



## CONDITIONS OF SERVICE

A guide to the types and level of service available to a Customer within the E.L.K.  
Service Area.

Original June 2007 Version 1  
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## Preface

### **Conditions of Service**

The Distribution System Code (DSC) requires that every Distributor produce its own “Conditions of Service” document. The purpose of this document is to provide a means of communicating the types and level of service available to the Customers within the Distributor’s service territory. The DSC requires that the Conditions of Service be readily available for review by the general public. In addition, the most recent version of the document must be provided to the Ontario Energy Board (OEB) who in turn will retain it on file for the purpose of activating dispute resolutions in the event that a dispute cannot be resolved locally.

A template has been prepared to assist Distributors in developing their own “Conditions of Service” document. The template outlines the minimum requirements; however, Distributors are encouraged to expand on the content to encompass local constraints and other specific requirements. The form and layout of the Condition of Service document are as required by the OEB.

The template will also serve as a reference for Distributors who may require changes to their existing documents in order to reflect new changes prescribed by the governing Legislation, Licenses, and Codes.

**The Introduction section** contains references to any codes and governing laws affecting this document. This section will also cover the policies for amending this document as well as provide the Distributors contact information.

**The General section** contains references to services and requirements, which span across all Customer classes. This section should cover such items as Rates, Billing, Hours of Work, Emergency Response, Power Quality, Available Voltage etc.

**The Customer Specific section** contains references to services and requirements, which are specific to individual Customer classes. This section would cover such items as Metering, Service Entrance Requirements, Delineation of Ownership, Special Contracts, etc.

The Appendices include Connection Agreements, etc. along with any other documentation, which may not easily be incorporated into specific sections.

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## SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)

### 1.1 Identification of Distributor and Service Area

E.L.K. Energy Inc. referred to herein as E.L.K. is a corporation, incorporated under the laws of the Province of Ontario to distribute electricity.

E.L.K. is licensed by the Ontario Energy Board "OEB" to supply electricity to Customers as described in the Distribution License issued to E.L.K. on January 4, 2007 by the OEB. Additionally there are requirements imposed on E.L.K. by the various codes referred to in the License and by the Electricity Act and the Ontario Energy Board Act.

E.L.K. is limited to operate distribution facilities within their Licensed Territory as defined in the Distribution License. This service area is subject to change with the OEB's approval. The defined Territories are:

- The former Town of Belle River.
- The former Police Village of Comber,
- The former Town of Essex and Harrow and
- The Town of Kingsville and the Village of Cottam
- Plan 12R-311, Part 1 through 6 in the former Township of Colchester North.

Nothing contained in this document or in any contract for the supply of electricity by E.L.K. shall prejudice or affect any rights, privileges, or powers vested in E.L.K. by law under any Act of the Legislature of Ontario or the Parliament of Canada, or any regulations there under.

Any customer may not resell electrical energy purchased from E.L.K. at a profit to a third party using E.L.K.'s rates. In the case of multi-tenant buildings with bulk metering, the Owner must pay the total cost of electrical energy.

The customer or their representative, who apply to E.L.K. for connection services, shall consult with E.L.K. or its agent concerning the availability of supply, the voltage of supply, service location, metering and any other details. These requirements are separate from and in addition to those of the Electrical Safety Authority. E.L.K. or its agent will confirm the characteristics of electric supply available at a specific site.

The customer is required to provide E.L.K. sufficient lead-time in order to ensure:

- (a) The timely provision of supply to new and upgraded premises, or
- (b) The availability of adequate capacity for additional loads to be connected in existing premises.

If special equipment is required or equipment delivery problems occur then longer lead times may be necessary. The customer will be notified of any extended lead times. Customers will be required to pay the cost of repair or replacement of E.L.K.'s equipment that has been damaged through the customer's action or neglect.

The supply of electricity is conditional upon E.L.K. being permitted and able to provide such a supply, obtaining the necessary apparatus and material, and constructing works to provide the service. Should E.L.K. not be permitted to supply or not be able to do so, it is under no responsibility to the customer whatsoever.

Customers may be required to pay for the addition of new electrical services in accordance with E.L.K. Capital Contribution Policy.

#### 1.1.1. Distribution Overview

E.L.K. distributes electrical power through 8 kV and 27.6 kV primary distribution systems. On the 27.6 kV system all feeders are arranged to run radial by maintaining open points between

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## SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)

interconnections. These feeders supply distribution transformers directly through a 4 kV sub-distribution system.

The supply of electricity by E.L.K. to any Customer will be at one of the following Primary voltage levels: 27.6 kV or 8 kV depending on the proximity of the Customer's premises to the nearest distribution facility. For connection of a Customer at 4 kV level, E.L.K. will carry out a special study to justify the investment as the 4 kV distribution facilities are being phased out. The cost of this study may be charged to the Customer.

### 1.2 Related Codes and Governing Laws

Current versions of the following codes and laws are implicitly part of this document. These supplementary documents outline rules, codes and mandatory practices that are the underpinnings of how E.L.K. operates and should be referred to if any questions arise.

The supply of electricity or related services by E.L.K. to any Customer shall be subject to various laws, regulations and codes, including the provisions of the latest editions of the following documents:

1. Electricity Act, 1998
2. Ontario Energy Board Act, 1998
3. E.L.K. Distribution License
4. Affiliate Relationships Code (ARC)
5. Transmission System Code (NOT ON ESPL DO WE NEED STILL?)
6. Distribution Service Code (DSC)
7. Retail Settlements Code (RSC)
8. Standard Supply Service Code (SSSC)
9. Electrical Safety Code (ESA)
10. Performance Based Rates Handbook (PBR)
11. Applicable CSA codes
12. Ontario Business Corporations Act (OBCA)

The above is not all-inclusive – other codes and laws may apply in special circumstances (i.e. by-laws, tax laws...).

In the event of a conflict between this document and the E.L.K. Distribution License or regulatory Codes issued by the OEB, or the Electricity Act, the Provisions of the Act, the Distribution License and associated regulatory Codes shall prevail. If there is a conflict between a Connection Agreement with a Customer and these Conditions of Service, these Conditions of Service shall govern.

When planning and designing for electricity service, Customers and their agents must refer to all applicable Provincial and Canadian electrical codes, and all other applicable federal, provincial, and municipal laws, regulations, codes and by-laws to also ensure compliance with their requirements. The work shall be conducted in accordance with the latest edition of the Ontario Occupational Health and Safety Act (OHSA), the Regulations for Construction Projects and the harmonized Electrical Utilities Safety Association (EUSA) rulebook.

### 1.3 Interpretations

This Conditions of Service document adds to and clarifies points in the previously listed documents. No clause or rule outlines in this document can contradict or change in any material way the intent of established law, standards and statutes. In any dispute on interpretation the relevant law, standard or statute shall be taken as correct. If there is no relevant document to reference then this document can be considered the official policy of E.L.K. and dispute resolution can be resolved as outlined in Dispute Resolution.

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## SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)

In these Conditions, unless the context otherwise requires:

- Headings, paragraph numbers and underlining are for convenience only and do not affect the interpretation of these Conditions;
- Words referring to the singular include the plural and vice versa; and
- Words referring to a gender include any gender.

### 1.4 Amendments and Changes

The provisions of these Conditions of Service and any amendments made from time to time form part of any Contract made between E.L.K. and any connected Customer, Retailer, or Generator, and these Conditions of Service supersedes all previous conditions of service, oral or written, of E.L.K. or any of its predecessor municipal electric utilities as of its effective date.

In the event of changes to these Conditions of Service, a public notice shall be made in the form of either a notice in a local newspaper, or a notice on E.L.K.'s Website.

The Customer is responsible for contacting E.L.K. to ensure that the Customer has, or to obtain the current version of the Conditions of Service. E.L.K. may charge a reasonable fee for providing the Customer with a copy of this document.

### 1.5 Contact Information

E.L.K. and its agents can be contacted 24 hours a day, 7 days a week, 365 days a year. Normal business hours are Monday to Friday between 8:30 a.m. and 4:30 p.m. The corporate mailing address is 172 Forest Avenue, Essex Ontario N8M 3E4, telephone number (519) 776-5291. Emergency telephone number (519) 776-5291. The website is [www.elkenegy.com](http://www.elkenegy.com). The email address contact is [customer.service@elkenegy.com](mailto:customer.service@elkenegy.com).

### 1.6 Customer Rights and Obligations

The following details the general obligations and rights of a customer of E.L.K. Refer to specific sections for details that apply to a particular class.

E.L.K. shall only be liable to a Customer and a Customer shall only be liable to E.L.K. for any damages that arise directly out of the willful misconduct or negligence:

- Of E.L.K. in providing distribution services to the Customer;
- Of the Customer in being connected to E.L.K.'s distribution system; or
- Of E.L.K. or Customer in meeting their respective obligations under these the Distribution System Code, their licenses and any other applicable law.

Notwithstanding the above, neither E.L.K. nor the Customer shall be liable under any circumstances whatsoever for any loss of profits or revenues, business interruption losses, loss of contract or loss of goodwill, or for any indirect, consequential, incidental or special damages, including but not limited to punitive or exemplary damages, whether any of the said liability, loss or damages arise in contract, tort or otherwise notwithstanding the customer financial contribution.

The Customer or Embedded Generator shall indemnify and hold harmless E.L.K., its directors, officers, employees and agents from any claims made by any third parties in connection with the construction and installation of a generator by or on behalf of the Customer or the Embedded Generator.

The customer shall assume all risk, liability or obligation to:

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## SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)

- a) All loss, damage or injury to property of the customer or property of a third person on the lands of the customer.
- b) All loss, damage or injury to any person or persons (including loss of life) on the customer lands and premises, which loss, damage or injury shall have been due to power supplied by E.L.K. to the customer, except to the degree that such loss, damage or injury shall have been due to the negligence or intentional acts of E.L.K., its servants or agents.

### 1.6.1 Customer Obligations

The customer is obligated to provide reasonable and safe access to E.L.K. or its agent employees for the installation, operation and maintenance of the metering and electrical connection plant located on the Customer's property.

The property Owner wanting an electrical service connected to the distribution system is obligated to provide consent permitting E.L.K. plant to be placed on that property. If access to private property, other than the property in question, is required, the property owner will obtain the necessary registered easements as described in Easements if these Conditions of Service.

The Customer is responsible for removing and reinstating any privately owned obstructions (tree trimming, landscape, sprinklers, driveways, etc.) for E.L.K. or its agent to perform installation, operation and maintenance of the electrical connection plant located on the Customer's property.

The Customer is required to supply all necessary facilities such as meter sockets, cabinets, enclosures, panels, mounting boards, conduits, wiring devices, fittings, space and 120 volt AC supply requirements of and for the metering equipment.

Customers whose load is < 50 kW (including residential customers), are typically not required to sign a Connection Agreement. However, in accepting electrical service from E.L.K., Customers are bound by these Conditions of Service, the OEB Rate Handbook, E.L.K.'s Distribution License and the DSC.

Use of electrical service, is construed by E.L.K. as a willingness and intention to pay.

### 1.6.2 Customer Rights

A Customer should expect to receive electrical energy within specified voltage limits as defined by the CSA standard CAN3-C235. Voltage Guidelines of these Conditions of Service identifies the voltage variation limits at a Customer's service entrance outlined in the CSA standard.

Customers who experience outages or other disturbances will be notified, upon request, of the cause of the outage and if possible an expected time until power can be restored (refer to Conveyance of Electricity). E.L.K. or its agents shall make every reasonable effort to respond promptly to a Customer's request for connection.

Proof of metering accuracy can be requested by a customer or by a Meter Service Provider. For details, refer to Meter Dispute Testing of these Conditions of Service.

At E.L.K.'s discretion, two services to a customer location may both be energized for a period of up to three (3) days to allow for the transferring of internal electric circuits. However, E.L.K. reserves the right to disconnect the non-permanent service should the three-day period lapse.

## 1.7 Distributor Rights and Obligations

### 1.7.1 Access to Customer Property

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**SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)**

E.L.K. shall have access to Customer property in accordance with section 40 of the *Electricity Act, 1998*, E.L.K. or its agent shall, in accordance with subsection 40(8) of the *Electricity Act*:

- Provide reasonable notice of the entry to the owner of the property;
- In so far as is practicable, restore the property to its original condition;
- Provide compensation for any damages caused by the entry that cannot be repaired.

When there is a possibility that unsafe conditions may be created by a planned power interruption, or there would be significant financial loss, E.L.K. or its agent will cooperate with the Customer to resolve that condition. This work may involve isolation of the system and other work and could incur a fee to the Customer.

**1.7.2 Safety of Equipment**

The Customer will comply with all aspects of the Ontario Electrical Safety Code with respect to insuring that equipment is properly identified and connected for metering and operation purposes and will take whatever steps necessary to correct any deficiencies, in particular cross wiring situation, in a timely fashion. If the Customer does not take such action within a reasonable time, E.L.K. may disconnect the supply of power to the Customer.

The Customer shall not build, plant or maintain or cause to be built, planted or maintained any structure, tree, shrub or landscaping that would or could obstruct the running of distribution lines, endanger the equipment of E.L.K., interfere with the proper and safe operation of E.L.K.'s facilities or adversely affect compliance with any applicable legislation at the sole opinion of E.L.K.

The Customer shall not use or interfere with the facilities of E.L.K. except in accordance with a written agreement with E.L.K. The Customer must also grant E.L.K. the right to seal any point where a connection may be made on the line side of the metering equipment.

**1.7.3 Operating Control**

The Customer will provide a convenient and safe place, satisfactory to E.L.K., for installing, maintaining and operating its equipment, in, on, or about the Customer's premises. E.L.K. assumes no risk and will not be liable for damages resulting from the presence of its equipment on the Customer's premises or approaches thereto, or action, omission or occurrence beyond its control, or negligence of any Persons over whom E.L.K. has no control.

Unless an employee or an agent of E.L.K., or other Person lawfully entitled to do so, no Person shall remove, replace, alter repair, inspect or tamper with E.L.K.'s equipment.

Customers will be required to pay the cost of repairs or replacement of E.L.K.'s equipment that has been damaged or lost by the direct or indirect act or omission of the Customer or its agents.

The physical location on Customer's premises at which a distributor's responsibility for operational control of distribution equipment ends is defined by the DSC as the "operational demarcation point".

**1.7.4 Repairs of Defective Customer Electrical Equipment**

The Customer will be required to repair or replace any equipment owned by the Customer that may affect the integrity or reliability of E.L.K.'s distribution system. If the Customer does not take such action within a reasonable time, E.L.K. may disconnect the supply of power to the Customer.

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## SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)

E.L.K.'s policies and procedures with respect to the disconnection process are further described in these Conditions.

### 1.7.5 Repairs of Customer's Physical Structures

Depending on the ownership demarcation point, construction and maintenance of all civil works on private property owned by the Customer, including such items as transformer vaults, transformer rooms, transformer pads, cable chambers, cable pull rooms and underground conduit, will be the responsibility of the Customer. All civil work on private property must be inspected and accepted by E.L.K. and the ESA.

The Customer is responsible for the maintenance and safe keeping conditions satisfactory to E.L.K. of its structural and mechanical facilities located on private property.

### 1.7.6 E.L.K. Rights

E.L.K. has the sole right to determine the "Voltage of Supply". For further explanation of customer voltage of supply to a customer's premises, refer to Standard Voltage Offerings of these Conditions of Service.

Although it is E.L.K.'s policy to minimize inconvenience to customers, it is necessary to occasionally interrupt a Customer's supply to allow work on the electrical system. Customers will be provided with reasonable notice of planned power interruptions and, whenever practical, arrangements suitable to the customer will be made to minimize any inconvenience. Notice may not be given where work is of an emergency nature involving the possibility of injury to persons or damage to equipment.

## 1.8 Dispute Resolution

To resolve disputes, E.L.K. will follow the terms of Section 16 of the Distribution License.

*Section 16 of the Distribution License states,*

- a) have a process for resolving disputes with customers that deals with disputes in a fair, reasonable and timely manner;
- b) publish information which will make its customers aware of and help them to use its dispute resolution process;
- c) make a copy of the dispute resolution process available for inspection by members of the public at each of the Licensee's premises during normal business hours;
- d) give or send a free of charge copy of the process to any person who reasonably requests it; and
- e) subscribe to and refer unresolved complaints to an independent third party complaints resolution service provider selected by the Board. This condition will become effective on a date to be determined by the Board. The Board will provide reasonable notice to the Licensee of the date this condition becomes effective.

### 1.8.1 Dispute Process – Third Party Arbitration

Disputes of this nature include complaints that have not been or cannot be resolved through the Local Resolution process. In these cases the Customer has the option of referring unresolved complaints to an independent third party complaint resolution agency that has been approved by the OEB. The decision of the arbitrator will be considered binding on both parties. Cost for this process is to be shared 50/50 between the Customer and E.L.K.

**SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)**

**2.1 Connections – Process and Timing**

The Customer or its authorized representative shall apply for new or upgraded electric services and temporary power services in writing. The Customer is required to provide E.L.K. with sufficient lead-time in order to ensure:

1. The timely provision of supply to new and upgraded premises or
2. The availability of adequate capacity for additional loads to be connected in existing premises.

E.L.K. shall make every reasonable effort to respond promptly to a Customer’s request for connection. E.L.K. shall respond to a Customer’s written request for a Customer connection within fifteen (15) calendar days of receipt of the written request. E.L.K. will make an offer to connect within sixty (60) days of receipt of the written request, unless other necessary information is required from the Customer before the offer can be made.

E.L.K. shall make every reasonable effort to respond promptly to a Generator’s request for connection. In any event E.L.K. shall provide an initial consultation with a generator that wishes to connect to the distribution system regarding the connection process within thirty (30) calendar days of receiving a written request for connection. A final offer to connect a generator to its distribution system shall be made within ninety (90) calendar days of receiving a written request for connection, unless other necessary information outside E.L.K.’s control is required before the offer can be made.

E.L.K. shall make every reasonable effort to respond promptly to another distributor’s request for connection. E.L.K. shall provide an initial consultation with another distributor regarding the connection process within thirty (30) days of receiving a written request for connection. A final offer to connect another distributor to E.L.K.’s distribution system shall be made within ninety (90) days of receiving the written request for connection, unless other necessary information outside E.L.K.’s control is required before the offer can be made.

E.L.K., in its discretion, may require a customer, generator or distributor to enter into a Connection Agreement with E.L.K. including terms and conditions in addition to those expressed in these Conditions (refer to the sample in the DSC Code – Appendix D).

If special equipment is required or equipment delivery problems occur then longer lead times may be necessary. E.L.K. will notify the Customer of any extended lead times.

In addition to any other requirements in these Conditions, the supply of electricity is conditional upon E.L.K. being permitted or able to provide such supply, obtaining the necessary apparatus and material, and constructing works to provide the service. Should E.L.K. not be permitted or able to do so, it is under no responsibility to the Customer whatsoever and the Customer releases E.L.K. from any liability in respect thereto.

**2.1.1 Building that Lies Along**

For the purpose of these Conditions “lies along” means a Customer property or parcel of land that is land directly adjacent to or abuts onto the public road allowance where E.L.K. has distribution facilities of the appropriate voltage and capacity.

Under the terms of the DSC, E.L.K. has the Obligation to connect (under Section 28 of the Electricity Act, 1998) a building or facility that “lies along” its distribution line provided:

- a) The building can be connected to E.L.K. distribution system without an Expansion or Enhancement and,
- b) The service installation meets the conditions listed in the Conditions of Service of E.L.K. that owns and operates the distribution line.

**SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)**

The location of the Customer's service entrance equipment will be subject to the approval of E.L.K. and the ESA.

**2.1.1.1 Connection Charges**

E.L.K. shall recover costs associated with the installation of "Connection Assets", by Customer Class, via a Basic Connection and a Variable Connection Charge, as applicable.

- a) For residential Customers, the Basic Connection Charge is recovered from the customer to provide a basic connection consistent with the defined demarcation point as outlined in Schedule 1 in these Conditions. This point may differ from the "Operational Demarcation Point".

**Note:** For the purpose of these Conditions, subdivision, multi-units or townhouse type developments are considered as Non-Residential Class of Customers.

- b) The variable Connection Charge shall be calculated as the costs associated with the installation of Connection assets. E.L.K. may recover this variable connection fee which shall be based on actual cost.

**Note:** Basic Connection Fees are reviewed annually and are calculated based on the average costs to provide Standard Allowance for Residential Class.

**2.1.2 Expansion/Offer to Connect**

Under the terms of the DSC, E.L.K. is required to make an "offer to connect" if, in order to connect a Customer, E.L.K. must construct new distribution facilities or increase the capacity of existing distribution facilities (i.e. an "Expansion" of its system). In making an "Offer to Connect", E.L.K. will include, without limitation, the following components, as applicable:

- a) the capital contribution that the customer will have to pay for the expansion;
- b) the calculation used to determine the amount of the capital contribution to be paid by the customer including all of the assumptions and inputs used to produce the economic evaluation;
- c) a statement as to whether the offer includes work for which the customer may obtain an alternative bid and, if so, the process by which the customer may obtain the alternative bid;
- d) a description of, and costs for, the contestable work and the uncontestable work associated with the expansion broken down into the following categories:
  - i. labour (including design, engineering and construction);
  - ii. materials;
  - iii. equipment; and
  - iv. overhead (including administration);
- e) an amount for any additional costs that will occur as a result of the alternative bid option being chosen (including, but not limited to, inspection costs);
- f) if the offer is for a residential customer, a description of, and the amount for, the cost of the basic connection that has been factored into the economic evaluation ; and
- g) if the offer is for a non-residential customer and if the distributor has chosen to recover the non-residential basic connection charge as part of its revenue requirement, a description of, and the amount for, the connection charges that have been factored into the economic evaluation.

The cost associated with the Expansion is to be fair and reasonable and be based on E.L.K.'s design standard. E.L.K. will perform an "Economic Evaluation" to determine whether the future revenue from the Customer will pay for the capital and on-going maintenance costs of the expansion project (refer to

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**SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)**

methodology and assumptions in the DSC Code – Appendix B). At the discretion of E.L.K., the capital costs for the Expansion may include incremental costs associated with the full use of E.L.K.'s existing spare facilities or equipment, which may result in an adverse impact to future Customers. The economic evaluation will be based on the Customer's proposed load, distributor's historical load for similar customers or actual load on the yearly anniversaries of the connected load, for the duration of the connection horizon.

**2.1.2.1 Offer to Connect**

If E.L.K.'s offer to connect is a firm offer, E.L.K. will provide one estimate to the Customer for any plans submitted to E.L.K. for an expansion project, at no expense to the Customer. If the Customer submits revised plans, E.L.K. may provide a new firm offer for revised plans at the Customer's expense.

If E.L.K.'s offer to connect is an estimate of the costs to construct the expansion and not a firm offer, the final amount charged to the Customer will be based on actual costs incurred. E.L.K. will calculate the first estimate and the final payment at no expense to the Customer.

Where the offer to connect meets the conditions identified in the DSC code, E.L.K. will inform the Customer that the Customer may obtain other-bids from contractors pre-qualified by E.L.K. for the work eligible for other bids.

**2.1.2.2 Capital Contributions for Buildings that Lie Along**

The capital contribution collected from the Customer is to be consistent with the respective Customer Class as outlined below:

**Class 1 – Residential Single Service:** No Transformation required on private property  
Overhead or Underground: *Capital contribution collected in the form of a variable connection charge, which is the actual cost.*

**Class 2 – General Service (<50 kW):** No Transformation required on private property  
Overhead or Underground: *Capital contribution collected in the form of a variable connection charge equal to the actual costs to service.*

**Class 3 – General Service (>50 kW):** No Transformation on private property  
*Capital contribution collected in the form of a variable connection charge equal to the actual costs to service.*

**Class 4 – General Service (1000 kW and above):**  
*Capital contribution collected in the form of a variable connection charge equal to the actual costs to service.*

Note: Customers who own a high-voltage switchgear and have a demand less than 1000 kW are included in Class 4.

**2.1.2.3 Settlement of Capital Contributions**

The initial demand or load proposed by the Customer, for the EEM, must be reasonable and shall be subject to acceptance by E.L.K. The Customer and E.L.K. agree on the one year anniversary of the first dollars spent by E.L.K., the average load and or Customer connections for the period will be entered into the EEM to determine the potential rebate to the Customer from their security deposit. This practice will continue through the connection horizon or until the entire security deposit has been rebated to Customer.

## SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)

A settlement of the Capital Contribution amount may require the Customer/Developer to pay E.L.K. or it may be necessary for E.L.K. to refund the Customer/Developer the settlement amount depending on the results of the Economic Evaluation Analysis.

### 2.1.2.4 Rebates Related to Expansions

In scenarios where E.L.K. is required to install new plant solely for the connection of a Customer, the Customer will be required to pay E.L.K. 100% of the calculated shortfall. If within 5 years from the first dollar spent, non-forecasted Customers are connected to this new plant without any further capital costs, non-forecasted Customers shall contribute their share and the first Customer will be entitled to a rebate as outlined in E.L.K.'s rebate process.

### 2.1.2.5 Supply Agreement and Securities

To keep E.L.K. harmless as a result of E.L.K. agreeing to reduce the amount of capital contribution required for the Expansion, the Customer shall enter into a Connection Agreement and provide a security deposit to cover the actual costs incurred by E.L.K. and the capital contribution(s) paid by the Customer

With each subsequent renewal of the security deposit, the Customer's liability shall be reduced by an amount equal to the actual incremental revenue collected since the first dollars spent. The residual debt, if any, is due 25 years after the first dollars spent date, or upon termination of the Connection Agreement. The obligation to pay any outstanding amount shall survive the termination of the Supply Agreement. An irrevocable (standby) letter of credit or a letter of guarantee from a chartered bank is acceptable in lieu of a cash deposit. This security deposit is in addition to any other charges or deposits that may be required by E.L.K. and is to be provided prior to the connection of service.

### 2.1.3 Connection Denial

The DSC provides for the ability of a Distributor to deny connections. A Distributor is not obligated to connect a building within its service territory, if the connection would result in any of the following:

- Contravention of existing laws in Canada and the Province of Ontario,
  - Violations of conditions in E.L.K.'s License,
  - Use of a distribution system line for a purpose that it does not serve and that E.L.K. does not intend to serve,
  - Adverse effect on the reliability and safety of the distribution system,
  - Public safety reasons or imposition of an unsafe work situation beyond normal risks inherent in the operation of the distribution system,
  - A material decrease in the efficiency of E.L.K.'s distribution system,
  - A material adverse effect on the quality of distribution services received by an existing connection
  - Discriminatory access to distribution services,
  - If the person or corporation requesting the connection owes E.L.K. money for distribution services,
  - Potential increases in monetary amounts that already are in arrears with E.L.K.
  - If an electrical connection to E.L.K.'s distribution system does not meet E.L.K.'s design requirements,
  - Failure to satisfy security deposit requirements as documented in Section 2.4.3 of this document.
- or

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**SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)**

- Any other conditions documented in E.L.K.'s Conditions of Service document that are consistent with the conditions identified above and with the goals delineated in the Energy Competition Act, 1998.

If E.L.K. refuses to connect a building in its service territory that lies along one of its distribution lines, E.L.K. shall inform the person requesting the connection of the reasons for the denial, and where E.L.K. is able to provide a remedy, make an offer to connect. If E.L.K. is unable to provide a remedy to resolve the issue, it is the responsibility of the customer to do so before a connection can be made.

**2.1.4 Inspections Before Connections**

All Customer electrical installations shall be approved by the ESA and must also meet E.L.K.'s requirements. E.L.K. requires notification from the ESA of this approval prior to energization of a customer's supply of electricity. Services that have been disconnected for a period of six months or longer must also be re-inspected and approved by the ESA, prior to reconnection.

Temporary services, typically used for construction purposes and for a period of twelve months or less, must be approved by the ESA and must be re-inspected should the period of use exceed twelve months.

Customer owned substations must be inspected by both the ESA and E.L.K.

Transformer rooms shall be inspected and approved by E.L.K. prior to the installation of E.L.K.'s equipment.

Duct banks shall be inspected and approved by E.L.K. prior to the pouring of concrete and again before backfilling. The completed ducts must be rodded by the site contractor in the presence of an E.L.K. inspector and shall be clear of all extraneous material. A mandrel, to nominal diameter of duct, will be passed through each duct. In the event of ducts blocked by ice, the owner's representative will be responsible for clearing the ducts prior to the cable installation. Connection to existing concrete duct banks or manholes will be done only by an approved contractor. All work done on existing E.L.K. plant must be performed by E.L.K., or agents acting on their behalf, and carried out in accordance with all applicable safety acts and regulations.

**2.1.5 Relocation of Plant**

When requested to relocate distribution plant, E.L.K. will exercise its rights and discharge its obligations in accordance with existing acts, by-laws and regulations including the Public Service Works on Highways Act, formal agreements, easements and law. In the absence of existing agreements, E.L.K. is not obligated to relocate the plant. However, E.L.K. shall resolve the issue in a fair and reasonable manner. Resolution in a fair and reasonable manner will include a response to the requesting party that explains the feasibility or unfeasibility of the relocation and reasonable charge for relocation based on cost recovery principles.

**2.1.6 Easements**

To maintain the reliability, integrity and efficiency of the distribution system, E.L.K. has the right to have supply facilities on private property and to have easements registered against title to the property. Easements are required where facilities serve property other than property where the facilities are located and/or where E.L.K. deems it necessary.

The Customer will prepare, at its own cost, any required reference plan and easement documents, to the satisfaction of E.L.K. Two copies of the deposited reference plan must be

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## SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)

supplied to E.L.K. prior to the preparation of the easement documents. Details will be provided upon application for service.

The Customer shall grant, at no cost to E.L.K., where required, an easement to permit installation and maintenance of service. The width and extent of this easement shall be determined by E.L.K. The easement shall be granted prior to energization of the service.

### Access to Property of Third Party

If access to private property, other than the property of the owner requesting a service connection, is necessary for the installation, operation and maintenance of the connection plant, the customer requesting connection will obtain the necessary registered easements. The customer requesting the connection is responsible for all costs incurred with obtaining and registering the easement. The customer may be required to enter into an Agreement.

## **2.1.7 Contracts**

### **2.1.7.1 Contract for New or Modified Electricity Service**

E.L.K. shall only connect a Building for a new or modified supply of electricity upon receipt by E.L.K. of a completed and signed contract for service in a form acceptable to E.L.K., payment to E.L.K. of any applicable connection charge, and an inspection and approval by the ESA of the electrical equipment for the new service.

### **2.1.7.2 Implied Contract**

In all cases, notwithstanding the absence of a written contract, E.L.K. has an implied contract with any Customer that is connected to E.L.K.'s distribution system and receives distribution services from E.L.K. The terms of the implied contract are embedded in E.L.K.'s Conditions of Service, the Rate Handbook, E.L.K.'s rate schedules, E.L.K.'s license and the DSC, as amended from time to time.

Any Person or Persons who take or use electricity from E.L.K. shall be liable for payment for such electricity. Any implied contract for the supply of electricity by E.L.K. shall be binding upon the heirs, administrators, executors, successors or assigns of the Person or Persons who took and/or used electricity supplied by E.L.K.

### **2.1.7.3 Subdivision Agreement**

All developers of Subdivisions or Industrial/Commercial Parks may be required to enter into a Subdivision Agreement with E.L.K. prior to the construction of any works.

### **2.1.7.4 Special Contracts**

Special contracts that are customized in accordance with the service requested by the Customer normally include, but are not necessarily limited to, the following examples:

- construction sites,
- mobile facilities,
- non-permanent structures,
- special occasions, etc., or
- generation.

## **2.2 Disconnection**

E.L.K. reserves the right to disconnect the supply of electrical energy for causes not limited to:

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**SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)**

- Contravention of the laws of Canada or the Province of Ontario
- Adverse effect on the reliability and safety of the distribution system,
- Imposition of an unsafe worker situation beyond normal risks inherent in the operation of the distribution system,
- A material decrease in the efficiency of the distributor's distribution system,
- A materially adverse effect on the quality of distribution services received by an existing connection
- Discriminatory access to distribution services,
- Inability of E.L.K. to perform planned inspections and maintenance,
- Failure of the Consumer or Customer to comply with a directive of E.L.K. that E.L.K. makes for purposes of meetings its license obligations,
- Overdue amounts payable to E.L.K. for the distribution or retail electricity (provided E.L.K. provides the customer with reasonable notice of the proposed disconnection of electricity), or for security deposit installment payments,
- Electrical disturbance propagation caused by Customer equipment that is not corrected in a timely fashion.

E.L.K. may disconnect the supply of electricity to a Customer without notice in accordance with a court order, or for emergency, safety or system reliability reasons.

**2.2.1 Unauthorized Energy Use**

E.L.K. reserves the right to disconnect the supply of electrical energy to a Customer for causes not limited to energy diversion, fraud or abuse on the part of the Customer. Such service may not be reconnected until the Customer rectifies the condition and provides full payment to E.L.K. including all costs incurred by E.L.K. arising from unauthorized energy use, including inspections, repair costs and the cost of disconnection and reconnection.

**2.3 Conveyance of Electricity**

**2.3.1 Guarantee of Supply**

E.L.K. will endeavor to use reasonable diligence in providing a regular and uninterrupted supply but does not guarantee a constant supply or the maintenance of unvaried frequency or voltage and will not be liable in damages to the Customer by reason of any failure in respect thereof.

Customers requiring a higher degree of security than that of normal supply are responsible to provide their own back-up or standby facilities.

E.L.K. will endeavor to maintain voltage variation limits, under normal operating condition, at the Customers' Delivery Points, as specified by the latest edition of the Canadian Standards Association, CAN3-235.

Customers may require special protective equipment on their premises to minimize the effect of momentary power interruptions.

Customers requiring a three-phase supply should install protective apparatus to avoid damage to their equipment, which may be caused by the interruption of one phase, or non-simultaneous switching of phases of E.L.K.'s supply.

Although it is E.L.K.'s policy to minimize inconvenience to Customers, it is necessary to occasionally interrupt a Customer's supply to maintain or improve E.L.K.'s system, or to provide new or upgraded

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## SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)

services to other Customers. Whenever practical and cost effective, as determined by E.L.K., arrangements suitable to the Customer and E.L.K. will be made to minimize any inconvenience. E.L.K. will endeavor to provide the Customer with reasonable advance notice, except in cases of extreme emergency, involving danger to life and limb, or impending severe equipment damage.

E.L.K. will endeavor to notify Customers prior to interrupting the supply to any individual service. However, if an unsafe or hazardous condition is found to exist or if the use of electricity by apparatus, appliances, or other equipment is found to be unsafe or damaging to E.L.K. or the public, service may be discontinued without notice.

During an emergency, E.L.K. may interrupt supply to a Consumer in response to a shortage of supply, or to effect repairs on the distribution system, or while repairs are being made to consumer owned equipment.

E.L.K. shall have rights to access to a property in accordance with section 40 of the *Electricity Act, 1998* and successor acts thereto.

To assist with distribution system outages or emergency response, E.L.K. may require a Customer to provide E.L.K. with emergency access to Customer owned distribution equipment that normally is operated by E.L.K. or E.L.K. owned equipment on Customer's property.

Depending on the outage duration and the number of Customers affected, E.L.K. may issue a news release to advise the general public of the outage.

### 2.3.2 Power Quality

In response to a Customer power quality concern, where the utilization of electric power adversely affects the performance of electrical equipment, E.L.K. will perform investigative analysis to identify the underlying cause. Depending on the circumstances, this may include review of relevant power interruption data, trend analysis, and/or use of diagnostic measurement tools.

Upon determination of the cause resulting in the power quality concern, where it is deemed a system delivery issue and where industry standards are not met, E.L.K. will recommend and/or take appropriate mitigation measures. E.L.K. will endeavor to control harmonics generated by its own system where these are found to be detrimental to the Customers. If E.L.K. is unable to correct the problem due to the impact on other Customers, then it is not obligated to make the corrections. E.L.K. will use appropriate industry standards (such as IEC or IEEE standards) and good utility practice as a guideline. If the problem lies on the Customer side of the system, E.L.K. may seek reimbursement for the time spent in investigating the problem.

If an undesirable system disturbance is being caused by Customer's equipment, the Customer will be required to cease operation of the equipment until satisfactory remedial action has been taken. If the Customer does not take such action within a reasonable time, E.L.K. may disconnect the supply of power to the Customer.

#### 2.3.2.1 Prevention of Voltage Distortion on Distribution

Consumers having non-linear load shall not be connected to E.L.K.'s distribution system unless power quality is maintained by implementing proper corrective measure such as installing proper filters, and/or grounding. Further, to ensure the distribution system is not adversely affected, power electronics equipment installed must comply with IEEE Standard 519-1992. The limit on individual harmonic distortion is 3%, while the limit on total harmonic distortion is 5%.

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**SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)****2.3.2.2 Obligation to Help in the Investigation**

If E.L.K. determines the Customer's equipment may be the source causing unacceptable harmonics, voltage flicker or voltage level on E.L.K.'s distribution system, the Consumer is obligated to help E.L.K. by providing required equipment information, relevant data and necessary access for monitoring the equipment.

**2.3.2.3 Timely Correction of Deficiencies**

If an undesirable system disturbance is being caused by Customer's equipment, the Customer will be required to cease operation of the equipment until satisfactory remedial action has been taken by the Customer at the Customer's cost. If the Customer does not take such action within a reasonable time, E.L.K. may disconnect the supply of power to the Customer.

**2.3.2.4 Notification for Interruptions**

Although it is E.L.K.'s policy to minimize inconvenience to Customers, it is necessary to occasionally interrupt a Customer's supply to allow work on the electrical system. E.L.K. will endeavor to provide the Customers with reasonable notice of planned power interruptions. Notice may not be given where work is of an emergency nature involving the possibility of injury to persons or damage to property or equipment.

However, during an emergency, E.L.K. may interrupt supply to a Customer in response to a shortage of supply or to effect repairs on E.L.K.'s distribution system or while repairs are being made to Customer owned equipment.

**2.3.2.5 Notification to Customers on Life Support**

Customers who require an uninterrupted source of power for life support equipment must provide their own equipment for these purposes. Customers with life support system are encouraged to inform E.L.K. of their medical needs and their available backup power. These Customers are responsible for ensuring that the information they provide E.L.K. is accurate and up to date.

With planned interruptions, the same procedure as prescribed in section 2.3.2.4 will be observed. For those unplanned power interruptions that extend beyond two hours and the time expected to restore power is longer than what was indicated by Customers (registered on life support) as their available backup power, E.L.K. will endeavor to contact these Customers but will not be liable in any manner to the Customers for failure to do so.

**2.3.2.6 Emergency Interruptions for Safety**

E.L.K. will endeavor to notify Customers prior to interrupting the supply to any service. However, if an unsafe or hazardous condition is found to exist, or if the use of electricity by apparatus, appliances, or other equipment is found to be unsafe or damaging to E.L.K. or the public, service may be interrupted without notice.

**2.3.2.7 Emergency Service (Trouble Calls)**

E.L.K. will exercise reasonable diligence and care to deliver a continuous supply of electrical energy to the Customer. However, E.L.K. cannot guarantee a supply that is free from interruption.

When power is interrupted, the Customer should first ensure that failure is not due to blowing of fuses within the installation. If there is a partial power failure, the Customer should obtain the services of an electrical contractor to carry out necessary repairs. If, on examination, it appears

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## SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)

that E.L.K.'s main source of supply has failed, the Customer should report these conditions at once to E.L.K.'s Call Center by calling 519-776-5291 or 1-877-ELK-7798.

E.L.K. operates a Call Center 24 hours a day to provide emergency service to Customers. E.L.K. will initiate restoration efforts as rapidly as practical.

### 2.3.2.8 Outage Reporting

Depending on the outage, duration and the number of Customers affected, Corporate Communications of E.L.K. may issue a news release to advise the general public of the outage. In turn, news radio stations may call for information on a 24-hour basis when they hear of an outage.

### 2.3.3 Electrical Disturbances

E.L.K. shall not be held liable for the failure to maintain supply voltages within standard levels due to Force Majeure as defined in Section 2.3.5 of these Conditions.

There are levels of voltage fluctuations and other disturbances that can cause flickering lights and more serious difficulties for Customers connected to E.L.K.'s distribution system.

Customers must ensure that their equipment does not cause any disturbances such as harmonics and spikes that might interfere with the operation of adjacent Customer equipment. Examples of equipment that may cause disturbance include large motors, welders and variable speed drives. In planning the installation of such equipment, the Customer must consult with E.L.K.

Some types of electronic equipment, such as video display terminals, can be affected by the close proximity of high electrical currents that may be present in transformer rooms.

E.L.K. will assist in attempting to resolve any such difficulties at the Customer's expense.

Customers who may require an uninterrupted source of power supply or a supply completely free from fluctuation and disturbance must provide their own power conditioning equipment for these purposes.

### 2.3.4 Standard Voltage Offerings

#### 2.3.4.1 Primary Voltage

The primary voltage to be used will be determined by E.L.K. for both E.L.K. owned and Customer owned transformation. Depending on what voltage of the plant that "lies along", the preferred primary voltage will be at 27.6/16 kV grounded wire, three phase, and four-wire system. However, in the Comber and Cottam service areas, 8/4.8 kV grounded wire, three phase, four wire; or 8 kV three phase, three wire, depending on the area, are the distribution voltages in these communities. Some areas of Essex, Harrow and Kingsville are serviced by 4.16/2.4 kV.

#### 2.3.4.2 Supply Voltage

Depending on the type of distribution plant that "lies along", the preferred secondary voltage will be at 120/240 V, single phase, 120/208 V, or 600/347 V. The Supply Voltage governs the limit of supply capacity for any Customer. General guidelines for supply from overhead street circuits are as follows:

- (i) at 120/240 V , single phase up to 100 kVA demand load,

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**SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)**

- (ii) 600/347 V, three phase, four wire up to 500 kVA demand load, or
- (iii) At 208 V, three phase or 208/120 V, three phase, four wire up to 500 kVA demand load.

Where street circuits are buried, the Supply Voltage and limits will be determined upon Application to E.L.K., OR

Where the Customer or Developer provides a pad on private property;

- (i) at 120/240 V, single phase, supply is available up to 75 kVA, or
- (ii) at 208/120 V or 600/347 V, three phase, four wire supply is available for loads up to 1000 kVA demand load (i.e. – 3 x 333 kVA, single phase).

When the customer requires voltages other than at the available Supply Voltage, or demands by a single occupant exceed 1000 kVA, transformation requirements will be determined by E.L.K.

**2.3.5 Voltage Guidelines**

E.L.K. maintains service voltage at the Customer's service entrance within the guidelines of C.S.A. Standard CAN3-C235-87 (latest edition) which allows variations from nominal voltage of,

- 6% for Normal Operating Conditions, or
- 8% for Extreme Operations Conditions.

Where voltages lie outside the indicated limits for Normal Operating Conditions but within the indicated limits for Extreme Operating Conditions, improvement or corrective action will be taken on a planned and programmed basis, but not necessarily on an emergency basis. Where voltages lie outside the indicated limits for Extreme Operating Conditions, improvement or corrective action will be taken on an emergency basis. The urgency for such action will depend on many factors such as the location and nature of load or circuit involved, the extent to which limits are exceeded with respect to voltage levels and duration, etc.

**2.3.6 Back-up Generators**

Customers with portable or permanently connected emergency generation capability shall comply with all applicable criteria of the Ontario Electrical Safety Code and in particular, shall ensure that customer emergency generation does not back feed on E.L.K.'s system.

Customers with permanently connected emergency generation equipment shall notify E.L.K. regarding the presence of such equipment.

Any other requirements E.L.K. imposes on Customers with backup generation equipment should be described in this section.

Customers with portable or permanently connected generation capability used for emergency backup shall comply with all applicable criteria of the Ontario Electrical Safety Code. In particular, the Customer shall ensure that Customer's emergency generation does not parallel with E.L.K.'s system without a proper interface protection and does not adversely affect E.L.K.'s distribution system.

**2.3.7 Metering**

E.L.K. will supply, install, own, and maintain all meters, instrument transformers, ancillary devices, and secondary wiring required for revenue metering. The cost of said metering may be collected through a Variable Connection Charge.

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## SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)

Additional metering requirements are listed in the DSC. Metered Market Participants in the Independent Electricity System Operator (“IESO”) administered wholesale market must meet or exceed all IESO metering requirements.

### 2.3.7.1 General

E.L.K. will typically install metering equipment at the Customer supply voltage. The Customer must provide a convenient and safe location satisfactory to E.L.K., for installation of meters, wires and ancillary equipment. Meters for new or upgraded residential services will be mounted outdoors on a meter socket approved by E.L.K.

No person, except those authorized by E.L.K., may remove, connect, or otherwise interfere with meters, wires, or ancillary equipment.

The Customer will be responsible for the care and safekeeping of E.L.K. meters, wires and ancillary equipment on the Customer’s premises. If any E.L.K. equipment installed on Customer premises is damaged, destroyed or lost other than by ordinary wear and tear, tempest or lightning, the Customer will be liable to pay to E.L.K. the value of such equipment, or at the option of E.L.K., the cost of repairing the same.

The location allocated by the owner for E.L.K. metering shall provide direct access for E.L.K. staff and shall be subject to satisfactory environmental conditions, some of which are:

- Maintain a safe and adequate working space in front of equipment, not less than 1.22 meters (48 inches) and a minimum ceiling height of 2.2 meters (87 inches),
- Maintain an unobstructed working space in front of equipment, free from, or protected against, the adverse effects of moving machinery, vibration, dust, moisture or fumes.

Where E.L.K. deems self-contained meters to be in a hazardous location, the Customer shall provide a meter cabinet or protective housing.

Any compartments, cabinets, boxes, sockets or other work space provided for the installation of E.L.K.’s metering equipment shall be for the exclusive use of E.L.K. No equipment, other than that provided and installed by E.L.K., may be installed in any part of the E.L.K. metering work space.

#### 2.3.7.1.1 Multi-Unit Sites

Customers wishing to have multi-unit sites equipped with individual tenant metering may install additional meters or sub-metering systems. The conditions, but not limited to, for multi-unit sites are listed below and must be approved by E.L.K. prior to construction:

- All meters are located in the same room,
- The building is not a high-rise development,
- The customer pays all additional costs necessary to provide the individually metered services.

A telephone service will be supplied next to the metering unit at the Customers expense to allow remote interrogation of the meters. E.L.K. will notify the customer in writing when they need the service to be activated. All ongoing costs associated with this telephone service are solely the Customers responsibility.

#### 2.3.7.1.2 Main Switch and Meter Mounting Devices

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**SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)**

The Customer's main switch immediately preceding the meter shall be installed so that the top of the switch is 1.83 meters (72 inches) or less from the finished floor and shall permit the sealing and padlocking of the handle in the "open" position; and the cover or door in the closed position.

Meter mounting devices for use on Commercial/Industrial accounts, in excess of 200 Amps or 240 Volts, shall be installed on the load side of the Customer's main switch and be located indoors.

The Customer is required to supply and install an ESA (ESA) approved meter socket for the use of E.L.K.'s self-contained socket meters for said service.

The Customer is required to supply and install a meter cabinet to contain E.L.K.'s metering equipment for the main switch ratings and supply voltages in excess of 200 Amps or 240 Volts. The cabinets will be approved on a per case basis.

Meter centers installed for individual metering applications must meet the ESA requirements and be approved by E.L.K. Schedule 2 lists the requirements, but is not limited to, for the meter centers.

The Customer shall permanently and legibly identify each metered service with respect to its specific address, including unit or apartment number. The identification shall be applied to all service switches, circuit breakers, meter cabinets, and meter mounting devices.

**2.3.7.1.3 Service Mains Limitations**

The metering provision and arrangement for service mains in excess of either 600 A or 600 V shall be submitted to E.L.K. for approval before building construction begins. Additional standards and requirements for services metered above 600 V can be made available upon request.

**2.3.7.1.4 Special Enclosures**

Specially constructed meter entrance enclosures will be permitted for outdoor use upon E.L.K.'s approval of a written application for use.

**2.3.7.1.5 Meter Loops**

The Customer shall provide meter loops having a length of 610 mm (24 in.) in addition to the length between line and load entry points. Line and load entry points shall be approved by E.L.K. prior to installation. Where more than two conductors per phase are used, the connectors shall be provided by the Customer.

Mineral insulated, solid or hard drawn wire conductors are not acceptable for meter loops.

Any variation from the above must first be checked and approved by E.L.K. prior to installation.

**2.3.7.1.6 Barriers**

Barriers are required in each section of switchgear or service entrance equipment between metered and un-metered conductors and/or between sections reserved for E.L.K. use and sections for Customer use.

**2.3.7.1.7 Doors**

**SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)**

Side hinged doors shall be installed over all live electrical equipment where E.L.K. personnel may be required to work (i.e. line splitters, unmetered sections of switchgear, breakers, switches, metering compartments, meter cabinets and enclosures).

**2.3.7.1.8 Auxiliary Connections**

All connections to circuits such as fire alarms, exit lights and Customer instrumentation shall be made to the load side of E.L.K.'s metering.

No Customer equipment shall be connected to any part of the E.L.K. metering circuit.

**2.3.7.1.9 Working Space**

Clear working space shall be maintained in front of all equipment and from all side panels in accordance with the Ontario Electrical Safety Code.

**2.3.7.2 Current Transformer Boxes**

Where a current transformer box is required, it shall be CSA approved, painted or galvanized, made of No. 16 gauge sheet metal and include a provision for scaling. A removable plate shall be provided in the box for mounting the equipment, unless the box is mounted on a wooden wall.

As an alternative to a separate CT box and meter, a single enclosure combining both functions may be feasible. Contact E.L.K. for details.

Where current transformers are to be installed in the secondary bus of metal clad switchgear, shop drawings must be submitted to E.L.K. to ensure that the CT's will fit. In cases where the CT's only meter a portion of the metal clad switchgear (such as public loads), a separate disconnect switch must be installed ahead of the metering compartment so that the service can be de-energized without any interruption to the main service supply. Generally, one public meter only will be allowed. Additional public meters will require authorization from E.L.K.

Where a current transformer box is required, its size will depend on the size of the service conductors to be used. The relationship is as follows:

Up to and including 300 MCM inclusive, use 910 mm x 910 mm x 300 mm (36 in. x 36 in. x 12 in.) CT box.

Above 500 MCM use 1220 mm x 1220 mm x 300 mm (48 in. x 48 in. x 12 in.) CT box.

Conductors should enter the current transformer box at the top and leave at the bottom, or vice versa. If this cannot be arranged, the next largest CT box must be used to enable conductors to be trained in place. Where parallel conductors are used, the sum of the conductors will determine the size of the CT box to use. In all cases the Customer shall supply suitable cable termination lugs.

On all electrical services that require current transformers and the neutral for metering, an isolated neutral block shall be provided in the current transformer box.

The cabinet and the compartment will be connected by an empty 32 mm (1 ¼ in.) conduit, the length of which shall not exceed 30 m (98 ft. 5 in.), and which shall include a maximum of three 90 degree bends. The Customer shall install a strong nylon or polyrope pull line in the conduit, with an excess of 1500 mm (59 in.) loop left at the end. The conduit will be provided for the exclusive use of E.L.K.

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**SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)**

The meter cabinet shall be grounded by a minimum #6 copper grounding conductor, not installed in the above conduit.

The final layout and arrangements of components must be approved by E.L.K., prior to fabrication of equipment.

Where two or more circuits are totalized, or where remote totalizing is involved, or where instrument transformers are incorporated in high voltage switchgear (greater than 750 V), E.L.K. will issue specific metering requirements.

**2.3.7.3 Interval Metering**

Interval meters will be installed for all new or upgraded services where the peak is forecast to be 1000 kW or greater. Once subsection 26(1) of the Electricity Act comes into force all new services with a forecasted load of 500 kW or greater will receive interval metering. Prior to the installation of an interval meter, the Customer must provide a 12.5 mm (1/2 in.) conduit from their telephone room to the meter cabinet. The Customer will arrange for the installation of a telephone line, terminated in the meter cabinet for the exclusive use of E.L.K. to retrieve interval meter data. The Customer will be responsible for the installation and ongoing monthly costs of operating the phone line. The phone line will be direct dial voice quality, active 24 hours per day, and energized prior to meter installation.

Other Customers that request interval metering, to participate in the spot market pass through pricing, shall compensate E.L.K. for all incremental costs associated with that meter, including the capital cost of the interval meter, installation costs associated with the interval meter, ongoing maintenance (including allowance for meter failure), verification and reverification of the meter, installation and ongoing provision of communication line or communication link with the Customer's meter, and cost of metering made redundant by the Customer requesting interval metering.

**2.3.7.4 Meter Reading**

The Customer must provide or arrange free, safe and unobstructed access during regular business hours to any authorized representative of E.L.K. for the purpose of meter reading, meter changing or meter inspection. Where premises are closed during E.L.K.'s normal business hours, the Customer must, on reasonable notice, arrange such access at a mutually convenient time.

**2.3.7.5 Final Meter Reading**

When a service is no longer required or if the Customer is switching Energy Providers, the Customer shall provide E.L.K. sufficient notice of the date so that a final meter reading can be obtained. The Customer shall provide access to E.L.K. or its agents for this purpose.

If a final meter reading is not obtained, the Customer shall pay a sum based on an estimated demand and/or energy for electricity used since the last meter reading.

**2.3.7.6 Faulty Registration of Meters**

Metering electricity usage for the purpose of billing is governed by the federal Electricity and Gas Inspection Act and associated regulations, under the jurisdiction of Measurement Canada, an agency of Industry Canada. E.L.K.'s revenue meters are required to comply with the accuracy specifications established by the regulations under the above Act.

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**SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)**

In the event of incorrect electricity usage registration, E.L.K. will determine the correction factors based on the specific cause of the metering error and the Customer's electricity usage history. The Customer shall pay for all the energy supplied, a reasonable sum based on the reading of any meter formerly or subsequently installed on the premises by E.L.K., due regard being given to any change in the character of the installation and/or the demand.

If the incorrect measurement is due to reasons other than the accuracy of the meter, such as incorrect meter connection, incorrect connection of auxiliary metering equipment or incorrect meter multiplier used in the bill calculation, the billing correction will apply for the duration of the error. E.L.K. will correct the bills for that period in accordance with the regulations under the Act.

**2.3.7.7 Meter Dispute Testing**

Metering inaccuracy is an extremely rare occurrence. Most billing inquiries can be resolved between the Customer and E.L.K. without resorting to the meter dispute test.

A representative of E.L.K. or the Customer may request the service of Measurement Canada to resolve a dispute. If the Customer initiates the dispute E.L.K. will charge the Customer a meter dispute fee if the meter is found to be accurate and Measurement Canada rules in favour of the utility.

**2.4 Tariffs and Charges**

**2.4.1 Service Connection**

Service and connection fees shall apply to all new electrical service connections and shall also apply where an upgrade to an electrical service requires equipment upgrades to accommodate the change.

The Ontario Energy Board (OEB) approves E.L.K. specific service charges and distribution rates. Charges for distribution services are made as set out in the Schedule of Rates available from E.L.K. Notice of Rate revisions shall be published in major local newspapers.

RESIDENTIAL SERVICE CLASSIFICATION

This classification refers to a service which is less than 50 kW supplied to a single family dwelling unit that is for domestic or household purposes, including seasonal occupancy. At E.L.K.'s discretion, residential rates may be applied to apartment buildings with 6 or less units by simple application of the residential rate or by blocking the residential rate by the number of units. Further servicing details are available in the distributor's Conditions of Service.

GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION

This classification refers to premises other than those designated as residential and do not exceed 50 kW in any month of the year. This includes multi-unit residential establishments such as apartment buildings supplied through one service (bulk- metered). Further servicing details are available in the distributor's Conditions of Service.

GENERAL SERVICE 50 TO 4,999 KW SERVICE CLASSIFICATION

This classification applies to a non-residential account whose average monthly maximum demand used for billing purposes is equal to or greater than, or is forecast to be equal to or greater than, 50 kW but less than 5,000 kW. Further servicing details are available in the distributor's Conditions of Service.

UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION

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## **SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)**

This classification applies to an account whose average monthly maximum demand is less than, or is forecast to be less than, 50kW and the consumption is unmetered. Such connections include cable TV power packs, bus shelters, telephone booths, traffic lights, railway crossings, etc. The level of the consumption will be agreed to by the distributor and the customer, based on detailed manufacturer information/documentalioin with regard to electrical consumption of the unmetered load or periodic monitoring of actual consumption. E.L.K. is not in the practice of connecting new unmetered scattered load services. Further servicing details are available in the distributor's Conditions of Service.

### **SENTINEL LIGHTING SERVICE CLASSIFICATION**

This classification refers to accounts that are an unmetered lighting load supplied to a sentinel light. E.L.K. is not in the practice of connecting new unmetered scattered load services. Further servicing details are available in the distributor's Conditions of Service.

### **EMBEDDED DISTRIBUTOR SERVICE CLASSIFICATION**

This classification applies to an electricity distributor licensed by the Ontario Energy Board, and provided electricity by means of E.L.K. Energy Inc.'s distribution facilities. Further servicing details are available in the distributor's Conditions of Service.

### **microFIT SERVICE CLASSIFICATION**

This classification applies to an electricity generation facility contracted under the Independent Electricity System Operator's microFIT program and connected to the distributor's distribution system. Further servicing details are available in the distributor's Conditions of Service.

#### **2.4.1.1 Customer Switching to Retailer**

There are no physical service connection differences between Standard Service Supply (SSS) Customers and third party retailers' Customers. Both Customer energy supplies are delivered through E.L.K. with the same distribution requirements. Therefore, all service connections requirements applicable to the SSS Customers are applicable to third party retailers' Customers.

#### **2.4.1.2 Supply Deposits & Agreements**

Where an owner proposes the development of premises that require E.L.K. to place orders for equipment for a specific project and before actual construction begins the owner is required to sign the necessary Supply Agreement and furnish a suitable deposit before such equipment is ordered by E.L.K.

#### **2.4.2 Energy Supply**

##### **2.4.2.1 Standard Service Supply (SSS)**

All existing E.L.K. Customers are Standard Service Supply (SSS) Customers until E.L.K. is informed of their switch to a competitive supplier. The Service Transfer Request (STR) must be made by the Customer or the Customer's authorized retailer.

##### **2.4.2.2 Retailer Supply**

Customers transferring from SSS to a retailer shall comply with the STR requirements as outlined in sections 10.5 through 10.5.6 of the Retail Settlement Code.

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**SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)**

All requests shall be submitted as an electronic file and transmitted as outlined in the Retail Service Agreement. STR shall contain information as set out in section 10.3 of the Retail Settlement Code.

If the information is incomplete, E.L.K. shall notify the retailer or Customer about the specific deficiencies and await a reply before proceeding to process the transfer.

**2.4.2.3 Wheeling of Energy**

All Customers considering delivery of electricity through the E.L.K. distribution system are required to contact E.L.K. for technical requirements and applicable tariffs.

**2.4.3 Security Deposits**

Wherever required by E.L.K., including but not limited to, as a condition of supplying or continuing to supply Distribution Services, the Customer shall provide and maintain security in an amount that E.L.K. deems necessary and reasonable.

A good payment history for all customer classifications must be for the most recent period of time and some of the time must have occurred in the previous 24 months and can include one (1) but not more than one (1):

- Disconnection Notice or Disconnection Trip
- Payment (cheque or pre-authorized payment) returned for non-sufficient funds.

The good payment history may be established while a customer of E.L.K. or a letter can be provided from another electrical distributor or gas distributor in Canada.

**2.4.3.1 Residential Customers**

Account security deposits must be in the form of cash, cheque debit or credit card (fee applies).

Security deposit shall be calculated as the billing cycle factor (2.5 for monthly billing) times the estimated consumption based on the service's average monthly load with the distributor during the most recent 12 consecutive months. Where this information is not available, the average monthly load will be based on an estimate made by E.L.K. (based on the electricity consumption for similar customers and premise types). In the event that the customer has been disconnected more than once in the previous 12 months, the service's average monthly load will be replaced with the highest monthly load.

A minimum of one quarter of the security deposit amount must be paid prior to establishing an active account with the customer. Upon payment of deposit, the customer must sign a letter of agreement with E.L.K. The balance may be paid over three additional installments due one (1) month after the previous installment. Failure to comply within seven (7) days of payment due date may result in a disruption of supply.

Security deposit will be waived if the customer can provide proof of good payment history for a period of one (1) year or provide a satisfactory credit check made at the customer's expense.

A security deposit can be reduced by 25% if the customer enrolls in the pre-authorized payment plan. If the pre-authorized payment plan is cancelled or a payment is returned for non-sufficient funds, the balance of the security deposit will be required.

**SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)**

Interest shall accrue on the deposit at the Prime Business Rate less 2% and shall be posted to the customer's account each quarter.

After one (1) year of good payment history, the security deposit will be transferred to the customer's account. If a customer does not meet these criteria, the customer may request a review of the security deposit amount and the new amount will apply.

Where a customer vacates the property, the security deposit will be applied to the final statement of account and any remainder will be refunded to the customer.

**2.4.3.2 General Service Less than 50 kW Customers**

Account security deposits must be in the form of cash, cheque or irrevocable letter of credit from a bank as defined in the Bank Act, 1991.

Security deposit shall be calculated as the billing factor (2.5 for monthly billing) times the estimated consumption based on the service's average monthly load with the distributor during the most recent 12 consecutive months. Where this information is not available, the average monthly load will be based on an estimate made by E.L.K. (based on the electricity consumption for similar customers and premise types). In the event that the customer has been disconnected more than once in the previous 12 months, the service's average monthly load will be replaced with the highest monthly load.

A minimum of one quarter of the security deposit amount must be paid prior to establishing an active account with the customer. Upon payment of deposit, the customer must sign a letter of agreement with E.L.K. The balance may be paid over three additional installments due one (1) month after the previous installment. Failure to comply within seven (7) days of payment due date may result in a disruption of supply.

Security deposit will be waived if the customer can provide proof of good payment history for a period of five (5) years or provide a satisfactory credit check made at the customer's expense.

A security deposit can be reduced by 25% if the customer enrolls in the pre-authorized payment plan. If the pre-authorized payment plan is cancelled or a payment is returned for non-sufficient funds, the balance of the security deposit will be required.

Interest shall accrue on the deposit at the Prime Business Rate less 2% and shall be posted to the customer's account each quarter.

After five years of good payment history, the security deposit will be transferred to the customer's account. If a customer does not meet these criteria, the customer may request a review of the security deposit amount and the new amount will apply.

Where a customer vacates the property, the security deposit will be applied to the final statement of account and any remainder will be refunded to the customer.

**2.4.3.3 General Service Greater than 50kW Customers**

Account security deposits must be in the form of cash, cheque or irrevocable letter of credit from a bank as defined in the Bank Act, 1991.

**SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)**

Security deposit shall be calculated as the billing cycle factor (2.5 for monthly billing) times the estimated consumption based on the service's average monthly load with the distributor during the most recent 12 consecutive months. Where this information is not available, the average monthly load will be based on an estimate made by E.L.K. (based on the electricity consumption for similar customers and premise types). In the event that the customer has been disconnected more than once in the previous 12 months, the service's average monthly load will be replaced with the highest monthly load.

A minimum of one quarter of the security deposit amount must be paid prior to establishing an active account with the customer. Upon payment of deposit, the customer must sign a letter of agreement with E.L.K. The balance may be paid over three additional installments due one (1) month after the previous installment. Failure to comply within seven (7) days of payment due date may result in a disruption of supply.

This required security deposit will be reduced if a credit rating from a recognized credit rating agency is available. The reductions will be consistent with Paragraph 2.4.13 of the Ontario Energy Board's DSC.

Security deposit will be waived if the customer can provide proof of good payment history for a period of seven (7) years or provide a satisfactory credit check made at the customer's expense.

A security deposit can be reduced by 25% if the customer enrolls in the pre-authorized payment plan. If the pre-authorized payment plan is cancelled or a payment is returned for non-sufficient funds, the balance of the security deposit will be required.

Interest shall accrue on the deposit at the Prime Business Rate less 2% and shall be posted to the customer's account each quarter.

After seven (7) years of good payment history, the security deposit will be transferred to the customer's account. If a customer does not meet these criteria, the customer may request a review of the security deposit amount and the new amount will apply.

Where a customer vacates the property, the security deposit will be applied to the final statement of account and any remainder will be refunded to the customer.

**2.4.3.4 Developers for New Construction/Expansion**

The amount required to be paid will be equal to the capital contribution based on the economic evaluation for the specific project. The capital contribution is to be paid upon submission of the signed Offer to Connect.

Acceptable forms of the capital contribution are:

- i) cash
- ii) cheque

If the offer was an estimate, a final economic evaluation will be carried out to reconcile estimate versus actual costs.

For expansions that require a capital contribution, an expansion deposit will be required to the maximum of 100% of the present value of the forecasted revenues. For expansions that do not require a capital contribution, the maximum expansion deposit equals 100% of the present value of the projected capital costs and ongoing

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**SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)**

maintenance costs. The expansion deposit is required immediately prior to the commencement of construction.

Acceptable forms of the expansion deposit are:

- i. cash;
- ii. letter of credit from a bank as defined in the Bank Act; or
- iii. surety bond

Once energized, annually E.L.K. will return the % of the expansion deposit in proportion to the number of connections (residential) or demand (commercial). This will continue for the customer connection horizon or a maximum of 5 years, whichever is shorter.

**2.4.3.5 Management Discretion**

Since there are many varying circumstances, management will adhere to the policy as listed above, but will apply professional judgment in situations where it is required.

**2.4.4 Billing**

E.L.K. may, at its option, render bills to its Customers on either a monthly basis. Bills for the use of electrical energy may be based on either a metered rate or a flat rate, as determined by E.L.K.

The Customer may dispute charges shown on the Customer's bill or other matters by contacting and advising E.L.K. of the reason of the dispute. E.L.K. will investigate all disputes and advise the Customer of the results.

**2.4.5 Payments and Overdue Account Interest Charges**

Bills are rendered for energy services provided to the Customer. Bills are payable in full by the due date; otherwise, a late payment charge will apply. Where a partial payment has been made by the Customer on or before the due date, the late payment charge will apply only to the amount of the bill outstanding at the due date, exclusive of arrears from previous billings.

Outstanding bills are subject to the collection process and may ultimately lead to the service being discontinued. Services will be restored once satisfactory payment has been made. Discontinuance of service does not relieve the Customer of the liability for arrears.

E.L.K. shall not be liable for any damage on the Customer's premises resulting from such discontinuance of service. A reconnection charge will apply where the service has been disconnected due to non-payment and subject to inspection where required by the ESA.

The Customer will be required to pay additional charges for the processing of non-sufficient fund (N.S.F.) cheques.

Customers will pay special charges and deposits, on request, which may arise from a variety of conditions such as:

**Energy Deposit.** As a guarantee of payment of energy bills some Customers will be required to pay a deposit to E.L.K.

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**SECTION 2 DISTRIBUTION ACTIVITIES (GENERAL)**

**Collection Charge.** It is sometimes necessary, for the Customer's convenience, for an E.L.K. employee to visit a Customer's premises to collect payment for an account. There will be a charge for this service.

**2.5 Customer Information**

A third party who is not a retailer may request historical usage information with the written authorization of the Customer to provide their historical usage information.

E.L.K. will provide information appropriate for operational purposes that has been aggregated sufficiently, such that an individual's Customer information cannot reasonably be identified, at no charge to another distributor, a transmitter, the IESO or the OEB. E.L.K. may charge a fee that has been approved by the OEB for all other request for aggregated information.

At the request of a Customer, E.L.K. will provide a list of retailers who have Service Agreements in effect within its distribution service area. The list will inform the Customer that an alternative retailer does not have to be chosen in order to ensure that the Customer receives electricity and the terms of service that are available under Standard Supply Service.

Upon receiving an inquiry from a Customer connected to its distribution system, E.L.K. will either respond to the inquiry if it deals with its own distribution services or provide the Customer with contact information for the entity responsible for the item of inquiry, in accordance with chapter 7 of the Retail Settlement Code.

An embedded distributor that receives electricity from E.L.K. shall provide load forecasts or any other information related to the embedded distributor's system load to E.L.K., as determined and required by E.L.K. A Distributor shall not require any information from another Distributor unless it is required for the safe and reliable operation of either Distributor's distribution system or to meet Distributors license obligations.

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**SECTION 3 CUSTOMER CLASS SPECIFIC**

**3.1 Residential**

This section refers to the supply of electrical energy to residential Customers residing in detached or semi-detached dwelling units, as defined in the local zoning by-law. It applies only to buildings that meet the following conditions:

- The building lies along a distribution line; and
- The building can be connected without an expansion or enhancement to the distribution system.

Refer to Schedule 1 for Point of Demarcation, Standard Allowance and Connection Fees for Residential Services.

**3.1.1 Overhead Services**

E.L.K. is not in the practice of connecting new or upgraded overhead services. All new and upgraded services shall be serviced underground with the exception of services that cannot be installed underground due to unforeseen obstacles. The customer will be required to pay connection costs (from the lot line in) for the underground service less the Standard Allowance for an overhead service of the same size.

**3.1.1.1 Minimum Requirements**

In addition to the requirements of the Ontario Electrical Safety Code (latest edition), the following conditions shall apply:

- (a) The meter will be within 3 m (10 ft.) of the face of the building. Certain areas will require a 5-jaw socket as determined by E.L.K. The Customer should contact E.L.K. to confirm details.
- (b) Clear unobstructed access must be maintained to and in front of the meter location.
- (c) Service locations requiring access to adjacent properties (mutual drives, narrow side set-backs, etc.) will require the completion of an easement or written consent from the property owner(s) involved.

**3.1.1.2 Services Over Swimming Pools**

Where a new swimming pool is to be installed and the service does not meet the ESA clearance standards, it will be necessary to relocate, at the property owner's expense, any electrical conductors located directly over, under and adjacent to the proposed pool location.

**3.1.2 Underground Services for Individual Residences**

Customers requesting an underground service will be required to pay connection costs (from the lot line in) for the underground service less the Standard Allowance for an overhead service of the same size.

The owner shall not pay for any necessary road crossings.

The trench route must be approved by E.L.K. and is to follow the route indicated on the service layout supplied by E.L.K. Any deviation from this route must be approved by E.L.K. The

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**SECTION 3 CUSTOMER CLASS SPECIFIC**

Customer will be responsible for E.L.K.'s costs associated with redesign and inspection due to changes or deviations initiated by the Customer or its agents.

All services will be located on the supply side of the residence. If the service passes under the driveway the Customer shall supply and install a 100 mm (4 in.) pvc conduit for the cable installation. The Customer is responsible for all excavation to a minimum depth of 914 mm (36 in.) and the supply and installation of 100 mm (4 in.) perforated conduit with a pull rope of a minimum 6 mm (1/4 in.) diameter. A 1.83 m (6 ft.) section of trench should be left open at the service entrance, service stub, pole and any sharp bends or joints in the service duct. The owner will assure the provision for the service entrance and meter meets E.L.K. approval.

Where there are other services to be installed (e.g. gas, telephone, cable) these shall be coordinated to avoid conflict with E.L.K.'s underground cables.

It is the responsibility of the owner or his/her contractor to obtain clearances from all of the utility companies (including E.L.K.) before digging.

It is the responsibility of the owner to contact E.L.K. to inspect each trench prior to the installation of E.L.K.'s service cables.

The owner shall provide unimpeded access for E.L.K. to install the service.

The owner shall ensure that any intended tree planting has appropriate clearance from underground electrical plant.

Where surface restoration by E.L.K. is required following any repairs or maintenance to a service, E.L.K. will provide only soil, seed, gravel or asphalt.

**3.2 General Service**

- (a) The Customer shall complete and submit to E.L.K. well in advance of installation commencement E.L.K.'s General Service Data Sheet which will include but is not limited to:
- Required in-service date,
  - Proposed Service Entrance equipment's Rated Capacity (Amperes) and Voltage rating and metering requirements,
  - Proposed Total Load details in kVA and/or kW (Winter and Summer),
  - Locations of other services, gas, telephone, water and cable TV,
  - Details respecting heating equipment, air-conditioners, motor starting current limitation and any appliances which demand a high consumption of electrical energy,
  - Survey plan and site plan indicating the proposed location of the service entrance equipment with respect to public rights-of-way and lot lines, and
  - For General Service (50 kW and above) Class Customers, electrical, architectural and/or mechanical drawings as required by E.L.K.
- (b) Should the Customer complete the civil infrastructure related to connection assets, E.L.K. would not include the associated civil component in its calculation of Basic and Variable Connection Fees. E.L.K. is responsible for the maintenance and repairs of its Connection Assets up to the demarcation point.
- (c) When effecting changes the Customer shall maintain sufficient clearances between electrical equipment and buildings and other permanent structures to meet the requirements of the Ontario Electrical Safety Code and the Occupational Health & Safety Act and Regulations.

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**SECTION 3 CUSTOMER CLASS SPECIFIC**

- (d) It is the responsibility of the owner or his/her contractor to obtain clearances from all of the utility companies (including E.L.K.) before digging.

Refer to Schedule 1 for Point of Demarcation, Standard Allowance and Connection Fees for General Service.

**3.2.1 Electrical Requirements (as applicable)**

For low voltage supply, the Customer's service entrance equipment shall be suitable to accept conductors installed by E.L.K. The Customer's cables shall be brought to a point determined by E.L.K. for connection to E.L.K.'s supply.

The owner is required to supply and maintain an electrical room of sufficient size to accommodate the service entrance and meter requirements of the tenants and provide clear working space in accordance with the Ontario Electrical Safety Code.

Access doors, panels, slabs and vents shall be kept free from obstructing objects. The Customer will provide unimpeded and safe access to E.L.K. at all times for the purpose of installing, removing, maintaining, operating or changing transformers and associated equipment.

The electrical room must be located to provide safe access from the outside or main hallway, and not from an adjoining room, so that it is readily accessible to E.L.K.'s employees and agents at all hours to permit meter reading and to maintain electric supply. This room must be locked. The electrical room shall not be used for storage or contain equipment foreign to the electrical installation within the area designated as safe working space. All stairways leading to electrical rooms above or below grade shall have a handrail on at least one side as per the Ontario Building Code and shall be located indoors.

Outside doors providing access to electrical rooms must have at least 150 mm (6 in.) clearance between final grade and the bottom of the door. Electrical rooms "on" or "below" grade must have a drain including a "P" trap complete with a non-mechanical priming device and a backwater valve connected to the sanitary sewer. The electrical room floor must slope 6 mm/300 mm or 2% towards the drain.

The electrical room shall have a minimum ceiling height of 2.2 m (87 in.) clear, be provided with adequate lighting at the working level, in accordance with Illuminating Engineering Society (I.E.S.) standards, and a 120 V convenience outlet. The lights and convenience outlet noted above and any required vault circuit shall be supplied from a panel located and clearly identified in the electrical room. The Customer must provide a 12.5 mm (1/2 in.) conduit from their telephone room to the meter cabinet. The Customer will arrange for the installation of a telephone line, terminated in the meter cabinet for the exclusive use of E.L.K. to retrieve interval meter data. The Customer will be responsible for the installation and ongoing monthly costs of operating the phone line. The phone line will be direct dial voice quality, active 24 hours per day, and energized prior to meter installation.

**3.2.2 Underground Service Requirements**

All civil infrastructures are to be in accordance with E.L.K.'s current standards, practices, specifications and these Conditions of Service and are subject to E.L.K.'s inspection/acceptance.

The Customer is responsible to maintain all its structural and mechanical facilities on private property in a safe condition satisfactory to E.L.K.

**SECTION 3 CUSTOMER CLASS SPECIFIC**

The trench route must be approved by E.L.K. Any deviation from this route must also be approved by E.L.K. The Customer will be responsible for E.L.K.'s costs associated with re-design and inspection services due to changes or deviations initiated by the Customer or its agents or any other body having jurisdiction.

It is the responsibility of the owner or his/her contractor to obtain clearances from all of the utility companies (including E.L.K.) before digging.

It is the responsibility of the owner to contact E.L.K. to inspect each trench prior to the installation of E.L.K.'s cables.

**3.2.3 Temporary Services (other than Residential)**

A temporary service is a normally metered service provided for construction purposes or special events. Temporary services can be supplied overhead or underground. The Customer will be responsible for all associated costs for **the installation and removal** of equipment required for a temporary service to E.L.K.'s point of supply. Temporary services may be provided for a period of no more than 12 months. Temporary services must be renewed thereafter if an extension is required and the equipment for such temporary service must be re-inspected at the end of the 12 month period.

Subject to the requirements of E.L.K., supply will be connected after receipt of a "Connection Authorization" from the ESA, a signed contract and a deposit from the Customer.

Where meter bases are required, they must be approved by E.L.K. and shall be securely mounted on minimum 150 mm (6 in.) diameter poles (or alternative if approved by E.L.K.) so that the midpoint of the meter is 1.73 m (+ or- 100 mm) 68 in. (+ or - 4 in.) from finished grade.

In the case of temporary overhead services, the Customer shall leave 760 mm (30 in.) of cable at the masthead for connection purposes.

**3.3 General Service (Greater than 50 kW)**

The following procedures will be used for the classification of General Service Greater than 50 kW:

- All non-residential customers who hit 50 kW or greater in any month of the year are to be classified as General Service Greater than 50 kW.
- The utility will review the customer's most recent 12 consecutive month consumption. If a re-assignment is warranted, E.L.K. shall re-assign the customer before the next billing period is finalized. This review will be done annually in January.
- For customers without prior billing history, the peak demand will be based on 80% of the service entrance capacity. Upon receiving written notification from the customer, E.L.K. will make arrangements with the customer to confirm the service size modification. The customer shall be re-assigned before the next billing period is finalized.

A customer may request a re-assignment if they have undertaken equipment reductions or have changed the use of the building. Upon receiving written notification and supporting evidence of the change from the customer, E.L.K. will monitor the customer's consumption for three months. At the end of this period, E.L.K. will determine if the consumption pattern supports the customer's information. If a re-assignment is warranted, E.L.K. shall re-assign the customer before the next billing period is finalized. In the event of re-assignment and the customer's consumption patterns subsequent to the three month period and prior to the annual review, do not support the original re-assignment, the customer will be re-assigned to the

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original rate class effective the date of the original re-assignment. Customer requests for re-assignments shall be limited to once annually.

**3.3.1 New Residential Subdivision or Multi-Unit Developments**

New Residential Subdivisions or Multi-unit Developments involving the construction of new city streets and roadways are treated as Non-Residential Class Customers and involve capital contribution for “Expansion” work, in addition to any applicable Connection Charges. Should the Economic Evaluation identify a shortfall for the Expansion, the Developer has a choice of either completing the portion of plant not yet connected to E.L.K.’s system or have E.L.K. complete this work in accordance with Section 3.3 of the DSC Code, titled “Alternate Bids”. The Customer will not be allowed to complete construction work on E.L.K.’s existing distribution system.

In all cases, all of the electrical service must be constructed to E.L.K.’s standards and in compliance with the Ontario Electrical Safety Code, applicable laws, regulations and codes.

The Developer is required to enter into an Offer to Connect Agreement with E.L.K. and to pay E.L.K. the capital contribution and expansion deposit for ordering of equipment and associated design and construction work for the installation of the proposed underground electrical distribution system. This capital contribution will be paid concurrently with the signing of the Offer to Connect Agreement, while the expansion deposit will be paid immediately prior to the commencement of work.

In case of conflict between the Offer to Connect Agreement and the terms herein, the Offer to Connect Agreement shall be binding. All design work including service locations and trench routes must be approved by E.L.K.

**3.3.2 Electrical Requirements**

Where the size of the Customer’s electrical service warrants, the Customer will be required to provide facilities on its property and an easement as required (i.e. on the premises to be served), acceptable to E.L.K., to house the necessary transformer(s) and/or switching equipment. E.L.K. will provide planning details upon application for service.

E.L.K. will supply, install and maintain the electrical transformation equipment, to a maximum of 1000 kVA within the transformer vault or pad. E.L.K. has the right to have this equipment connected to its distribution system.

The owner is required to supply and maintain an electrical room of sufficient size to accommodate the service entrance and meter requirements of the tenants and provide clear working space in accordance with the Ontario Electrical Safety Code.

The electrical room must be separate from, but adjacent to, the transformer vault. It must be located to provide safe access from the outside or main hallway, and not from an adjoining room, so that it is readily accessible to E.L.K.’s employees and agents at all hours to permit meter reading and to maintain electric supply. This room must be locked.

The electrical room shall not be used for storage or contain equipment foreign to the electrical installation within the area designated as safe working space. All stairways leading to electrical rooms above or below grade shall have a handrail on at least one side as per the Ontario Building Code, and shall be located indoors.

Outside doors providing access to electrical rooms must have at least 150 mm (6 in.) clearance between final grade and the bottom of the door. Electrical rooms “on” or “below” grade must have

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a drain including a "P" trap complete with a non-mechanical priming device and a backwater valve connected to the sanitary sewer. The electrical room floor must slope 6 mm/300 mm or 2% towards the drain.

The electrical room shall have a minimum ceiling height of 2.2 m (87 in.) clear, be provided with adequate lighting at the working level, in accordance with Illuminating Engineering Society (I.E.S.) standards, and a 120 V convenience outlet. The lights and convenience outlet noted above and any required vault circuit shall be supplied from a panel located and clearly identified in the electrical room. The Customer must provide a 12.5 mm (1/2 in.) conduit from their telephone room to the meter cabinet. The Customer will arrange for the installation of a telephone line, terminated in the meter cabinet for the exclusive use of E.L.K. to retrieve interval meter data. The Customer will be responsible for the installation and ongoing monthly costs of operating the phone line. The phone line will be direct dial voice quality, active 24 hours per day, and energized prior to meter installation.

The owner shall identify each Customer's metered service by address and/or unit number in a permanent and legible manner. The identification shall apply to all main switches, breakers and to all meter cabinets or meter mounting devices that are not immediately adjacent to the switch or breaker. The electrical room shall be visibly identified from the outside.

**3.3.3 Technical Information**

Where project drawings are required for E.L.K.'s approval, for items under E.L.K.'s jurisdiction, the Customer or its authorized representative must ensure that proposal drawings are fully in compliance with E.L.K.'s standards. Approval of project drawings by E.L.K. shall not relieve the Customer of its responsibility in respect of full compliance with E.L.K.'s standards. In all cases, two copies of all relevant drawings must be submitted to E.L.K. Where the Customer requires an approved copy to be returned, three copies of all plans must be submitted.

For all subdivisions or major line extensions, the Customer will provide digital copies of the electrical expansion in Auto Cad version 14.

Prior to the preparation of a design for a service, the Customer will provide the following information to E.L.K. including the approximate date that the Customer requires the electrical service.

**3.3.3.1 Site & Grading Plans**

Indicate the lot number, plan numbers and, when available, the street number. The site plan shall show the location of the Building on the property relative to the property lines, any driveways and parking areas and the distance to the nearest intersection. All elevations shall be shown for all structures and proposed installations.

**3.3.3.2 Mechanical Servicing Plan**

Show the location on the property of all services proposed and/or existing such as water, gas, storm and sanitary sewers, telephone, et cetera.

**3.3.3.3 Floor Plan**

Show the service location, other services location, driveway, parking and indicate the total gross floor area of the building.

**3.3.3.4 Duct Bank Location**

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Show the preferred routing of the underground duct bank on the property. This is subject to approval by E.L.K.

**3.3.3.5 Transformer Location**

Indicate the preferred location on the property for the high voltage transformation. This is subject to approval by E.L.K.

Transformation will be vault, pad or pole mounted depending on the project load requirements.

**3.3.3.6 Electrical Meter Room**

Indicate preferred location in the building of the meter room and the main switchboard.

**3.3.3.7 Single Line Diagram**

Show the main service entrance switch capacity, the required supply voltage, and the number and capacity of all sub-services showing provision for metering facilities, as well as the connected load breakdown for lighting, heating, ventilation, air conditioning, et cetera. Also, indicate the estimated initial kilowatt demand and ultimate maximum demands. Provide protection equipment information where co-ordination is required between E.L.K. and Customer owned equipment. Fusing will be determined later by E.L.K. to co-ordinate with the transformer size selected.

**3.3.3.8 Switchgear**

Submit three copies of any service entrance switchgear to be installed for E.L.K.'s approval, including interlocking arrangement if required.

**3.3.3.9 Substation Information**

Where a Customer owned substation is to be provided, the owner will be required to provide the following in addition to the site information outlined above:

- All details of the transformer, including kVA capacity, short circuit rating (in accordance with 3.3.4.1), primary and secondary voltages, impedance and cooling details,
- A site plan of the transformer station showing the equipment layout, proposed primary connections, grounding and fence details, where applicable,
- A co-ordination study for protection review.

**3.3.4 Technical Considerations****3.3.4.1 Short Circuit Ratings**

The Customer shall ensure that his service entrance equipment has an adequate short-circuit interrupting capability. E.L.K. will advise, on request, the maximum available short-circuit symmetrical inrush Amperes at any specific location.

**3.3.4.2 Primary Fusing**

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All equipment connected to the E.L.K.'s distribution system shall satisfy the short circuit ratings specified in clause 3.3.4.1. The Customer and/or the Customer's consultant shall specify the fuse link rating and demonstrate co-ordination with E.L.K.'s upstream protection including station breakers and/or distribution fuses. The Customer shall submit a co-ordination study to E.L.K. for verification to ensure co-ordination with upstream protection including station breakers and/or distribution fuses. The Customer shall maintain an adequate supply of spare fuses to ensure availability for replacement in the event of a fuse blowing.

**3.3.4.3 Ground Fault Interrupting**

Where ground fault protection is required to comply with the Ontario Electrical Safety Code, the method and equipment used shall be compatible with E.L.K.'s practice of grounding transformer neutral terminals in vaults. Zero sequence sensing will normally apply. Where ground strap sensing is used, the ground sensing devices shall be set to operate at 600 A if transformer and switchboard buses are not bonded and 400 A if buses are bonded. Ground fault protection proposals for dual secondary supply arrangements shall be submitted to E.L.K. for approval, before construction of the switchboard.

**3.3.4.4 Lightning Arrestors**

Customer installations that are directly supplied from E.L.K.'s primary underground system are not protected with lightning arresters. If the Customer wishes to install lightning arresters they shall be located on the load side of the first protective devices. For Customer installations that are supplied from E.L.K.'s primary overhead system, E.L.K. will install lightning arresters, at the Customer's expense, at the pole and the Customer may install lightning arresters in the switchgear on the roadside of the incoming disconnect device. The mimic diagram shall indicate the presence of such devices in the switchgear.

**3.3.4.5 Unbalanced Loads**

On three-phase service, the unbalance due to single-phase loads shall not exceed 20% of the Customer's balanced phase loading expressed in kilowatts.

**3.4 General Service (Above 1000 kW)**

All non-residential Customers with an average peak demand of 1000 kW or higher over the past twelve months are to be classified as Customers over 1000 kW. For new Customers without prior billing history, the peak demand will be based on 90% of the installed transformer.

**3.4.1 Electrical Requirements**

Where a primary service is provided to a Customer-owned substation, the Customer shall install and maintain such equipment in accordance with all applicable laws, codes, regulations, and E.L.K.'s requirements for high voltage installations.

Customer owned substations are a collection of transformers and switchgear located in a suitable room or enclosure owned and maintained by the Customer, and supplied at primary voltage: i.e. the Supply Voltage is greater than 750 volts.

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All high voltage distribution services are three phase, four wire. The Customer is required to bring out a neutral conductor for connection to the system neutral. If not required for Customer's use, this neutral shall be terminated to the Customer's station ground system.

E.L.K. will provide Customer interface details and requirements for high voltage supplies.

It is recommended that Customer's transformers have voltage taps in their primary windings.

Customer owned substations must be inspected by both the ESA and E.L.K. The owner will provide a pre-service inspection report to E.L.K. A contractor acceptable to E.L.K. will prepare the certified report to E.L.K.

### 3.4.2 Technical Information and Considerations

The same information and considerations apply as for other General Service Customers. Refer to Subsection 3.3.3 and 3.3.4 for applicable requirements.

### 3.5 Embedded Generation

The connection and operation of a Customer's embedded generator must not endanger workers or jeopardize public safety, or adversely affect or compromise equipment owned or operated by E.L.K., or the security, reliability, efficiency and the quality of electrical supply to other Customers connected to E.L.K.'s distribution system. If damage or increased operating costs result from a connection with a generator, E.L.K. shall be reimbursed for these costs by the generator.

When an embedded generator is connected to E.L.K.'s distribution system, the Customer shall provide an interface protection that minimizes the severity and extent of disturbances to E.L.K.'s distribution system and the impact on other Customers. The interface protection shall be capable of automatically isolating the generator(s) from E.L.K.'s distribution system for the following situations:

- Internal faults within the generator,
- External faults in E.L.K.'s distribution system,
- Certain abnormal system conditions, such as over/under voltage, over/under frequency.

The Customer shall disconnect the embedded Generator from E.L.K.'s distribution system when:

- a) a remote trip or transfer trip is included in the interface protection, and
- b) the Customer effects changes in the normal feeder arrangements other than those agreed upon in the operating agreement between E.L.K. and the Customer.

The Customer must also comply with the detailed requirements outlined in the document "E.L.K. Embedded Generator Agreement".

### 3.6 Embedded Market Participant

Under the "Market Rules for the Ontario Electricity Market", Chapter 2, section 1.2.1, "No persons shall participate in the IESO-administered markets or cause or permit electricity to be conveyed into, through or out of IESO-controlled grid unless that person has been authorized by the IESO to do so".

All Embedded Market Participants, within the service jurisdiction of E.L.K., once approved by the IESO are required to inform E.L.K. of their approved status in writing, 30 days prior to their participation in the Ontario Electricity market.

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**3.7 Embedded Distributor**

All embedded distributors within the service jurisdiction of E.L.K. are required to inform E.L.K. of their status in writing 30 days prior to the supply of energy from E.L.K. The terms and conditions applicable to the connection of an embedded distributor shall be included in the Connection Agreement with E.L.K.

**3.8 Unmetered Connections**

**3.8.1 Street Lighting**

All services supplied to street lighting equipment owned by or operated for a municipality or the Province of Ontario shall be classified as Street Lighting Service. For rate structure details refer to E.L.K.'s Schedule of Rates.

Street Lighting plant, facilities, or equipment owned by the Customer are subject to the ESA (ESA) requirements.

Charges related to the Connections of Street Lighting will be recovered via a Variable Connection Fee consistent with the Ownership Demarcation Point defined in Schedule 3 for various Street Lighting Distribution systems.

**3.8.2 Traffic Signals and Pedestrian X-Walk Signals/Beacons**

Traffic Signals and Pedestrian X-Walk signals/beacons shall have a rate structure equal to General Service (<50 kW) Class Customers. Each Traffic Signal and Pedestrian X-Walk/Beacon location is reviewed individually and is connected to E.L.K.'s low voltage distribution system. ESA (ESA) "Authorization to Connect" is required prior to connecting the service.

The Ownership Demarcation point is as follows:

- For Overhead – the top of the Customer's service standpipe/mast.
- For Underground – the line side of the customers meter base.

Re-design and inspection services are at extra costs to the Customer. The Customer is responsible for maintaining and repairing its equipment and/or facilities.

**3.8.3 Bus Shelters, Telephone booths, Signs (<5 kW) and Miscellaneous Unmetered Loads (<5 kW)**

The above service types shall have a rate structure as General Service (< 50 kW) Class Customers and have the same terms and conditions as outlined in Section 3.8.2 above titled "Traffic Signals and Pedestrians X-Walk Signals/Beacons".

**3.8.4 Decorative Lighting and Tree Lighting Services**

1. Decorative or Tree Lighting if connected to the municipal or the Province of Ontario Street Lighting system will be treated as a Street Lighting Class of service. Please refer to Section 3.8.1 titled "Street Lighting" for applicable Terms and Conditions and rate structure.
2. Decorative or Tree Lighting connected to E.L.K.'s distribution System shall have a rate structure as General Service (<50 kW) Class Customers. Refer to the Schedule of Rates.

**SECTION 3 CUSTOMER CLASS SPECIFIC**

3. **If the service is metered** the following outlines the Ownership Demarcation point:

- For Overhead – the top of the Customer's service standpipe/mast.
- For Underground – the line side of the Customer's meter base.

Re-design and inspection services are at the expense of the Customer. The Customer is responsible for maintaining and repairing its equipment and/or facilities.

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**SECTION 4 - DEFINITIONS**

Sources for definitions:

A	Electricity Act, 1998, Schedule A, Section 2, Definitions
MR	Market Rules for the Ontario Electricity Market, Chapter I 1, Definitions
TDL	Transitional Distribution License, Part 1, Definitions
TTL	Transitional Transmission License, Part 1, Definitions
DSC	DSC Definitions
RSC	Retail Settlement Code Definitions

“Accounting Procedures Handbook” means the handbook approved by the OEB and in effect at the relevant time, which specifies the accounting records, accounting principles and accounting separation standards to be followed by E.L.K.; (TDL, DSC)

“Act” means the Ontario Energy Board Act, 1998, S.O. 1998, C. 15, Schedule B;

“Affiliate Relationships Code” means the code, approved by the Board and in effect at the relevant time, which among other things, establishes the standards and conditions for the interaction between electricity distributors or transmitters and their respective affiliated companies; (TDL, DSC)

“Ancillary services” means services necessary to maintain the reliability of the IESO controlled grid; including frequency control, voltage control, reactive power and operating reserve services; (MR, TDL, DSC)

“Apartment building” means a structure containing four or more dwelling units having access from an interior corridor system or common entrance;

“Apparent power” means the total power measured in kilovolt Amperes (kVA);

“Application for service” means the agreement or contract with E.L.K. under which electrical service is requested;

“Bandwidth” means a distributor’s defined tolerance used to flag data for further scrutiny at the stage in the VEE (validating, estimating and editing) process where a current reading is compared to a reading from an equivalent historical billing period. For example, a 30 percent bandwidth means a current reading that is either 30% lower or 30% higher than the measurement from an equivalent historical billing period will be identified by the VEE process as requiring further scrutiny and verification; (DSC)

“Billing Demand” means the metered demand or connected load after necessary adjustments have been made for power factor, intermittent rating, transformer losses and minimum billing. A measurement in kilowatts (kW) of the maximum rate at which electricity is consumed during a billing period;

“Board” or “OEB” means the Ontario Energy Board; (A, TDL, DSC)

“Building” means a building, portion of a building, structure or facility;

“Code” means The Distribution System Code;

“Competitive Retailer” is a person who retails electricity to consumers who do not take Standard Supply Service (“SSS”);

“Complex metering installation” means a metering installation where instrument transformers, test blocks, recorders, pulse duplicators and multiple meters may be employed; (DSC)

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**SECTION 4 - DEFINITIONS**

“Conditions of Service” means the document developed by a distributor in accordance with subsection 2.3 of the Code that describes the operating practices and connection rules for E.L.K.; (DSC)

“Connection” means the process of installing and activating connection assets in order to distribute electricity to a Customer; (DSC)

“Connection Agreement” means an agreement entered into between a distributor and a person connected to its distribution system that delineates the conditions of the connection and delivery of electricity to that connection; (DSC)

“Connection assets” means that portion of the distribution system used to connect a Customer to the existing main distribution system, and consists of the assets between the point of connection on a distributor’s main distribution system and the ownership demarcation point with that Customer; (DSC)

“Consumer” means a person who uses, for the person’s own consumption, electricity that the person did not generate; (A, MR, TDL, DSC)

“Customer” means a person that has contracted for or intends to contract for connection of a building. This includes developers of residential or commercial subdivisions; (DSC)

“Demand” means the average value of power measured over a specified interval of time, usually expressed in kilowatts (kW). Typical demand intervals are 15, 30 and 60 minutes; (DSC)

“Demand meter” means a meter that measures a consumer’s peak usage during a specified period of time; (DSC)

“Developer” means a person or persons owning property for which new or modified electrical services are to be installed;

“Disconnection” means a deactivation of connection assets that result in cessation of distribution services to a consumer; (DSC)

“Distribute” with respect to electricity, means to convey electricity at voltages of 50 kilovolts or less; (A, MR, TDL, DSC)

“Distribution losses” means energy losses that result from the interaction of intrinsic characteristics of the distribution network such as electrical resistance with network voltage and current flows; (DSC)

“Distribution loss factor” means a factor or factors by which metered loads must be multiplied such that when summed equal the total measured load at the supply point(s) to the distribution system; (RSC)

“Distribution services” means services related to the distribution of electricity and the services the Board has required distributors to carry out, for which a charge or rate has been approved by the Board under section 78 of the Ontario Energy Board Act; (RSC, DSC)

“Distribution system” means a system for distributing electricity, and includes any structures, equipment or other things used for that purpose. A distribution system is comprised of the main system capable of distributing electricity to many customers and the connection assets used to connect a customer to the main distribution system; (A, MR, TDL, DSC)

“Distribution System Code (DSC)” means the code, approved by the Board, and in effect at the relevant time, which, among other things, establishes the obligations of E.L.K. with respect to the services and terms of service to be offered to Customers and retailers and provides minimum technical operating standards of distribution systems; (TDL, DSC)

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**SECTION 4 - DEFINITIONS**

“Distributor” means a person who owns or operates a distribution system; (A, MR, TDL, DSC)

“Duct bank” means two or more ducts that may be encased in concrete used for the purpose of containing and protecting underground electric cables;

“Electricity Act” means the Electricity Act, 1998, S.O. 1998, c.15, Schedule A; (MR, TDL, DSC)

“ESA” or “ESA” means the person or body designated under the Electricity Act regulations as the Electricity Safety Authority; (A)

“Electric service” means the Customer’s conductors and equipment for energy from E.L.K.;

“Embedded distributor” means a distributor who is not a wholesale market participant and that is provided electricity by a host distributor; (RSC, DSC)

“Embedded generator” or “embedded generation facility” means a generator whose generation facility is not directly connected to the IESO controlled grid but instead is connected to a distribution system; (DSC)

“Embedded retail generator” means an embedded generator that settles through a distributor’s retail settlements system and is not a wholesale market participant; (DSC)

“Embedded wholesale consumer” means a consumer who is a wholesale market participant whose facility is not directly connected to the IESO controlled grid but is connected to a distribution system; (DSC)

“Embedded wholesale generator” means an embedded generator that is a wholesale market participant; (DSC)

“Emergency” means any abnormal system condition that requires remedial action to prevent or limit loss of a distribution system or supply of electricity that could adversely affect the reliability of the electricity system; (DSC)

“Emergency backup” means a generation facility that has a transfer switch that isolates it from a distribution system; (DSC)

“Energy” means the product or power multiplied by time, usually expressed in kilowatt-hours (kwh);

“Energy Competition Act” means the Energy Competition Act, 1998, S.O. 1998, c. 15; (MR)

“Energy diversion” means the electricity consumption unaccounted for but that can be quantified through various measures upon review of the meter mechanism, such as unbilled meter readings, tap off load(s) before revenue meter or meter tampering;

“Enhancement” means a modification to an existing distribution system that is made for purposes of improving system operating characteristics such as reliability or power quality or for relieving system capacity constraints resulting, for example, from general load growth; (DSC)

“Expansion” means an addition to a distribution system in response to a request for additional customer connections that otherwise could not be made; for example, by increasing the length of the distribution system; (DSC)

“Extreme operating conditions” means extreme operating conditions as defined in the Canadian Standards Association (“CSA”) Standard CAN3-C235-87 (latest edition);

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**SECTION 4 - DEFINITIONS**

“Four-quadrant interval meter” means an interval meter that records power injected into a distribution system and the amount of electricity consumed by the Customer; (DSC)

“General service” means any service supplied to premises other than those designated as Residential and less than 50 kW, Large User, or Municipal Street Lighting. This includes multi-unit residential establishments such as apartment buildings supplied through one service (bulk-metered);

“Generate”, with respect to electricity, means to produce electricity or provide ancillary services, other than ancillary services provided by a transmitter or distributor through the operation of a transmission or distribution system; (A, TDL, DSC)

“Generation facility” means a facility for generating electricity or providing ancillary services, other than ancillary services provided by a transmitter or distributor through the operation of a transmission or distribution system, and includes any structures, equipment or other things used for that purpose; (A, MR, TDL, DSC)

“Generator” means a person who owns or operates a generation facility; (A, NM, TDL, DSC)

“Geographic distributor”, with respect to a load transfer, means a distributor that is licensed to service a load transfer Customer and is responsible for connecting and billing the load transfer Customer; (DSC)

“Good utility practice” means any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry in North America during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good practices, reliability, safety and expedition. Good utility practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in North America; (MR, DSC)

“Holiday” a Saturday, Sunday, statutory holiday, or any day as defined in the Province of Ontario as a legal holiday;

“Host distributor” means the registered wholesale market participant distributor who provides electricity to an embedded distributor; (RSC, DSC)

“House service” means that portion of the electrical service in a multiple occupancy facility which is common to all occupants, (i.e. parking lot lighting, sign service, corridor and walkway lighting, et cetera);

“IEC” means International Electrotechnical Commission;

“IEEE” means Institute of Electrical and Electronics Engineers;

“IESO” means the Independent Electricity Market Operator established under the Electricity Act; (A, TDL, DSC)

“IESO-controlled grid” means the transmission systems with respect to which, pursuant to agreements, the IESO has authority to direct operation; (A, TDL, DSC)

“Interval meter” means a meter that measures and records electricity use on an hourly or sub-hourly basis; (RSC, DSC)

“Load factor” means the ratio of average demand for a designated time period (usually one month) to the maximum demand occurring in that period;

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**SECTION 4 - DEFINITIONS**

“Load transfer” means a network supply point of one distributor that is supplied through the distribution network of another distributor and where this supply point is not considered a wholesale supply or bulk sale point; (DSC)

“Load transfer Customer” means a Customer that is provided distribution services through a load transfer; (DSC)

“Main service” refers to E.L.K.’s incoming cables, bus duct, disconnecting and protective equipment for a building of from which all other metered sub-services are taken;

“Market Rules” means the rules made under section 32 of the Electricity Act; (MR, TDL, DSC)

“Measurement Canada” means the Special Operating Agency established in August 1996 by the Electricity and Gas Inspection Act, 1980-81-82-83, c. 87., and Electricity and Gas Inspection Regulations SOR/86-13 1; (DSC)

“Meter service provider” means any entity that performs metering services on behalf of a distributor; (DSC)

“Meter installation” means the meter and, if so equipped, the instrument transformers, wiring, test links, fuses, lamps, loss of potential alarms, meters, data recorders, telecommunication equipment and spin-off data facilities installed to measure power past a meter point, provide remote access to the metered data and monitor the condition of the installed equipment; (RSC, DSC)

“Meter socket” means the mounting device for accommodating a socket type revenue meter;

“Metering services” means installation, testing, reading and maintenance of meters; (DSC)

“MIST meter” means an interval meter from which data is obtained and validated within a designated settlement timeframe. MIST refers to “Metering Inside the Settlement Timeframe”; (RSC, DSC)

“MOST meter” means an interval meter from which data is only available outside of the designated settlement timeframe. MOST refers to “Metering Outside the Settlement Timeframe”; (RSC, DSC)

“Multiple dwelling” means a building which contains more than one self-contained dwelling unit;

“Municipal street lighting” means all services supplied to street lighting equipment owned and operated for a municipal corporation;

“Non-competitive electricity costs” means costs for services from the IESO that are not deemed by the board to be competitive electricity services plus costs for distribution services, other than Standard Supply Service (SSS); (RSC)

“Non-nal operating conditions” means the operating conditions comply with the standards set by the Canadian Standards Association (“CSA”) Standard CAN3-C23587 (latest edition);

“Ontario Energy Board Act” means the Ontario Energy board Act, 1998, S.O. 1998, c.1 5, Schedule B; (MR, DSC)

“Operational demarcation point” means the physical location at which a distributor’s responsibility for operational control of distribution equipment including connection assets ends at the Customer; (DSC)

“Ownership demarcation point” means the physical location at which a distributor’s ownership of distribution equipment including connection assets ends at the Customer; (DSC)

**SECTION 4 - DEFINITIONS**

“Performance standards” means the performance targets for the distribution and connection activities of E.L.K. as established by the Board pursuant to the Ontario Energy Board Act and in the Rate Handbook; (DSC)

“Person” includes an individual, a corporation, sole proprietorship, partnership, unincorporated organization, unincorporated association, body corporate, and any other legal entity;

“Physical distributor”, with respect to a load transfer, means E.L.K. provides physical delivery of electricity to a load transfer Customer, but is not responsible for connecting and billing the load transfer Customer directly; (DSC)

“Physical Distributor” means the distributor that provides physical delivery of electricity to a load transfer customer, but is not responsible for connecting and billing the load transfer customer directly;

“Plaza” means any building containing two or more commercial business tenants;

“Point of Connection” is the point in service where the customer accepts electrical energy from the Utility circuits and beyond which the customer bears full responsibility for installation and maintenance;

“Point of supply”, with respect to an embedded generator, means the connection point where electricity produced by the generator is injected into a distribution system; (DSC)

“Power factor” means the ratio between Real Power and Apparent Power (i.e. kW/kVA);

“Primary service” means any service which is supplied with a nominal voltage greater than 750 volts;

“Private property” means the property beyond the existing public street allowances;

“Rate” means any rate, charge or other consideration, and includes a penalty for late payment; (TDL, DSC)

“Rate Handbook” means the document approved by the Board that outlines the regulatory mechanisms that will be applied in the setting of distributor rates; (RSC, DSC)

“Reactive power” means the power component which does not produce work but is necessary to allow some equipment to operate, and is measured in kilovolt Amperes Reactive (kVAR);

“Real power” means the power component required to do real work, which is measured in kilowatts (kW);

“Regulations” means the regulations made under the *Ontario Energy Board Act* or the *Electricity Act*; (TDL, DSC)

“Residential service” means a service which is less than 50 kW supplied to single family dwelling units that is for domestic or household purposes, including seasonal occupancy. At E.L.K.’s discretion, residential rates may be applied to apartment buildings with 6 or less units by simple application of the residential rate or by blocking the residential rate by the number of units;

“Retail”, with respect to electricity means,

- a) to sell or offer to sell electricity to a Consumer,
- b) to act as agent or broker for a retailer with respect to the sale or offering for sale of electricity, or
- c) to act or offer to act as an agent or broker for a Consumer with respect to the sale or offering for sale of electricity (A, MR, TDL, DSC);

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**SECTION 4 - DEFINITIONS**

“Retail Settlement Code” means the code approved by the Board and in effect at the relevant time, which, among other things, establishes a distributor’s obligations and responsibilities associated with financial settlement among retailers and Consumers and provides for tracking and facilitating Consumers transfers among competitive retailers; (TDL, DSC)

“Retailer” means a person who retails electricity; (A, MR, TDL, DSC)

“Secondary service” means any service which is supplied with a nominal voltage less than 750 Volts;

“Service agreement” means the agreement that sets out the relationship between a licensed retailer and a distributor, in accordance with the provisions of Chapter 12 of the Retail Settlement Code; (RSC)

“Service area”, with respect to a distributor, means the area in which E.L.K. is authorized by its license to distribute electricity; (A, TDL, DSC)

“Service date” means the date that the Customer and E.L.K. mutually agree upon to begin the supply of electricity by E.L.K.;

“Standard Supply Service Code” means the code approved by the Board and in effect at the relevant time, which, among other things, establishes the minimum conditions that a distributor must meet in carrying out its obligations to sell electricity under section 29 of the Electricity Act; (TDL)

“Sub-service” means a separately metered service that is taken from the main building service;

“Supply voltage” means the voltage measured at the Customer’s main service entrance equipment (typically below 750 volts). Operating conditions are defined in the Canadian Standards Association (“CSA”) Standard CAN3-C235 (latest edition);

“Temporary service” means an electrical service granted temporarily for such purposes as construction, real estate sales, trailers, et cetera;

“Terminal pole” refers to the E.L.K.’s distribution pole on which the service supply cables are terminated;

“Total losses” means the sum of distribution losses and unaccounted for energy; (DSC)

“Transformer room” means an isolated enclosure built to applicable codes to house transformers and associated electrical equipment;

“Transmission system” means a system for transmitting electricity, and includes any structures, equipment or other things used for that purpose; (A, MR, TDL, DSC)

“Transmission system code” means the code, approved by the Board, that is in force at the relevant time, which regulates the financial and information obligations of the Transmitter with respect to its relationship with Customers, as well as establishing the standards for connection of Customers to, and expansion of a transmission system; (DSC)

“Transmit”, with respect to electricity, means to convey electricity at voltages of more than 50 kilovolts; (A, TDL, DSC)

“Transmitter” means a person who owns or operates a transmission system; (A, MR, TDL, DSC)

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**SECTION 4 - DEFINITIONS**

“Unaccounted for energy” means all energy losses than cannot be attributed to distribution losses. These include measurement error, errors in estimates of distribution losses and unmetered loads, energy theft and non-attributable billing errors; (DSC)

“Unmetered loads” means electricity consumption that is not metered and is billed based on estimated usage; (DSC)

“Validating, estimating and editing (VEE)” means the process used to validate, estimate and edit raw metering data to produce final metering data or to replicate missing metering data for settlement purposes; (MR, DSC)

“Wholesale buyer” means a person that purchases electricity or ancillary services in the IESO-administered markets or directly from a generator; (TDL, DSC)

“Wholesale market participant” means a person that sells or purchases electricity or ancillary services through the IESO administered markets; (RSC, DSC)

“Wholesale settlement cost” means costs for both competitive and non-competitive electricity services billed to a distributor by the IESO or a host distributor, or provided by an embedded retail generator or by a neighbouring distributor; (RSC, DSC)

“Wholesale supplier” means a person who sells electricity or ancillary services through the IESO administered markets or directly to another person, other than a Consumer; (TDL, DSC)

**SECTION 5 - SCHEDULES**

**Schedule 1 Demarcation Points & Charges for NON Expansion Connection Assets**

<b>Rate/Customer Class</b>	<b>Ownership Demarcation Point</b>	<b>Standard Allowance (Basic Connection)</b>	<b>Basic Connection Fee (for Standard Allowance)</b>	<b>Variable Connection Fee</b>
<b>Class 1 Residential Service</b>				
Overhead	Connection point at the top of customers service mast	Up to 30m (98 ft. 5 in.) of OH service wire and equivalent credit for transformer allowance provided by E.L.K. The customer is responsible for the additional costs from the lot line in.	Recovered through E.L.K.'s rates.	Customer charged actual costs for connection assets.
Underground	Line side of customer's meter base.		Recovered through E.L.K.'s rates.	
<b>Class 2 General Service &lt; 50 kW</b>				
Overhead	Connection point at the top of Customer's service mast			Customer Charged actual costs for connection assets.
Underground	To be determined on a case by case basis and defined in the Connection Agreement.			

**SECTION 5 - SCHEDULES**

<b>Rate/ Customer Class</b>	Ownership Demarcation Point	<b>Standard Allowance (Basic Connection)</b>	<b>Basic Connection Fee (for Standard Allowance)</b>	<b>Variable Connection Fee</b>
Class 3 General Service 50 – 1000 kW				
Overhead	Connection point at the top of Customers service mast			Customer charged actual costs for connection assets.
Underground	To be determined on a case by case basis and defined in the Connection Agreement.			

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**SECTION 5 - SCHEDULES****Schedule 2 Meter Centers (Article 2.3.7.1.2)**

Meter centers may be used for 750 V applications or less, as far as they meet the following specifications:

- 1) Side-hinged doors or panels shall be installed over all sections of the switchboard where E.L.K. may be required to work, such as unmetered sections and those sections containing breakers, switches and meter mounting devices. Hinged doors or panels shall have provision for sealing and padlocking in the closed position. Where bolts are used, they shall be of the captive knurled type. The hinged covers over breakers or switches shall be so constructed that the covers cannot be opened when sealed or padlocked.
- 2) Breakers or switch handles shall have provision for positive sealing and padlocking in the "off" position.
- 3) Meter mounting devices shall be wired so as to be on the "load" side of the breakers or switches.
- 4) Each combination meter socket and breaker panel shall have adequate space for permanent Customer identification with respect to street address and/or unit number.
- 5) The center of the bottom row of meter sockets shall be not less than 600 mm (23 5/8 in.) from the finished floor. The center of the top row of meter sockets shall be not less than 1800 mm (71 in.) from the finished floor.
- 6) The distance between adjacent meter socket rims in the horizontal plane shall not be less than 152 mm (6 in.).
- 7) The distance between adjacent meter socket rims in the vertical plane shall be as follows:
  - a) For 100 A., 4 or 5 jaw, not less than 76 mm (3 in.).
  - b) For 100 A, 7 jaw, not less than 152 mm (6 in.).
- 8) The meter mounting socket and sealing ring shall be acceptable to E.L.K.
- 9) Where a neutral is required, the meter mounting device shall have a pre-wired, ungrounded neutral connection to the 5<sup>th</sup> or 7<sup>th</sup> terminal. The connection, if not made directly to the neutral bus, shall be not less than #12 AWG copper or equivalent.

**SECTION 5 - SCHEDULES**

**Schedule 3 Street Lighting Demarcation Points**

<b>Types of Street Lighting Distribution Systems</b>	<b>Ownership Demarcation Point</b>	<b>Variable Connection Fee</b>
Municipally owned lights attached to E.L.K.'s pole and secondary bus with individual photocells.	1) line side of fuse, or 2) the connection point to E.L.K.'s bus if not fused.	Customer charged actual costs for the connection and all associated materials.
Municipally owned lights attached to E.L.K.'s pole and powered by Controlled Circuits.	Line side of the first protective device for the controlled circuit, i.e. fuse or relay.	
Municipally owned lights, pole and powered by Controlled Circuits separate from E.L.K.'s circuits.	The connection point to E.L.K.'s bus or the line side of the first protective device for the controlled circuit. i.e. fuse or relay.	

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**SECTION 5 - SCHEDULES**

**SECTION 5 - SCHEDULES**

1. **Economic Evaluation Model for Distribution System Expansion**
2. **Connection Agreement with a Customer**
3. **Offer to Connect for Expansions**
4. **Underground Standards**

ECONOMIC EVALUATION MODEL  
FOR DISTRIBUTION SYSTEM  
EXPANSION



April 30, 2003

Revised December 2021

**APPENDIX 1**

**B. 1 COMMON ELEMENTS OF THE DISCOUNTED CASH FLOW MODEL**

To achieve consistent business principles for the development of the elements of an economic evaluation model, the following parameters for the approach are to be followed by all distributors.

The discounted cash flow (DCF) calculation for individual projects will be based on a set of common elements and related assumptions listed below.

Revenue Forecasting

The common elements for any project will be as follows:

- (a) The forecasted customer additions over the Customer Connection Horizon, by class as specified below;
- (b) Customer Revenue Horizon as specified below;
- (c) Estimate of average energy and demand per added customer (by project) which reflects the mix of customers to be added – for various classes of customers, this should be carried out by class;
- (d) Customer additions, as reflected in the model for each year of the Customer Connection Horizon, and
- (e) Rates from the approved rate schedules for the particular distributor reflecting the distribution (wires only) rates.

Capital Costs

Common elements will be as follows:

- (a) An estimate of all capital costs directly associated with the expansion to allow forecast customer additions.
- (b) For expansions to the distribution system, costs of the following elements, where applicable, should be included:
  - distribution stations
  - distribution lines
  - distribution transformers
  - secondary busses
  - services; and
  - land and land rights

**Note that the “Ownership Demarcation Point” as specified in the distributor’s Condition of Service would define the point of separation between customers’ facilities and distributors’ facilities.**

- (c) Estimate of incremental overheads applicable to distribution system expansion.

Expense Forecasting

Common elements will be as follows:

- (a) Attributable incremental operating and maintenance expenditures – any incremental attributable costs directly associated with the addition of new customers to the system would be included in the operating and maintenance expenditures.
- (b) Income and capital taxes based on tax rates underpinning the existing rate schedules.
- (c) Municipal property taxes based on projected levels.

## APPENDIX 1

### Specific Parameters/Assumptions

Specific parameters of the common elements include the following:

- (a) A maximum customer connection horizon of five (5) years.<sup>1</sup>
- (b) A maximum customer revenue horizon of twenty-five (25) years, calculated from the in service date of the new customers.<sup>2</sup>
- (c) A discount rate equal to the incremental after-tax cost of capital, based on the prospective capital mix, debt and preference share cost rates, and the latest approved rate of return on common equity.
- (d) Discounting to reflect the true timing of expenditures. Up-front capital expenditures will be discounted as the beginning of the project year and capital expended throughout the year will be mid-year discounted. The same approach to discounting will be used for revenues and operating and maintenance expenditures.<sup>3</sup>

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<sup>1</sup> For customer connection periods of greater than 5 years an explanation of the extension of the period will be provided to the Board

<sup>2</sup> For example, that the revenue horizon for customers connected in year 1, is 25 years while for those connected in year 3, the revenue horizon is 22 years.

<sup>3</sup> For certain projects Capital Expenditures may be staged and can occur in any year of the five year Connection Horizon.

**APPENDIX 1**

**B. 2 DISCOUNTED CASH FLOW (DCF) METHODOLOGY**

<b><u>Net Present Value (“NPV”)</u></b>	=	Present Value (“PV) of Operating Cash Flow + PV of CCA Tax Shield – PV Capital
1. <u>PV of Operating Cash Flow</u>	=	PV of Net Operating Cash (before taxes) – PV of Taxes
a) PV of Net Operating Cash	=	PV of Net Operating Cash Discounted at the Company’s discount rate for the customer revenue horizon. Mid-year discounting is applied. Incremental after tax weighted average cost of capital will be used in discounting.
Net (Wires) Operating Cash	=	(Annual (Wires) Revenue – Annual (Wires) O & M)
Annual (Wires) Revenue	=	Customer Additions * [Appropriate (Wires) Rates * Rate Determinant]
Annual (Wires) O & M	=	Customer Additions * Annual Marginal (Wires) O & M Cost/customer
b) PV of Taxes	=	PV of Municipal Taxes + PV of Capital Taxes + PV of Income Taxes (before interest tax shield)
Annual Municipal Tax	=	Municipal Tax Rate * (Total Capital Cost)
Total Capital Cost	=	Distribution Capital Investment + Customer Related Investment + overhead at the project level
Annual Capital Taxes	=	(Capital Tax Rate) * (Closing Un-depreciated Capital Cost Balance)
Annual Capital Tax	=	(Capital Tax Rate) * (Net Operating Cash – Annual Municipal tax – Annual Capital Tax)

The Capital Tax Rate is a combination of the Provincial Capital Tax Rate and the Large Corporation Tax (Grossed up for income tax effect where appropriate).

**Note: Above is discounted, using mid-year discounting, over the counter revenue horizon.**

2. <u>PV of Capital</u>	=	PV of Total Annual Capital Expenditures
a) PV of Total Annual Capital Expenditure		
Total Annual Capital Expenditures over the customer’s revenue horizon discounted to time zero.		
Total Annual Capital Expenditure	=	(for New Facilities and/or Reinforcement Investments + Overheads at the project level). This applies for implicated system elements at the utility side of the “Ownership Demarcation Line”.

**Note: Above is discounted to the beginning of year one over the customer addition horizon.**

**APPENDIX 1**

3. PV of CCA Tax Shield

PV of the CCA Tax Shield on [Total Annual Capital]

The PV of the perpetual tax shield may be calculated as:

PV at time zero of: 
$$\frac{[(\text{Income tax rate}) * (\text{CCA Rate}) * \text{Annual Total Capital}]}{(\text{CCA Rate} + \text{Discount Rate})}$$

Or,

Calculated annually and present valued in the PV of Taxes calculation.

**Note: An adjustment is added to account for the ½ year CCA rule.**

4. Discount Rate

PV is calculated with an incremental, after-tax discount rate.

CONNECTION AGREEMENT  
CUSTOMER



April 30, 2005

Revised December 2021

**APPENDIX 2**

This Connection Agreement is made this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

**BETWEEN:**

E.L.K. Energy Inc. (hereinafter called “E.L.K.”) a corporation incorporated pursuant to the laws of the Province of Ontario and licensed by the Ontario Energy Board.

**PARTY OF THE FIRST PART;**

**-and-**

(Name of Customer)  
(hereinafter called “Customer”)

**PARTY OF THE SECOND PART;**

From time to time, E.L.K. and the Customer shall be individually referred to in this Agreement as “Party” and collectively as “Parties”.

Whereas the Customer has applied to E.L.K. for connection service;

Whereas the Parties are willing to enter into a Connection Agreement for the delivery of power by E.L.K. to the Customer in accordance with E.L.K.’s Conditions of Service and on the terms and conditions of this Agreement.

The Parties hereto mutually agree as follows:

**1.0 Definitions**

For the purpose of this agreement and the attached schedules, the following definitions apply:

“*Agreement*” means this agreement together with Schedule “A”, “B” and “C” hereto, as amended from time to time by the written agreement of the Parties.

“*Power*” means electrical power including electrical energy delivered by E.L.K. to supply the Customers internal load requirements.

“*Connection*” means the process of installing and activating connection assets in order to distribute electricity to a Customer.

“*Ownership*” means having the design authority and the replacement responsibility of the facilities.

“*Operating Control*” means the authority to perform, direct or authorize the operation of all devices under its control. Operating control is not synonymous with ownership. Operating Control is not synonymous with the actual execution of any switching operations.

“*Work Protection*” is the provision of a safe work environment for work. A guarantee that an isolated, condition has been established for work.

“*Conditions of Service*” means the document developed by E.L.K. in accordance with the DSC that describes the operating practices and connection rules for E.L.K.

## APPENDIX 2

“DSC” means the code, approved by the Ontario Energy Board, which establishes the obligations of E.L.K. with respect to the services and terms of service to be offered to customers and retailers and provides technical operating standards of distribution systems.

### 2.0 Term of Agreement

This Agreement shall commence on the date of execution and shall continue in force and effect in perpetuity, with the provision that the Customer or E.L.K. may terminate this Agreement by providing the other Party with written notice. Such notice will terminate this Agreement ninety days (90) following receipt of such notice.

This Agreement sets out the terms and conditions upon which E.L.K. has agreed to offer, and the Customer has agreed to accept connection service.

### 3.0 Conditions of Service

***E.L.K.’s “Conditions of Service” and this Agreement establish the operating practices and connection rules for E.L.K. and the Customer. The Parties hereby agree to be bound by, and act at all times in accordance with the Conditions of Service, and which hereby forms part of this Agreement.***

### 4.0 Contact Information

Schedule “A” of this Agreement details the specific Customer information required for connection to E.L.K. distribution system and provides names, telephone numbers and addresses for any ‘Notices’ that may be required to be given by either Party to this Agreement.

Any formal written notice required by this Agreement shall be deemed given and received, when delivered to the Customer’s or E.L.K. business address or, where a facsimile number is provided and the notice is transmitted electronically to the appropriate number as identified in Schedule “A”.

### 5.0 Billing, Rates & Charges

Power is delivered by E.L.K. to the Customer in accordance with this Agreement subject to the distribution rates and charges authorized from time to time by E.L.K. for the classification of service that is applicable to the Customer. Schedule “B” of this Agreement contains E.L.K.’s schedule of rates and charges that have been approved by the Ontario Energy Board.

E.L.K. shall provide, install and maintain a meter installation, as per E.L.K.’s Conditions of Service, for the settlement and monthly billing purposes of the Customer. In the event of a metering malfunction affecting billing data for a portion of or all of a month, the best alternative data will be used for billing purposes.

### 6.0 Customer Financial Contributions

E.L.K. is committed to construct its distribution system infrastructure to accommodate the Customer’s historical or forecasted load as identified in Schedule “B”. The customer agrees that if their load decreases from the level of the Schedule “B” profile that E.L.K. may, through written notice to the Customer, alter their commitment of distribution system capacity to the Customer’s lesser historical level. If E.L.K. experiences a revenue shortfall due to the Customer’s load decrease, E.L.K. may collect the revenue shortfall from the Customer as per E.L.K.’s documented policy on capital contributions.

If E.L.K. is required to extend or upgrade the existing assets of its main distribution system in order to connect and/or to supply an increase in the Customer’s load, then E.L.K. will perform an economic

## APPENDIX 2

evaluation of the expansion project. The cost associated with the Expansion is to be fair and reasonable and be based on E.L.K.'s design standard. E.L.K. will perform an "Economic Evaluation" to determine whether the future revenue from the Customer will pay for the capital and on-going maintenance costs of the Expansion project (refer to methodology and assumptions in the DSC Code – appendix B). At the discretion of E.L.K., the capital costs for the Expansion may include incremental costs associated with the full use of E.L.K.'s existing spare facilities or equipment, which may result in an adverse impact to future Customers. The economic evaluation will be based on the Customer's proposed load, distributor's historical load for similar customers.

The initial demand or load proposed by the Customer, for the EEM, must be reasonable and shall be subject to acceptance by E.L.K. The Customer and E.L.K. agree that on the one year anniversary of the first dollars spent by E.L.K., the average load and or Customer connections for the period will be entered into the EEM to determine the potential rebate to the Customer from their security deposit. This practice will continue through the connection horizon or until the entire security deposit has been rebated to the Customer.

A settlement of the Capital Contribution amount may require the Customer/Developer to pay E.L.K. or it may be necessary for E.L.K. to refund the Customer/Developer the settlement amount depending on the results of the Economic Evaluation Analysis.

### 7.0 Space and Access

The Customer agrees to provide suitable space for E.L.K.'s meters, wires and where necessary poles, cables, transformers and all other required appliances and equipment on the said premises. The Customer also agrees that no one who is not an agent of E.L.K. shall be permitted to remove, inspect or tamper with the said equipment, including E.L.K. seals.

The location of indoor and outdoor meters shall be readily accessible at all times to staff of E.L.K. A space of 1.2 meters (4 feet) clear of all obstructions shall be provided in front of the meter and service panel.

The Customer shall grant properly authorized agents of E.L.K. reasonable access to the said premises for the purpose of reading, examining, preparing or removing their meters, wires, poles, cables, transformers and other appliances and equipment of E.L.K. and for the inspection of all the Customer's appliances and wiring. The properly authorized E.L.K. agents shall comply with the Customer's requirements for access.

To service the Customer, E.L.K.'s underground and/or overhead plant may be located on the Customer's property or, may cross over an adjacent private property to service the Customer. Therefore, the Customer must enter into a Landowner/E.L.K. Easement Agreement as explained in Section 2.1.6 of E.L.K.'s Conditions of Service. The Customer is responsible for registering the easement on title against their property. For adjacent properties, the Customer will obtain the necessary registered agreements and the Customer agrees to incur all costs incurred with obtaining and registering the easement.

### 8.0 Liability

E.L.K. shall only be liable to the Customer and the Customer shall only be liable to E.L.K. for any damages which arise directly out of the willful misconduct or negligence:

- Of E.L.K. in providing distribution services to the Customer;
- Of the Customer in being connected to E.L.K.'s distribution system; or
- Of E.L.K. or Customer in meeting their respective obligations under the DSC, their licenses and any other applicable law.

## APPENDIX 2

Despite the above, neither E.L.K. nor the Customer shall be liable under any circumstances whatsoever for any loss of profits or revenues, business interruption losses, loss of contract or loss of goodwill, or for any indirect, consequential, incidental or special damages, including but not limited to punitive or exemplary damages, whether any of the said liability, loss or damages arise in contract, tort or otherwise notwithstanding the Customer financial contribution as per Section 6.0.

The customer shall assume all risk, liability or obligation to:

- a) All loss, damage or injury to property of the Customer or property of a third person on the lands of the customer.
- b) All loss, damage or injury to any person or persons (including loss of life) on the Customer lands and premises, which loss, damage or injury shall have been due to power supplied by E.L.K. to the Customer, except to the degree that such loss, damage or injury shall have been due to the negligence or intentional acts of E.L.K., its servants or agents.

### 9.0 Ownership of Equipment

Schedule "C" of this Agreement includes a description of the electrical service connection that E.L.K. has agreed to supply to the Customer and a description of the service capacity that the Customer has installed.

All E.L.K. owned equipment, including the revenue metering equipment and instrument transformers shall continue to be vested in E.L.K., unless the Parties have specified otherwise in Schedule "C" to this Agreement.

All Customer equipment and facilities shall continue to be vested in the Customer, unless the Parties have specified otherwise in Schedule "C" to this Agreement.

### 10.0 Responsibility for Equipment

Meters, wires, poles, cables, transformers and all other appliances and equipment of E.L.K. on the Customer premises shall be in the care and at the risk of the Customer and if destroyed or damaged by fire or any other cause whatsoever other than ordinary wear and tear the Customer shall pay to E.L.K. the value of such meters, wires, poles, cables, transformers, appliances and equipment, or the cost of repairing or replacing same.

### 11.0 Operation of Equipment

All electrical and mechanical equipment such as motors and welders used by the Customer shall be subject to the reasonable approval of E.L.K. and the Customer shall so take and use electrical power as not to endanger the apparatus of E.L.K.

E.L.K. will maintain operating control of the Customer owned main high voltage disconnect device (*insert nomenclature*). Any required operation of this device must be coordinated with E.L.K. by providing E.L.K. with (*LDC to identify*) working days' notice for requests to operate this device. For the purpose of communicating between the Customer and E.L.K., name, position and telephone numbers, (work & home) will be maintained in Schedule "A" which will be reviewed annually for accuracy. In the case of an emergency threatening life, the primary disconnect device, may be operated without prior notification. Post operating notification is mandatory.

E.L.K. agrees to use reasonable diligence in providing a regular and uninterrupted supply of power, but does not guarantee a constant supply of power or the maintenance of unvaried frequency or voltage, and will not be liable in damages to the Customer by reason of any failure in respect thereof. It is the

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## APPENDIX 2

Customer's responsibility to provide for the protection of his equipment from voltage variations, transient operations and single phasing.

The Customer shall operate their equipment so as to avoid unacceptable harmonics, voltage flicker or voltage level being subjected onto E.L.K. electrical distribution system. If E.L.K. determines that the Customer's equipment or operation is causing the above conditions, the Customer is responsible to correct these in a timely manner.

Where practical, it is recommended that the Customer choose equipment with the highest power factor and motors should be sized to match the load. Equipment performance characteristics shall be in accordance with E.L.K.'s Conditions of Service.

### 12.0 Maintenance

The responsibility for maintenance of equipment rests with the owner. E.L.K. and the Customer shall maintain their respective equipment in efficient condition with proper devices, according to the requirements and rules of the ESA. If in the opinion of the Customer or E.L.K., maintenance is not properly performed, the identifying Party will notify the other in writing. The Customer shall inspect, test and monitor its facilities and equipment connected to E.L.K.'s distribution system to ensure and maintain compliance with E.L.K.'s Conditions of Service and this Agreement.

If the Customer's electrical installation is found to be inadequate, the supply of power may be suspended until such time as maintenance requirements are complied with.

### 13.0 Work Protection

When work is to be done by the Customer on apparatus that can be isolated by devices under the control of the Customer, the procedures and protection will be in accordance with the Customer practices and the Occupational Health and Safety Act of Ontario.

When the Customer requires isolation from E.L.K. supply or isolation of a device under E.L.K. control, the Customer will request that E.L.K. provide a Condition Guarantee.

### 14.0 Security Deposits

Wherever required by E.L.K., including but not limited to, as a condition of supplying or continuing to supply Distribution Services, the Customer shall provide and maintain security in an amount that E.L.K. deems necessary and reasonable.

A good payment history for all customer classifications must be for the most recent period of time and some of the time must have occurred in the previous 24 months and can include one (1) but not more than one (1):

- Disconnection Notice or Disconnection Trip
- Payment (cheque or pre-authorized payment) returned for non-sufficient funds

The good payment history may be established while a customer of E.L.K. or a letter can be provided from another electrical distributor or gas distributor in Canada.

#### Residential Customers

Account security deposits must be in the form of cash or cheque.

**APPENDIX 2**

Security deposit shall be calculated as the billing cycle factor (2.5 for monthly billing) times the estimated consumption based on the service's average monthly load with the distributor during the most recent 12 consecutive months. Where this information is not available, the average monthly load will be based on an estimate made by E.L.K. (based on the electricity consumption for similar customers and premise types). In the event that the customer has been disconnected more than once in the previous 12 months, the service's average monthly load will be replaced with the highest monthly load.

A minimum of one quarter of the security deposit amount must be paid prior to establishing an active account with the customer. Upon payment of deposit, the customer must sign a letter of agreement with E.L.K. The balance may be paid over three additional installments due one (1) month after the previous installment. Failure to comply within seven (7) days of payment due date may result in a disruption of supply.

Security deposit will be waived if the customer can provide proof of good payment history for a period of one (1) year or provide a satisfactory credit check made at the customer's expense.

A security deposit can be reduced by 25% if the customer enrolls in the pre-authorized payment plan. If the pre-authorized payment plan is cancelled or a payment is returned for non-sufficient funds, the balance of the security deposit will be required.

Interest shall accrue on the deposit at the Prime Business Rate less 2% and shall be posted to the customer's account each quarter.

After one (1) year of good payment history, the security deposit will be transferred to the customer's account. If a customer does not meet these criteria, the customer may request a review of the security deposit amount and the new amount will apply.

Where a customer vacates the property, the security deposit will be applied to the final statement of account and any remainder will be refunded to the customer.

General Service Less than 50kW Customers

Account security deposits must be in the form of cash, cheque or irrevocable letter of credit from a bank as defined in the Bank Act, 1991.

Security deposit shall be calculated as the billing cycle factor (2.5 for monthly billing) times the estimated consumption based on the service's average monthly load with the distributor during the most recent 12 consecutive months. Where this information is not available, the average monthly load will be based on an estimate made by E.L.K. (based on the electricity consumption for similar customers and premise types). In the event that the customer has been disconnected more than once in the previous 12 months, the service's average monthly load will be replaced with the highest monthly load.

A minimum of one quarter of the security deposit amount must be paid prior to establishing an active account with the customer. Upon payment of deposit, the customer must sign a letter of agreement with E.L.K. The balance may be paid over three additional installments due one (1) month after the previous installment. Failure to comply within seven (7) days of payment due date may result in a disruption of supply.

Security deposit will be waived if the customer can provide proof of good payment history for a period of five (5) years or provide a satisfactory credit check made at the customer's expense.

A security deposit can be reduced by 25% if the customer enrolls in the pre-authorized payment plan. If the pre-authorized payment plan is cancelled or a payment is returned for non-sufficient funds, the balance of the security deposit will be required.

**APPENDIX 2**

Interest shall accrue on the deposit at the Prime Business Rate less 2% and shall be posted to the customer's account each quarter.

After five years of good payment history, the security deposit will be transferred to the customer's account. If a customer does not meet these criteria, the customer may request a review of the security deposit amount and the new amount will apply.

Where a customer vacates the property, the security deposit will be applied to the final statement of account and any remainder will be refunded to the customer.

General Service Greater than 50kW Customers

Account security deposits must be in the form of cash, cheque or irrevocable letter of credit from a bank as defined in the Bank Act, 1991.

Security deposit shall be calculated as the billing cycle factor (2.5 for monthly billing) times the estimated consumption based on the service's average monthly load with the distributor during the most recent 12 consecutive months. Where this information is not available, the average monthly load will be based on an estimate made by E.L.K. (based on the electricity consumption for similar customers and premise types). In the event that the customer has been disconnected more than once in the previous 12 months, the service's average monthly load will be replaced with the highest monthly load.

A minimum of one quarter of the security deposit amount must be paid prior to establishing an active account with the customer. Upon payment of the deposit, the customer must sign a letter of agreement with E.L.K. The balance may be paid over three additional installments due one (1) month after the previous installment. Failure to comply within seven (7) days of payment due date may result in a disruption of supply.

This required security deposit will be reduced if a credit rating from a recognized credit rating agency is available. The reductions will be consistent with Paragraph 2.4.1.3 of the Ontario Energy Board's DSC.

Security deposit will be waived if the customer can provide proof of good payment history for a period of seven (7) years or provide a satisfactory credit check made at the customer's expense.

A security deposit can be reduced by 25% if the customer enrolls in the pre-authorized payment plan. If the pre-authorized payment plan is cancelled or a payment is returned for non-sufficient funds, the balance of the security deposit will be required.

Interest shall accrue on the deposit at the Prime Business Rate less 2% and shall be posted to the customer's account each quarter.

After seven (7) years of good payment history, the security deposit will be transferred to the customer's account. If a customer does not meet these criteria, the customer may request a review of the security deposit amount and the new amount will apply.

Where a customer vacates the property, the security deposit will be applied to the final statement of account and any remainder will be refunded to the customer.

Developers for New Construction/Expansion

The deposit amount required will be equal to the capital cost outlay for the specific period.

**APPENDIX 2**

As a minimum, one-half of the deposit must be paid before the commencement of work on the project. The remainder of the deposit must be received by our utility within one month of the commencement of work.

Acceptable forms of security are:

- i) cash
- ii) cheque
- iii) debit
- iv) credit (fee applies)

Each year thereafter, the project Economic Evaluation Model (EEM) will be updated for the current year actual load. The difference between the security deposit received and the capital contribution required in the updated EEM will be rebated to the developer. This annual rebate process will continue for the customer connection horizon or a maximum of 5 years, whichever is shorter.

#### Management Discretion

Since there are many varying circumstances, management will adhere to the policy as listed above, but will apply professional judgment in situations where it is required.

#### **15.0 Disconnection**

E.L.K. reserves the rights to disconnect the supply of electrical energy for causes not limited to:

- Contravention of the laws of Canada or the Province of Ontario,
- Adverse effect on the reliability and safety to the distribution system,
- Imposition of an unsafe worker situation beyond normal rises inherent in the operation of the distribution system,
- A material decrease in the efficiency of the distributor's distribution system,
- A materially adverse effect on the quality of distribution services received by an existing connection,
- Discriminatory access to distribution services,
- Inability of E.L.K. to perform planned inspections and maintenance,
- Failure of the Consumer or Customer to comply with a directive of E.L.K. that E.L.K. makes for purposes of meeting its license obligations,
- Overdue amounts payable to E.L.K. for the distribution or retail of electricity (provided E.L.K. provides the Customer with reasonable notice of the proposed disconnection of electricity),
- Electrical disturbance propagation caused by Customer equipment that are not corrected in a timely fashion, or
- Any other conditions identified in these Conditions of Service document.

E.L.K. may disconnect the supply of electricity to a Customer without notice in accordance with a court order, or for emergency, safety or system reliability reasons.

E.L.K. reserves the right to disconnect the supply of electrical energy to a Customer for causes not limited to energy diversion, fraud or abuse on the part of the Customer. Such services may not be reconnected until the Customer rectifies the condition and provides full payment to E.L.K. including all costs incurred by E.L.K. arising from unauthorized energy use, including inspections, repair costs and the cost of disconnection and reconnection.

The Customer hereby expressly authorizes and empowers E.L.K. at E.L.K.'s option to remove the meter, wires, poles, cables, transformers and all other appliances and equipment installed at E.L.K.'s expense and discontinue the supply of power and terminate this agreement whenever any of the above related

causes for disconnection cannot be resolved or upon violation by the Customer of any of the terms and conditions of this agreement.

**APPENDIX 2**

**16.0 Force Majeure**

For the purposes of this Agreement, "Force Majeure" means any act of God, labour disturbance, act of a public enemy, war, insurrection, riot, fire, storm or flood, earthquake, or explosion; any curtailment, order, regulation, or restriction imposed by governmental, military or lawfully established civilian authorities; or any other cause beyond a Party's reasonable control.

Subject to the items below, neither Party shall be held to have committed an event of default in respect of any obligation under this Agreement if prevented from performing that obligation, in whole or in part, because of a force majeure event.

If a force majeure event prevents a Party from performing any of its obligations under the DSC and this Agreement, that Party shall:

- Promptly notify the other Party of the force majeure event and its assessment in good faith of the effect that the event will have on its ability to perform any of its obligations. If the immediate notice is not in writing, it shall be confirmed in writing as soon as reasonably practicable;
- Not be entitled to suspend performance of any of its obligations under this Agreement to any greater extent or for any longer time than the force majeure event requires it to do;
- Use its best efforts to mitigate the effects of the force majeure event, remedy its inability to perform, and resume full performance of its obligations;
- Keep the other Party continually informed of its efforts; and
- Provide written notice to the other Party when it resumes performance of any obligations affected by the force majeure event.

Notwithstanding any of the foregoing, settlement of any strike, lockout, or labour dispute constituting a force majeure event shall be within the sole discretion of the Party to the Agreement involved in the strike, lockout, or labour dispute. The requirement that a Party must use its best efforts to remedy the cause of the force majeure event mitigates its effects, and resume full performance under this Agreement and the DSC shall not apply to strikes, lockouts, or labour disputes.

**17.0 Divisibility of Agreement**

If any term, covenant or condition of this Agreement, shall, to any extent, be invalid or unenforceable, the remainder of this Agreement shall remain in full force and effect, subject to any necessary adjustments to delete any of the above said invalid or unenforceable provisions.

**18.0 Dispute Resolution**

Except where this policy states otherwise, the dispute resolution procedures set forth in the Conditions of Service document shall apply to all disputes arising between E.L.K. Energy Inc. and the "Customer" and shall be the process for resolving any such disputes.

**18.1 Policy**

- 18.1.1** All complaints or disputes shall be submitted to E.L.K. Energy Inc. in writing, via mail, facsimile or e-mail to one of the following addresses:

E.L.K. Energy Inc.  
172 Forest Avenue  
Essex ON N8M 3E4

E-mail: [customer.service@elkenergy.com](mailto:customer.service@elkenergy.com)

## APPENDIX 2

- 18.1.2 The complaint will be forwarded to a Customer Service Representative or a Manager who has authority in regards to the complaint.
- 18.1.3 E.L.K. Energy Inc. shall research and investigate the cause of the complaint and attempt in good faith to resolve the dispute within 10 business days of receipt.
- 18.1.4 E.L.K. Energy Inc. will contact the Customer within 10 business days if the dispute is expected to exceed 10 business days to investigate and resolve. The Customer will be advised of the delay and reasons thereof.
- 18.1.5 E.L.K. Energy Inc. will provide a suggested resolution to the Customer and if accepted by the Customer the complaint and dispute will be deemed resolved.
- 18.1.6 Any dispute that leads to or may lead to legal action against the Corporation shall be referred to the Corporations solicitor.
- 18.1.7 In the event that issues cannot be resolved between E.L.K. Energy Inc. and the Customer, complaints can be referred to an independent third party complaints resolution agency that has been approved by the Ontario Energy Board.
- 18.1.8 Until such time as the Ontario Energy Board approves an independent third party dispute resolution agency, the Ontario Energy Board will assume this role.

### 18.2 Dispute Negotiation

- 18.2.1 Any dispute between E.L.K. Energy Inc. and the Customers regarding distribution services provided under the terms of E.L.K. Energy Inc.'s License shall be referred to a designated representative chosen by E.L.K. Energy Inc. and to a designated representative chosen by the Customer for resolution on an informal basis.
- 18.2.2 Any resolution of the dispute by the designated representatives shall be in writing and shall be executed by an authorized signing officer of E.L.K. Energy Inc. The resolution shall bind E.L.K. Energy Inc. and the Customer and their respective successors and assigns.

### 18.3 Referral of Unresolved Disputes

If the designated representatives cannot resolve the dispute within the time period set out in Sections 3.3 and 3.4, and are not referred to an independent third party under Section 3.7 either the Customer or E.L.K. Energy Inc. may submit the dispute to the Ontario Energy Board for direction on resolution.

## 19.0 Waiver

Failure by either Party to exercise any right or to enforce any remedy under this Agreement shall be limited to the particular instance. It shall not be deemed to waive any right or to limit the ability to enforce any remedy in other or similar instances, nor should it affect the validity of this Agreement.

## 20.0 Review and Revisions

Either party may initiate a review or revisions by the Parties of this Agreement at any time, however, both Parties, acting reasonably, must approve any changes hereto in writing.

**APPENDIX 2**

**21.0 Successor and Assigns**

This Agreement and its attached schedules shall extend to and be binding upon and inure to the benefit of the Customer and E.L.K., and to their respective successors and assigns. In the event of a successor or assign, the Customer or E.L.K. is required to give written notice to the other Party to this Agreement, identifying the name of the successor or assign and the date that the change comes into effect.

**22.0 Acceptance of Agreement**

Dated at \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_

We, the undersigned, agree to the above **Connection Agreement**

Name of Customer

Name of the Distributor  
E.L.K. Energy Inc.

\_\_\_\_\_  
**(Name of representative of Customer)**

Michael J. Audet  
\_\_\_\_\_  
**(Name of representative of E.L.K. Energy Inc.)**

Title \_\_\_\_\_

Title CEO \_\_\_\_\_

**APPENDIX 2**

**SCHEDULE "A" of Connection Agreement between**

***(Name of LDC) and (Name of Customer)***

**Contact Information:**

Date:  
Account Number:  
Date Customer's Responsibility Commences:  
Name:  
Service Address:  
Mailing Address:  
Home Telephone Number:  
Business Telephone Number:  
Business Facsimile Number:  
Type of Business:  
SIC:

Notices

Notice to E.L.K.:

Contact: E.L.K. Energy Inc.  
172 Forest Avenue  
Essex ON N8M 3E4  
  
Michael J. Audet, CEO  
Bus. Tel: (519) 776-5291 ext 206  
  
Bruce Bratt, Operations Manager  
Bus. Tel: (519) 776-5291 ext 209

Notice to the Customer:

Contact:

**APPENDIX 2**

**SCHEDULE “B” of Connection Agreement between**

*(Name of LDC) and (Name of Customer)*

**Billing Rates & Charges**

Classification of Service *(place approved OEB billing rates and charges for customer)*

**Load Profile**

*(Name of Customer)* monthly peak kW and energy load to be connected to E.L.K. distribution system.

Please identify whether the following is **Historical data** \_\_\_\_\_ or **Forecasted data** \_\_\_\_\_

	<b>Net kWh</b>	<b>Peak kW</b>
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		

**APPENDIX 2**

**SCHEDULE “C” of Connection Agreement between**

***(Name of LDC) and (Name of Customer)***

**Description of Service**

*(list specifics of electrical service)*

*e.g. – supply voltage (include phase/wire, service capacity, type of metering, telecommunications circuit (if required), location of service on customer property and any other specifics pertinent to the service connection.*

*Note: The above detail will be in an “Offer to Connect”, however, there may be times when a Connection Agreement may be initiated without a prior Offer to Connect (e.g. customer moving into an existing facility).*

**Ownership of Equipment**

*(list and identify the ownership of equipment for E.L.K. and the Customer)*

**Operating Control**

*(identify who has operating control of key devices at interface with the Customer and E.L.K.)*

OFFER TO CONNECT



PROJECT NAME

October 15, 2003

Revised December 2021

**APPENDIX 3**

E.L.K. Energy Inc. (hereafter identified as E.L.K.) makes this Estimated Offer to construct the distribution system upgrade/expansion required for supplying electrical service to

Customer/Developer.....(*Name of Customer/Developer.....*, at the following

Property known municipally as .....in the county of .....

as indicated in the single line drawing of Schedule A in accordance with the following terms:

1. The Customer/Developer, along with the signing of this agreement, submits \$xx,xxx.xx CDN Dollars plus GST and applicable RST in cash/cheque payable to E.L.K. as an estimated capital contribution or security deposit against the load forecast for the engineering design and upgrading/expansion construction costs as detailed in Schedule B.
2. The Customer/Developer agrees to pay any increase in the capital contribution amount to E.L.K. and, E.L.K. agrees to refund any reduction in the capital contribution amount to the Customer/Developer that results from a re-calculation of the capital contribution prior to connection of the electrical service. This re-calculation will reflect the actual project costs incurred and include any cost adjustments due to the Alternative Bid Process, using the Economic Evaluation Model of Schedule B.
3. Schedule(s) A, B, C, D, E and F herewith attached will form part of this agreement.
4. Customer/Developer and E.L.K. hereby agree to be bound by, and act at all times in accordance with E.L.K.'s Conditions of Service (on Expansions/Offer To Connect, Connection Denial, Inspection Before Connection, Customer Rights, E.L.K. Rights, Disputes, Easements, etc.) and the DSC of the Ontario Energy Board. A copy of the Conditions of Service is available from E.L.K. and a copy of the DSC is available at [www.oeb.gov.on.ca](http://www.oeb.gov.on.ca).
5. Customer/Developer hereby agrees to enter into a Connection Agreement, if requested by E.L.K., prior to the termination of this Agreement. Customer/Developer hereby agrees to enter into a Development Agreement, prior to commencement of any work for the installation of any assets required to fulfill this Agreement. A copy of the draft format of the Development Agreement is attached as Schedule F, which shall be completed with necessary information and changes by E.L.K.'s solicitor.

#### Requirement for Drawings and Specifications

6. Customer/Developer hereby agrees to submit to E.L.K. for final written approval, detailed plans, specifications and drawings, in paper format and digitized AutoCAD version 14, and such other material and information that E.L.K. may reasonably require. All design and construction is to be in accordance with the ESA and E.L.K. Underground Standards (available from E.L.K.). Any changes, modifications, or revisions to the Plans required by E.L.K. shall be made at the expense of the Customer/Developer. After all necessary changes, modifications or revisions have been made, the Customer/Developer shall furnish E.L.K. with a complete set of paper and digitized format Plans as revised. Upon completion of the installation, the Customer/Developer shall provide a further complete set of "as built" paper and digitized format Plans, to the satisfaction of E.L.K.

#### Payment of E.L.K. Costs and Expenses

7. Whenever this Agreement shall refer to the payment of costs or expenses for services by E.L.K., it is agreed and understood that such costs and expenses shall include all direct and indirect costs of E.L.K. including administrative charges, markup charges and burden calculated in accordance with the policies and directives of E.L.K. in effect at the time such costs and expenses were incurred. E.L.K. may invoice, including interim invoicing, from time to time for all services, materials, or costs

**APPENDIX 3**

and expenses incurred by it pursuant to this Agreement and such invoices shall be due as provided therein.

8. Customer/Developer agrees that no contract shall be awarded under the Alternative Bid Process and no work shall commence for the installation of any assets required to fulfill this Agreement or portion thereof in respect of which E.L.K. is to bear any portion of cost, without approval in writing of E.L.K. in accordance with the DSC.

Timing, Access, Easements and Ownership

9. E.L.K. agrees that this Estimated Offer shall be irrevocable by E.L.K. until .....(am/pm) on the .....day of .....200..., after which time if not accepted this Estimated Offer shall be null and void.
10. E.L.K.'s obligations under paragraph 2 of this Agreement shall be completed and satisfied subsequent to a final review of the 5 year Connection Horizon and once the adjusted Capital Contribution amount has been established as agreed in Item #2 of the main body of this Agreement.
11. E.L.K. shall be allowed to inspect, test and commission, at the Customer/Developer's expense, any distribution system assets constructed under the Alternative Bid Process by a pre-qualified contractor. The Customer/Developer shall provide unimpeded access at all times for all employees, contractors, subcontractors and agents of E.L.K. and for their equipment to perform installations, inspections, test and commissioning works contemplated by this Agreement.
  - 11.1 Provided that if any such inspection, testing or commissioning discloses any valid objection to nonstandard construction, registering of easement(s) on title, or any outstanding work order or deficiency notice, or the fact that the assets in their present state are unacceptable, E.L.K. shall advise the Customer/Developer in writing. If within 20 days of written notice, the Customer/Developer is unable or unwilling to remove, remedy or satisfy the objection, E.L.K., may elect in writing to terminate this Agreement, and upon so electing and notwithstanding any intermediate acts or negotiations in respect of such object, this Agreement shall be at an end, and all money therefore paid to E.L.K. shall remain with E.L.K. The Customer/Developer hereby consents to the municipality releasing to E.L.K. details of all outstanding work orders or deficiency notices affecting the expansion assets installed under the Alternative Bid Process and, Customer/Developer agrees to execute and deliver to E.L.K. or E.L.K.'s solicitor such further authorizations in this regard as E.L.K. may reasonably require.
  - 11.2 Provided that the distribution system assets constructed under the Alternative Bid Process meet the distribution standards of E.L.K. and free from all restrictions, charges, liens, claims and encumbrances, except as otherwise specifically provided in this Agreement and, providing that where an easement is required, the easement will be acquired, at no cost to E.L.K. (i.e. reference plan, registration on title, etc. and the width and extent of the easement shall be determined by E.L.K.). The Customer/Developer is responsible for the costs of registering the easement on title, and the Customer/Developer shall prepare and deliver a reference plan and associated easement documents to the satisfaction of E.L.K.'s solicitor prior to commencement of the work.
  - 11.3 Provided title to and ownership of all distribution system assets constructed under the Alternative Bid Process shall upon, and not earlier than, the Board's written notice of acceptance of the work and services and at all times thereafter be vested in and automatically transferred to the Board and said notice shall in conjunction with this

APPENDIX 3

agreement operates as a good and valid transfer effective as of the date of said notice. Provided that and without detracting from the foregoing, the Developer agrees to execute and deliver to the Board, without cost, any transfers, conveyances and other assurances in connection with the foregoing and transferring and conveying title thereto to the Board free and clear of any and all encumbrances and shall do so prior to energizing if called upon, or as may be further required under the Development Agreement, unless otherwise provided for as follows:

- (a) Street Lighting Services revert to (Name of Municipality).....
- (b) .....

Liability and Default of this Agreement

12. The Customer/Developer agrees to indemnify and save harmless E.L.K. from and against all loss or damage, expense, claims, suits and liability on account of any and all damage to or loss or destruction of any property (including without limitation, the work hereby covered and all property of the Customer/Developer and E.L.K.), or injury to or death of any person (including without limitation, employees of the Customer/Developer and E.L.K.) arising directly or indirectly out of or in connection with any willful or negligent act or unlawful or non-performance of any obligation of the Customer/Developer, its contractors, employees and invitees under this Agreement or on any lands of the Customer/Developer or on any lands, easements or rights-of-way conveyed or to be conveyed to E.L.K.

12.1 During the construction of the expansion or during any other construction or attendance, easements or rights-of-way to be conveyed to E.L.K., pursuant to this Agreement, the Customer/Developer shall maintain a policy of public liability insurance in the amount of not less than \$5,000,000.00 and containing endorsements showing E.L.K. as an additional named Insured and having a cross-liability clause and in a form satisfactory to E.L.K. or the Solicitors for E.L.K. Before commencing construction of assets contemplated by this Agreement or entering upon any lands, right-of-ways, easements or municipal road allowance, the Customer/Developer shall provide E.L.K. with a certified copy of such an insurance policy.

13. The Customer/Developer acknowledges that in the event of default by the Customer/Developer In performing its obligations under this Agreement, E.L.K. may elect, in addition to any other remedies available at law, including but not limited to those remedies provided to E.L.K. under the Development Agreement, to vigorously pursue realization of all security to ensure that the work under this Agreement is completed. The Customer/Developer agrees that any persons or other entities, including E.L.K., may make use of all installations constructed by the Customer/Developer to complete the work and that ownership of all assets installed by the Customer/Developer revert to E.L.K. except for any Street Lighting Services which revert to the .....(Name of Municipality).....upon completed installation.

14. Any notice, acceptance or other communication required or permitted to be given in this agreement shall be in writing and may be sufficiently given by personal notice, or by sending same by facsimile or other prepaid recorded communication, or by ordinary mail, to the other party at the addresses set out herein, or by leaving it at the addresses set out herein. All such notices, acceptances or other communications shall be deemed to have been validly and effectively given at the time and date of service, where personally serviced, or at the time and date of delivery, where left at the party's address, or on the third day following sending, where sent by ordinary mail, or on the next business day following sending, when sent by other means set out herein.

**APPENDIX 3**

**Successors and Assigns**

15. This Agreement and its attached Schedules shall extend to and be binding upon and inure to the benefit of the Customer/Developer and E.L.K., and to their respective successors and assigns. In the event of a successor or assign, the Customer/Developer or E.L.K. is required to give written notice to the other Party to this Agreement, identifying the name of the successor or assign and the date that the change comes into effect.

Miscellaneous

16. Time shall in all respects be of the essence hereof provided that the time for doing or completing of any matter provided for herein may be extended or abridged by an agreement in writing signed by Customer/Developer and E.L.K. or by their respective solicitors.

17. Money may be tendered by bank draft or cheque drawn on a Chartered Bank, Trust Company, Province of Ontario Savings Office, Credit Union or Caisse Populaire.

18. If there is a conflict between any provision written or typed in this agreement (including any Schedule to this Agreement and the Development Agreement in its executed format) and any provision in the printed portion hereof, the written or typed provision shall supersede the printed provision to the extent of such conflict. This agreement including any Schedules attached hereto shall constitute the entire Agreement between the Customer/Developer and E.L.K.

19. Where Goods and Services Tax (G.S.T.) and Retail Sales Tax (R.S.T.) are applicable, then such G.S.T. and R.S.T. shall be in addition to and not included in the amounts quoted in this Agreement and services provided to the Customer/Developer by E.L.K.

**APPENDIX 3**

SIGNED BY THE AUTHORIZED OFFICERS AND COPIES RECEIVED

**DATED at the.....(Name of Municipality)....., in the County of .....and Province of Ontario on this.....day of.....2005**

Customer/Developer:

Per:

Date:

Per:

We have authority to bind the Corporation.

E.L.K.:

Per:

Date

Per:

We have authority to bind the Corporation.

**ACKNOWLEDGEMENT**

I acknowledge receipt of my signed copy of this accepted Agreement for Construction of Distribution System Expansion.

E.L.K.:

Customer/Developer:

\_\_\_\_\_  
Per:

\_\_\_\_\_  
Per:

\_\_\_\_\_  
Per:

\_\_\_\_\_  
Per:

172 Forest Avenue  
Essex ON N8M 3E4

\_\_\_\_\_  
Address

Telephone (519) 776-5291

\_\_\_\_\_  
Telephone

\_\_\_\_\_  
E.L.K. Solicitor & Telephone

\_\_\_\_\_  
Customer/Developer Solicitor & Telephone

**APPENDIX 3**

Schedule A: Associated Drawings

(Please list here and attach)

**APPENDIX 3**

Schedule B: Estimate of Work

The following capital contribution amount for the construction work associated with the distribution system upgrade/expansion was calculated using the E.L.K. Economic Evaluation Model as noted in Schedule D. The input quantities to the E.L.K. EEM came from the Customer/Developer's forecast of load to be connected over a 5 year connection horizon as detailed in Schedule C and the associated revenues and costs resulting from the connected load as determined by E.L.K.

The E.L.K. Economic Evaluation Model calculates that a Capital Contribution of \$xx,xxx.xx is to be paid by the Customer/Developer to E.L.K. for the engineering design and construction of the upgrade/expansion to the main distribution system to supply the Customer/Developer's new electrical service. This Contributed Capital amount will be recalculated using the actual costs and connections over the 5-year connection horizon as noted in Items #2 & #10 in the main body of this agreement.

Listed below is a description of all the items associated with this upgrade/expansion work. Shown also is the estimated costs for each item and whether the item is eligible for the Alternative Bid Process which is described in Schedule E.

Item	Description	E.L.K. Estimated Cost	Eligible for Alter. Bid Option (Y/N)	Initial to Select Alter. Bid Item
1				
2				
3				
4				
5				
Etc.				

- The breakdown of the total engineering and design, materials, labour, equipment and administration costs for E.L.K. to complete the project are as follows:

<b>Engineering and Design</b>		<b>\$xx,xxx.xx</b>
Materials	xxx,xxx.xx	
Labour	xxx,xxx.xx	
Equipment	xxx,xxx.xx	
Administration	xxx,xxx.xx	
	<u>                    </u> Total	\$xx,xxx.xx

- If the Customer/Developer uses the Alternative Bid Process as described in Schedule E, the additional E.L.K. costs to service the Alternative Bid Process is \$xx,xxx.xx

These E.L.K. services costs, to be paid by the Customer/Developer through periodic invoicing by E.L.K., may include but not be limited to, the following:

- Analysis of alternatives bid submissions,
- Supervision of work by pre-qualified contractor, and
- Costs of inspection and commissioning by E.L.K. staff

If the Customer/Developer uses the Alternative Bid Process security shall be required as outlined in the Development Agreement, Schedule F to the Offer to Connect.

**APPENDIX 3**

Schedule C: Customer/Developer Information

Residential Subdivision:

Total Number of Lots (this phase only): \_\_\_\_\_

Planned Connection Schedule (# lots/yr):	_____	Year 1
	_____	Year 2
	_____	Year 3
	_____	Year 4
	_____	Year 5

Average size of home: \_\_\_\_\_ sq. ft.

**I acknowledge that:**

- 1. The above information will be used by E.L.K. to make me an offer for the connection of my electrical service(s) to their distribution system.**
- 2. If I change the above information after signing this form, E.L.K. can charge me for additional costs they incur as a result of my changes.**

**Customer:** \_\_\_\_\_ **Date:** \_\_\_\_\_



**APPENDIX 3**

General Service Greater Than 500 kW:

Substation Owned by: E.L.K. \_\_\_\_\_ Customer \_\_\_\_\_

Customer's Forecast of Electrical Load:

Month	KW Demand	KWh
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
Average		

Design Peak demand \_\_\_\_\_ MW Forecasted Plant Power Factor \_\_\_\_\_%

Customer's Forecasted Load Growth (% Above Average Demand)

\_\_\_\_\_ Year 1  
 \_\_\_\_\_ Year 2  
 \_\_\_\_\_ Year 3  
 \_\_\_\_\_ Year 4  
 \_\_\_\_\_ Year 5

Service Voltage: \_\_\_\_\_ volts \_\_\_\_\_ single phase \_\_\_\_\_ three phase

Generator on Site Yes \_\_\_\_\_ No \_\_\_\_\_

List Large Motors

Type	HP	Voltage

- I acknowledge that:**
- 1. The above information will be used by E.L.K. to make me an offer for the connection of my electrical service to their distribution system.**
  - 2. If I change the above information after signing this form, E.L.K. can charge me for additional costs they incur as a result of my changes.**

Customer: \_\_\_\_\_ Date: \_\_\_\_\_

APPENDIX 3

Schedule D: Economic Evaluation Analysis

## Input Summary

Estimated/Actual capital costs: \_\_\_\_\_  
EEM attributable Estimated/Actual capital costs: \_\_\_\_\_  
Total new potential customer additions: \_\_\_\_\_  
Kwh's used per customer: \_\_\_\_\_  
Developer/Customer forecasted connections: \_\_\_\_\_

### Year 1 Economic Evaluation

Estimated/Actual year 1 costs: \_\_\_\_\_  
Estimated/Actual new customers connected: \_\_\_\_\_  
Estimated/Actual Developer/Customer rebate: \_\_\_\_\_  
Balance of Estimated/Actual capital costs: \_\_\_\_\_

### Year 2 Economic Evaluation

Estimated/Actual year 2 costs: \_\_\_\_\_  
Estimated/Actual new customers connected: \_\_\_\_\_  
Estimated/Actual Developer/Customer rebate: \_\_\_\_\_  
Balance of Estimated/Actual capital costs: \_\_\_\_\_

### Year 3 Economic Evaluation

Estimated/Actual year 3 costs: \_\_\_\_\_  
Estimated/Actual new customers connected: \_\_\_\_\_  
Estimated/Actual Developer/Customer rebate: \_\_\_\_\_  
Balance of Estimated/Actual capital costs: \_\_\_\_\_

### Year 4 Economic Evaluation

Estimated/Actual year 4 costs: \_\_\_\_\_  
Estimated/Actual new customers connected: \_\_\_\_\_  
Estimated/Actual Developer/Customer rebate: \_\_\_\_\_  
Balance of Estimated/Actual capital costs: \_\_\_\_\_

### Year 5 Economic Evaluation

Estimated/Actual year 5 costs: \_\_\_\_\_  
Estimated/Actual new customers connected: \_\_\_\_\_  
Estimated/Actual Developer/Customer rebate: \_\_\_\_\_  
Balance of Estimated/Actual capital costs: \_\_\_\_\_

**APPENDIX 3**

Fore mentioned rebates are estimates. Actual rebates may differ. These rebates were calculated using estimated construction costs and Developer/Customer supplied forecasted connection rates. Rebate values were calculated using market values and abiding by market rules in effect at the time of the calculation.

**APPENDIX 3**Schedule E: Alternative Bid Process**Step #1**

E.L.K. shall calculate the Contributed Capital requirement of the asset upgrade/expansion using the Economic Evaluation Analysis as identified in Schedule D. The data input into the model for calculation was provided by the Customer/Developer (note Schedule C Customer/Developer Information) and by E.L.K.'s forecast of expected revenues and operational maintenance costs over the 5 year connection horizon.

**Step #2**

The Customer/Developer shall solicit bids, at their own expense, from pre-qualified contractors to construct the assets and perform the work identified in Schedule B as eligible for alternative bids. The Customer/Developer has the prerogative to select all or some of those eligible for alternative bids.

E.L.K. maintains a list of pre-qualified contractors for all services that are eligible for the Alternative Bid Process. The Customer/Developer shall request and obtain this listing of pre-qualified contractors from E.L.K. staff. Only contractors from this list shall be acceptable to construct the eligible items identified for alternative bids in Schedule B.

**Step #3**

The Customer/Developer shall take into consideration the estimated additional costs of the E.L.K. services for engineering and managing the Alternative Bid Process for constructing the expansion assets under the Alternative Bid Process. An estimate of these costs are detailed in Schedule B.

These E.L.K. services costs, to be paid by the Customer/Developer through periodic invoicing by E.L.K. may include, but not be limited to, the following:

- a) Analysis of alternatives bid submissions,
- b) Supervision of work by pre-qualified contractor, and
- c) Costs of inspection and commissioning by E.L.K. staff

**Step #4**

The Customer/Developer shall evaluate the costs of those items eligible for the alternative bid in Step #2 plus the additional costs of Step #3 and then decide whether to proceed with the Alternative Bid Process.

If the Customer/Developer chooses to proceed with the Alternative Bid Process .....then he should go to step #6.

If the Customer/Developer chooses to have E.L.K. build the expansion assets then go to Step #5.

**Step #5**

Two Customer/Developer representatives with corporate binding authority shall:

- a) Initial the attached Schedules to acknowledge their inclusion as a part of this Agreement
- b) Sign the Agreement
- c) Sign acknowledgement of receipt of a signed copy of this Agreement
- d) Submit payment, in cash/cheque payable to E.L.K., as a capital contribution for the construction costs in the amount noted in Item #1 of the main body of this Agreement

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**APPENDIX 3**

- e) Submit proof of a policy of public liability insurance as outlined in Item 12.1 of the main body of this Agreement

Two E.L.K. representatives with corporate binding authority shall:

- a) Initial the attached Schedules to acknowledge their inclusion as a part of the Agreement
- b) Sign this Agreement
- c) Sign acknowledgement of receipt of signed copy of this Agreement

This terminates the Alternative Bid Process because of the Customer/Developer's choice to have E.L.K. construct the expansion. Do not proceed to Step #6.

**Step #6**

Two Customer/Developer representatives with corporate binding authority shall:

- a) Initial the items on Schedule B for which the Customer/Developer will seek bids from pre-qualified contractors
- b) Initial the remaining Schedules to acknowledge their inclusion as a part of the Agreement
- c) Sign this Agreement
- d) Sign acknowledgement of receipt of signed copy of this Agreement
- e) Submit proof of a policy of public liability insurance as outlined in Item 12.1 of the main body of this Agreement.

Two E.L.K. representatives with corporate binding authority shall:

- a) Initial the items on Schedule B for which the Customer/Developer will seek bids from pre-qualified contractors.
- b) Initial the remaining Schedules to acknowledge their inclusion as a part of the Agreement
- c) Sign this Agreement
- d) Sign acknowledgement of receipt of signed copy of this Agreement

**Step #7**

Customer/Developer shall submit to E.L.K. for final written approval, detailed plans, specifications and drawings, in paper format and digitized AutoCAD version 14, and such other material and information that E.L.K. may reasonably require.

The Customer/Developer must provide E.L.K. with original bid documents for review. The costs of the selected Alternative Bid will be borne directly by the Customer/Developer and all costs associated with the electrical distribution servicing shall be separately shown in all tenders and shall be monitored throughout the work by E.L.K. staff to ensure proper cost assignment.

**Step #8**

E.L.K. shall inspect, test and commission, at the Customer/Developer's expense, any distribution system assets constructed under the Alternative Bid Process. The Customer/Developer shall provide unimpeded access at all times for all employees, contractors, subcontractors and agents of E.L.K. and for their equipment to perform installations, inspections, tests and commissioning works contemplated by this Agreement.

### APPENDIX 3

#### Step #9

Re-calculate the costs to identify the amount to be refunded or the increased cost to the Customer as per Item #2 of the main body of the Agreement. The settlement shall be refunded to the Customer/Developer on or before the completion of this Agreement as noted in Item #10, but not before the date and time of Item #11, in the main body of this Agreement.

#### Step #10

The initial demand or load proposed by the Customer, as submitted in Schedule C, for the EEM, must be reasonable and shall be subject to acceptance by E.L.K. The Customer and E.L.K. agree that on the one year anniversary of the first dollars spent by E.L.K., the average load and/or Customer connections for the period will be entered into the EEM to determine the potential rebate to the Customer from their security deposit. This practice will continue through the connection horizon or until the entire security deposit has been rebated to the Customer. After the five year Connection Horizon, E.L.K. is not obligated to provide any re-evaluation of the proposed development.

#### Step #11

A settlement of the Capital Contribution amount may require the Customer/Developer to pay E.L.K. or it may be necessary for E.L.K. to refund the Customer/Developer the settlement amount depending on the results of the Economic Evaluation Analysis as identified in Schedule D.

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Schedule F: Development Agreement

THIS AGREEMENT made in duplicate this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

BETWEEN:

\_\_\_\_\_

hereinafter called the **DEVELOPER**  
OF THE FIRST PART

-and-

**E.L.K. Energy Inc.**

hereinafter called the **BOARD**  
OF THE SECOND PART

Where, in this agreement, the following words are used, it shall be used to refer to and to mean:

- Board            E.L.K. Energy Inc.
- Town            The Corporation of the Town of \_\_\_\_\_
- Engineer        The Engineer of E.L.K. Energy Inc. or such other person(s) as may be duly authorized and appointed by the Board
- Developer        The Developer and/or person(s) who have entered into an agreement with the Town and/or the Board for the development or subdivision of the lands included in those lands shown in Schedule "A" attached hereto and more particularly described in Schedule "B" attached hereto and installation of services therein.
- Land             Shall mean those lands described in Schedule "B" of this Agreement

**WHEREAS** the Developer intends to develop a subdivision on the lands shown as \_\_\_\_\_, in Schedule "A" attached hereto (the "Subdivision") and described more particularly in Schedule "B" attached hereto;

**AND WHEREAS** the Developer is desirous of purchasing electrical utilities from the Board;

**THEREFORE THIS AGREEMENT WITNESSETH** that in consideration of the mutual covenants hereinafter expressed and for other good and valuable consideration (the receipt and sufficiency of which are hereby acknowledged), it is agreed by and between the parties as follows:

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**APPENDIX 3****1. EXTENT OF WORK**

- 1.1 The extent of the work shall be construed to consist of the labour and material necessary for the construction in a good, substantial, workmanlike manner of all the items required for the completion of the entire work consisting of all the items shown on the project drawings as it relates to Phase \_\_\_\_\_ indicated thereon (see Schedule "C") as approved by the Board, and which shall be installed according to the Board's specifications; also consisting of all excavations, drains, sheathing, shoring, false-work, forms, tools, appliances and material necessary to the safe, expeditious and effective execution of all temporary and permanent work in connection with the foregoing. Schedule C is not attached hereto but is part of this agreement and is incorporated herein by reference and is filed with the Chief Executive Officer of the Board and is identified by the signatures of the signing officers of the Developer and the Board. Schedule C does not constitute approval of drawings as it relates to other lots not part of Phase \_\_\_\_\_ and not described in Schedule B.
- 1.2 The Developer will be responsible for obtaining the location of all utilities (other than utilities of the Board) such as electric underground cables, water pipes, Bell Telephone conduits, sewer catch basins, farm drainage tiles, gas mains, and all other related municipal services from the Utility or other Authority concerned and must protect and/or repair same subject to the regulations of the particular Utility or other Authority involved. The Developer agrees to indemnify and save harmless the Board from any liability, costs, expenses, claims, demands arising out of the Developer's failure to protect and/or repair same.
- 1.3 Excavations, backfilling and all work on Municipal streets by the Developer must have the approval of the Engineer and/or Board and Municipality.
- 1.4 Pavements, driveways, entrances to property, lawns, and landscaping must be replaced or restored by the Developer in as good condition as found and developer agrees to fill in all excavations and as far as practicable restore the surface to the same condition as prior to the commencement of construction or of any subsequent work to it.
- 1.5 Barricades and regulation lighting must be installed by the Developer on all works for the protection of vehicles and pedestrians and all precautions taken to minimize risk of damage and inconvenience to others.
- 1.6 All work shall be carried out by the Developer so that it conforms to the regulations of the Construction Safety Act and the Workplace Safety & Insurance Board as pertains to the safe working condition of the men employed on the job.
- 1.7 The Developer shall take full responsibility for pavement breaks which must be approved in advance by the Engineer and/or Board and restored to the regulations applicable.
- 1.8 In the absence of the Developer from the job (whether permanent or temporary) he shall provide and leave a competent and reliable agent or foreman in charge for him and this person shall be considered as acting in his place and all notices, communications, instructions or orders given, sent or served upon this person shall be taken as served upon the Developer.

**APPENDIX 3****2.0 ELECTRICAL DISTRIBUTION SYSTEM**

- 2.1 The Developer hereby agrees to construct within 180 days of signing this agreement at his own expense, a complete underground electrical distribution system for the Subdivision, including pad-mounted transformers, all trenching and backfilling in earth and also install service conductors to the right-of-way limits. The system shall be designed and installed in accordance with the Board's specifications which are in effect at the time of installation of the system and as more specifically illustrated in Schedule C. The Developer agrees to maintain the system in accordance with the Board's specifications in effect from time to time until termination of the maintenance period as identified herein provided that the Board reserves the right to complete said maintenance work as agent on behalf of and at the cost of the Developer. The installation of the electrical distribution system shall be subject to inspection by the Board from time to time.
- 2.2 The Board consents to the connection of the electrical distribution system proposed by the Developer to the Board's system at such time that the Board is satisfied that the construction of the Subdivision is within the Board's specifications. The Developer will be responsible for all cost associated with the Board making the connection of the developers electrical distribution system to that of the Board's.
- 2.3 The Developer agrees that he will pay to the Board upon demand, in cash or by certified cheque all inspection fees in respect of the installation and connection of the electrical distribution system.
- 2.4 Notwithstanding anything contained herein to the contrary, the title to and ownership of the electrical distribution system and all parts thereof, constructed pursuant to this agreement shall upon, and not earlier than, the Board's written notice of acceptance of the work and services and at all times thereafter be bested in and automatically transferred to the Board and said notice shall in conjunction with this agreement operate as a good and valid transfer effective as of the date of said notice. Provided that and without detracting from the foregoing, the Developer agrees to execute and deliver to the Board, without cost, any transfers, conveyances and other assurances in connection with the foregoing and transferring and conveying title thereto to the Board free and clear of any and all encumbrances and shall do so prior to energizing if called upon.

**3. ELECTRICAL DISTRIBUTION SYSTEM PAYMENT**

The Developer agrees that he is responsible for all costs associated with the construction of the required electrical distribution system within the lands to be developed. Developer shall be also responsible for all costs associated with this agreement including but not limited to the connections as mentioned in Section 2.2 hereof, the inspections as mentioned in Section 2.3 hereof, including but not limited to the Board's engineering, legal and other costs associated with preparation, negotiation, and enforcement of this agreement and inspection of the system. All payments due the Board will be paid upon demand.

**4. WORKS TO BE INSTALLED**

- 4.1 The Developer shall at its expense complete:
- a) Supply and installation of an electrical distribution system including underground service to the street line located in road allowances in front of the properties receiving services and/or side lot;
  - b) Electrical secondary services in accordance with all Board regulations of 120/240 volts from transformer locations to the street line; primary voltage power supplies to all other land areas within the subdivision as illustrated on the project drawings as approved by the Board.

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**APPENDIX 3**

c) A street lighting system meeting the requirements of the Board and the Town.

**5. REQUIRED MINIMUM CONDITIONS FOR INSTALLATIONS**

5.1 The Developer acknowledges that the said works shall be installed in accordance with the following required minimum conditions applying to the installation of an underground electrical distribution system to residential subdivisions:

- a) Gravel road base must be completed and boulevards must be level and graded to within 100 mm of finished grade with finished grade indicated to the requirement of the Board;
- b) Underground wiring cannot be economically installed in inclement weather. Areas requiring electrical power during the winter must be ready to receive the underground system in early fall. Extra costs resulting from inclement weather shall be the responsibility of the Developer;
- c) The electrical distribution system layout is based on the subdivision as laid out according to Registered Plan (Schedule "A"). Any deviation from this or any changes in lots could necessitate a complete new layout. The Developer acknowledges that the Board approval be obtained before any changes are implemented. Should any changes occur after any or all of the electrical plant is installed, alterations to the electrical distribution system layout will be made at the expense of the party applying for such change;
- d) The board is unable to guarantee any date on which power will be available to any specific area. The condition of the subdivision and weather play a much more critical part in underground construction as compared to overhead. Developer shall ensure the building trades keep the boulevards and rear lot easements clear of construction shacks, materials and debris;
- e) Requests for temporary building power or temporary full capacity service must be made as soon as possible. These facilities when available will be provided at the cost of the party requiring such service. Labour and unrecoverable material will be charged for erection and dismantling;
- f) Developer shall make best efforts to locate poles, pedestals, vaults and other portions of the plant in such a manner as to not hinder the future intended use of the property involved. It is contemplated that some error in the location of the plant is inevitable or that future owners may request relocation of some portions of the plant. The Board does not assume any responsibility in relocation of any of the plant which may be hindering the use of a particular portion of the property to which this agreement applies and relocation of plant will require the consent of the Board, the cost of which will become the responsibility of the owner of the property involved at the time the issue of relocation arises or request for relocation is made;
- g) Where underground fixtures are to be installed which will be required to be at or near the finished grade, such as transformer vaults, pads, junction boxes, switching compartments and the like, the Developer assumes the responsibility and agrees that he will provide at no cost to the Board, the necessary Ontario Land Surveyor (herein "surveyor") to supervisor the setting of the fixtures at the proper grade as established by the Board prior to setting of the fixtures. Said

**APPENDIX 3**

surveyor shall provide a certificate to the Board certifying that the said fixtures are at the required grade.

- 5.2 Following completion of the installation of the underground electrical distribution system, but prior to the acceptance of the system by the Board, no excavation will be carried out in the development without the Developer or contractor or sub-contractors or future owner of the property requesting locations from the Developer or his engineer as to the whereabouts of the underground wiring. This covenant is also required from and shall be deemed to bind any future owners including lot purchasers from the Developer.

**6. EASEMENTS**

- 6.1 Where easements, rights of way, and any other rights of entry, access or otherwise (hereinafter "the Easements"), are required by the Board for the purpose of carrying out the distribution of electricity or other work or services hereunder or are otherwise required by the Board in relation to the system, to be provided hereunder, the Developer agrees to provide the Easements, for one (1) dollar to the Board prior to the completion and acceptance by the Board of construction of the services, works and systems, mentioned herein, and as reflected on the approved project drawings free and clear of any prior encumbrances.

- 6.2 No work shall be commenced until the Easements are provided and the documents associated with the Easements are properly registered, at the cost of the Developer which documents may include, without limitation, any postponements and/or subordination of encumbrances to the Easements. The Easements shall be approved as to form and content by the Board's solicitor. The Board may request that the Developer provide to the Board an opinion from a duly qualified solicitor in Ontario as to the Developer's title to the lands and any encumbrances affecting title to the lands and no work shall be accepted by the Board until any requested opinion shall have been delivered to the Board in such form and verified in such manner as the Board's solicitor may require.

**7. BACKFILL AND COMPACTION**

All trenches, regardless of their location, whether they be in the roadways, in the boulevards, or under sidewalks, lawns, etc. are to be backfilled with suitable material and properly compacted. Mechanical compactors are to be used where possible and compaction is to be done at least every 150 mm. No wet, frozen or unsuitable materials are to be used for backfilling, and, all cases, the requirements of the Town Engineer will be met. Where excavations are made in roadways where roadway bases have been laid, new materials will be installed in the top of the trench in accordance with the requirements of the Engineer.

**8. SPECIFICATIONS**

The installation of the electrical distribution system is to be carried out within 180 days of signing this agreement in accordance with the specifications previously referred to as supplied by the Board. These specifications are considered to be a part of this agreement and the Developer acknowledges having a copy of said specifications.

**9. ROAD GRADES**

Before actual construction begins, proof must be furnished by the Developer or his agents that the road grades have been approved by the Engineer and/or Board in order that all plant as required by this agreement will be laid to the proper grade.

**APPENDIX 3****10. PROPERTY STAKES**

Sufficient property stakes shall be available and placed so that the proper and locations limits for all plant to be constructed as required by this agreement and in accordance with the project drawings can be readily determined.

**11. ENGINEERING AND INSPECTIONS**

- 11.1 The Developer shall employ the proper Engineers registered with the Association of Professional Engineers of Ontario to design and supervise the construction of all works required to be installed by the Developer pursuant to this agreement at the cost of the Developer.
- 11.2 All of the works installed in connection with the electrical distribution system shall be constructed and installed under the supervision of Inspectors employed by the Board, and the Developer hereby agrees to pay all accounts of the Board in connection with the services of the said Inspectors. No work specified in the agreement or in the specifications shall be carried out unless there is an Inspector to insure that all work is being completed in accordance with the specifications approved by the Board.
- 11.3 The Board will issue to the Developer a monthly invoice for the cost of inspection performed in the subdivision during the immediately preceding month. The Developer shall pay such invoices within ten (10) days of receipt thereof.

**12. UNCOMPLETED OR FAULTY WORK**

If, in the opinion of the Engineer and/or Board the Developer is not executing or causing to be executed the work required in connection with this agreement or is improperly performing the work or shall the Developer neglect or abandon before the completion, or unreasonably delay the same, so that conditions of this agreement are being violated or carelessly executed or in bad faith; or shall the Developer neglect or refuse to renew or again perform such work as may be rejected by the Engineer and/or Board as defective or unsuitable by the Developer, in any manner; or of in the opinion of the Engineer and/or Board the Developer defaults in the performance of the terms of this agreement, then in any such case, the Engineer and/or Board shall promptly notify the Developer, in writing, of such default or neglect and, if such default or neglect is not corrected to the satisfaction of the Board within seven clear days after notice, the Board shall thereupon have full authority and power to exercise its option, hereby granted, to purchase materials and employ workmen and machines for proper completion of the said work at the cost and expense of the Developer and to enter upon the lands to perform the work. In case of an emergency, in the opinion of the Engineer and/or Board such work may be done without notice. The cost of such work shall be calculated by the Engineer and/or Board whose decision shall be final. The cost of this work, together with an Engineering fee of 5% of the cost of materials and work if applicable shall forthwith be paid to the Board by the Developer on demand. It is further understood and agreed between the parties hereto that such exercise of option and entry upon the lands to perform such work shall be as an agent for the Developer and shall not be deemed for any purpose whatsoever as an acceptance of the said services by the Board and shall not serve as a notice of acceptance within the meaning of this agreement.

**13. DAMAGE CLAIMS**

- 13.1 The Developer shall be responsible for the total costs associated with the repair of any damage to the said works which damage is caused during the course of construction of buildings within the subdivision. The Developer shall indemnify the Board from and against all damage caused by the Developer, his employees, servants, agents and contractors to the works installed.

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- 13.2 The Board shall give to the Developer notice of any claims arising under the above paragraph upon the report of any such damage to the Board and shall assist the Developer in determining the person or corporation responsible for such damage and in recovering compensation therefore without prejudice or derogating from the indemnity of the Developer.

**14. AS-BUILD DRAWINGS AND DOCUMENTATION**

Immediately upon completion of the works required by this agreement, and as constructed by the Developer, the Developer will prepare and forward to the Board, as-built drawings and associated documentation which accurately reflect the locations and grades of all the works constructed. Same drawings and documentation will be prepared by the Developer in accordance with the requirements of the Board and at no expense to the Board.

**15. LIABILITY INSURANCE**

The Developer shall, at its own expense and prior to construction of the works, obtain and lodge with the Board a policy or policies of insurance satisfactory to the Board, indemnifying the Board with cross-liability endorsement against any claim for public liability, personal injury including death, and/or property damages to limits of \$5,000,000 for any one accident arising in any way out of the construction, installation, repair or maintenance of all works and services required to be done under this agreement. The said policy shall be maintained in full force and effect at the expense of the Developer until the termination of the Maintenance Period outlined herein.

**16. PERFORMANCE BOND**

The Developer shall, prior to commencing any servicing work, deposit with the Board an irrevocable and unconditional letter of credit of a Schedule 1 chartered bank of Canada in an amount equal to one hundred percent (100%) of the cost of construction of all the services required to be installed by the Developer under this agreement to guarantee the installation of all services required, and to otherwise perform the terms of this agreement, which letter of credit shall otherwise be in form and substance satisfactory to the Board. The said cost of construction of services shall be based upon the cost of services required under this Agreement estimated by the engineer for the Developer and approved by the Board and the Board's Engineer. The letter of credit (or the undrawn portion thereof, as the case may be) shall not be released until the Developer has filed a maintenance letter of credit in accordance with Section 18 hereof, covering the services in respect of which such performance letter of credit was deposited. The amount of the letter of credit shall not include the cost of construction of any of said service which are installed by the Board pursuant to an Awarded Contract or otherwise (herein "Board Work"). The Developer acknowledges that the Board may require pre-payment of the costs of Board Work prior to commencement of that particular work.

**17. MAINTENANCE BOND**

The Developer shall be responsible for all the materials, equipment and work until all construction and installation has been completed as described herein, and upon such acceptance thereof by the Board the Developer shall deposit an irrevocable and unconditional letter of credit from a Schedule 1 Canadian chartered bank in an amount equal to fifty percent (50%) of the total cost of the construction work required for a period of one year from the date of such acceptance ("the maintenance period"), which letter of credit shall otherwise be in form and substance satisfactory to the Board.

The Developer shall be responsible during the maintenance period for all of the services installed upon the lands and the maintenance thereof, and correct any deficiencies in workmanship,

**APPENDIX 3**

materials and labour installed by the Developer pursuant to this agreement, all to the satisfaction of the Board and the Board's Engineer in the manner outlined in article 2.1 above.

In connection with the foregoing, it is acknowledged that the Board may (without any obligation to do so) bid on and be awarded a contract or contracts (the "Awarded Contract(s)") to perform or provide for the Developer certain workmanship, materials and/or labour in connection with the services to be installed by the Developer under this Agreement. During the maintenance period, the Developer shall not be required to correct any deficiencies in workmanship, materials or labour performed or provided by the Board pursuant to an Awarded Contract so long as and to the extent the Board is required to rectify such deficiencies pursuant to the terms of such Awarded Contract.

**18. LIENS OR CLAIMS**

The Developer agrees that upon applying for acceptance of the electrical system in the said subdivision, to supply the Board with a Statutory Declaration that all accounts for work and material have been paid or provided for, that there are no claims for liens or otherwise, in connection with such work done or material supplied on behalf of the Developer in connection with the Subdivision and such other proof of compliance with the Construction Lien Act as may be required by the Board, the Engineer and/or the Board's solicitor. And provided further, that should there be any outstanding liens or claims for work and materials from time to time, the Developer shall indemnify the Board from any such liens or claims, including without limitation all liens whatsoever under the Construction Lien Act, R.S.O. 1990.

**19. ACKNOWLEDGEMENT**

The Developer acknowledges having been given a reasonable and sufficient opportunity to review this agreement and the offer to connect and to obtain independent legal, technical, and business advice as to the developer's rights and obligations under those documents. The persons(s) executing this document on behalf of the Developer warrant and represent that they have authority to bind the developer to this agreement and that it is enforceable against the developer.

**20. GENERAL**

- 20.1 This agreement shall inure to the benefit of and be binding upon the Parties hereto and their respective heirs, administrators, successor and assigns.
- 20.2 Notices and other correspondence given pursuant to the agreement, if required to be given to the Board shall be delivered or mailed by prepaid post to:

**E.L.K. Energy Inc.  
172 Forest Avenue  
Essex Ontario  
N8M 3E4**

and if required to be given to the Developer, shall be delivered or mailed by prepaid post to:

- 20.3 Each party has the right to change its address for the purpose of notices hereunder by a notice to the other at the address then in force hereunder. All invoiced or notices shall be deemed to have been received on the date of delivery where the invoice or notice is in fact delivered, or on the second day following the day on which the invoice or notice was mailed.

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- 20.4 Notwithstanding anything hereinbefore mentioned where there is an interpretation of the provision of this Agreement or of the plans and specifications herein referred to, the Board's interpretation shall be binding on the parties hereto.
- 20.5 This Agreement is without prejudice to any right, power or authority given to the Board under any statute as that statute may be amended from time to time and the rights of the Board under this agreement are in addition to any of said rights, powers, or authority.
- 20.6 For greater certainty it is specifically acknowledged and agreed that the burden of this Agreement shall run with the Land. The Developer agrees that this Agreement may be registered upon the title to the land both before and after registration of the Plan of Subdivision or any Reference Plan outlining how the property is to be subdivided. Such registration shall be at the sole discretion of the Board and paid for by the Developer. In the event of registration, the Board may call for the agreement to be registered free and clear of any prior encumbrances in like manner as the Easements. The Board or its solicitor is hereby authorized to add to this agreement the registration number and date of the Plan of Subdivision or Reference Plan after it is registered.
- 20.7 This agreement and the provisions hereof do not give to the Developer or any person acquiring any interest in the Land (each hereinafter in his clause called "such person") any rights against the Board or the Engineer with respect to the failure of any such person to perform any obligations under this agreement or the failure of the Board to force any such person to perform any obligations under this agreement or any negligence of any such person in the performance of the said obligations. Further, the only duty and responsibility of the Engineer arising out of this agreement is to the Board and this agreement and any work or services done or performed by the Engineer under this agreement do not in any way create any liability on the part of the Engineer to the Developer or any person acquiring any interest in the Land.
- 20.8 The Developer shall not assign the benefits of this agreement or any interest herein without the written consent of the Board.
- 20.9 This agreement shall be read with any change of gender or number required by the context.
- 20.10 It is agreed that interest shall accrue at the rate of eighteen (18%) percent per annum calculated monthly on any monies payable to the Board under this agreement from the date default in payment of such monies occurs. All monies payable to the Board under this Agreement and all interest accruing on monies in default shall be a charge on the Land. The Board may also claim against any bond, letter of credit or other security filed with the Board with respect to any monies or interest owing to the Board hereunder.

APPENDIX 3

IN WITNESS WHEREOF the Parties have hereunto set their corporate seals attested by the hands of its proper officers duly authorized in that behalf.

SIGNED, SEALED AND DELIVERED in the presence of:

XXXXXXXXXXXX, Developer

Per: \_\_\_\_\_, President  
I have authority to bind the Corporation

E.L.K. Energy Inc.

Per: \_\_\_\_\_  
(Chairman)

Per: \_\_\_\_\_  
(Chief Executive Officer)

We have the authority to bind the Corporation

**APPENDIX 3**

Schedule B

Part Lot \_\_\_\_\_, Concession \_\_\_\_\_,

Or Lots \_\_\_\_\_ on Plan 12M- \_\_\_\_\_

Town of \_\_\_\_\_, County of Essex

Province of Ontario

Now designated as Parts/Lots \_\_\_\_\_, All on Plan \_\_\_\_\_  
(delete/amend as necessary)

# UNDERGROUND STANDARDS



April 30, 2003  
Revised December 2021

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**APPENDIX 4**

Specifications and Regulations for Installation of Residential Underground Electrical Plant in E.L.K. Distribution Areas (former Towns of Belle River, Comber, Cottam, Essex, Harrow and Kingsville).

**1.0 GENERAL**

1.1 Introduction

It is the purpose of the following text to provide for consulting engineers, architects, subdividers, and contractors, as well as any other person concerned with the decision and/or installation of an underground electrical distribution system under a subdivision agreement in the Town of Essex, Town of Lakeshore or Town of Kingsville, the specifications and requirements of E.L.K. Energy Inc.

The consultant shall maintain accounts suitable to the Board's Director of Finance, who will require separate accounts for the capitalization of transformers, distribution system and street lighting, on an installed cost basis.

This information will be supplementary to any other specifications approved by the Board.

Where regulations within this text pertain to subdivisions, the regulations are intended to be in accordance with the terms of the current Subdivider's Agreement and Engineering Procedure in subdivisions issued by the Corporation of the Town of Essex, Corporation of the Town of Lakeshore or the Corporation of the Town of Kingsville.

1.2 Definitions

The word "Board" shall mean E.L.K. Energy Inc.

The word "Contractors" shall mean the firm of contractors, the company or the individual acting as contractor and commissioned by the owner to install the electrical distribution system.

The word "Plant" shall mean the underground electrical distribution system.

The word "Owner" shall mean the person or persons currently registered as the owner or owners of the land.

The word "Inspector" shall mean an employee of the Board who has been assigned by the Engineer, or the Engineer to inspect the work and method of installation.

1.3 System Co-ordination

All plant proposed by the Owner shall be of sufficient size as determined by the Board, to service the proposed project as well as adjacent lands which, in the opinion of the Board, may require the use of the Owner's Plant, in part or in whole as feeders.

1.4 Easements

The Owner shall provide, at the Board's request, sufficient easements to enable the servicing of existing or proposed Developments or subdivisions from Plant located on the Owner's property.

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**APPENDIX 4**

1.5 Submission of Plants

(a) Prior to Commencement of Work

The Owner or his Engineers shall submit to the Board two (2) prints of the proposed layout plan to a scale not less than 1/20 imperial or equivalent in metric for preliminary approval. The plan shall show the location of primary cables, secondary cables, service cables, transformers, switchgear, load break junctions, vaults, road crossings, street lighting and connection points with existing distribution systems. Municipal numbers must be recorded on all lots within proposed development.

The Owner or his Engineers shall also submit to the Board two (2) copies detailing the method of construction of trenches, road crossings, transformer vaults and transformer to be supplied, switchgear vaults, meter installation, transformer grounding, and street light pole installation for the Board's approval, as well as profiles of grade for all transformer installations.

After examination by the Board, one copy shall be returned to the Owner or his Engineers. The returned plan will be stamped approved and signed by the Board if the plan meets the Board's requirements and specifications. Should the plans not be approved, the Owner or his Engineers shall resubmit two (2) copies incorporating the appropriate alterations as instructed by the Board. Only after final approval has been received from the Board and all required agreements between the Board and the Owner have been completed, may the work proceed, under direction of the Board's inspector.

(b) Prior to Energizing

Prior to energizing by the Board of any Plant, the Owner or his engineers shall submit one digital print, one mylar print, plus three copies of this, suitable for reproduction of the Plant "as built" by the Contractor. Where there are no differences between the proposed and the installed Plant, written notification by the Owner or his Engineers to the Board is required.

1.6 Inspection

The Board reserves the right to provide an Inspector at the expense of the Owner, who will be on duty for the duration of the work and the Contractor shall provide such accommodation as he may require. The Inspector is empowered to stop work at any time he feels the Contractor is not proceeding according to the specifications of the Board.

Work shall not commence until the Board has been notified that such work is to commence and until the Inspector is present at the site.

1.7 Contractor Approval

Any contractor entering into contract with the Owner for the installation of a plant, shall, prior to entering that contract, be required to submit proof to the Board of previous experience and satisfactory performance of both the company and its workmen in the area of expertise to be contracted. Such experience and performance shall be to the satisfaction of the Board before any work is commenced.

**APPENDIX 4**

1.8 Prior to Commencement of Installation

Prior to the commencement of installation, inspection shall be arranged for as in Section 1.6, Contractor Approval shall be obtained as in Section 1.7, Approval of Plans shall be obtained as in Section 1.5. In addition cost information of the Plant is required by the Board for use by the Board's Accountants. This information shall remain confidential and shall contain a breakdown of the total contracted cost of the Plant including installation and engineering costs in the following manner:

- 1) Total number and cost of transformers installed.
- 2) Total amount and cost of cable installed.
- 3) Total number and cost of street lights installed.

**2.0 PRIMARY DISTRIBUTION**

An Owner or his Contractor may install a primary distribution system in a subdivision. The current general specifications of the Board shall be adhered to.

The Owner or his agents shall obtain approval as in section 1.7 before commencing any installations.

The Inspector shall inspect the progress of the work as in section 1.6.

The Owner shall indemnify and save harmless the Board from all claims or actions of any nature or kind whatsoever arising out of use of such lands until such time as the Plant installed therein has been accepted by the Board.

2.1 Location

All primary distribution cables shall be underground. The center line or primary cable trenches shall be in accordance with typical utility cross section. Deviations from the standard location must be approved by the Board.

2.2 Installation

a) Inspection

An Inspector is required at the job site from time to time, or as long as is required to ensure that the provisions of the specifications are adhered to, especially in regards to the quality of materials and workmanship. Before commencing installation, the Owner or his Contractor shall apply to the Board for an Inspector. The application shall be made at least 24 hours prior to the commencement of work. Any work done in the absence of an Inspector may be ordered to be opened up for examination and should there be any faults in the workmanship or materials, must be rebuilt or replaced as directed by the Inspector at the Contractor's sole expense, but no approval by any Inspector shall be taken as improper work or material, which in every case must be removed and properly replaced whenever discovered at any stage of the work.

The Inspector is authorized by the Board to stop the installation at any time if there is not sufficient quantity of suitable and approved material, or if current specifications and regulations are not adhered to.

**APPENDIX 4**

The Inspector's responsibilities shall not include ensuring that a trench is in accordance with the Trench Excavators Act or the Construction Safety Act, nor shall the Inspector set out work or give any stakes, lines, levels or grades.

The Owner shall pay the Board for the inspector's services at the current rates Monday through Friday, at regular Board hours, and at current overtime rates for all other hours.

If, in the opinion of the Board, the work at any site is of sufficient scale that an Inspector may not give proper supervision to the job, then the Board may decide that additional Inspectors are required and if required will place these additional Inspectors on the job and charge the Owner for their services at the current rates.

Any orders or directions, other than as herein provided for, given by Inspectors shall not be binding upon the Board.

b) Contractor's Absence

The provision for inspection by the Board is not to be considered a substitute for supervision by the Owner or his Contractor. In the absence of the Contractor from the job (whether permanent or temporary) he shall provide and leave a competent and reliable agent in charge on his behalf and this person shall be considered as acting in his place and all notices, communication, instructions, or orders given, sent or served upon this person shall be taken as served upon the Contractor.

c) Connection to Existing Primary Distribution Systems

The location and method of connecting to existing systems shall be determined by the Board. All work related to such connecting shall be done by the Board's forces and at the expense of the Owner.

d) Alignment and Grade

Before the commencement of work, the Owner or his Contractor shall provide stakes so as to indicate line and grade as shown on the approved drawing. Only the most recently approved drawings are to be used for this purpose.

Any cable incorrectly laid due to errors in setting out location and/or grade shall be relocated at the Owner's expense. Any deviations from line or grade required due to unforeseen obstructions must be approved by the Engineer.

e) Excavating and Trenching

Location of trenches shall be as outlined in Section 2.1

Trenches shall be dug as true to line as possible to a minimum depth of forty-four (44) inches below final grade. The bottom of the trench shall be uniform and raked free of stones and all other foreign sharp materials. All trench profiles shall be approved by the Board.

Clean masonry sand or equivalent shall be provided by the Contractor and raked to a minimum depth of 150 mm before the installation of cables.

**APPENDIX 4**

## f) Laying of Cables

Cables shall be laid in such a manner that they will not be damaged in any way and in no case shall one cable cross over another in such a manner that it will bear directly upon the lower cable.

Primary cables shall be laid as required in 100 mm Type II PVC duct from the reel and not pulled by any mechanical means. Where this is not possible the cables are to be walked in by hand.

Where primary cables are installed in a common trench with service cables, primary cables shall be placed on the street side of the trench 150 mm deeper than secondary cables with a sand separation.

Cables shall have a minimum horizontal and vertical separation of 150 mm.

## g) Road Crossings

All road crossing trenches shall be to a depth of 1.2 m below final grade. All cables shall be encased in separate 100 mm (minimum) PVC pipe approved by the Board. All pipes shall extend a minimum of 1.83 m beyond the curb on both sides of the road way or to cable trench.

All road crossing duct structures shall be encased in cement from curb to curb. The duct structure is to be a self-supporting structure with the ducts in position before pouring the concrete. See drawings DU-VII - 9 and 10. Intermediate spacers establish vertical and horizontal separation in the duct assembly.

The first tier of ducts is laid on the base spacers centered on the bottom of the trench located approximately 1.5 m apart. This will allow a 75 mm thickness of concrete below the bottom layer of ducts. The joints and spacers should be arranged as shown in drawing DU-VII-9. If the duct bank is to be constructed over recent fill or where the bottom of the trench is not solid, the trench should be deepened and the base spacers blocked up from the bottom so that the thickness of the concrete above and below the duct will be at least 130 mm. In such cases it may also be necessary to reinforce with 12 mm, 16 mm or 19 mm steel bars laid longitudinally along the trench with approximately a 150 mm lateral spacing and approximately 50 mm inside the concrete envelope, and should lap 40 bar diameters at the ends. In such cases only individual runs of reinforcing bars should be tied together.

The subsequent tiers of ducts required are laid on intermediate spacers placed immediately above the base spacers. The top tier is sometimes given additional support by placing extra spacers midway between the tiers of spacers supporting the duct structures as a whole. The whole structure should be braced down at the tiers of spacers to maintain accurate position of the ducts against the tendency of the concrete to lift and float the ducts.

Concrete should be in accordance with the Canadian Standards Association's Standards CAN3-A23.2 – M77, CAN3 – A23.1 – M77 and CAN3 – A23.4 – M78, Concrete Materials and Methods of Concrete Construction, Methods of Test for Concrete and Precast Concrete Materials and Construction, with a minimum strength of 20 Mpa normally used.

APPENDIX 4

Concrete should not be poured when the temperature is below freezing without special precautions. If concrete is poured in freezing weather, heated aggregates and non-corrosive additives should be used. After pouring, the concrete should be covered.

When the duct work is layered the aggregate used in the concrete should be small enough (9 mm) to allow it to flow freely between the ducts.

To prevent any displacement of the duct structure during pouring, the concrete should be deflected down alongside the structure to the bottom and up through the assembly. A long flat spatula worked carefully up and down between the ducts will help to eliminate voids.

Concrete should be poured into the trench until the top layer of ducts is covered to a minimum depth of 75 mm. Chutes should be used when pouring so that the aggregate does not separate.

All other requirements as outlined in section 2.2 (f) apply.

h) Backfilling

Trench shall be backfilled by hand with a minimum of 150 mm of clean, mason sand before mechanical backfilling.

Backfilling shall be mechanically tamped to 90% density for road crossings and runs along the road and to 50% for all other locations.

All roadway, walkways, driveways, or sodded and other finished surfaces shall be compacted and replaced in as good condition as they were prior to work commencement.

i) Cable Termination

Where cable ends are left exposed in transformers, vaults or service locations, they shall be terminated with a permanent elbow and put on an arresting post attached to an arrestor.

Where ducts are laid and cables are to be installed at a later time, cable pull wires shall be installed and both ends of the duct shall be capped in a waterproof manner and marked for ease of location by an appropriate method of staking.

All work on cable termination poles (poles must have lightning arrestors installed) shall be done by the Board's forces and at the cost of the Owner.

j) Splicing

Splices in primary cables shall not be allowed under any circumstances.

k) Cable Testing

All primary cables shall be tested in accordance with the attached **System Testing Specification**.

If terminations have been installed, the test voltages shall not exceed the operational range of the termination.

## APPENDIX 4

When one or more cables are being tested which are paralleled by other disconnected cables, the disconnected cables shall be grounded to avoid dangerous build up of voltage.

The Inspector shall be present for all testing as in Section 1.6. All testing to be at owner's expense.

If the Board feels it necessary, the Owner or his Contractor may be called upon to have further tests performed on main primary cables, using an approved radar testing device.

### l) Common Trenching

Common trenching shall be allowed with Bell Canada Ltd. and/or other companies providing approval is given by the Board prior to installation. The Board shall not be responsible for the establishing of layout requirements of others involved in the application of common trenching.

### 2.3 Materials

All cables, connectors, terminators, ducts and other associated materials shall be provided by the Contractor, who will be responsible for the safe storage of all such materials until they are used. Said materials are required in accordance with the attached **Material Specification** or approved equal.

### 2.4 Cable Marking Identification

All primary cable shall be tagged entering and leaving transformers and/or cubicle within the transformer and/or cubicle compartment. Tags shall be of the coloured rigid plastic type attached by means of a permanent type of tie approved by the Board. Tags of the appropriate colour shall be attached to each primary phase cable identifying the previous and/or next transformer and/or termination point and/or junction cubicle from which it leads to or from. For this purpose each transformer and/or cubicle shall be identified by a number supplied by the Board and prefixed by the letter "T" for transformer, "C" for junction cubicle and "L" for load centers. The cable tag shall be marked with a waterproof and fade proof marker in a clear and legible manner.

Materials used shall receive approval from the Board prior to their use. The above identification shall be in addition to colour coding of cables by means of coloured tape. Only red, blue and white coloured tape shall be used to identify the appropriate phases. A single colour band shall be used for all cables entering the transformer or cubicle from the normal direction of feed and two colour bands for all cables leaving the transformer or cubicle.

### 2.5 Circuit Loading

The maximum number of 50 or 75 kVA pad-mounted transformers per double ended open loop shall be fifteen (15). Any deviation in excess of this number shall receive prior approval of the Engineer.

## 3.0 SERVICE CABLES

An Owner or his Contractor may install service cables in a subdivision. The current general specifications of the Board shall be adhered to.

The Owner or his agents shall obtain approval as in Section 1.5, before commencing any installation. The Inspector shall inspect the progress of the work as in Section 1.6.

**APPENDIX 4**

3.1 Location

All service cables shall be underground. Service to individual customers shall be provided by individual service runs from transformation points to standard service locations or meter bases.

Service cables shall be run directly from transformers to service entrances or meter bases. If this is not possible, cables shall be terminated at the lot line, 0.9 m from the property line.

Service trenches shall run parallel to the street property line and conform to typical utility cross section.

3.2 Installation

- a) Inspection – As per Section 2.2 (a)
- b) Alignment and Grade – As per Section 2.2 (d)
- c) Excavation and Trenching – As per Section 2.2 (e)
- d) Laying of Cables – As per Section 2.2 (f)
- e) Road Crossing – As per Section 2.2 (g)
- f) Backfilling – As per Section 2.2 (h)
- g) Cable Termination

Where service cables are not terminated at meter bases or service entrances, they shall be fastened securely to a steel fence post or if wood stakes are used they shall be 50 mm x 100 mm minimum. Stakes shall extend from the bottom of the trench to a minimum of 0.9 m above existing grade. Sufficient cable shall be left at the service entrance to allow connection in the meter base or switch box and shall be connected at time of installation.

At least 0.9 m of cable shall be left above grade at the transformer for secondary connection.

3.3 Cable Marking Identification

All service cables shall be identified in the transformer compartment as to the house number they serve.

3.4 Number of Services PerTransformer

The number of services supplied by a transformer shall be approved first by the Board.

Servicing arrangements for electrically heated dwellings shall be requested from the Board.

**4.0 TRANSFORMERS**

Transformers for residential use shall be supplied by the Owner and shall be of the mini-pad type, purchased in accordance with the enclosed ***Padmount Transformer Specification***.

Manufacturers of transformers which have been approved by the Board are as follows:

Carte	Moloney Electric	Federal-Pioneer
Cam-Tram	Ferranti-Packard	Canadian Electrical Services

The owner shall provide to the Board N.L. (no load) and L.L. (load loss) figures for each transformer quote obtained. The Board will apply the MEA transformer loss formula to calculate the present value of the transformer losses. The results of the calculation will enable the Board to advise the Owner as to which transformer will be accepted.

---

**APPENDIX 4**

**4.1 Fault Indicators**

All transformers shall be equipped with approved cable fault indicators as outlined in the attached **Material Specification**.

Fault indicators shall be installed for clear observation inside the primary compartment.

**4.2 Grounding**

Grounding of the transformer and vault for mini-pad type transformers in the 50 – 100 kVA size shall consist of four (4), 3.0 m galvanized steel rods 0.9 m from the edge of the vault. The top of the ground rods shall be a minimum of 200 mm below final grade.

2/0 bare copper ground wire shall completely circle the vault, buried a minimum of 200 mm below final grade.

A 2/0 bare copper ground lead shall be fastened securely to the ground rod with an appropriate ground rod connector, and at least 0.9 m of ground cable shall be left above grade inside the vault for connection.

**4.3 Transformer Vaults**

All residential transformer installations shall be of the vault type.

Transformer vaults shall be installed as shown on typical utility cross section to be totally supported by undistributed earth.

No transformer shall be installed within 3.0 m of a fire hydrant.

Vaults shall be set at a grade above curb such that the rear of the vault is 75 mm above finished grade.

**5.0 SERVICE LOCATIONS**

All services shall have outdoor metering.

There shall be one meter only for each service.

Meters shall be installed on the house in the following location:  
On the side of the house or garage no more than 1.83 m back from the front of the house

Meter installation shall be preceded by a Board layout.

All service locations shall be approved by the Board prior to the commencement of installation. Services installed without prior approval, may be subject to removal, or change of location at the Owner's expense.

**6.0 ENERGIZING OF PLANT**

Energizing of the Plant shall not take place until the Board is satisfied that all requirements of the Board are met and the Board is in receipt of "as built" plans as outlined in Section 1.5(b).

All energizing of electrical plants, in whole or in part shall be done by the Board's forces.

**APPENDIX 4**

Once energizing of the plant has taken place no one other than the Board's forces shall have access to energized transformers. All termination work in energized transformers shall be done by the Board's forces including primary and secondary terminations. Such work shall be at the Owner's expense.

All service cables not connected by the Contractor in the transformer prior to energizing shall be left with appropriate terminators installed.

Failure to adhere to the above regulations by any Contractor may result in the de-energizing of the plant in whole or in part until such time as the Board's forces can perform suitable tests, and Contractor Approved status as outlined in Section 1.7, may be cancelled.

**7.0 BOARD ASSUMPTION OF SYSTEM**

The Board will assume the Plant according to Subdivision Agreement from the date of acceptance of the works in their entirety by the Board. In the interim period from Plant completion to assumption, the Owner shall arrange this work to be performed by Board forces, at his expense, for adequate maintenance and repairs as needed to the Plant.

Upon completion of the Plant, a final inspection shall be made. If any deficiencies are found in the Plant a date shall be set by which time all deficiencies shall be corrected and a subsequent inspection made.

To qualify for recommendation for assumption, the Plant shall be complete in all respects, "as built" drawings shall be in the hands of the Board, all outstanding monies shall be paid, and the Plant shall be energized in its entirety.

All dwelling units within the subdivision shall be serviced. Those services which are installed, and for which the dwelling unit has not yet been constructed, shall be tested by any means the Board deems acceptable.

**MATERIAL SPECIFICATION**

1. **FOUNDATION** – Low profile transformer pad mount, precast, concrete; well type  
Underground Specialties # UGS023
2. **BUSHING INSERT** – Separable insulated loadbreak, 200 Amp, 16.2 KV phase to ground for use on 28 KV  
ElastIESOld 2701A4-CS 854 RTE 2637612CO1M
3. **SURGE ARRESTER** – M.O.V.E. (Metal Oxide Varistor Elbow) surge protector, 21 KV arrester rating, 28 KV elbow interface, 17 KV MCOV  
RTE #3237016C20M ElastIESOld #273ESA-21
4. **CONNECTOR** – Silicon bronze vise type connector for 2/0 AWG stranded conductor range (for transformer ground bonding)  
FARGO #GC-5020-S Teledyne Penn-Union #FF-2/0 Anderson #DG-2/0C
5. **FLATWASHER** – Silicon bronze size 3/8"

APPENDIX 4

- Burndy                  Anderson
6.     **PARKING STAND SURGE ARRESTER** - Metal oxide arrester, 21 KV arrester rating, 28 KV elbow interface, 17 KV MCOV, (for terminating unused loadbreak elbow)  
  
RTE CAT #3237758C21M                  ElastIESOld #273PSA-21
  7.     **BUSHING WELL INSULATING CAP** – (for insulating unused bushing insert)  
Rated and stamped 16.2/28 KV  
  
ElastIESOld #270DRG-CS 854 RTE 2606591A02MC
  8.     **FAULT INDICATOR** – RTE type – CR single phase, current reset, 160 Amp trip setting  
  
SCLO-CLAMP or STLO – PLUG IN (Cable DIA 1.05 in.)
  9.     **PRIMARY CABLE** - #2/0 AWG (18 wires) compact aluminum, extruded conductor shield, TRXLPE insulation extruded auxiliary insulation shield, 20 x #14 AWG tinned copper concentric neutral wires, taped PVC jacket overall. 28 KV (100% insulation level), (-40C) type URD power cable to CSA C68.2 specification.  
  
Pirelli Cables    Alcan    Phillips Canadian Wire
  10.    **MODULAR TERMINATOR** – Rated and marked 28/16.2 KV  
  
ElastIESOld    35MTG-GH-10-8-4-00CS871    General Electric 9U08-H-F-G-1-2-0
  11.    **LOADBREAK ELBOW** – Separable insulated with test point, 200 A 16.2 KV, phase to round for installation on 28 KV 2/0 AWG compact round, class B, stranded cable installation with CSA22 per ANSI C119.2  
  
ElastIESOld 274LR-H-5240C-CS868    RTE #2604740-B-56-2/0
  12.    **CONDUIT**- 50 mm rigid PVC conduit with preformed belled ends in 3 m lengths (for cable protection up riser pole)  
  
Scepter
  13.    **STRAPS** – 50 mm galvanized steel two (2) hole mounting, rigid, type support straps for rigid conduit  
  
Swift Devices #SD-10-65-2
  14.    **CONNECTOR** – Transformer, quick disconnect, covered secondary stud connector for 15 mm – 11 stud, for 12 conductors - range #4-350 (kcmil) pre-filled with approved inhibitor for use on A1. secondary cables  
  
 Fargo Gus 20663Q0-LT (Bel-Volt supplier)
  15.    **TAGS** – **Primary cable identification** EG Blue tag for blue phase  
  
U.G. Product Co.                  No. 100B (Blue)                  No. 100W (White)                  No. 100R (Red)  
(Young Utility Equipment Supply)

**APPENDIX 4**

16.     **TAGS** – **Secondary cable identification**, numbers and letters as required  
           Weidmuller Partex Cat #2534-No.            or Letter            (Ruddy Electric Supplier)
  
17.     **CABLE** – Copper, bare #2/0 AWG 19 stranded, soft drawn  
           Canada Wire    Alcan    Phillips    Pirelli Cables
  
18.     **GROUND ROD** – Tapered one end 19 mm x 3.0 m, galvanized steel CSA G40 x 21 grade 60G galvanized steel or CSA G30 12 grade 60 (re-bar steel) rolled as 19 mm diameter galvanized round bar  
           Slater    McCormak Blades            Clark Kennedy Co.
  
19.     **CONNECTOR** – Ground rod for 19 mm rod to 2/0 AWG copper conductor  
           Amp – Code #BN Cat #1-276337            Burndy #YGHR-26C34TN
  
20.     **CARTRIDGE** – For use in ampact tool when installing Amp, wire to ground rod connector  
           Amp- Cat #69338-1
  
21.     **SERVICE CABLE** – Aluminum polyethylene insulation PVC jacket secondary for direct burial #3/0 AWG con. USC/75 CSA  
           Canada Wire    Phillips    Alcan
  
22.     **CONNECTOR** – Splice compression installation. Non-tension chamfer or tapered ends. Waterstop and pre-filled with an approved inhibitor for use on secondary and primary voltage. Urd cables. Installation with CSA die for 3/0 AWG compact round class be stranded aluminum conductor  
           Alcan ATHV-3/0C            Burndy YNS3/0A
  
23.     **END CAPS** – Heat shrinkable for insulation and sealing end of secondary cable 3/0 AWG 0.37” to 0.73”  
           Raychem Cat #ESC-2-A            Sigmaform Cat #SS075
  
24.     **INSULATOR** – Heat shrinkable tubing for insulating and sealing electrical connections on dielectric cables 0.40” to 0.95”  
           Raychem Cat#WCSM-28-9-A    Sigmaform Cat #SST9-11/97
  
25.     **INSULATOR** – Cold shrink connector insulator 0.44” to 0.95” for sealing and insulating electrical connections on dielectric cables  
           3M – Cat #8406-11PST
  
26.     **END CAPS** – Heat shrinkable for sealing end of primary cable  
           Raychem Cat #ESC-4-A            Sigmaform Cat #SSC200

**APPENDIX 4**

27. **DUCT** – PVC type 2, direct burial super duct, nominal size – 4” (100 mm) in 10 ft. (3 m) lengths with integral bell CSA specification C22.2 No. 211.1

Scepter Part #34-030-21-100

28. **COUPLING** – Polyethylene, straight push fit coupling for 4” (100 mm) nominal size type – 2 duct

Scepter Part #83-0437-0030

29. **LUBRICANT** – For cable pulling

Polywater-WF-Lubricant

30. **TRICHLOROETHANE 111** – (For cleaning cable and related components)

S.F. Lawrason & Co. Ltd. Standard Chemical Co. Quatic Chemicals Ltd.

31. **PAD VAULT** – For sectionalizing terminal. Precast concrete pad with removable 710 mm x 863 mm x 5 mm thick one piece reinforced galvanized steel cover plate. Bolted down to vault with penta head security nuts. Side of cover to be installed flush with either side of vault.

To be approved by E.L.K. Energy Inc.

32. **SECTIONALIZING TERMINAL** – (Terminating Cabinet) – Three phase sectionalizing terminal 28 KV class loadbreak junctions, complete with copper grounding bus bar 7 mm thick x 50 mm high x 1778 mm wide C/W 14 – 11 mm dia. holes evenly spaced, 4 under each module and one on each end of bus bar. Cabinet to be complete with penta head security bolt and recessed padlock provision

Electrical Equipment Inc. Cat #LPT-378-P-GH

33. **LOADBREAK JUNCTION** – Four point loadbreak junction, 200 Amp, 16.2/28 KV class C/W U-Straps for surface mounting in sectionalizing terminal.

**NOTE:** Three loadbreak junctions required for each sectionalizing terminal

R.T.E. Cat #2637166C13M ElastIESOld Cat #271J4-5-CS854

**APPENDIX 4**

**SYSTEM TESTING SPECIFICATION**

- (a) Prior to the electrical system being energized, the Developer will have the complete cable system tested. The HV system will be tested using standard High potential (ICEA) test equipment in accordance with the following:

Test Voltage = 2 x Rated Cable Voltage  
(Eg. 28 KV cable = 56 KV D.C.)

**Increment Steps**

0 to 100% of rated voltage in no less than 10 seconds

From 100% to 200% of rated cable voltage in a 10 second interval, in no less than a total of 20 seconds and no longer than a total of 50 seconds

**Duration**

Hold 200% of rated cable voltage for 15 minutes

Record leakage current at 1 minute intervals

**Note:**

Leakage current should decrease slightly over the 15 minute duration

Any similar cable runs (Eg. 3 Phase should have similar readings and stability)

- (b) The LV system will be tested with a 5,000 Volt Megar unit, or equivalent
- (c) Upon completion of the testing, a written report issued by the testing company will be submitted to the Board
- (d) Any defects in the system must be corrected before energizing will occur
- (e) A Board representative will be on job when testing is done

**APPENDIX 4**

**PADMOUNT TRANSFORMER SPECIFICATION**

Mini Pad up to and including 100 KVA

Single Phase, 60 hz, dead front, fused loop feed, 125 KV B.I.L., 65 c temperature rise, type ONAN

To be finished in CEMA Y-1 equipment green colour

**Primary Voltage:** 16000 volts

**Secondary Voltage:** 120/240 volts

**Taps**

Transformer complete with externally operated standard taps on primary voltage, 4 – 2.5% full capacity, 2 above and 2 below normal (-5%, -2.5%, 0, +2.5%, +5%)

**Transformer Fusing**

R.T.E. Corporation ELSP current limiting fuse

Magnex interrupter load break switch required

**Primary Termination (HV)**

Externally clamped moulded epoxy bushing well

**Secondary Termination (LV)**

Externally clamped 4 hole NEAM square configuration spade terminal

**Transformer Oil**

PCB free oil type: VOLTESSO 35 or approved equal

**Notes**

All conditions of the latest CSA standard C227.4M shall apply unless superseded, modified or cancelled, as detailed on this sheet

Transformer loss formula  $7.4 N + 3.9 L$  will be used in calculating the present value of distribution transformer losses