	\$ 2,054	\$ 2,622	\$ 2,850
10	80.00%	\$ 1,042	\$ 1,062	\$ 1,209	\$ 1,340	\$ 1,445	\$ 2,004	\$ 2,558	\$ 2,781
11	78.00%	\$ 1,016	\$ 1,035	\$ 1,179	\$ 1,307	\$ 1,409	\$ 1,954	\$ 2,494	\$ 2,711
12	76.00%	\$ 990	\$ 1,009	\$ 1,148	\$ 1,273	\$ 1,373	\$ 1,904	\$ 2,430	\$ 2,642
13	74.00%	\$ 964	\$ 982	\$ 1,118	\$ 1,240	\$ 1,336	\$ 1,854	\$ 2,366	\$ 2,572
14	72.00%	\$ 938	\$ 955	\$ 1,088	\$ 1,206	\$ 1,300	\$ 1,804	\$ 2,302	\$ 2,503
15	70.00%	\$ 912	\$ 929	\$ 1,058	\$ 1,173	\$ 1,264	\$ 1,754	\$ 2,238	\$ 2,433
16	68.00%	\$ 886	\$ 902	\$ 1,027	\$ 1,139	\$ 1,228	\$ 1,703	\$ 2,174	\$ 2,364
17	66.00%	\$ 860	\$ 876	\$ 997	\$ 1,106	\$ 1,192	\$ 1,653	\$ 2,110	\$ 2,294
18	64.00%	\$ 834	\$ 849	\$ 967	\$ 1,072	\$ 1,156	\$ 1,603	\$ 2,046	\$ 2,225
19	62.00%	\$ 808	\$ 823	\$ 937	\$ 1,039	\$ 1,120	\$ 1,553	\$ 1,982	\$ 2,155
20	60.00%	\$ 782	\$ 796	\$ 907	\$ 1,005	\$ 1,084	\$ 1,503	\$ 1,918	\$ 2,086
21	58.00%	\$ 756	\$ 770	\$ 876	\$ 972	\$ 1,047	\$ 1,453	\$ 1,854	\$ 2,016
22	56.00%	\$ 730	\$ 743	\$ 846	\$ 938	\$ 1,011	\$ 1,403	\$ 1,790	\$ 1,947
23	54.00%	\$ 704	\$ 717	\$ 816	\$ 905	\$ 975	\$ 1,353	\$ 1,726	\$ 1,877
24	52.00%	\$ 678	\$ 690	\$ 786	\$ 871	\$ 939	\$ 1,303	\$ 1,662	\$ 1,808
25	50.00%	\$ 652	\$ 664	\$ 756	\$ 838	\$ 903	\$ 1,253	\$ 1,599	\$ 1,738
26	48.00%	\$ 625	\$ 637	\$ 725	\$ 804	\$ 867	\$ 1,202	\$ 1,535	\$ 1,668
27	46.00%	\$ 599	\$ 610	\$ 695	\$ 771	\$ 831	\$ 1,152	\$ 1,471	\$ 1,599
28	44.00%	\$ 573	\$ 584	\$ 665	\$ 737	\$ 795	\$ 1,102	\$ 1,407	\$ 1,529
29	42.00%	\$ 547	\$ 557	\$ 635	\$ 703	\$ 759	\$ 1,052	\$ 1,343	\$ 1,460
30	40.00%	\$ 521	\$ 531	\$ 604	\$ 670	\$ 722	\$ 1,002	\$ 1,279	\$ 1,390
31	38.00%	\$ 495	\$ 504	\$ 574	\$ 636	\$ 686	\$ 952	\$ 1,215	\$ 1,321
32	36.00%	\$ 469	\$ 478	\$ 544	\$ 603	\$ 650	\$ 902	\$ 1,151	\$ 1,251
33	34.00%	\$ 443	\$ 451	\$ 514	\$ 569	\$ 614	\$ 852	\$ 1,087	\$ 1,182
34	32.00%	\$ 417	\$ 425	\$ 484	\$ 536	\$ 578	\$ 802	\$ 1,023	\$ 1,112
35	30.00%	\$ 391	\$ 398	\$ 453	\$ 502	\$ 542	\$ 751	\$ 959	\$ 1,043
36	28.00%	\$ 365	\$ 372	\$ 423	\$ 469	\$ 506	\$ 701	\$ 895	\$ 973
37	26.00%	\$ 339	\$ 345	\$ 393	\$ 435	\$ 470	\$ 651	\$ 831	\$ 904
38	24.00%	\$ 313	\$ 318	\$ 363	\$ 402	\$ 433	\$ 601	\$ 767	\$ 834
39	22.00%	\$ 287	\$ 292	\$ 332	\$ 368	\$ 397	\$ 551	\$ 703	\$ 765
40	20.00%	\$ 261	\$ 265	\$ 302	\$ 335	\$ 361	\$ 501	\$ 639	\$ 695
41	18.00%	\$ 235	\$ 239	\$ 272	\$ 301	\$ 325	\$ 451	\$ 575	\$ 626
42	16.00%	\$ 208	\$ 212	\$ 242	\$ 268	\$ 289	\$ 401	\$ 512	\$ 556
43	14.00%	\$ 182	\$ 186	\$ 212	\$ 234	\$ 253	\$ 351	\$ 448	\$ 487
44	12.00%	\$ 156	\$ 159	\$ 181	\$ 201	\$ 217	\$ 301	\$ 384	\$ 417
45	10.00%	\$ 130	\$ 133	\$ 151	\$ 167	\$ 181	\$ 250	\$ 320	\$ 348
46	8.00%	\$ 104	\$ 106	\$ 121	\$ 134	\$ 144	\$ 200	\$ 256	\$ 278
47	6.00%	\$ 78	\$ 80	\$ 91	\$ 100	\$ 108	\$ 150	\$ 192	\$ 209
48	4.00%	\$ 52	\$ 53	\$ 60	\$ 67	\$ 72	\$ 100	\$ 128	\$ 139

49	2.00%	\$ 2	\$ 27	\$ 30	\$ 33	\$	\$ 50	\$ 64	\$ 70
50	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

**EARTH SET POLES**

*Revised/Issued: January 2005*

AGE	CONDITION	30 FT	35 FT	40 FT	45 FT	50 FT	55 FT	60 FT	65 FT
0	100.00%	\$ 559	\$ 582	\$ 767	\$ 931	\$ 1,078	\$ 1,442	\$ 2,134	\$ 2,413
1	97.20%	\$ 548	\$ 570	\$ 752	\$ 912	\$ 1,056	\$ 1,413	\$ 2,091	\$ 2,365
2	94.40%	\$ 537	\$ 559	\$ 736	\$ 894	\$ 1,035	\$ 1,384	\$ 2,049	\$ 2,316
3	91.70%	\$ 525	\$ 547	\$ 721	\$ 875	\$ 1,013	\$ 1,355	\$ 2,006	\$ 2,268
4	88.90%	\$ 514	\$ 535	\$ 706	\$ 857	\$ 992	\$ 1,327	\$ 1,963	\$ 2,220
5	86.10%	\$ 503	\$ 524	\$ 690	\$ 838	\$ 970	\$ 1,298	\$ 1,921	\$ 2,172
6	83.34%	\$ 492	\$ 512	\$ 675	\$ 819	\$ 949	\$ 1,269	\$ 1,878	\$ 2,123
7	80.80%	\$ 481	\$ 501	\$ 660	\$ 801	\$ 927	\$ 1,240	\$ 1,835	\$ 2,075
8	78.20%	\$ 470	\$ 489	\$ 644	\$ 782	\$ 906	\$ 1,211	\$ 1,793	\$ 2,027
9	75.70%	\$ 458	\$ 477	\$ 629	\$ 763	\$ 884	\$ 1,182	\$ 1,750	\$ 1,979
10	73.30%	\$ 447	\$ 466	\$ 614	\$ 745	\$ 862	\$ 1,154	\$ 1,707	\$ 1,930
11	70.90%	\$ 436	\$ 454	\$ 598	\$ 726	\$ 841	\$ 1,125	\$ 1,665	\$ 1,882
12	68.60%	\$ 425	\$ 442	\$ 583	\$ 708	\$ 819	\$ 1,096	\$ 1,622	\$ 1,834
13	66.30%	\$ 414	\$ 431	\$ 568	\$ 689	\$ 798	\$ 1,067	\$ 1,579	\$ 1,786
14	64.10%	\$ 402	\$ 419	\$ 552	\$ 670	\$ 776	\$ 1,038	\$ 1,536	\$ 1,737
15	62.00%	\$ 391	\$ 407	\$ 537	\$ 652	\$ 755	\$ 1,009	\$ 1,494	\$ 1,689
16	59.90%	\$ 380	\$ 396	\$ 522	\$ 633	\$ 733	\$ 981	\$ 1,451	\$ 1,641
17	57.80%	\$ 369	\$ 384	\$ 506	\$ 614	\$ 711	\$ 952	\$ 1,408	\$ 1,593
18	55.80%	\$ 358	\$ 372	\$ 491	\$ 596	\$ 690	\$ 923	\$ 1,366	\$ 1,544
19	53.90%	\$ 347	\$ 361	\$ 476	\$ 577	\$ 668	\$ 894	\$ 1,323	\$ 1,496
20	52.00%	\$ 335	\$ 349	\$ 460	\$ 559	\$ 647	\$ 865	\$ 1,280	\$ 1,448
21	50.10%	\$ 324	\$ 338	\$ 445	\$ 540	\$ 625	\$ 836	\$ 1,238	\$ 1,400
22	48.30%	\$ 313	\$ 326	\$ 430	\$ 521	\$ 604	\$ 808	\$ 1,195	\$ 1,351
23	46.50%	\$ 302	\$ 314	\$ 414	\$ 503	\$ 582	\$ 779	\$ 1,152	\$ 1,303
24	44.70%	\$ 291	\$ 303	\$ 399	\$ 484	\$ 561	\$ 750	\$ 1,110	\$ 1,255
25	43.00%	\$ 280	\$ 291	\$ 384	\$ 466	\$ 539	\$ 721	\$ 1,067	\$ 1,207
26	41.30%	\$ 268	\$ 279	\$ 368	\$ 447	\$ 517	\$ 692	\$ 1,024	\$ 1,158
27	39.60%	\$ 257	\$ 268	\$ 353	\$ 428	\$ 496	\$ 663	\$ 982	\$ 1,110
28	37.90%	\$ 246	\$ 256	\$ 337	\$ 410	\$ 474	\$ 634	\$ 939	\$ 1,062
29	36.30%	\$ 235	\$ 244	\$ 322	\$ 391	\$ 453	\$ 606	\$ 896	\$ 1,013
30	34.70%	\$ 224	\$ 233	\$ 307	\$ 372	\$ 431	\$ 577	\$ 854	\$ 965
31	33.10%	\$ 212	\$ 221	\$ 291	\$ 354	\$ 410	\$ 548	\$ 811	\$ 917
32	31.50%	\$ 201	\$ 210	\$ 276	\$ 335	\$ 388	\$ 519	\$ 768	\$ 869
33	29.90%	\$ 190	\$ 198	\$ 261	\$ 317	\$ 367	\$ 490	\$ 726	\$ 820
34	28.40%	\$ 179	\$ 186	\$ 245	\$ 298	\$ 345	\$ 461	\$ 683	\$ 772
35	26.90%	\$ 168	\$ 175	\$ 230	\$ 279	\$ 323	\$ 433	\$ 640	\$ 724
36	25.30%	\$ 157	\$ 163	\$ 215	\$ 261	\$ 302	\$ 404	\$ 598	\$ 676
37	23.80%	\$ 145	\$ 151	\$ 199	\$ 242	\$ 280	\$ 375	\$ 555	\$ 627
38	22.30%	\$ 134	\$ 140	\$ 184	\$ 223	\$ 259	\$ 346	\$ 512	\$ 579
39	20.80%	\$ 123	\$ 128	\$ 169	\$ 205	\$ 237	\$ 317	\$ 469	\$ 531
40	19.30%	\$ 112	\$ 116	\$ 153	\$ 186	\$ 216	\$ 288	\$ 427	\$ 483
41	17.80%	\$ 101	\$ 105	\$ 138	\$ 168	\$ 194	\$ 260	\$ 384	\$ 434
42	16.30%	\$ 89	\$ 93	\$ 123	\$ 149	\$ 172	\$ 231	\$ 341	\$ 386
43	14.80%	\$ 78	\$ 81	\$ 107	\$ 130	\$ 151	\$ 202	\$ 299	\$ 338
44	13.30%	\$ 67	\$ 70	\$ 92	\$ 112	\$ 129	\$ 173	\$ 256	\$ 290
45	11.80%	\$ 56	\$ 58	\$ 77	\$ 93	\$ 108	\$ 144	\$ 213	\$ 241
46	10.30%	\$ 45	\$ 47	\$ 61	\$ 74	\$ 86	\$ 115	\$ 171	\$ 193
47	8.80%	\$ 34	\$ 35	\$ 46	\$ 56	\$ 65	\$ 87	\$ 128	\$ 145
48	7.30%	\$ 22	\$ 23	\$ 31	\$ 37	\$ 43	\$ 58	\$ 85	\$ 97
49	5.80%	\$ 11	\$ 12	\$ 15	\$ 19	\$ 22	\$ 29	\$ 43	\$ 48
50	4.30%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



**EARTH PLUS SET POLES**

*Revised/Issued: January 2005*

AGE	CONDITION	30 FT	35 FT	40 FT	45 FT	50 FT	55 FT	60 FT	65 FT
0	100.00%	\$ 856	\$ 880	\$ 1,064	\$ 1,228	\$ 1,359	\$ 1,741	\$ 2,433	\$ 2,712
1	98.00%	\$ 839	\$ 862	\$ 1,043	\$ 1,203	\$ 1,332	\$ 1,706	\$ 2,384	\$ 2,658
2	96.00%	\$ 822	\$ 845	\$ 1,021	\$ 1,179	\$ 1,305	\$ 1,671	\$ 2,336	\$ 2,604
3	94.00%	\$ 805	\$ 827	\$ 1,000	\$ 1,154	\$ 1,277	\$ 1,637	\$ 2,287	\$ 2,549
4	92.00%	\$ 788	\$ 810	\$ 979	\$ 1,130	\$ 1,250	\$ 1,602	\$ 2,238	\$ 2,495
5	90.00%	\$ 770	\$ 792	\$ 958	\$ 1,105	\$ 1,223	\$ 1,567	\$ 2,190	\$ 2,441
6	88.00%	\$ 753	\$ 774	\$ 936	\$ 1,081	\$ 1,196	\$ 1,532	\$ 2,141	\$ 2,387
7	86.00%	\$ 736	\$ 757	\$ 915	\$ 1,056	\$ 1,169	\$ 1,497	\$ 2,092	\$ 2,332
8	84.00%	\$ 719	\$ 739	\$ 894	\$ 1,032	\$ 1,142	\$ 1,462	\$ 2,044	\$ 2,278
9	82.00%	\$ 702	\$ 722	\$ 872	\$ 1,007	\$ 1,114	\$ 1,428	\$ 1,995	\$ 2,224
10	80.00%	\$ 685	\$ 704	\$ 851	\$ 982	\$ 1,087	\$ 1,393	\$ 1,946	\$ 2,170
11	78.00%	\$ 668	\$ 686	\$ 830	\$ 958	\$ 1,060	\$ 1,358	\$ 1,898	\$ 2,115
12	76.00%	\$ 651	\$ 669	\$ 809	\$ 933	\$ 1,033	\$ 1,323	\$ 1,849	\$ 2,061
13	74.00%	\$ 633	\$ 651	\$ 787	\$ 909	\$ 1,006	\$ 1,288	\$ 1,800	\$ 2,007
14	72.00%	\$ 616	\$ 634	\$ 766	\$ 884	\$ 978	\$ 1,254	\$ 1,752	\$ 1,953
15	70.00%	\$ 599	\$ 616	\$ 745	\$ 860	\$ 951	\$ 1,219	\$ 1,703	\$ 1,898
16	68.00%	\$ 582	\$ 598	\$ 724	\$ 835	\$ 924	\$ 1,184	\$ 1,654	\$ 1,844
17	66.00%	\$ 565	\$ 581	\$ 702	\$ 810	\$ 897	\$ 1,149	\$ 1,606	\$ 1,790
18	64.00%	\$ 548	\$ 563	\$ 681	\$ 786	\$ 870	\$ 1,114	\$ 1,557	\$ 1,736
19	62.00%	\$ 531	\$ 546	\$ 660	\$ 761	\$ 843	\$ 1,079	\$ 1,508	\$ 1,681
20	60.00%	\$ 514	\$ 528	\$ 638	\$ 737	\$ 815	\$ 1,045	\$ 1,460	\$ 1,627
21	58.00%	\$ 496	\$ 510	\$ 617	\$ 712	\$ 788	\$ 1,010	\$ 1,411	\$ 1,573
22	56.00%	\$ 479	\$ 493	\$ 596	\$ 688	\$ 761	\$ 975	\$ 1,362	\$ 1,519
23	54.00%	\$ 462	\$ 475	\$ 575	\$ 663	\$ 734	\$ 940	\$ 1,314	\$ 1,464
24	52.00%	\$ 445	\$ 458	\$ 553	\$ 639	\$ 707	\$ 905	\$ 1,265	\$ 1,410
25	50.00%	\$ 428	\$ 440	\$ 532	\$ 614	\$ 680	\$ 871	\$ 1,217	\$ 1,356
26	48.00%	\$ 411	\$ 422	\$ 511	\$ 589	\$ 652	\$ 836	\$ 1,168	\$ 1,302
27	46.00%	\$ 394	\$ 405	\$ 489	\$ 565	\$ 625	\$ 801	\$ 1,119	\$ 1,248
28	44.00%	\$ 377	\$ 387	\$ 468	\$ 540	\$ 598	\$ 766	\$ 1,071	\$ 1,193
29	42.00%	\$ 360	\$ 370	\$ 447	\$ 516	\$ 571	\$ 731	\$ 1,022	\$ 1,139
30	40.00%	\$ 342	\$ 352	\$ 426	\$ 491	\$ 544	\$ 696	\$ 973	\$ 1,085
31	38.00%	\$ 325	\$ 334	\$ 404	\$ 467	\$ 516	\$ 662	\$ 925	\$ 1,031
32	36.00%	\$ 308	\$ 317	\$ 383	\$ 442	\$ 489	\$ 627	\$ 876	\$ 976
33	34.00%	\$ 291	\$ 299	\$ 362	\$ 418	\$ 462	\$ 592	\$ 827	\$ 922
34	32.00%	\$ 274	\$ 282	\$ 340	\$ 393	\$ 435	\$ 557	\$ 779	\$ 868
35	30.00%	\$ 257	\$ 264	\$ 319	\$ 368	\$ 408	\$ 522	\$ 730	\$ 814
36	28.00%	\$ 240	\$ 246	\$ 298	\$ 344	\$ 381	\$ 487	\$ 681	\$ 759
37	26.00%	\$ 223	\$ 229	\$ 277	\$ 319	\$ 353	\$ 453	\$ 633	\$ 705
38	24.00%	\$ 205	\$ 211	\$ 255	\$ 295	\$ 326	\$ 418	\$ 584	\$ 651
39	22.00%	\$ 188	\$ 194	\$ 234	\$ 270	\$ 299	\$ 383	\$ 535	\$ 597
40	20.00%	\$ 171	\$ 176	\$ 213	\$ 246	\$ 272	\$ 348	\$ 487	\$ 542
41	18.00%	\$ 154	\$ 158	\$ 192	\$ 221	\$ 245	\$ 313	\$ 438	\$ 488
42	16.00%	\$ 137	\$ 141	\$ 170	\$ 196	\$ 217	\$ 279	\$ 389	\$ 434
43	14.00%	\$ 120	\$ 123	\$ 149	\$ 172	\$ 190	\$ 244	\$ 341	\$ 380
44	12.00%	\$ 103	\$ 106	\$ 128	\$ 147	\$ 163	\$ 209	\$ 292	\$ 325
45	10.00%	\$ 86	\$ 88	\$ 106	\$ 123	\$ 136	\$ 174	\$ 243	\$ 271
46	8.00%	\$ 68	\$ 70	\$ 85	\$ 98	\$ 109	\$ 139	\$ 195	\$ 217
47	6.00%	\$ 51	\$ 53	\$ 64	\$ 74	\$ 82	\$ 104	\$ 146	\$ 163
48	4.00%	\$ 34	\$ 35	\$ 43	\$ 49	\$ 54	\$ 70	\$ 97	\$ 108
49	2.00%	\$ 17	\$ 18	\$ 21	\$ 25	\$ 27	\$ 35	\$ 49	\$ 54
50	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

**ROCK MOUNT SET POLES**

*Revised/Issued: January 2005*

AGE	CONDITION	30 FT	35 FT	40 FT	45 FT	50 FT	55 FT	60 FT	65 FT
0	100.00%	\$ 2,367	\$ 2,828	\$ 3,006	\$ 3,163	\$ 3,885	\$ 4,240	\$ 4,925	\$ 5,196
1	98.00%	\$ 2,320	\$ 2,771	\$ 2,946	\$ 3,100	\$ 3,807	\$ 4,155	\$ 4,827	\$ 5,092
2	96.00%	\$ 2,272	\$ 2,715	\$ 2,886	\$ 3,036	\$ 3,730	\$ 4,070	\$ 4,728	\$ 4,988
3	94.00%	\$ 2,225	\$ 2,658	\$ 2,826	\$ 2,973	\$ 3,652	\$ 3,986	\$ 4,630	\$ 4,884
4	92.00%	\$ 2,178	\$ 2,602	\$ 2,766	\$ 2,910	\$ 3,574	\$ 3,901	\$ 4,531	\$ 4,780
5	90.00%	\$ 2,130	\$ 2,545	\$ 2,705	\$ 2,847	\$ 3,497	\$ 3,816	\$ 4,433	\$ 4,676
6	88.00%	\$ 2,083	\$ 2,489	\$ 2,645	\$ 2,783	\$ 3,419	\$ 3,731	\$ 4,334	\$ 4,572
7	86.00%	\$ 2,036	\$ 2,432	\$ 2,585	\$ 2,720	\$ 3,341	\$ 3,646	\$ 4,236	\$ 4,469
8	84.00%	\$ 1,988	\$ 2,376	\$ 2,525	\$ 2,657	\$ 3,263	\$ 3,562	\$ 4,137	\$ 4,365
9	82.00%	\$ 1,941	\$ 2,319	\$ 2,465	\$ 2,594	\$ 3,186	\$ 3,477	\$ 4,039	\$ 4,261
10	80.00%	\$ 1,894	\$ 2,262	\$ 2,405	\$ 2,530	\$ 3,108	\$ 3,392	\$ 3,940	\$ 4,157
11	78.00%	\$ 1,846	\$ 2,206	\$ 2,345	\$ 2,467	\$ 3,030	\$ 3,307	\$ 3,842	\$ 4,053
12	76.00%	\$ 1,799	\$ 2,149	\$ 2,285	\$ 2,404	\$ 2,953	\$ 3,222	\$ 3,743	\$ 3,949
13	74.00%	\$ 1,752	\$ 2,093	\$ 2,224	\$ 2,341	\$ 2,875	\$ 3,138	\$ 3,645	\$ 3,845
14	72.00%	\$ 1,704	\$ 2,036	\$ 2,164	\$ 2,277	\$ 2,797	\$ 3,053	\$ 3,546	\$ 3,741
15	70.00%	\$ 1,657	\$ 1,980	\$ 2,104	\$ 2,214	\$ 2,720	\$ 2,968	\$ 3,448	\$ 3,637
16	68.00%	\$ 1,610	\$ 1,923	\$ 2,044	\$ 2,151	\$ 2,642	\$ 2,883	\$ 3,349	\$ 3,533
17	66.00%	\$ 1,562	\$ 1,866	\$ 1,984	\$ 2,088	\$ 2,564	\$ 2,798	\$ 3,251	\$ 3,429
18	64.00%	\$ 1,515	\$ 1,810	\$ 1,924	\$ 2,024	\$ 2,486	\$ 2,714	\$ 3,152	\$ 3,325
19	62.00%	\$ 1,468	\$ 1,753	\$ 1,864	\$ 1,961	\$ 2,409	\$ 2,629	\$ 3,054	\$ 3,222
20	60.00%	\$ 1,420	\$ 1,697	\$ 1,804	\$ 1,898	\$ 2,331	\$ 2,544	\$ 2,955	\$ 3,118
21	58.00%	\$ 1,373	\$ 1,640	\$ 1,743	\$ 1,835	\$ 2,253	\$ 2,459	\$ 2,857	\$ 3,014
22	56.00%	\$ 1,326	\$ 1,584	\$ 1,683	\$ 1,771	\$ 2,176	\$ 2,374	\$ 2,758	\$ 2,910
23	54.00%	\$ 1,278	\$ 1,527	\$ 1,623	\$ 1,708	\$ 2,098	\$ 2,290	\$ 2,660	\$ 2,806
24	52.00%	\$ 1,231	\$ 1,471	\$ 1,563	\$ 1,645	\$ 2,020	\$ 2,205	\$ 2,561	\$ 2,702
25	50.00%	\$ 1,184	\$ 1,414	\$ 1,503	\$ 1,582	\$ 1,943	\$ 2,120	\$ 2,463	\$ 2,598
26	48.00%	\$ 1,136	\$ 1,357	\$ 1,443	\$ 1,518	\$ 1,865	\$ 2,035	\$ 2,364	\$ 2,494
27	46.00%	\$ 1,089	\$ 1,301	\$ 1,383	\$ 1,455	\$ 1,787	\$ 1,950	\$ 2,266	\$ 2,390
28	44.00%	\$ 1,041	\$ 1,244	\$ 1,323	\$ 1,392	\$ 1,709	\$ 1,866	\$ 2,167	\$ 2,286
29	42.00%	\$ 994	\$ 1,188	\$ 1,263	\$ 1,328	\$ 1,632	\$ 1,781	\$ 2,069	\$ 2,182
30	40.00%	\$ 947	\$ 1,131	\$ 1,202	\$ 1,265	\$ 1,554	\$ 1,696	\$ 1,970	\$ 2,078
31	38.00%	\$ 899	\$ 1,075	\$ 1,142	\$ 1,202	\$ 1,476	\$ 1,611	\$ 1,872	\$ 1,974
32	36.00%	\$ 852	\$ 1,018	\$ 1,082	\$ 1,139	\$ 1,399	\$ 1,526	\$ 1,773	\$ 1,871
33	34.00%	\$ 805	\$ 962	\$ 1,022	\$ 1,075	\$ 1,321	\$ 1,442	\$ 1,675	\$ 1,767
34	32.00%	\$ 757	\$ 905	\$ 962	\$ 1,012	\$ 1,243	\$ 1,357	\$ 1,576	\$ 1,663
35	30.00%	\$ 710	\$ 848	\$ 902	\$ 949	\$ 1,166	\$ 1,272	\$ 1,478	\$ 1,559
36	28.00%	\$ 663	\$ 792	\$ 842	\$ 886	\$ 1,088	\$ 1,187	\$ 1,379	\$ 1,455
37	26.00%	\$ 615	\$ 735	\$ 782	\$ 822	\$ 1,010	\$ 1,102	\$ 1,281	\$ 1,351
38	24.00%	\$ 568	\$ 679	\$ 721	\$ 759	\$ 932	\$ 1,018	\$ 1,182	\$ 1,247
39	22.00%	\$ 521	\$ 622	\$ 661	\$ 696	\$ 855	\$ 933	\$ 1,084	\$ 1,143
40	20.00%	\$ 473	\$ 566	\$ 601	\$ 633	\$ 777	\$ 848	\$ 985	\$ 1,039
41	18.00%	\$ 426	\$ 509	\$ 541	\$ 569	\$ 699	\$ 763	\$ 886	\$ 935
42	16.00%	\$ 379	\$ 452	\$ 481	\$ 506	\$ 622	\$ 678	\$ 788	\$ 831
43	14.00%	\$ 331	\$ 396	\$ 421	\$ 443	\$ 544	\$ 594	\$ 689	\$ 727
44	12.00%	\$ 284	\$ 339	\$ 361	\$ 380	\$ 466	\$ 509	\$ 591	\$ 624
45	10.00%	\$ 237	\$ 283	\$ 301	\$ 316	\$ 388	\$ 424	\$ 492	\$ 520
46	8.00%	\$ 189	\$ 226	\$ 240	\$ 253	\$ 311	\$ 339	\$ 394	\$ 416
47	6.00%	\$ 142	\$ 170	\$ 180	\$ 190	\$ 233	\$ 254	\$ 295	\$ 312
48	4.00%	\$ 95	\$ 113	\$ 120	\$ 127	\$ 155	\$ 170	\$ 197	\$ 208
49	2.00%	\$ 47	\$ 57	\$ 60	\$ 63	\$ 78	\$ 85	\$ 98	\$ 104
50	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

**SWAMP SET POLES**

*Revised: January 2005*

AGE	CONDITION	30 FT	35 FT	40 FT	45 FT	50 FT	55 FT	60 FT	65 FT
0	100.00%	\$ 2,509	\$ 2,533	\$ 2,717	\$ 2,881	\$ 3,012	\$ 3,432	\$ 4,124	\$ 4,404
1	98.00%	\$ 2,459	\$ 2,482	\$ 2,663	\$ 2,823	\$ 2,952	\$ 3,363	\$ 4,042	\$ 4,316
2	96.00%	\$ 2,409	\$ 2,432	\$ 2,608	\$ 2,766	\$ 2,892	\$ 3,295	\$ 3,959	\$ 4,228
3	94.00%	\$ 2,358	\$ 2,381	\$ 2,554	\$ 2,708	\$ 2,831	\$ 3,226	\$ 3,877	\$ 4,140
4	92.00%	\$ 2,308	\$ 2,330	\$ 2,500	\$ 2,651	\$ 2,771	\$ 3,157	\$ 3,794	\$ 4,052
5	90.00%	\$ 2,258	\$ 2,280	\$ 2,445	\$ 2,593	\$ 2,711	\$ 3,089	\$ 3,712	\$ 3,964
6	88.00%	\$ 2,208	\$ 2,229	\$ 2,391	\$ 2,535	\$ 2,651	\$ 3,020	\$ 3,629	\$ 3,876
7	86.00%	\$ 2,158	\$ 2,178	\$ 2,337	\$ 2,478	\$ 2,590	\$ 2,952	\$ 3,547	\$ 3,787
8	84.00%	\$ 2,108	\$ 2,128	\$ 2,282	\$ 2,420	\$ 2,530	\$ 2,883	\$ 3,464	\$ 3,699
9	82.00%	\$ 2,057	\$ 2,077	\$ 2,228	\$ 2,362	\$ 2,470	\$ 2,814	\$ 3,382	\$ 3,611
10	80.00%	\$ 2,007	\$ 2,026	\$ 2,174	\$ 2,305	\$ 2,410	\$ 2,746	\$ 3,299	\$ 3,523
11	78.00%	\$ 1,957	\$ 1,976	\$ 2,119	\$ 2,247	\$ 2,349	\$ 2,677	\$ 3,217	\$ 3,435
12	76.00%	\$ 1,907	\$ 1,925	\$ 2,065	\$ 2,190	\$ 2,289	\$ 2,608	\$ 3,134	\$ 3,347
13	74.00%	\$ 1,857	\$ 1,874	\$ 2,011	\$ 2,132	\$ 2,229	\$ 2,540	\$ 3,052	\$ 3,259
14	72.00%	\$ 1,806	\$ 1,824	\$ 1,956	\$ 2,074	\$ 2,169	\$ 2,471	\$ 2,969	\$ 3,171
15	70.00%	\$ 1,756	\$ 1,773	\$ 1,902	\$ 2,017	\$ 2,108	\$ 2,402	\$ 2,887	\$ 3,083
16	68.00%	\$ 1,706	\$ 1,722	\$ 1,848	\$ 1,959	\$ 2,048	\$ 2,334	\$ 2,804	\$ 2,995
17	66.00%	\$ 1,656	\$ 1,672	\$ 1,793	\$ 1,901	\$ 1,988	\$ 2,265	\$ 2,722	\$ 2,907
18	64.00%	\$ 1,606	\$ 1,621	\$ 1,739	\$ 1,844	\$ 1,928	\$ 2,196	\$ 2,639	\$ 2,819
19	62.00%	\$ 1,556	\$ 1,570	\$ 1,685	\$ 1,786	\$ 1,867	\$ 2,128	\$ 2,557	\$ 2,730
20	60.00%	\$ 1,505	\$ 1,520	\$ 1,630	\$ 1,729	\$ 1,807	\$ 2,059	\$ 2,474	\$ 2,642
21	58.00%	\$ 1,455	\$ 1,469	\$ 1,576	\$ 1,671	\$ 1,747	\$ 1,991	\$ 2,392	\$ 2,554
22	56.00%	\$ 1,405	\$ 1,418	\$ 1,522	\$ 1,613	\$ 1,687	\$ 1,922	\$ 2,309	\$ 2,466
23	54.00%	\$ 1,355	\$ 1,368	\$ 1,467	\$ 1,556	\$ 1,626	\$ 1,853	\$ 2,227	\$ 2,378
24	52.00%	\$ 1,305	\$ 1,317	\$ 1,413	\$ 1,498	\$ 1,566	\$ 1,785	\$ 2,144	\$ 2,290
25	50.00%	\$ 1,255	\$ 1,267	\$ 1,359	\$ 1,441	\$ 1,506	\$ 1,716	\$ 2,062	\$ 2,202
26	48.00%	\$ 1,204	\$ 1,216	\$ 1,304	\$ 1,383	\$ 1,446	\$ 1,647	\$ 1,980	\$ 2,114
27	46.00%	\$ 1,154	\$ 1,165	\$ 1,250	\$ 1,325	\$ 1,386	\$ 1,579	\$ 1,897	\$ 2,026
28	44.00%	\$ 1,104	\$ 1,115	\$ 1,195	\$ 1,268	\$ 1,325	\$ 1,510	\$ 1,815	\$ 1,938
29	42.00%	\$ 1,054	\$ 1,064	\$ 1,141	\$ 1,210	\$ 1,265	\$ 1,441	\$ 1,732	\$ 1,850
30	40.00%	\$ 1,004	\$ 1,013	\$ 1,087	\$ 1,152	\$ 1,205	\$ 1,373	\$ 1,650	\$ 1,762
31	38.00%	\$ 953	\$ 963	\$ 1,032	\$ 1,095	\$ 1,145	\$ 1,304	\$ 1,567	\$ 1,674
32	36.00%	\$ 903	\$ 912	\$ 978	\$ 1,037	\$ 1,084	\$ 1,236	\$ 1,485	\$ 1,585
33	34.00%	\$ 853	\$ 861	\$ 924	\$ 980	\$ 1,024	\$ 1,167	\$ 1,402	\$ 1,497
34	32.00%	\$ 803	\$ 811	\$ 869	\$ 922	\$ 964	\$ 1,098	\$ 1,320	\$ 1,409
35	30.00%	\$ 753	\$ 760	\$ 815	\$ 864	\$ 904	\$ 1,030	\$ 1,237	\$ 1,321
36	28.00%	\$ 703	\$ 709	\$ 761	\$ 807	\$ 843	\$ 961	\$ 1,155	\$ 1,233
37	26.00%	\$ 652	\$ 659	\$ 706	\$ 749	\$ 783	\$ 892	\$ 1,072	\$ 1,145
38	24.00%	\$ 602	\$ 608	\$ 652	\$ 691	\$ 723	\$ 824	\$ 990	\$ 1,057
39	22.00%	\$ 552	\$ 557	\$ 598	\$ 634	\$ 663	\$ 755	\$ 907	\$ 969
40	20.00%	\$ 502	\$ 507	\$ 543	\$ 576	\$ 602	\$ 686	\$ 825	\$ 881
41	18.00%	\$ 452	\$ 456	\$ 489	\$ 519	\$ 542	\$ 618	\$ 742	\$ 793
42	16.00%	\$ 401	\$ 405	\$ 435	\$ 461	\$ 482	\$ 549	\$ 660	\$ 705
43	14.00%	\$ 351	\$ 355	\$ 380	\$ 403	\$ 422	\$ 480	\$ 577	\$ 617
44	12.00%	\$ 301	\$ 304	\$ 326	\$ 346	\$ 361	\$ 412	\$ 495	\$ 528
45	10.00%	\$ 251	\$ 253	\$ 272	\$ 288	\$ 301	\$ 343	\$ 412	\$ 440
46	8.00%	\$ 201	\$ 203	\$ 217	\$ 230	\$ 241	\$ 275	\$ 330	\$ 352
47	6.00%	\$ 151	\$ 152	\$ 163	\$ 173	\$ 181	\$ 206	\$ 247	\$ 264
48	4.00%	\$ 100	\$ 101	\$ 109	\$ 115	\$ 120	\$ 137	\$ 165	\$ 176
49	2.00%	\$ 50	\$ 51	\$ 54	\$ 58	\$ 60	\$ 69	\$ 82	\$ 88
50	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

**BLASTED SET POLES**

*Revised/Issued: January 2005*

AGE	CONDITION	30 FT	35 FT	40 FT	45 FT	50 FT	55 FT	60 FT	65 FT
0	100.00%	\$ 2,645	\$ 3,036	\$ 3,178	\$ 3,511	\$ 3,919	\$ 4,457	\$ 5,325	\$ 5,779
1	98.00%	\$ 2,592	\$ 2,975	\$ 3,114	\$ 3,441	\$ 3,841	\$ 4,368	\$ 5,219	\$ 5,663
2	96.00%	\$ 2,539	\$ 2,915	\$ 3,051	\$ 3,371	\$ 3,762	\$ 4,279	\$ 5,112	\$ 5,548
3	94.00%	\$ 2,486	\$ 2,854	\$ 2,987	\$ 3,300	\$ 3,684	\$ 4,190	\$ 5,006	\$ 5,432
4	92.00%	\$ 2,433	\$ 2,793	\$ 2,924	\$ 3,230	\$ 3,605	\$ 4,100	\$ 4,899	\$ 5,317
5	90.00%	\$ 2,381	\$ 2,732	\$ 2,860	\$ 3,160	\$ 3,527	\$ 4,011	\$ 4,793	\$ 5,201
6	88.00%	\$ 2,328	\$ 2,672	\$ 2,797	\$ 3,090	\$ 3,449	\$ 3,922	\$ 4,686	\$ 5,086
7	86.00%	\$ 2,275	\$ 2,611	\$ 2,733	\$ 3,019	\$ 3,370	\$ 3,833	\$ 4,580	\$ 4,970
8	84.00%	\$ 2,222	\$ 2,550	\$ 2,670	\$ 2,949	\$ 3,292	\$ 3,744	\$ 4,473	\$ 4,854
9	82.00%	\$ 2,169	\$ 2,490	\$ 2,606	\$ 2,879	\$ 3,214	\$ 3,655	\$ 4,367	\$ 4,739
10	80.00%	\$ 2,116	\$ 2,429	\$ 2,542	\$ 2,809	\$ 3,135	\$ 3,566	\$ 4,260	\$ 4,623
11	78.00%	\$ 2,063	\$ 2,368	\$ 2,479	\$ 2,739	\$ 3,057	\$ 3,476	\$ 4,154	\$ 4,508
12	76.00%	\$ 2,010	\$ 2,307	\$ 2,415	\$ 2,668	\$ 2,978	\$ 3,387	\$ 4,047	\$ 4,392
13	74.00%	\$ 1,957	\$ 2,247	\$ 2,352	\$ 2,598	\$ 2,900	\$ 3,298	\$ 3,941	\$ 4,276
14	72.00%	\$ 1,904	\$ 2,186	\$ 2,288	\$ 2,528	\$ 2,822	\$ 3,209	\$ 3,834	\$ 4,161
15	70.00%	\$ 1,852	\$ 2,125	\$ 2,225	\$ 2,458	\$ 2,743	\$ 3,120	\$ 3,728	\$ 4,045
16	68.00%	\$ 1,799	\$ 2,064	\$ 2,161	\$ 2,387	\$ 2,665	\$ 3,031	\$ 3,621	\$ 3,930
17	66.00%	\$ 1,746	\$ 2,004	\$ 2,097	\$ 2,317	\$ 2,587	\$ 2,942	\$ 3,515	\$ 3,814
18	64.00%	\$ 1,693	\$ 1,943	\$ 2,034	\$ 2,247	\$ 2,508	\$ 2,852	\$ 3,408	\$ 3,699
19	62.00%	\$ 1,640	\$ 1,882	\$ 1,970	\$ 2,177	\$ 2,430	\$ 2,763	\$ 3,302	\$ 3,583
20	60.00%	\$ 1,587	\$ 1,822	\$ 1,907	\$ 2,107	\$ 2,351	\$ 2,674	\$ 3,195	\$ 3,467
21	58.00%	\$ 1,534	\$ 1,761	\$ 1,843	\$ 2,036	\$ 2,273	\$ 2,585	\$ 3,089	\$ 3,352
22	56.00%	\$ 1,481	\$ 1,700	\$ 1,780	\$ 1,966	\$ 2,195	\$ 2,496	\$ 2,982	\$ 3,236
23	54.00%	\$ 1,428	\$ 1,639	\$ 1,716	\$ 1,896	\$ 2,116	\$ 2,407	\$ 2,876	\$ 3,121
24	52.00%	\$ 1,375	\$ 1,579	\$ 1,653	\$ 1,826	\$ 2,038	\$ 2,318	\$ 2,769	\$ 3,005
25	50.00%	\$ 1,323	\$ 1,518	\$ 1,589	\$ 1,756	\$ 1,960	\$ 2,229	\$ 2,663	\$ 2,890
26	48.00%	\$ 1,270	\$ 1,457	\$ 1,525	\$ 1,685	\$ 1,881	\$ 2,139	\$ 2,556	\$ 2,774
27	46.00%	\$ 1,217	\$ 1,397	\$ 1,462	\$ 1,615	\$ 1,803	\$ 2,050	\$ 2,450	\$ 2,658
28	44.00%	\$ 1,164	\$ 1,336	\$ 1,398	\$ 1,545	\$ 1,724	\$ 1,961	\$ 2,343	\$ 2,543
29	42.00%	\$ 1,111	\$ 1,275	\$ 1,335	\$ 1,475	\$ 1,646	\$ 1,872	\$ 2,236	\$ 2,427
30	40.00%	\$ 1,058	\$ 1,214	\$ 1,271	\$ 1,404	\$ 1,568	\$ 1,783	\$ 2,130	\$ 2,312
31	38.00%	\$ 1,005	\$ 1,154	\$ 1,208	\$ 1,334	\$ 1,489	\$ 1,694	\$ 2,023	\$ 2,196
32	36.00%	\$ 952	\$ 1,093	\$ 1,144	\$ 1,264	\$ 1,411	\$ 1,605	\$ 1,917	\$ 2,080
33	34.00%	\$ 899	\$ 1,032	\$ 1,081	\$ 1,194	\$ 1,332	\$ 1,515	\$ 1,810	\$ 1,965
34	32.00%	\$ 846	\$ 972	\$ 1,017	\$ 1,124	\$ 1,254	\$ 1,426	\$ 1,704	\$ 1,849
35	30.00%	\$ 793	\$ 911	\$ 953	\$ 1,053	\$ 1,176	\$ 1,337	\$ 1,597	\$ 1,734
36	28.00%	\$ 741	\$ 850	\$ 890	\$ 983	\$ 1,097	\$ 1,248	\$ 1,491	\$ 1,618
37	26.00%	\$ 688	\$ 789	\$ 826	\$ 913	\$ 1,019	\$ 1,159	\$ 1,384	\$ 1,503
38	24.00%	\$ 635	\$ 729	\$ 763	\$ 843	\$ 941	\$ 1,070	\$ 1,278	\$ 1,387
39	22.00%	\$ 582	\$ 668	\$ 699	\$ 772	\$ 862	\$ 981	\$ 1,171	\$ 1,271
40	20.00%	\$ 529	\$ 607	\$ 636	\$ 702	\$ 784	\$ 891	\$ 1,065	\$ 1,156
41	18.00%	\$ 476	\$ 546	\$ 572	\$ 632	\$ 705	\$ 802	\$ 958	\$ 1,040
42	16.00%	\$ 423	\$ 486	\$ 508	\$ 562	\$ 627	\$ 713	\$ 852	\$ 925
43	14.00%	\$ 370	\$ 425	\$ 445	\$ 492	\$ 549	\$ 624	\$ 745	\$ 809
44	12.00%	\$ 317	\$ 364	\$ 381	\$ 421	\$ 470	\$ 535	\$ 639	\$ 693
45	10.00%	\$ 264	\$ 304	\$ 318	\$ 351	\$ 392	\$ 446	\$ 532	\$ 578
46	8.00%	\$ 212	\$ 243	\$ 254	\$ 281	\$ 314	\$ 357	\$ 426	\$ 462
47	6.00%	\$ 159	\$ 182	\$ 191	\$ 211	\$ 235	\$ 267	\$ 319	\$ 347
48	4.00%	\$ 106	\$ 121	\$ 127	\$ 140	\$ 157	\$ 178	\$ 213	\$ 231
49	2.00%	\$ 53	\$ 61	\$ 64	\$ 70	\$ 78	\$ 89	\$ 106	\$ 116
50	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

TABLE 2 - UNIT TRANSFER AND REARRANGEMENT COSTS TABLE

Unit Transfer or Rearrangement Costs 2005			
Crossarm		Single, (wood) ea.	\$ 200
Crossarm		Double, (wood) ea.	\$ 466
Crossarm		Triple, (wood) ea.	\$ 599
Crossarm		(steel) ea.	\$ 333
Secondary Rack		or Bracket	\$ 84
Pole Top Pin ea.			\$ 95
Saddle Clamp, ea.			\$ 89
Spool Bolt or 1 Pt. Rack, ea.			\$ 73
Post Type Insulator -	ea. up to 14KV		\$ 111
Post Type Insulator -	ea, over 14KV		\$ 133
Conductor Dead End	Primary, De-energized, ea.		\$ 258
Conductor Dead End	Primary, Live up to 14KV, ea.		\$ 383
Conductor Dead End	Primary, Live over 14KV, ea.		\$ 433
Conductor Dead End	Secondary per Bus ( 1 Rack)		\$ 326
Conductor Dead End	Secondary per Wire ( Single Point Racks)		\$ 198
Splices	Primary ea. Conductor Live		\$ 314
Splices	Primary ea. Conductor De-Energized		\$ 246
Splices	Secondary ea. Conductor		\$ 82
Conductor Semi Strain	Primary, De-energized, ea.		\$ 264
Conductor Semi Strain	Primary, Live up to 14KV, ea.		\$ 344
Conductor Semi Strain	Primary, Live over 14KV, ea.		\$ 389
Line Wire	Primary De-energized, Tang, ea.		\$ 98
Line Wire	Primary Live up to 14 KV, Tang. ea.		\$ 133
Line Wire	Primary Live over 14 KV, Tang. ea.		\$ 155
Line Wire	Primary De-energized, Angle, ea.		\$ 98
Line Wire	Primary Live up to 14 KV, Angle. ea.		\$ 133
Line Wire	Primary Live over 14 KV, Angle ea.		\$ 155
Line Wire	Secondary ea.		\$ 69
Spun Secondary	Tangent or Small Angle	(0-30deg)	\$ 195
Spun Secondary	Medium Angle	(30-60deg)	\$ 278
Spun Secondary	Heavy Angle	(60-90deg)	\$ 655
Spun Secondary	Dead End		\$ 344
Triplex Service	one end on pole		\$ 155
Triplex Service	one end on spun bus		\$ 164
Triplex Service	replace service (100ft)		\$ 574
Triplex Service	splice		\$ 170
Line Switch, ea.			\$ 200

In Line Switch or Fuse Cu				\$ 588
Transformer Assembly, ea.				\$ 996
Ground Wire, ea.				\$ 133
Ground Rod, ea.				\$ 148
Regulator, ea.				\$ 2,220
Anchor	Plate or Log	ea.		\$ 537
Anchor	Expansion	ea.		\$ 577
Anchor	P.I.S.A.	ea.		\$ 277
Anchor	Rock	ea.		\$ 532
Guys				\$ 257
Reclosers	1 Phase	Note- unit price does not include primary dead ends		\$ 555
Reclosers	2 Phase	Note- unit price does not include primary dead ends		\$ 833
Reclosers	3 Phase	Note- unit price does not include primary dead ends		\$ 1,110
Street Light	Bracket, ea.			\$ 278
Street Light	Relay, ea.			\$ 133
Street Light	Photoelectric Controller			\$ 178
Meter Test Box				\$ 200
Under Ground	Primary Riser	No Splice		\$ 1,082
Under Ground	Primary Riser	Splice and add 5 feet		\$ 2,193
Under Ground	Secondary Riser	No Splice		\$ 333
Under Ground	Secondary Riser	Splice and add 5 feet		\$ 671
Triplex	Convert 3 wire service to triplex	1 spans		\$ 521
Triplex	Convert 3 wire service to triplex	2 spans		\$ 1,092
Pole Top Extension - Epoxy				\$ 278
Pole Cribs, ea. (0.6meters)				\$ 1,166
No. 44 Crossarm				\$ 306
Connect/Disconnect Bell Bond To/From Neutral (Hydro Owned Poles Only)				\$ 117
Extra Trip To job ( Based on 2 Hrs. Travel - Round Trip)				\$ 538
Special Work Vehicle Charge Billed as Extra Charge per pole, ie., Bombardiers or muskeg tractors applicable for work in locations not accessible to standard work vehicles ie. (Line Trucks)				\$ 160
Float charge for Special Work Vehicle transportation				\$ 400
Engineering Charge per hour		*Includes Truck		\$ 138
Line Construction Labour Rate per man-hour				\$ 117
Forestry Hourly Labour Rate per man-hour				\$ 122
Administration Overhead for Contract Labour (% of contract)				16%

Miscellaneous Charges - Charges for other Transfer and Rearrangement activities for which unit cost is not provided may be established by estimating the time required for the work operation and applying the hourly labour rate that is provided above.

**Notes:**

1. Attachment or removal charges will be calculated at 50% of the Transfer or Rearrangement charges.
2. When interspersing a pole charges will be calculated at 50% of the Transfer or Rearrangement charges.
3. Unit Price Includes Material
4. Miscellaneous Charges - Charges for other Transfer and Rearrangement activities for which unit cost is not provided may be established by estimating the time required for the work operation and applying the hourly labour rate that is provided above.

<b>New Pole Costs</b>						
<i>Revised/Issued: January 2005</i>						
<b>Material Costs (dollars)</b>			<b>TYPE OF SETTING</b>			
Height (Ft)	Earth, Earth Plus & Rock Drilled (Pole Only)		Cribbed Mount (pole, crib & backfill)		Rock Mount (Pole & rock mount)	
30	\$	221	\$	689	\$	1,545
35	\$	244	\$	713	\$	2,006
40	\$	386	\$	855	\$	2,148
45	\$	508	\$	976	\$	2,269
50	\$	597	\$	1,065	\$	2,795
55	\$	916	\$	1,385	\$	3,114
60	\$	1,565	\$	2,033	\$	3,763
65	\$	1,800	\$	2,268	\$	3,998
<b>Labour Costs (dollars)</b>			<b>TYPE OF SETTING</b>			
Height (Ft)	Earth	Earth Plus or Swamp	Earth or Earth Plus Hydro Vac	Rock Drilled	Swamp with Cribbed Mount	Rock Mount
<b>Pole Dig &amp; Set (Includes delivery of pole from own yard, if required.)</b>						
30	\$	338	\$	635	\$	1,380
35	\$	338	\$	636	\$	1,380
40	\$	381	\$	678	\$	1,423
45	\$	423	\$	720	\$	1,464
50	\$	481	\$	762	\$	1,507
55	\$	526	\$	825	\$	1,569
60	\$	569	\$	868	\$	1,612
65	\$	613	\$	912	\$	1,656
<b>Pole Dig (only)</b>						
30	\$	135	\$	407	\$	1,164
35	\$	135	\$	408	\$	1,164
40	\$	152	\$	424	\$	1,182
45	\$	169	\$	441	\$	1,198
50	\$	192	\$	458	\$	1,215
55	\$	210	\$	483	\$	1,240
60	\$	228	\$	500	\$	1,257
65	\$	276	\$	502	\$	911
<b>Pole Set (only)</b>						
30	\$	203	\$	228	\$	216
35	\$	203	\$	228	\$	216
40	\$	229	\$	254	\$	241
45	\$	254	\$	279	\$	266
50	\$	289	\$	304	\$	292
55	\$	316	\$	342	\$	329
60	\$	341	\$	368	\$	355
65	\$	337	\$	394	\$	381
Notes: All pole digs other that (Blended or Rock Drilled) and (Rock Mounted) poles shall be supplied using a porta hole.						
Pole Removal & Recycling				\$	176	All lengths (each)
Extra Pole Space (charged if LDC requires more than 10 feet normal space on a pole)				\$	185	Per unit of additional 5ft.
Access Fee ( to be charged per pole if no Make Ready exists)					\$	185



1                                   **HYDRO OTTAWA LIMITED INTERROGATORY - 22**

2  
3                   **Reference:**

4                   Hydro One's supplemental evidence 20221107 - MTO Permit, page 2, lines 5 to 17

5  
6                   **Preamble:**

7                   The new poles that will be installed on the existing pole centre-line as part  
8                   of the Joint Use Project will likely not be able to accommodate two 8.32kV  
9                   circuits (one-three phase 8.32kVHydro One circuit is already on these  
10                  Hydro One poles) due to MTO requirements. In discussions with the MTO  
11                  about this project, Hydro One was made aware that the permit being sought  
12                  from the MTO would not support a second circuit on the existing pole  
13                  centre-line. If a second circuit is sought, the MTO has shared 1 that the  
14                  distributor will need to secure an additional permit and will be required to  
15                  relocate the centre-line of the pole line to the west to maintain an 80m  
16                  separation from the location of the overpass.

17  
18                  Should a determination be made by the OEB that a second 8.32kV circuit  
19                  needs to be accommodated on this pole line for Hydro Ottawa to serve 626  
20                  Principale Street, a new pole line will need to be redesigned, replaced, and  
21                  potentially relocated, contingent on the requirements of the MTO.

22  
23                  **Interrogatory:**

- 24                  a) Please confirm if Hydro One initially requested a permit for one or two 8.32 kV circuits  
25                  from the MTO?
- 26  
27                  b) When the MTO advised that an additional permit would be required for a second  
28                  circuit, as well as, relocating the centre-line of the pole line to the west to maintain an  
29                  80m separation from the location of the overpass, did Hydro One weigh the potential  
30                  cost implications to both Hydro One and Hydro Ottawa, in light of the active Hydro  
31                  Ottawa disputed Hydro One SAA?
- 32  
33                  c) Would Hydro Ottawa's request, regardless of the Telecom Existing Joint Use Tenant  
34                  request, require the pole line to be moved?
- 35  
36                  d) If Hydro Ottawa's joint pole use request had been actioned first, would the Telecom  
37                  Existing Joint Use Tenant request have been required to have the pole line moved?
- 38  
39                  e) If Hydro Ottawa's joint pole use request had been actioned first, would the Telecom  
40                  Existing Joint Use Tenant be required to pay to move the pole?

- 1 f) When the MTO advised that an additional permit would be required for a second  
2 circuit, as well as relocating the centre-line of the pole line to the west to maintain an  
3 80m separation from the location of the overpass, did Hydro One weigh the potential  
4 cost implications to both Hydro One and Hydro Ottawa, in light of the request by Hydro  
5 Ottawa to attach to Hydro One's poles?  
6
- 7 g) Please confirm if Hydro One estimated the costs of upgrading the poles to  
8 accommodate the Existing Joint Use Tenant, as well as, Hydro Ottawa's plans to utilize  
9 the pole line for an 8.32kV circuit?  
10 i. If so, what was the estimated cost?  
11 ii. If no assessment was made, please explain why?  
12
- 13 h) Please provide any written requests made on or after June 9, 2021 to the MTO in  
14 regards to the poles Hydro Ottawa requested joint use of in order to serve the customer  
15 at 626 Principale St, Casselman.  
16
- 17 i) Please provide a summary of any verbal requests made on or after June 9, 2021 to  
18 the MTO in regards to the poles Hydro Ottawa requested joint use of in order to serve  
19 the customer at 626 Principale St, Casselman.  
20

21 **Response:**

- 22 a) Hydro One has not requested additional circuits to be installed upon the existing poles  
23 to the MTO, since the requested work is being driven by the Existing Joint Use Partner.  
24
- 25 b) Please refer to Exhibit I, Tab 2, Schedule 19 part a).  
26
- 27 c) Based on information received from the MTO, and articulated in the evidence  
28 referenced in this interrogatory, this is Hydro One's understanding. Any new electrical  
29 circuit not currently on these poles would necessitate a new permit and the relocation  
30 of the centre-line of the existing pole line. The final determination with respect to MTO  
31 requirements on what is allowed to cross the provincial highway rests with the MTO  
32 and not Hydro One. In accordance with the Joint Use Agreement, once Hydro Ottawa  
33 approves the joint use estimate and provides the necessary documentation to advance  
34 the design and execution schedule of the Hydro Ottawa requested upgrade, the work  
35 will advance and the information will be shared with the MTO so they can make their  
36 assessment of this inquiry.  
37
- 38 d) The scenario put forward by Hydro Ottawa is a hypothetical and does not consider the  
39 fact that Hydro Ottawa has not approved the joint use estimate dated July 11, 2022 or  
40 provided the necessary documentation to advance the design and execution schedule

1 to facilitate a review of the inquiry by the MTO to determine the MTO requirements.  
2 The Existing Joint Use Tenant is already crossing the provincial highway and  
3 accommodating their request does not require any relocation of the centre-line of the  
4 existing distribution poles per direction from the MTO. There is no current obligation  
5 to defer the work required by the Existing Joint Use Tenant. If the pole line had to be  
6 relocated due to receipt of a subsequent application (e.g., Hydro Ottawa), then it would  
7 have been between the potential joint use partner and the MTO to resolve what the  
8 requirements would have been.

9  
10 e) Please refer to part d).

11  
12 f) No. Please refer to Exhibit I, Tab 2, Schedule 19.

13  
14 g) Hydro One already provided a high-level estimate to Hydro Ottawa on the same day  
15 that the information was sought; this has been placed on the record of this proceeding  
16 as Attachment 10 of Hydro One's pre-filed evidence. The estimate was \$600,000 +/-  
17 50%. No further assessment of this high-level estimate was undertaken because  
18 Hydro Ottawa has not approved the estimate in accordance with the terms and  
19 conditions of the Joint Use Agreement between the two utilities irrespective of Hydro  
20 Ottawa's reliance on the estimate for the purposes of contesting this service area  
21 amendment (SAA) application. In parallel with the review of this SAA application, day-  
22 to-day operations continue and a joint use request by the Existing Joint Use Tenant  
23 was appropriately received, studied and estimated. The cost estimate associated with  
24 that work was provided via Hydro One's Supplemental Evidence in this proceeding,  
25 filed on November 7, 2022 (the Supplemental Evidence) and is forecast to cost  
26 \$137,000 +/- 10%. As articulated in the Supplemental Evidence, from an incremental  
27 capital cost perspective, addressing the request of the Existing Joint Use Tenant will  
28 likely increase the cost of the high-level estimate provided to Hydro Ottawa because  
29 of the redesign, replacement and potential relocation of the poles that will be  
30 necessitated by the addition of a second 8.32kV circuit on this pole line. However, for  
31 the reasons already articulated in this response and Exhibit I, Tab 2, Schedule 19,  
32 further study of this estimate has not been conducted.

33  
34 h) Please refer to Exhibit I, Tab 2, Schedule 19. Hydro One did not submit any requests  
35 to the MTO in order to service the customer at 626 Principale St., Casselman; any  
36 requests made were to support the application received by the Existing Joint Use  
37 Tenant.

38  
39 i) Please refer to h).

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1                                   **HYDRO OTTAWA LIMITED INTERROGATORY - 23**

2  
3                   **Reference:**

4                   Hydro One's supplemental evidence 20221107 - Cost of Hydro Ottawa's Proposal, page  
5                   2, lines 19-24

6  
7                   **Preamble:**

8                   As a result, if Hydro Ottawa was to serve the customer at 626 Principale  
9                   Street, the work described above will not reduce the cost of the Hydro  
10                  Ottawa proposal from an incremental capital cost perspective. In fact,  
11                  addressing the request may increase the cost of the high-level estimate  
12                  provided to Hydro Ottawa because of the redesign, replacement and  
13                  potential relocation of the poles that will be necessitated by the addition of  
14                  a second 8.32kV circuit on this pole line.

15  
16                  **Interrogatory:**

- 17                  a) Please confirm the rationale for Hydro One's support of a likely higher-cost solution to  
18                  meet the needs of the Existing Joint Use Tenant and potential needs of Hydro Ottawa?  
19  
20                  b) Could the Existing Joint Use Tenant have achieved savings if Hydro Ottawa's request  
21                  had been coordinated?  
22  
23                  c) Will Hydro One customers pay for any of the work related to the Existing Joint Use  
24                  Tenant requested work?  
25  
26                  d) Is it Hydro One's assertion that the cost to Hydro Ottawa is likely to go up based solely  
27                  on the fact that the Existing Joint Use Tenant request would be actioned first?  
28

29                  **Response:**

- 30                  a) Please refer to Exhibit I, Tab 1, Schedule 4.  
31  
32                  b) Please refer to Exhibit I, Tab 1, Schedule 4, Exhibit I, Tab 2, Schedule 4 and Exhibit I,  
33                  Tab 2, Schedule 19. Had Hydro Ottawa made a decision and confirmed their  
34                  willingness to proceed with the joint use connection and the timing of the ISPs  
35                  connection aligned with the timing of a committed Hydro Ottawa upgrade project  
36                  execution schedule, there may have been potential savings. However, these are  
37                  hypothetical scenarios that do not reflect the facts of this matter. Moreover, Hydro  
38                  Ottawa has still not agreed to the joint use estimate and has not provided Hydro One  
39                  with any further detailed drawings and/or information necessary to refine the high-level  
40                  estimate Hydro One provided to Hydro Ottawa. There is no reason to delay the

- 1 Existing Joint Use Tenant's request to the detriment of the Existing Joint Use Tenant  
2 and the Customer who would be not be able to receive the internet services of the ISP.  
3
- 4 c) Hydro One submits that the costs will be allocated in accordance with Hydro One's  
5 existing Joint Use Agreement with the Existing Joint Use Tenant which may result in  
6 immaterial Hydro One ratepayer cost. The total incremental cost of the Existing Joint  
7 Use Tenant requested work alone has been placed on the record of this proceeding  
8 through the Hydro One Supplemental evidence; it is \$137,000 +/- 10%. Irrespective  
9 of who pays for the facilities, the OEB's consideration of economic efficiency between  
10 alternatives considers total incremental costs (i.e., Hydro One's less than \$3,200<sup>1</sup>  
11 simple lies along connection relative to the joint use work being requested by Hydro  
12 Ottawa that will likely cost 300x more than the Hydro One solution prior to any  
13 consideration of pole line relocations that may be imposed by the MTO). Focusing on  
14 total incremental connection costs, and not who pays that cost, is akin to the OEB's  
15 assessment of capital contributions for other contested customer connections. Please  
16 refer to Exhibit I, Tab 1, Schedule 4 for further information on total incremental cost  
17 implications for the Hydro Ottawa proposed connection.  
18
- 19 d) No. Please refer to part b.)

---

<sup>1</sup> Please refer to Exhibit I, Tab 1, Schedule 4

1                                   **HYDRO OTTAWA LIMITED INTERROGATORY - 24**

2  
3                   **Reference:**

- 4           1. Hydro One's supplemental evidence 20221107 - Hydro One Pole Line Upgrade  
5           2. Hydro One's SAA Application Submission dated 2022-09-09  
6

7                   **Preamble:**

8           Hydro One is providing this correspondence as it has become clear during the  
9           development of responses to interrogatory questions posed by OEB Staff and Hydro  
10          Ottawa that there may be additional information that the OEB and/or Hydro Ottawa may  
11          find pertinent to this proceeding, specifically regarding works that have been requested  
12          along the same pole line that will require upgrading for Hydro Ottawa to execute its  
13          proposed connection to the Subject Area of this proceeding.  
14

15                   **Interrogatory:**

- 16          a) When Hydro One receives multiple requests for joint use of the same poles or other  
17             assets, does Hydro One treat each request independently without consideration of the  
18             impact on other requestors?  
19  
20          b) Does Hydro One have processes in place to coordinate multiple projects involving the  
21             same assets in order to efficiently manage design work and to avoid or limit the need  
22             to redesign or rebuild electricity infrastructure?  
23  
24          c) If processes are in place, how does Hydro One engage the associated stakeholders?  
25

26                   **Response:**

- 27          a) Managing multiple requests on the same poles concurrently is not common. In 2021  
28             Hydro One released a new online portal for the intake of joint-use applications.  
29             Following standard process via the portal allows Hydro One to have visibility to all  
30             applications received in an area. Until concurrence is received from a joint use  
31             applicant on the costs of the estimate provided, Hydro One does treat each application  
32             independently since Hydro One receives many requests which do not end up  
33             proceeding beyond the estimate stage. Therefore, it would not be reasonable to hold  
34             up one request because of another company's potential interest. In addition, there are  
35             sensitivities with the sharing of information between joint use tenants. For example, if  
36             two different telecom partners were looking to attach infrastructure in the same area,  
37             Hydro One cannot hold a public meeting with both as that would expose one  
38             company's construction plans to a potential competitor.

- 1 b) Please refer to part a). Yes, Hydro One does have processes and controls in place to  
2 mitigate the possibility of redesigning and/or rebuilding electricity infrastructure. This  
3 includes having joint use applicants make requests through specific mutually-agreed  
4 methods and having joint-use applicants agree to estimates before initiating work.  
5 Hydro One seeks to be as efficient as possible with the replacement of Hydro One's  
6 poles, however each requesting company has different needs and timelines for their  
7 work.  
8
- 9 c) If there were two such applications received by Hydro One through the portal, Hydro  
10 One would then have separate conversations with the parties to establish the  
11 sensitivities of the applications and then would seek to schedule a tri-party meeting  
12 with the consent of the parties where the requirements of all parties would be  
13 discussed and potential cost savings or the sharing of costs could be investigated.



1                                   **HYDRO OTTAWA LIMITED INTERROGATORY - 25**

2  
3                   **Reference:**

4                   Hydro One's supplemental evidence 20221107 - Hydro One Pole Line Upgrade

5  
6                   **Preamble:**

7                   As Hydro Ottawa is not a joint use tenant on this pole line, the Existing Joint Use Tenant-  
8                   initiated and MTO-driven work should not have any impact on the operations of Hydro  
9                   Ottawa, however, as a courtesy, Hydro Ottawa will be notified of the implementation  
10                  schedule of the Joint Use Project when established.

11  
12                  **Interrogatory:**

- 13                  a) Does Hydro One have an update to the implementation schedule?  
14  
15                  b) If yes, please provide the updated implementation schedule.

16  
17                  **Response:**

- 18                  a) Hydro One is refreshing cable locate information in the area to ensure safe installations  
19                  of the poles given other infrastructure works undertaken in the general vicinity of the  
20                  Subject Area. Hydro One expects to finalize this work shortly and continues to commit  
21                  to notify Hydro Ottawa of the implementation schedule of the Joint Use Project when  
22                  established.  
23  
24                  b) Please refer to part a).

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