



By RESS and Email

December 16, 2022

Ms. Nancy Marconi
Registrar
Ontario Energy Board
PO Box 2319
2300 Yonge Street, 27th Floor
Toronto, ON, M4P 1E4

Dear Ms. Marconi:

**Subject: Hydro Ottawa Limited Interrogatory Responses
Ontario Energy Board File Number: EB-2022-0234
Hydro One Networks Inc. Service Area Amendment Application**

Pursuant to the Ontario Energy Board's (OEB) Notice of Hearing and Procedural Order No. 2, issued November 30, 2022, Hydro Ottawa Limited ("Hydro Ottawa") hereby submits the attached responses to the interrogatories submitted by OEB staff and Hydro One Networks Inc. (Hydro One) in regard to Hydro Ottawa's new evidence on its alternative pole line in the subject proceeding.

Please do not hesitate to contact me should you require further information.

Sincerely,

DocuSigned by:

April Barrie

1E403775748B4CB...

April Barrie

Director, Regulatory Affairs

Directeur, Affaires réglementaires

aprilbarrie@hydroottawa.com

Tel./tél.: 613 738-5499 | ext./poste 2106

Cell.: 613 808-3261

Cc:

Joanne Richardson, Director, Regulatory Affairs, Hydro One Networks Inc.
Jeffrey Smith, Director Regulatory Compliance, Hydro One Networks Inc.
Pasquale Catalano, Sr. Regulatory Advisor, Hydro One Networks Inc.
Shuo Zhang, Case Manager, Ontario Energy Board
James Sidlofsky, Counsel, Ontario Energy Board
Claudio Bertone

1 **INTERROGATORY RESPONSE - OEB Staff-6**

2 **Question-6**

3
4 **TOPIC**

5 Need for Service Area Amendment

6
7 **REFERENCE**

- 8 1. Ref 1.: [Hydro One Networks Inc. – Supplemental Evidence, November 7, 2022](#)
9 2. Ref 2.: [Hydro Ottawa Interrogatory Responses, November 11, 2022](#)

10
11 **PREAMBLE**

12 In its cover letter to Ref. 2, Hydro Ottawa states that it “has not been able to properly assess the
13 supplemental evidence or consider how it would impact its interrogatory responses.”

14 In Ref. 2, HONI-3, part g), Hydro Ottawa states that it “would also be able to construct a separate
15 pole line along the east side of Principale Street. While this would not be the preferable option, it
16 could be done for a comparable price to the estimate provided by Hydro One, should Hydro One not
17 be able to accommodate Hydro Ottawa’s system expansion on their pole line.”

18 In Ref. 1, Hydro One states that the high-level cost estimate provided to Hydro Ottawa may increase
19 “because of the redesign, replacement and potential relocation of the poles that will be necessitated
20 by the addition of a second 8.32kV circuit on this pole line.”

21 **INTERROGATORY**

- 22 a) Please confirm whether Hydro One’s supplemental evidence has any impact on Hydro Ottawa’s
23 interrogatory responses. If so, please explain the impacts and provide a revised version of any
24 affected Hydro Ottawa responses accordingly.
- 25 b) Given Hydro One’s supplemental evidence, please clarify whether “constructing a separate pole
26 line along the east side of Principale Street” is Hydro Ottawa’s proposed option now to connect
27 the Customer.

- 1 c) If question b) was answered in the affirmative, please provide:
- 2 i) A description of the proposed plan, including a detailed list of infrastructure and related
3 activities necessary to construct the connection.
- 4 ii) The estimated cost of this option, the expected customer connection date and if not the
5 same, the expected date of completing all connection-related work.
- 6 iii) A revised Offer to Connect based on this option.

7

8 **RESPONSE**

9 a) Many of Hydro Ottawa's concerns related to the supplementary evidence have not been
10 addressed at this time and Hydro Ottawa has sought additional information as part of the follow
11 up interrogatories from Hydro Ottawa to Hydro One on December 8, 2022. Primarily, the impact
12 of Hydro One's supplemental evidence is that an earlier, existing telecom tenant's request for an
13 upgrade of poles should have been discussed with Hydro Ottawa at the outset, given the ongoing
14 discussions regarding the need for Hydro Ottawa to extend a 8.32kV circuit to feed the customer
15 at 626 Principale Street. Combining these upgrades and working with Hydro Ottawa, the telecom
16 company, and the Ministry of Transportation, it is expected a more economical solution for the
17 Hydro Ottawa system expansion could be found. Assuming Hydro One's estimate remains within
18 a reasonable tolerance, then Hydro Ottawa's preferred option would be to attach to Hydro One's
19 poles. However, should the estimated costs make this economically prohibitive then Hydro Ottawa
20 would extend its own pole line.

21

22 With respect to Hydro One's supplemental evidence, it would have impacts on the following Hydro
23 Ottawa interrogatory responses submitted on November 11, 2022. In the below responses, Hydro
24 Ottawa assumes Hydro One is able to work to make efficient upgrades to the poles impacted by
25 the telecom request, taking into account the Hydro Ottawa system expansion and the height
26 required for a second circuit which was known by Hydro One.

27

28 OEB staff-1 part b) - Based on the assumption above, the scope for a Hydro Ottawa connection
29 as described by Hydro One in Hydro One's Service Area Amendment application, pp. 15 - 16 in

1 relation to section 7.5.5, would need to be revised. In scope (3), while Hydro One would still need
2 to upgrade poles from Lafleche Blvd to the subject area, the amount of poles would be reduced
3 by six (6) due to the upgrade being driven by the telecom.

4
5 OEB staff-3 part a) - Given that six (6) poles would be paid for by the telecom, the system
6 expansion estimate would be reduced by using a joint use Hydro One owned pole line. Hydro
7 One has estimated the cost for the telecom pole upgrade would be \$137,000 in the supplemental
8 information¹, which would reduce the system expansion cost for Hydro Ottawa to service the
9 customer at 626 Principale Street. The system expansion costs would be reduced from \$700,000
10 to \$563,000 which will be fully offset through the economic evaluation process. Therefore the
11 customer's performance guarantee will be reduced from \$791,000 to \$636,190 with taxes
12 included.

13
14 OEB staff-4 part a) - The number of Hydro One owned poles requiring upgrade for the system
15 expansion would be reduced by six (6), as they would be upgraded as part of the telecom project.

16
17 HONI-4 part d) - The reduced cost due to the telecom paying for six (6) poles to be upgraded
18 would reduce the payback period. Based on the cost reductions noted above, the payback period
19 would reduce from being part way through the 13th year to being part way through the 10th year.

20
21 HONI-6 part b) - As noted above, the performance guarantee to be paid by the customer would
22 be reduced with the telecom paying a portion of the pole upgrade cost.

23
24 b) Hydro Ottawa's preferred option has been to connect to Hydro One's existing poles. However,
25 given the subsequent disclosure of supplemental evidence by Hydro One it is no longer clear if
26 that outcome is the economical solution.

27
28 Hydro Ottawa believe's Hydro Ottawa's June 2021 request to attach to Hydro One's existing pole
29 line and the telecom's March 2022 request provided the opportunity for the three entities to
30 coordinate utilizing the same assets and that a lower cost solution for all involved could have been

¹ Hydro One's Supplemental Evidence, November 7, 2022, page 2, line 1.

1 achieved. At the very least, the parties involved should have undertaken such an assessment, as
2 standard due diligence.

3
4 Hydro Ottawa is willing to work with Hydro One on a solution to attach to Hydro One poles. In
5 doing so, Hydro Ottawa believes the specific customer at 626 Principale St, Casselman, as well
6 as Hydro Ottawa should not be required to absorb the costs of the inefficiencies associated with
7 Hydro One's planned actions. Specifically, Hydro One should take on the costs of any extra design
8 work or other associated work that would be required to be redone as a result of not moving
9 forward on Hydro Ottawa's June 2021 request.

10
11 However, should Hydro One's cost no longer be the most economical solution, Hydro Ottawa
12 would propose to extend its own pole line to serve the customer.

13
14 c)

15 i) If Hydro Ottawa extended its existing pole line, Hydro Ottawa would prepare a preliminary
16 engineered design to extend a pole line and 8.32kV overhead circuit from the south east
17 of the intersection of Racine Street and Principale Street. The new pole line would extend
18 ~750m to 900m depending on the customer's equipment location and Hydro One servicing
19 equipment. Hydro Ottawa would further engage the Ministry of Transportation and the
20 Village of Casselman to discuss the design and any clearance requirement, as well as any
21 conflicting utilities. Hydro Ottawa would then procure the necessary equipment,
22 specifically ~15 to 18 wooden poles and hardware, and ~3x750m to 3x900m overhead
23 8.32kV conductor and neutral conductor. Hydro Ottawa would engage a civil contractor
24 for pole holes and anchoring and hire its electrical contractor in Casselman to construct
25 the overhead pole line and customer connection, ensuring to discuss with the customer
26 and Hydro One an appropriate time for transferring the customer over which will require a
27 planned outage.

28
29 ii) The estimated cost of this option is \$455,000. \$440,000 will be subject to an economic
30 evaluation and is calculated to be fully offset from the customer's forecasted revenues.
31 \$15,000 is the estimated connection costs which will require a customer contribution. It is
32 assumed this will be lower once Hydro Ottawa reviews the design and connection Hydro

1 One has provided. At this time, Hydro Ottawa estimates that the connection-related work,
2 that being the system expansion and customer connection, could be completed by the
3 end of July/August 2023 (with contingency), assuming the Ontario Energy Board approves
4 Hydro Ottawa's Service Area Amendment in early February 2023.

5

6 iii) Please see Attachment OEB-6 A: Ready to issue Adjusted Offer to Connect - 626
7 Principale Casselman. This Offer to Connect is what would be sent to the customer should
8 the OEB approve Hydro Ottawa's SAA and Hydro Ottawa extend its existing pole line on
9 the east side of Principale Street based upon economic costs and Hydro One's comment
10 regarding the potential relocation of their pole line.

December 16, 2022

Ford Motor Company of Canada, Limited
200-1285 Hodge St.
Vill St. Laurent, QC H4H 2B6

Via Email: cbertone@bertone.ca

Attention: Claudio Bertone

Re: Ford Canada - 626 Principal Street, Casselman
Hydro Ottawa File Number: 9202015485

Please find enclosed the agreement between the Developer and Hydro Ottawa Limited for the design and installation of the proposed new primary service at the above location.

If you would like Hydro Ottawa to proceed with this work, would you kindly sign and return the agreement along with full payment. Payment to Hydro Ottawa can be made through your bank or financial institution by telephone or online banking, credit card, electronic funds transfer or by cheque or money order. Please see page 2 of your service invoice for further instructions on payment methods. If payment is by cheque it should be mailed to 2711 Hunt Club Road, PO Box 8700, Ottawa, Ontario, K1G 3S4 to the attention of Michelle Kennedy - Finance. **Please Note – This is an estimate only and the Developer will be billed on actual costs.**

If you choose not to accept this offer, please submit a design of the Developer's installation so that Hydro Ottawa can review and create a cost estimate for the connection to the existing distribution system.

If you have any questions, comments or concerns, please do not hesitate to contact me.

Regards,

James (Jim) Badour, C.E.T.
System Designer, Commercial Design
Tel. / tél. 613-738-5499 | ext. / poste 7142
Cell. 613-889-0542
jimbadour@hydroottawa.com

Hydro Ottawa Limited / Hydro Ottawa limitée

2711 Hunt Club Road
Ottawa, Ontario K1G 3S4

www.hydroottawa.com

Encl: Appendix A – Comments on Developer Submission
 Appendix B – Letter of Credit Provisions
 Appendix C – Electrical Loading Forecast Schedule

Hydro Ottawa Limited / Hydro Ottawa limitée

2711 Hunt Club Road, PO Box 8700 / chemin Hunt Club, C.P. 8700
Ottawa, Ontario K1G 3S4

www.hydroottawa.com



INSTALLATION AND MAINTENANCE AGREEMENT

Hydro Ottawa File Number: 9202015485
Ford Canada - 626 Principal Street, Casselman

THIS AGREEMENT made this ____ day of _____ ,

BETWEEN: _____, hereinafter called the "Developer"

AND: **HYDRO OTTAWA LIMITED** hereinafter called the "Hydro Ottawa"

- 1. HYDRO OTTAWA'S WORK** - Except for those items which, under this Agreement, are the obligation of the Developer to supply or install, Hydro Ottawa will design, supply, and install the Electrical System. More specifically, Hydro Ottawa will supply and install:
 - (i) work, as set out below and in Appendix A;
 - (ii) overhead poles and 556 MCM AL overhead conductor to the supply point;
 - (iii) riser equipment;
 - (iv) all primary cable terminations at the demarcation switch;
 - (v) metering equipment;
 - (vi) undertake all associated labour, trucking and engineering ("Hydro Ottawa's Work")

For the purpose of this Agreement, "Electrical System" means the electrical system designed, supplied, and installed by Hydro Ottawa for the purpose of providing electrical service to 626 Principal St. , Casselman. The Electrical System will consist of the following components: overhead poles, conductor, OH switches, and metering equipment.

- 2. DEVELOPER'S WORK** – The Developer shall provide reasonable advance notice to Hydro Ottawa as to the timing of the construction of a building at 626 Principal St. , Casselman (the "Developer's Project") to permit the orderly coordination of construction, installation, and energization of the Electrical System. The Developer shall arrange for the installation of civil works on private property (trenching, concrete encased duct banks) ("Developer's Work"). The Developer's Work shall be in compliance with Ontario Building Code, Ontario Electrical Safety Code, Hydro Ottawa's plans and specifications (to be developed pursuant to section 1), and Hydro Ottawa's Conditions of Service as set out on Hydro Ottawa's website at www.hydroottawa.com. Hydro Ottawa's decision on compliance with the aforesaid shall be final.
- 3. PLANS, DRAWINGS** - The Developer shall submit plans (namely, architectural site and landscape plans, electrical site plan, composite utility plan, electrical single line diagram, main electrical switchboard shop drawings) in a format acceptable to Hydro Ottawa. The Developer shall provide Hydro Ottawa with soil surveys, grading plans, and any other information pertaining to the Developer's Project if so requested by Hydro Ottawa. The Developer shall be responsible for providing to Hydro Ottawa written confirmation of the necessary approvals by the municipality, and any other branch or agency of the federal, provincial or municipal government or other utility whose approval or co-operation is required for the Developer's Work.
- 4. CHANGES DURING CONSTRUCTION** - The Developer shall not vary the design of the Electrical System subsequent to the commencement of construction of the Electrical System, without first submitting such variation in writing to Hydro Ottawa for approval. The Developer shall not implement any such variation unless approval in writing has been received from Hydro Ottawa.

Hydro Ottawa reserves the right to modify, by written direction and upon reasonable notice to the Developer, at any time and as circumstances require, the plans and specifications, Hydro Ottawa's Work, or the Developer's Work, to accommodate the requirements of Hydro Ottawa or the Developer, the existing or changing regulations, standards, specifications or technical requirements of the Electrical System. The Developer shall perform, or pay, the cost of such changes without accounting or compensation from Hydro Ottawa.
- 5. SURVEY MARKERS** - The Developer shall place and maintain in place, during the construction of the Developer's Project, such survey markers as may be required by Hydro Ottawa to properly locate and install the various components of the Electrical System. The Developer shall be liable for any loss, damage or additional expenditure occasioned to Hydro Ottawa as a result of said grades and survey markers not being maintained as required; unless such markers are displaced by Hydro Ottawa in the performance of Hydro Ottawa's Work.

6. CHARGES FOR HYDRO OTTAWA’S WORK

6.1 The cost of Hydro Ottawa’s Work at 626 Principal St., Casselman is as follows:

- **An additional capital contribution in the amount of \$16,950.00 and a performance security per section 7 in the amount of \$497,200.00** for Hydro Ottawa’s Work as set out in section 1 and Appendix A. *This quote is based on Hydro Ottawa completing their work during regular working hours.*
- “Electrical Forecast Loading Schedule” means the customer electrical connection time window and loading rate applied to the OEB Economic Evaluation as set out in Appendix B of Hydro Ottawa’s Conditions of Service. These are required timing and electrical load factors in determining the future electrical service revenue from each customer’s electrical class.
- “Net Present Value Credit” means Residential Services revenue over a 25 year horizon and Commercial Services revenue over a 15 year horizon based on the Developer’s Electrical Forecast Loading Schedule minus the future operating and maintenance costs, applicable taxes, and any required third party costs as set out in Appendix B of Hydro Ottawa’s Conditions of Service.

Hydro Ottawa will extend (System Expansion) the overhead 8.32 kV system to the supply point at Principal Street and Concession Road 7 in order to meet the Forecast Loading Schedule proposed by the Developer.

Site Specific Connection Asset Estimated Cost		\$15,000.00
System Expansion Estimated Cost	\$440,000.00	
Net Present Value Credit based on Electrical Forecast Loading Schedule (Appendix C)	- \$440,000.00	
Developer’s Contribution Towards System Expansion Estimated Cost (without Taxes)		\$0.00
Developer's Total Contribution (without Taxes)		\$15,000.00
Applicable Taxes		+ \$1,950.00
Developer’s Total Contribution (with Taxes)		\$16,950.00
Deposit Received for Preliminary Design and Long Lead Material		- \$0.00
Balance of Deposit Owed by Developer		\$16,950.00
Performance Security Owed by Developer (with Taxes)		\$497,200.00

Remaining design and equipment deposit shall be refunded upon the energization of the service to 626 Principal St. , Casselman.

This deposit is based on time and material estimates and may not reflect the total cost of the project. This offer will expire on March 16th, 2023. Construction will not commence until the final deposit has been received. A final bill will be issued upon completion of Hydro Ottawa’s Work.

The Developer shall pay Hydro Ottawa interest at a rate of 1.5% per month on overdue accounts. The Developer acknowledges that the various payments hereby required to be made are collectively, and individually, a consideration without which Hydro Ottawa would not have executed this Agreement, nor extended the electrical facilities herein contemplated to service the Developer’s Project. The Developer hereby relinquishes any right it may have to demand the provision of energy from Hydro Ottawa until all payments required herein have been made, whether such right is given by common law or statute.

- 6.2 The Developer will be charged the cost of any additional designs of the Electrical System, which are necessitated by changes from the Developer.

7. PERFORMANCE SECURITY

- 7.1 The Developer shall provide financial security to Hydro Ottawa upon execution of this Agreement for the performance of the Developer's obligations under this Agreement, in regard to the realization of the Developer's Electrical Forecast Loading Schedule, in an amount equal to the Net Present Value Credit of the 626 Principal St. , Casselman project (see section 6.1), or any part thereof (the "Performance Security"). The Performance Security (example in Appendix B) shall be provided in the form of cash, irrevocable Letter of Credit, certified cheque, bank draft, surety bond, or other equivalent form of security instrument acceptable to Hydro Ottawa. In the event that Hydro Ottawa, in accordance with this Agreement, has recovered monies that were due to it using all or part of the Performance Security, the Developer shall forthwith provide replacement security to cover an amount equal to that recovered or paid out of the Performance Security.
- 7.2 Hydro Ottawa may draw on the Performance Security where the Electrical Forecast Loading Schedule is not realized by the Developer at the end of the duration of the connection horizon. The amount of the draw shall be determined by multiplying the amount of the Performance Security by the ratio of the electrical load not realized within the connection horizon of five (5) years after the primary service energization date to the Electrical Forecast used in the determination of the Net Present Value Credit, see Appendix C. One year after the energization date, the Developer is entitled to an annual reduction of the Expansion deposit based on the number of Connections and/or Demand that occurred during each year of the connection horizon. It is the Developer's responsibility to provide the Connection details to Hydro Ottawa for verification.
- 7.3 Hydro Ottawa shall not be required to keep the Performance Security deposit separate from its general accounts.
- 7.4 Any Letter of Credit provided shall be subject to the provisions set out in Appendix B.
- 7.5 At the end of the five (5) year connection horizon Hydro Ottawa shall return the Performance Security, or so much thereof as has not been applied by Hydro Ottawa, as aforesaid, without interest to the Developer, without limiting any of its rights or remedies under this Agreement.
- 7.6 If the Developer fails to provide a Performance Security or, at any time, fails to renew, substitute, or sufficiently increase the amount of the Performance Security, Hydro Ottawa shall have the right, without prejudice to all or any of Hydro Ottawa's other rights and remedies under this Agreement, to refuse to undertake any energization or further connections.

8. **LETTER OF CREDIT** – Any Letter of Credit provided pursuant to this Agreement shall be subject to the provisions set out in Appendix B.

9. **LIABILITY** - The Developer agrees to indemnify Hydro Ottawa against all damages, loss, actions, causes of action, suits, claims, or demands whatsoever against Hydro Ottawa arising directly, or indirectly, as a result of the Developer carrying out, or permitting to be carried out, by its express or implied consent, any work whatsoever pursuant to, or purportedly pursuant to, the terms of this Agreement. Notwithstanding the foregoing, the Developer shall not be required to indemnify Hydro Ottawa with respect to damages, loss, actions, causes of action, suits, claims or demands arising out of Hydro Ottawa's Work. The Developer shall be liable for all damage to the Electrical System caused by the Developer, its employees, representatives, contractors, subcontractors or agents. Hydro Ottawa shall be liable for all damage done to the Developer's Project and all damages, loss, actions, causes of action, suits, claims or demands arising out of Hydro Ottawa's Work caused by Hydro Ottawa, its employees, representatives, contractors, subcontractors or agents. The Developer shall provide a Certificate of Insurance to Hydro Ottawa prior to the initiation of Hydro Ottawa's Work in a form, and in an amount and with an insurance company satisfactory to Hydro Ottawa. Said policy of insurance shall insure against all damages, or claims, of damage arising of the Developer's Work and the Developer agrees that it shall be responsible for all premiums due with respect to the said policy of insurance. Hydro Ottawa retains the right to require the Developer to provide proof that all premiums of the aforesaid policy or policies of insurance have been paid and that said insurance is in full force and effect, said proof to be to the satisfaction of Hydro Ottawa.

10. **DAMAGES TO OTHER SERVICES** - The Developer shall be responsible for repairing any damages caused to any other service or utility by any activities arising directly, or indirectly, out of this Agreement, which are undertaken by the Developer. Hydro Ottawa shall be responsible for repairing any damages caused to any other service or utility by any activities arising directly, or indirectly, out of this Agreement, which are undertaken by Hydro Ottawa. The obligation of the Developer herein shall continue until a Certificate of Acceptance has been issued by Hydro Ottawa for the Developer's Work.

11. **CONVEYANCING OF EASEMENTS** - The Developer shall grant to Hydro Ottawa, at the Developer's expense, and in a form acceptable to Hydro Ottawa, such transfer of Easement as Hydro Ottawa deems necessary. If an Easement is required by Hydro Ottawa, the legal description of the lands to be encumbered by the Easement described therein and the documents formally granting same to Hydro Ottawa shall be prepared by the Developer to the satisfaction of Hydro Ottawa and the easement shall be registered by the Developer at the expense of the Developer. A copy of the registered Transfer of Easement document, and all associated registered plans, shall be submitted to Hydro Ottawa for its records. The Developer shall also obtain written consent and acknowledgment from any mortgagee, chargee, or other encumbrancer of the Developer's Project which might rank in priority to that of Hydro Ottawa confirming the existence of the easement and postponing the interest of such mortgagees, chargees or encumbrancers to the interests of Hydro Ottawa. The Developer shall register such postponements on the title to the Developer's Project in the applicable Land Registry Office.
12. **TITLE TO THE ELECTRICAL SYSTEM** - The Developer shall retain full title to the Electrical System until a Certificate of Acceptance has been issued by Hydro Ottawa in respect of the Developer's Work, at which time all title to the Electrical System shall be deemed transferred to Hydro Ottawa. Upon issuance of a Certificate of Acceptance for the Developer's Work, Hydro Ottawa shall assume ownership and the responsibility for operating and maintaining those parts of the Electrical System for which Hydro Ottawa has agreed to be responsible as set out in Appendix A.
13. **TERM**- This Agreement shall commence at the time of execution by all parties thereto and shall remain in full force and effect until Hydro Ottawa has delivered to the Developer a Certificate of Acceptance for the entirety of the Developer's Work, or until this Agreement is terminated in accordance with its provisions, whichever occurs first. In the event that the Developer's Work has not commenced within one year of the time of execution of this Agreement, this Agreement will become null and void and of no further force or effect.

IN WITNESS WHEREOF the parties hereto bind their corporations under the hands of their proper signing officers authorized in that behalf, as the case may be.

Developer

Hydro Ottawa Limited

Company: _____

Name: _____

Per: _____

Date: _____

Name _____

Per: _____

Date: _____

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Ford Canada - 626 Principal Street, Casselman

Site Specific Electrical Servicing

The Developer is responsible for 100% of the costs of Hydro Ottawa's Work for the proposed primary service. This includes all overhead modifications to extend electrical power to the supply point, riser equipment, all primary cable terminations at the demarcation switch, metering equipment, all associated labour, trucking and engineering costs.

The Developer is responsible for cost and installation of all civil/electrical structures on private property including concrete encased duct structures from the Hydro Ottawa supply point. All work must be completed as per Hydro Ottawa's Conditions of Service and engineering specifications. Refer to Hydro Ottawa site servicing drawing 9202015485-COM for details.

Ownership Demarcation

The electrical and civil ownership demarcation point and responsibilities will be as described in the table below:

Activity/Equipment	Installation / Removal	Cost Covered By	Ownership	Operating Control Authority	Maintenance
Civil Work on private property (duct structures.)	Developer	Developer	Developer	Hydro Ottawa	Developer
Civil Work in the road right of way (pole lateral)	Developer	Developer	Hydro Ottawa	Hydro Ottawa	Hydro Ottawa
55' Wooden Pole(s)	Hydro Ottawa / Hydro One	Developer	Hydro Ottawa / Hydro One	Hydro Ottawa / Hydro One	Hydro Ottawa / Hydro One
8 kV, Overhead Switch(es)	Hydro Ottawa	Developer	Hydro Ottawa	Hydro Ottawa	Hydro Ottawa
Customer owned Transformer	Developer	Developer	Developer	Hydro Ottawa	Developer
Primary Terminations on Customer owned cable	Hydro Ottawa	Developer	Hydro Ottawa	Hydro Ottawa	Hydro Ottawa
Primary Cables, Secondary Cables & Equipment to Supply Development	Developer	Developer	Developer	Developer	Developer
Metering Equipment	Hydro Ottawa	Developer	Hydro Ottawa	Hydro Ottawa	Hydro Ottawa
Dedicated Analog Phone Line / Communication Infrastructure as required by Hydro Ottawa.	Developer	Developer	Developer / Hydro Ottawa	Hydro Ottawa	Developer / Hydro Ottawa

Easement / Access Requirements

Hydro Ottawa shall not require an easement at this time to service the property. Hydro Ottawa requires access to the equipment 24 hours/day, 7 days/week once the service is energized for operational purposes. Hydro Ottawa's system office will give reasonable notice for this access.

Transition From Temporary To Permanent Services

If applicable, in order to allow a reasonable transition of power, the temporary service will be disconnected a maximum of two working days following the energization of the permanent service to the development. It should be noted that simultaneous connection of both the temporary and permanent services are subject to the requirements of the Ontario Electrical Safety Code and the Electrical Safety

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Ford Canada - 626 Principal Street, Casselman

Authority.

Site Meeting Requirements

A site meeting is required with the Developer, engineer, civil and electrical contractors prior to the service installation. The purpose of the meeting is to coordinate the work, review Hydro's engineering drawing, and define the responsibilities of all parties involved and ensure the installation of civil work and cable ducts adheres to Hydro Ottawa's specifications.

All Hydro Ottawa engineering specifications/standards referenced on the Hydro Ottawa engineering drawing are available on Hydro Ottawa's web site. <https://www.hydroottawa.com> -- go to → "Accounts & Billing" then → "Developer's Guide" then → "Commercial Design Specifications"

Testing Requirements

The electrical contractor is to megger test the primary cables and guarantee that there is no short or crossover of conductors. The electrical contractor is also required to complete the test report/form available within the Hydro Ottawa Installation & Testing of Underground Primary and Secondary Power Cables Prior to Energization document GCG0001.

The Developer's electrical contractor is to supply and install grounding at the transformer as per ESA Requirements. The contractor shall arrange with the Hydro Ottawa's Inspector to have the grounding inspected and tested. Grounding resistance shall be a maximum of 25 ohms before energization of the service shall take place.

Other Requirements

All third party conductive equipment, including fencing or generators, within 2.4m of the transformers must be bonded to the ground rod as per Hydro Ottawa specifications. This must take place prior to energization.

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Metering Requirements

Where available, the dedicated communication link(s) shall be a Hydro Ottawa wireless communication system. Where the wireless communication system is not available or a non-wireless meter has been requested by the Developer, the Developer shall provide a dedicated analogue telephone line.

Metering equipment will be installed in accordance with Hydro Ottawa Metering Specification GCS0008, which is available on Hydro Ottawa's website, and will be inspected by the Electrical Safety Authority. Please contact Hydro Ottawa's metering department for the proper metering regulations for your project. Please keep in mind that the meter department requires adequate time for installation of metering equipment in the Developer's switchboard.

Metering equipment is based on DDMAC Electrical consultants single line diagram E-001.

- 1 x 3000A 347/600V @80% – Main Meter (Phone line or modem required)

Security Deposit

Please refer Hydro Ottawa Limited Conditions of Service Section 2.4.3, Security Deposits.

Calculation of Security Deposit Amount

The amount of your security deposit is calculated using your average bill amount over the most recent 12 consecutive months within the past two years. Your deposit amount will be 2.5 times your average monthly bill. If you have less than 12 months of billing history, we estimate your security deposit amount based on your service size (voltage/ampereage) and load type, see the table below.

Customer Class	Default Security Deposit Amount
Residential	No Deposit Required
Commercial <50kW (Small Commercial)	\$900
Commercial (C1) 50 – 1000 kW	\$13,000
Commercial (C2) 50 – 1000 kW (Interval)	\$39,000
Commercial (C3) 1000 – 1500 kW (Interval)	\$109,000
Commercial (C4) 1500 – 5000 kW (interval)	\$234,000
Commercial >5000 kW	Refer to Collections

Paying by Installments

Your security deposit amount will appear on your electricity bill and must be paid in full. Once the total amount is paid, you will no longer see the security deposit amount on your bill.

Monthly installments, to a maximum of four, are available upon request with one of Hydro Ottawa's Customer Service agents.

Deposit Waiver

When opening an account, you may qualify for a deposit waiver or reduction based on the following criteria:

- You have already demonstrated a good payment history with Hydro Ottawa or can provide a letter confirming a satisfactory payment history from another electricity or gas Distributor in Canada. Your good payment history must have occurred within the last 24 months and was for the following length of time:
 - Less than 50 kW demand: five years
 - Greater than 50 kW demand: seven years; or

Hydro Ottawa File Number: 9202015485
Ford Canada - 626 Principal Street, Casselman

- You consent to a credit check and achieve a satisfactory credit rating. A \$15 charge will be applied to your account for this service.

Security Deposit Reviews

We review all security deposits annually to determine whether the deposit should be adjusted (increased or partially refunded) based on a change in usage and good payment history. Customers may be eligible to have their security deposit amount/requirement reduced if they have established a satisfactory payment history with Hydro Ottawa.

The length of time that a security deposit is held varies by customer class:

- Five years for non-residential customers with less than 50 kilowatt (kW) demand; and
- Seven years for non-residential customers with 50 kW demand or greater.

If your consumption is greater than 5,000 kW, you may be eligible for a security deposit reduction of up to 50% after seven years of good payment history. The remaining balance of the security deposit will be refunded when the account is closed.

Once a good payment history has been established, all or part of the security deposit will be returned with interest.

Good Payment History

A good payment history is not maintained when the following events occur:

- More than one disconnection notice;
- More than one returned payment due to non-sufficient funds;
- Failure to pay more than one pre-authorized payment;
- Disconnection of service for non-payment; or
- Collection of payment for overdue charges.

Interest

Interest on these deposits is accrued monthly and credited to your account at least annually. The interest rate is the Prime Business Rate published on the Bank of Canada website, less 2 percent, and is updated quarterly.

More information about Hydro Ottawa's Security Deposit Policy may be found in Hydro Ottawa's Conditions of Service.

Reference Project # 9202013329
VT432 Vault Upgrade – 50 Rideau Street

Letter of Credit Provisions

1. The Developer shall:
 - (i) renew or cause the renewal of the Letter of Credit on a timely basis;
 - (ii) if the bank that issued an outstanding Letter of Credit has indicated its intent not to renew such Letter of Credit, provide a substitute Letter of Credit or other equivalent form of security instrument acceptable to Hydro Ottawa at least ten (10) Business Days prior to the expiration of the outstanding Letter of Credit; and
 - (iii) if a bank issuing a Letter of Credit fails to honour Hydro Ottawa's properly documented request to draw on an outstanding Letter of Credit, provide for the benefit of Hydro Ottawa, (A) a substitute Letter of Credit that is issued by another financial institution, or (B) other surety instrument satisfactory to Hydro Ottawa in an amount equal to such outstanding Letter of Credit, in either case within five (5) Business Days after the Developer receives notice of such refusal.
2. The Letter of Credit, in the form and on the terms and conditions acceptable to Hydro Ottawa, shall provide that Hydro Ottawa may draw upon the Letter of Credit in an amount (up to the face amount for which the Letter of Credit has been issued) that is equal to all amounts claimed by Hydro Ottawa from the Developer pursuant to this Agreement. The Letter of Credit shall provide that a drawing may be made on the Letter of Credit upon submission to the bank issuing the letter of Credit of one or more certificates specifying the amounts due and owing to Hydro Ottawa.
3. Should the Developer fail to renew, substitute, or sufficiently increase the amount of an outstanding Letter of Credit, or establish one or more additional Letters of Credit or other equivalent form of security instrument acceptable to Hydro Ottawa, then Hydro Ottawa may draw on the entire, undrawn portion of any outstanding Letter of Credit. The Developer shall remain liable for any amounts due and owing to Hydro Ottawa and remaining unpaid after the application of the amounts so drawn by Hydro Ottawa.

The costs and expenses of establishing, renewing, substituting, cancelling, increasing and reducing the amount of (as the case may be) one or more Letters of Credit shall be borne by the Developer.

Hydro Ottawa File Number: 9202015485
Ford Canada - 626 Principal Street, Casselman

The table below summarizes the loading forecast utilized to calculate economic evaluation.

Hydro Ottawa Economic Evaluation Summary									
Date	1-May-22		Estimated Project In-Service Year				1-Oct-22		
Project #	9202015485		Economic Evaluation Connection Horizon				5		
Project Name	626 Principal		Economic Evaluation Revenue Horizon				15		
Cumulative Number of Connections									
	1-Oct	1-Oct	1-Oct	1-Oct	1-Oct	1-Oct	Average Monthly Usage per Connection		
Customer Type	2022	2023	2024	2025	2026	2027			
Residential	0	0	0	0	0	0	N/A		
Service < 50kW	0	0	0	0	0	0	0	kWh	
Service > 50kW < 1500kW	0	1	1	1	1	1	1160	kW	
Service > 1500kW < 5000kW	0	0	0	0	0	0	0	kW	
Large User	0	0	0	0	0	0	0	kW	
Total	0	1	1	1	1	1			
Discounted Cash Flow Summary									
Discount Rate	4.75%		PV of Incremental Revenue				\$856,305		
Corporate Income Tax Rate	26.50%		PV of Capital Expenditure				(\$683,956)		
Capital Cost Allowance	8.00%		PV of Incremental OM&A Costs				(\$61,077)		
			PV of Corporate Taxes				(\$224,924)		
Customer Type	Fixed Rate	Variable Rate	PV of CCA Tax Shield				\$113,651		
Residential	\$ 30.77	\$0 / kWh							
Service < 50kW	\$ 20.83	\$0.027 / kWh	Customer Contribution Required (Pre-Tax)				\$0		
Service > 50kW < 1500kW	\$ 200.00	\$5.6423 / kW	Customer Contribution Required (With Tax)				\$0		
Service > 1500kW < 5000kW	\$ 4,193.93	\$5.1687 / kW	Performance Guarantee (Pre-Tax)				\$700,000		
Large User	\$ 15,231.32	\$5.0761 / kW	Performance Guarantee (With Tax)				\$791,000		

Loading Information													
Total Loading Profile													
Peak Load – Proposed (kW):	1800			Service Ampere Rating (Panel Size) Proposed (Final) Amps:	3000			Requested Service Voltage Rating:	347/600V				
Power Factor:	0.90			Service Ampere Rating:	<input checked="" type="checkbox"/> 80% <input type="checkbox"/> 100%								
Total Service Demand (kW)	Auto Fill	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1 st Year -		0	0	0	0	0	0	0	0	300	600	600	600
2 nd Year -		600	900	900	900	1300	1300	1300	1300	1300	1300	1300	1300
3 rd Year -		1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300
4 th Year -		1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300
5 th Year -		1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300

1 **INTERROGATORY RESPONSE - HONI-8**

2 **Question-8**

3
4 **TOPIC**

5 Assessment of Alternatives

6
7 **REFERENCE**

8 1. Hydro Ottawa Response to OEB Staff Interrogatory 1

9 Hydro Ottawa currently rents 34 poles from Hydro One in Casselman. Hydro Ottawa's Joint Use
10 Agreement with Hydro One is based upon a mutual desire by both Parties to work together for
11 their respective benefit, and to ensure that joint use is planned and implemented where feasible
12 because it is the right approach and provides the optimal outcome for each party's Customers
13 that it serves, its employees and stakeholders. Therefore, Hydro Ottawa's proposal aligns with
14 the outcomes set out in the Joint Use Agreement. However, Hydro Ottawa would also be able to
15 construct a separate pole line along the east side of Principale Street. While this would not be the
16 preferable option, it could be done for a comparable price to the estimate provided by Hydro One,
17 should Hydro One not be able to accommodate Hydro Ottawa's system expansion on their pole
18 line.

19
20 2. OEB Notice of Amendments to a Code, Amendments to the Distribution System Code - December
21 21, 2015 – page 4

22
23 3. Hydro Ottawa Submissions, September 2, 2022 – pages 2-19

24
25 **INTERROGATORY**

26 a) Please place a copy of Hydro Ottawa's Joint Use Agreement with Hydro One on the record of this
27 proceeding.

28
29 b) Please provide all records documenting Hydro Ottawa's consideration of this connection option
30 and evidence to support why this connection alternative was dismissed as the less preferred

1 option to connect the Subject Area.

2 c) Please provide the Hydro Ottawa cost estimate to construct a pole line along the east side of
3 Principale Street. In so doing, please document the quality¹ of the estimate that underpins the
4 Hydro Ottawa cost estimate for this work.

5

6 d) Please provide any Ontario Ministry of Transportation requirements for this newly proposed
7 alternative.

8

9 e) Hydro Ottawa has not provided a physical connection date nor is there any date identified on the
10 record as to when Hydro Ottawa can physically serve the Subject Area if Hydro Ottawa were to
11 construct a separate pole line along the east side of Principale Street to serve the Subject Area.
12 Please provide the date that Hydro Ottawa can physically serve 626 Principale Street if this option
13 is pursued. In so doing, please provide a detailed schedule that outlines all necessary milestones
14 that must be accomplished for Hydro Ottawa to meet that date. Please include all anticipated
15 dates of receiving permits and permitting applications, designs, constructions milestones, etc.

16

17 f) Contingent on Hydro Ottawa's response to part e), and given the date of the temporary connection
18 was January 11, 2022², how long will Hydro One's connection be required to complete the newly
19 proposed Hydro Ottawa alternative along the east side of Principale.

¹ In terms of Association for the Advancement of Cost Engineering (AACE) or universally recognized equivalent.

² Exhibit I, Tab 2, Schedule 11 part b).

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RESPONSE

- a) Please refer to Attachment HONI-8 A: HONI-HOL Pole Attachment Agreement, 2006. Hydro Ottawa has also provided the updated Exhibit 4 Residual Value Tables in Attachment HONI-8 B.

- b) Prior to Hydro One’s supplemental evidence, dated November 7, 2022, Hydro Ottawa had not considered the option of extending its pole line on the east side of Principale Street to service the Subject Area due to the desire to efficiently use a single upgraded pole line which would then become subject to the Joint Use Agreement between Hydro Ottawa and Hydro One.

Hydro Ottawa’s Joint Use Agreement with Hydro One is based upon a mutual desire by both parties to work together for their respective benefit, and to ensure that joint use is planned and implemented where feasible as it is the right approach and provides the optimal outcome for each party's Customers that it serves, its employees and stakeholders. Therefore, Hydro Ottawa’s proposal aligns with the outcomes set out in the Joint Use Agreement. However, as Hydro One had not been forthcoming with the third party telecom need for a pole upgrade on the same pole line which Hydro One knew Hydro Ottawa would require upgrading to support the expansion of the Hydro Ottawa 8.32kV overhead circuit, along with Hydro One’s comments about clearance issues with the Ministry of Transportation, Hydro Ottawa determined that should this Service Area Amendment be ruled in its favor, a pole line on the east side of Principale Street may be required as the most economical solution.

- c) Hydro Ottawa’s estimate to construct a pole line along the east side of Principale Street to the Subject Area is \$440,000. The accuracy of this estimate is +/- 50%. Please also see response to OEB staff-6 part b).

- d) At this time the only Ontario Ministry of Transportation (“MTO”) requirement expressed has been to coordinate with any other ongoing projects in the vicinity.

- e) Hydro Ottawa estimates that the connection-related work, being the system expansion and customer connection, could be completed by the end of July/August 2023 (with contingency),

1 assuming the Ontario Energy Board approves Hydro Ottawa's Service Area Amendment in early
2 February 2023. The following is a breakdown of the construction milestones based on the above
3 assumption.

- 4 ● Preliminary Design - Early February through to the end of March, 2023.
- 5 ● Permit Submissions including to the Village of Casseleman, MTO, and various utilities for
6 their consent/feedback - End of March, 2023.
- 7 ● Revised Design (if required) / Permit Approvals - Beginning of April, 2023 through to the
8 end of May, 2023.
- 9 ● Construction - Mid June through to the end of July, 2023. End of August, 2023 as a buffer
10 of schedule contingency for the above.

11
12 f) Please refer to the response to part e) of this interrogatory response for Hydro Ottawa's timeline.

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

THIS AGREEMENT FOR LICENSED OCCUPANCY OF POWER UTILITY DISTRIBUTION POLES
made in duplicate this 1st 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:

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

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

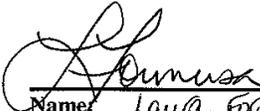
- 20.1 The permission granted by any Permit may be terminated by the Owner: (i) if the Joint Use Pole(s) designated by such Permit is abandoned by the Owner; or (ii) if the Owner desires or must discontinue the use of the Joint Use Pole(s), and in either case the Licensee does not wish to purchase the 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 Licensed 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 = 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:

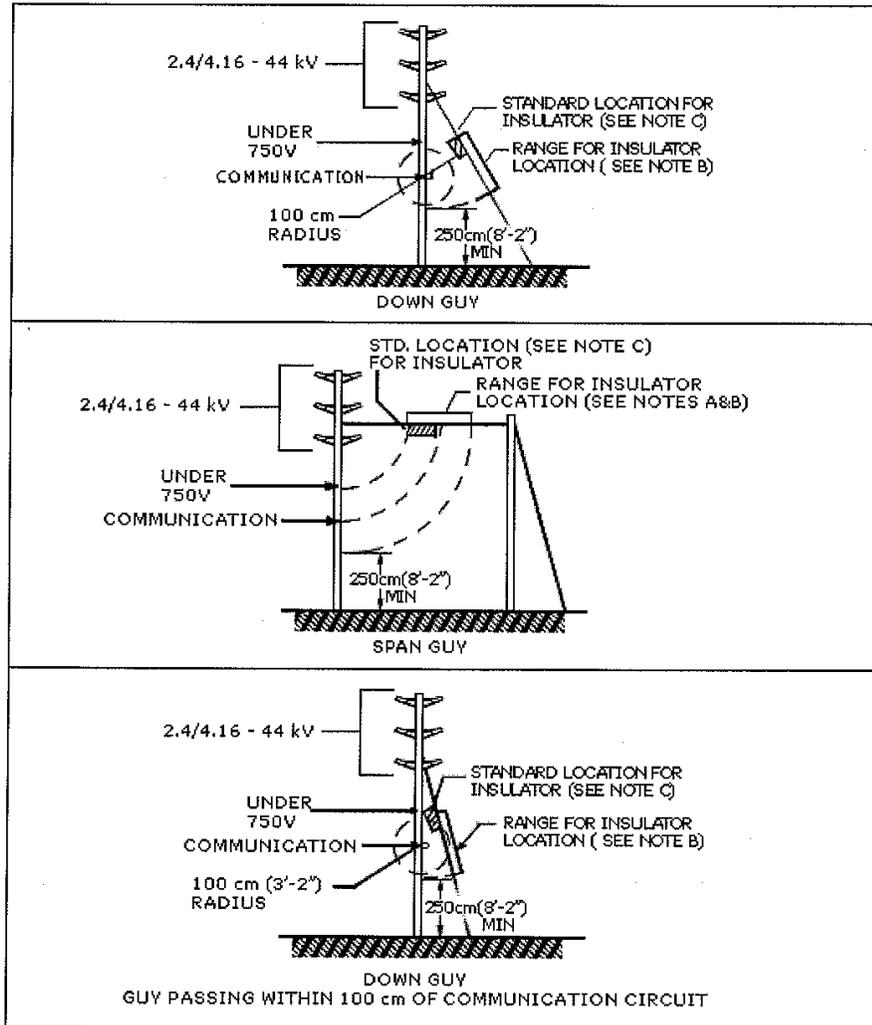
- If the pole has less than 2 inches average shell thickness, or has "SEVERE" damage, or both,
- bands to be placed (4 feet to 5 feet above ground line.)

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:

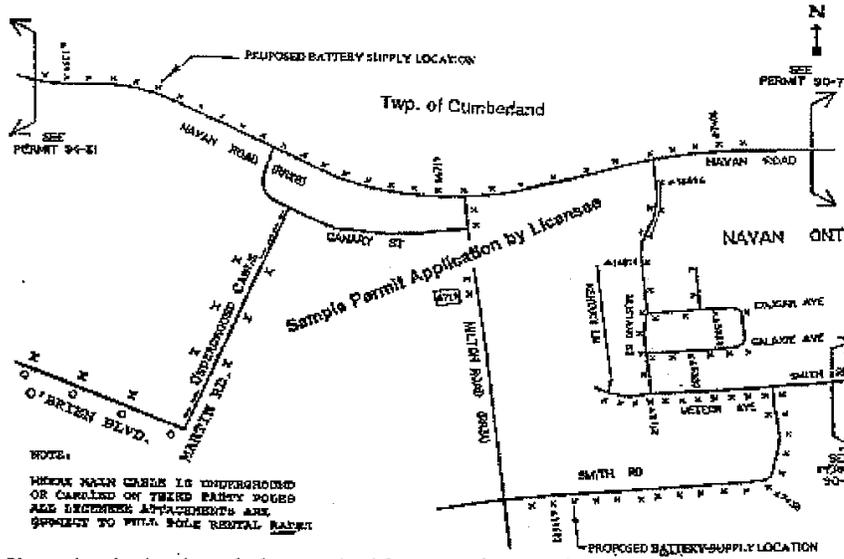
- 11.1 Each Party shall provide guys and anchors with sufficient capacity to support its own Attachments and shall ensure that any such guys (except those used to support Attachments that form the subject of Existing Permits) are a minimum 3/8 of an inch thick.
- 11.2 Suitable anchoring and guying that 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" 90-12	
Permission is requested by Name of company	Signature: (by authorized company rep)	Print Name and Title:	
To place attachments as follows: (note specific quantity, size and nature of proposed attachment(s))			
Detail # of conductors, Size, & associated hardware Note, sketch should show any transformers, reclosures, switches etc.			
Company Division		External Permit #	
Lot no. (in or between) Lots 7 - 11	Conc./Street or Road Names Con. 9 & 10	Township/village or town of Village of Navan	County/Municipality Ottawa-Carleton



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

For Internal Use Only

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

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 #	
		Supersedes 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

BLENDED (60% ROCK 40% EARTH) ROCK DRILLED SET POLES									
<i>Revised/Issued: January 2005</i>									
AGE	CONDITION	30 FT	35 FT	40 FT	45 FT	50 FT	55 FT	60 FT	65 FT
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									
<i>Revised/Issued: January 2005</i>									
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 Cut				\$ 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.

New Pole Costs						
Revised/Issued: January 2005						
Material Costs (dollars)		TYPE OF SETTING				
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			
Labour Costs (dollars)		TYPE OF SETTING				
Height (Ft)	Earth	Earth Plus or Swamp	Earth or Earth Plus Hydro Vac	Rock Drilled	Swamp with Cribbed Mount	Rock Mount
Pole Dig & Set (Includes delivery of pole from own yard, if required.)						
30	\$ 338	\$ 635	\$ 1,380	\$ 1,082	\$ 1,820	\$ 822
35	\$ 338	\$ 636	\$ 1,380	\$ 1,083	\$ 1,820	\$ 822
40	\$ 381	\$ 678	\$ 1,423	\$ 1,125	\$ 1,862	\$ 858
45	\$ 423	\$ 720	\$ 1,464	\$ 1,167	\$ 1,905	\$ 894
50	\$ 481	\$ 762	\$ 1,507	\$ 1,209	\$ 1,947	\$ 1,090
55	\$ 526	\$ 825	\$ 1,569	\$ 1,589	\$ 2,047	\$ 1,126
60	\$ 569	\$ 868	\$ 1,612	\$ 1,632	\$ 2,091	\$ 1,162
65	\$ 613	\$ 912	\$ 1,656	\$ 1,676	\$ 2,136	\$ 1,198
Pole Dig (only)						
30	\$ 135	\$ 407	\$ 1,164	\$ 892	\$ 1,497	\$ 534
35	\$ 135	\$ 408	\$ 1,164	\$ 893	\$ 1,497	\$ 534
40	\$ 152	\$ 424	\$ 1,182	\$ 909	\$ 1,529	\$ 558
45	\$ 169	\$ 441	\$ 1,198	\$ 875	\$ 1,563	\$ 581
50	\$ 192	\$ 458	\$ 1,215	\$ 907	\$ 1,595	\$ 709
55	\$ 210	\$ 483	\$ 1,240	\$ 1,192	\$ 1,673	\$ 732
60	\$ 228	\$ 500	\$ 1,257	\$ 1,224	\$ 1,707	\$ 755
65	\$ 276	\$ 502	\$ 911	\$ 1,257	\$ 1,742	\$ 779
Pole Set (only)						
30	\$ 203	\$ 228	\$ 216	\$ 190	\$ 323	\$ 288
35	\$ 203	\$ 228	\$ 216	\$ 190	\$ 323	\$ 288
40	\$ 229	\$ 254	\$ 241	\$ 216	\$ 333	\$ 300
45	\$ 254	\$ 279	\$ 266	\$ 241	\$ 342	\$ 313
50	\$ 289	\$ 304	\$ 292	\$ 266	\$ 352	\$ 381
55	\$ 316	\$ 342	\$ 329	\$ 303	\$ 374	\$ 394
60	\$ 341	\$ 368	\$ 355	\$ 328	\$ 384	\$ 407
65	\$ 337	\$ 394	\$ 381	\$ 355	\$ 394	\$ 419
Notes						
All pole digs other than (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	

Table 2			
Unit Transfer or Rearrangement Costs			
<i>Revised/Issued: January 2018</i>			
Item/Equipment	Unit	Description	Total Unit Cost
Crossarm	Single, (wood) ea.	Unit consists of a single crossarm complete with braces, pins and insulators. This unit covers any size crossarm, buckarm or alley arm.	\$253
Crossarm	Double, (wood) ea.	Unit consists of crossarms complete with pins, insulators, braces and spacers.	\$590
Crossarm	Triple, (wood) ea.		\$760
Crossarm	(steel) ea.	Unit consists of a steel crossarm complete with braces, pins and insulators	\$423
Secondary Rack	or Bracket	Unit covers one rack or bracket with through bolts and insulators.	\$107
Pole Top Pin ea.		Unit includes either long or short pin, insulator and through bolts	\$121
Saddle Clamp, ea.		Unit includes the saddle clamp complete with hardware and conductor.	\$113
Spool Bolt or 1 Pt. Rack, ea.		Unit covers spool bolt and insulator. Applies also to old construction where the neutral support is a clevis or single point rack.	\$93
Post Type Insulator	ea. Up to 14KV	Unit covers the insulator, bracket and through bolts	\$142
Post Type Insulator	ea., over 14 KV		\$169
Conductor Dead End	Primary, De-energized, ea.	Unit covers the conductor, insulator and associated dead-end hardware. Add a splice unit if necessary to splice in extra wire.	\$329
Conductor Dead End	Primary, Live up to 14KV, ea.		\$485
Conductor Dead End	Primary, Live over 14KV, ea.		\$548
Conductor Dead End	Secondary per Bus (1 Rack)	Unit covers all conductors (bus) together with a 3 or 4 point rack and through bolts.	\$413
Conductor Dead End	Secondary per Wire (Single Point Racks)	Unit covers one secondary conductor together with a single point rack and through bolt. Add a splice unit if necessary to splice in extra wire.	\$251
Splices	Primary ea. Conductor Live	Covers the complete operation of making the splice.	\$400
Splices	Primary ea. Conductor De-Energized		\$313
Splices	Secondary ea. Conductor		\$105
Conductor Semi Strain	Primary, De-energized, ea.	Unit covers conductor, insulators, clamps and through bolts on primary angles where the conductor is not dead ended.	\$335
Conductor Semi Strain	Primary, Live up to 14KV, ea.		\$435
Conductor Semi Strain	Primary, Live over 14KV, ea.		\$493
Line Wire	Primary De-energized, Tang, ea.	Unit covers the conductor and tie wire.	\$124
Line Wire	Primary Live up to 14KV, Tang. Ea.		\$169
Line Wire	Primary Live over 14 KV, Tang. Ea.		\$196
Line Wire	Primary De-energized, Angle, ea.		\$124
Line Wire	Primary Live up to 14KV, Angle. Ea.		\$169
Line Wire	Primary Live over 14 KV, Angle. Ea.		\$196
Line Wire	Secondary ea.		Unit covers the conductor and tie wire. NOTE: The unit for secondary is used for each wire of an open wire secondary bus, or each wire of an open wire secondary service. Where extra wire must be spliced in, charge a splice unit for each splice.
Spun Secondary	Tangent or Small Angle (0-30 degree)	Unit covers the secondary aerial cable and associated hardware.	\$247
Spun Secondary	Medium Angle (30-60 degree)		\$352
Spun Secondary	Heavy Angle (60-90 degree)		\$831
Spun Secondary	Dead End		\$435
Triplex Service	one end on pole	Unit covers the triplex wire, preformed grips and wire connectors for either termination or intermediate pole. Add one splice unit where necessary to splice in extra wire.	\$196
Triplex Service	one end on spun bus		\$208
Triplex Service	replace service (100Ft)		\$727
Triplex Service	splice		\$215
Line Switch, ea.		Unit covers one fuse cutout or switch complete with mounting bracket, leads and wire connections. The unit includes a mounting arm. This unit does not apply to air-break switches.	\$253

In Line Switch or Fuse Cutout		Unit covers one fuse cutout, switch on Live Line opener with appropriate connectors and by-pass loop or blade.	\$746
Transformer Assembly, ea.		Unit takes into consideration that the transformer may be direct pole mounted or crossarm mounted and that the cross arms may be double. It covers the transformer, the mounting, lightning arrester, cutout, drop leads, grounding plate, ground wire connections and clamp rest. It does not include the primary or secondary line wires or their supports or services and ground wires or ground rod(s).	\$1,261
Ground Wire, ea.		The unit covers the ground wire, moulding and fasteners. In practice new ground wire and moulding are used and the old pole is stripped in the yard.	\$169
Ground Rod, ea.		Unit includes trenching and meggering	\$189
Regulator, ea.		Unit includes the regulator, cutouts, arresters, drop leads, control box and associated hardware. It does not include the vertical ground wire.	\$2,813
Anchor	Plate or Log	Unit covers all labour and material cost required for installation.	\$682
Anchor	Expansion		\$730
Anchor	P.I.S.A.		\$351
Anchor	Rock		\$674
Guys		Unit covers one guy (single or double) and takes into consideration that one section of guy must be replaced with a longer section where a higher pole is installed. This unit does not include the strut in a strut guy and does not include a guy guard.	\$328
Reclosers	1 Phase (not including primary dead-ends)	Unit covers recloser(s), recloser mounting, drop leads, live line clamps, arrester and clamp rest. It does not include the neutral, line crossarms, ground wires, by pass switches or primary dead ends. NOTE: Recloser units may also be used for sectionalizers	\$703
Reclosers	2 Phase (not including primary dead-ends)		\$1,055
Reclosers	3 Phase (not including primary dead-ends)		\$1,406
Street Light	Bracket, ea.	Unit includes the luminaire, bracket, vertical run conductor connections and ground connection.	\$352
Street Light	Relay, ea.	Unit includes the relay, mounting and lead connections.	\$169
Street Light	Photoelectric Controller	Unit includes the base, photoelectric unit and lead connections.	\$226
Meter Test Box		Unit consists of meter box, convenience outlet, vertical conductors, wood moulding and all connections including connection to ground wire.	\$253
Underground	Primary Riser- No Splice	Unit includes conductor, connections, PVC duct, metal guard fastenings.	\$1,370
Underground	Primary Riser- Splice & add 5 ft.		\$2,776
Underground	Secondary Riser- No Splice		\$421
Underground	Secondary Riser- Splice & add 5 ft.		\$849
Triplex	Convert 3 wire service to triplex- 1 span	Unit includes labour & material required to convert 3-wire service to triplex	\$659
Triplex	Convert 3 wire service to triplex- 2 spans		\$1,384
Pole Top Extension- Epoxy		Unit covers material and labour cost of installing a pole top extension for added height with no pole replacement.	\$352
Pole Cribs, ea. (0.6meters)		Unit includes one section of galvanized pole crib installed with fill.	\$1,476
No. 44 Crossarm			\$389
Connect/Disconnect Bell Bond To/From Neutral (Hydro Owned Poles Only)			\$149
Extra Trip to job (Based on 2 Hrs. Travel- Round Trip)		Unit covers cost of return trip to work site by Lines Crew (2 Line Maintainers & truck), and is billable in situations where a second trip is required due to the actions of the JU party. (i.e. Hydro One asked to set pole but once on-site pole and/or hole were not ready). Additional charges may apply when travel time exceeds 2 hours round-trip.	\$683

Special Work Vehicle Charge Billed as Extra Charge per pole, i.e., Bombardiers or muskeg tractors applicable for work in locations not accessible to standard work vehicles i.e.. (Line Trucks)	Unit covers the use of any all terrain vehicle such as timberjack, swamp buggy, bombardier etc., where the ATV is used instead of a standard line truck. The unit is applied on a per pole basis only to poles where equipment is actually required. The unit cost is an average which covers vehicles that can travel on roads or must be transported by means of a truck and trailer	\$202
Easement Acquisition	Per Easement or Permission	\$469
Extra Height Charge	5' Increments	\$244
Float Charge for Special Work Vehicle transportation		\$198
Engineering Charge per hour	When Joint use not established within 6 months includes truck	\$169
Line Construction Labour Rate per man-hour		\$145
Forestry Hourly Labour Rate per man-hour		\$158
Administration Overhead for Contract Labour (% of contract)	Unit covers the additional cost for Hydro One to arrange for contract labour to install LDC Joint Use Poles (i.e. rock drill, backhoe, etc.)	17%
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. Unit Price Includes Material		
3. 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.		

New Pole Costs						
Revised/Issued: January 2018						
Material Costs (dollars)			TYPE OF SETTING			
Height (Ft)	Earth, Earth Plus & Rock Drilled (Pole Only)	Cribbed Mount (pole, crib & backfill)	Rock Mount (Pole & rock mount)			
30	\$270	\$844	\$1,891			
35	\$297	\$872	\$2,454			
40	\$472	\$1,046	\$2,627			
45	\$623	\$1,194	\$2,774			
50	\$732	\$1,306	\$3,419			
55	\$1,120	\$1,697	\$3,810			
60	\$1,917	\$2,487	\$4,605			
65	\$2,203	\$2,773	\$4,890			
Labour Costs (dollars)			TYPE OF SETTING			
Height (Ft)	Earth	Earth Plus or Swamp	Earth or Earth Plus Hydro Vac	Rock Drilled	Swamp with Cribbed Mount	Rock Mount
Pole Dig & Set (Includes delivery of pole from own yard, if required.)						
30	\$414	\$776	\$1,688	\$1,322	\$2,226	\$1,007
35	\$414	\$778	\$1,688	\$1,323	\$2,226	\$1,007
40	\$467	\$832	\$1,742	\$1,377	\$2,278	\$1,049
45	\$518	\$882	\$1,791	\$1,429	\$2,332	\$1,094
50	\$589	\$934	\$1,844	\$1,480	\$2,384	\$1,331
55	\$642	\$1,010	\$1,921	\$1,943	\$2,505	\$1,378
60	\$695	\$1,063	\$1,974	\$1,997	\$2,557	\$1,423
65	\$752	\$1,117	\$2,027	\$2,052	\$2,614	\$1,465
Pole Dig (Only)						
30	\$167	\$500	\$1,425	\$1,093	\$1,833	\$655
35	\$167	\$501	\$1,425	\$1,093	\$1,833	\$684
40	\$187	\$519	\$1,446	\$1,113	\$1,871	\$684
45	\$207	\$538	\$1,465	\$1,223	\$1,915	\$712
50	\$234	\$560	\$1,488	\$1,331	\$1,950	\$868
55	\$257	\$592	\$1,518	\$1,458	\$2,047	\$896
60	\$281	\$614	\$1,537	\$1,498	\$2,087	\$923
65	\$337	\$616	\$1,558	\$1,537	\$2,131	\$955
Pole Set (only)						
30	\$249	\$281	\$265	\$232	\$397	\$352
35	\$249	\$281	\$265	\$232	\$397	\$352
40	\$282	\$313	\$293	\$265	\$408	\$366
45	\$313	\$342	\$327	\$293	\$418	\$386
50	\$355	\$371	\$358	\$327	\$428	\$467
55	\$389	\$418	\$403	\$370	\$458	\$482
60	\$417	\$451	\$434	\$403	\$470	\$500
65	\$443	\$482	\$467	\$434	\$478	\$513
Pole Removal (only) - All Heights and Settings						\$341

1 **INTERROGATORY RESPONSE - HONI-9**

2 **Question-9**

3
4 **TOPIC**

5 Assessment of Alternatives

6
7 **REFERENCE**

8 1. Hydro Ottawa Response to OEB Staff Interrogatory 1

9 Hydro Ottawa currently rents 34 poles from Hydro One in Casselman. Hydro Ottawa's Joint Use
10 Agreement with Hydro One is based upon a mutual desire by both Parties to work together for
11 their respective benefit, and to ensure that joint use is planned and implemented where feasible
12 because it is the right approach and provides the optimal outcome for each party's Customers
13 that it serves, its employees and stakeholders. Therefore, Hydro Ottawa's proposal aligns with
14 the outcomes set out in the Joint Use Agreement. However, Hydro Ottawa would also be able to
15 construct a separate pole line along the east side of Principale Street. While this would not be the
16 preferable option, it could be done for a comparable price to the estimate provided by Hydro One,
17 should Hydro One not be able to accommodate Hydro Ottawa's system expansion on their pole
18 line.

19
20 2. Hydro Ottawa Response to OEB Staff Interrogatory 2

21 For the Casselman station only the Common Sub-Transmission (Common ST) Line charge
22 applies. Hydro Ottawa does not have an hourly load profile of the Customer and as a result does
23 not know to what extent the Customer will contribute to the system peak which this charge is
24 based on. In addition, if the Customer's load does not have a peak that is coincident to the relevant
25 system peak, it could result in the Customer sharing the existing low voltage charges in Hydro
26 Ottawa's service territory.

27
28 **INTERROGATORY**

- 29 a) Given the new alternative being contemplated by Hydro Ottawa to build on the east side of
30 Principale Street, and assuming the full load of the Customer will contribute to Hydro Ottawa's

1 system peak, please outline whether there would be any impact on the low voltage charges paid
2 by Hydro Ottawa's customers if this connection is pursued by Hydro Ottawa. Please provide an
3 estimate of the potential increase under the assumption that the full load of the Customer
4 contributes to Hydro Ottawa's system peak. Please confirm whether the impact would be different
5 if the preferred alternative proposed by Hydro Ottawa is pursued under these assumptions.
6

7
8 **RESPONSE**

9 a) As Hydro One is likely aware, the new alternative does not change the way Hydro One applies
10 low voltage charges, as low voltage charges do not distinguish what poles the distribution lines
11 are attached to. As a result, Hydro Ottawa extending its existing pole line would not change the
12 impact of low voltage charges from what it would be if Hydro Ottawa connected the customer
13 through the use of joint use poles.
14

15 Hydro Ottawa believes the same configuration occurs with regards to the Hydro One Casselman
16 station as it relates to serving customers in the Casselman region. However, it is not immediately
17 clear to Hydro Ottawa how a low voltage charge related to distribution is ultimately charged to
18 Hydro One customers when it is on Hydro One's own system.
19

20 Hydro Ottawa notes that Hydro One's request to estimate low voltage charges from Hydro One
21 are outside the scope of procedural order #2, as Hydro One's low voltage charges are unrelated
22 to if Hydro Ottawa extends its pole line. Regardless, Hydro Ottawa will respond to the question.
23 In the unlikely scenario that the customer's peak load increases the Hydro One low voltage charge
24 equally, it would increase by approximately \$2K a month. As noted, it is not expected that this is
25 a realistic assumption and Hydro Ottawa would anticipate the charge to be lower.