



CONDITIONS OF SERVICE

Originally Submitted to the Ontario Energy Board May 1, 2003

TABLE OF CONTENTS

SECTION 1 - INTRODUCTION

- 1.1 Identification of Distributor and Service Area**
- 1.2 Related Codes and Governing Laws**
- 1.3 Interpretations**
- 1.4 Amendments and Changes**
- 1.5 Contact Information**
- 1.6 Customer Rights**
- 1.7 Distributor Rights**
 - 1.7.1 Access to Customer Property
 - 1.7.2 Safety of Equipment
 - 1.7.3 Operating Control
 - 1.7.4 Repairs of Defective Consumer Electrical Equipment
 - 1.7.5 Repairs of Customer's Physical Structures
- 1.8 Disputes**

SECTION 2 - DISTRIBUTION ACTIVITIES (GENERAL)

- 2.1 Connections**
 - 2.1.1 Building that Lies Along
 - 2.1.1.1 Connection Charges
 - 2.1.2 Expansions / Offer to Connect
 - 2.1.2.1 Offer to Connect
 - 2.1.2.2 Capital Contributions
 - 2.1.2.3 Settlement of Capital Contributions
 - 2.1.2.4 Rebates Related to Expansions
 - 2.1.2.5 Supply Agreement and Securities
 - 2.1.3 Connection Denial
 - 2.1.4 Inspections Before Connections
 - 2.1.5 Relocation of Plant
 - 2.1.6 Easements
 - 2.1.7 Contracts
 - 2.1.7.1 Contract for New or Modified Electricity Service
 - 2.1.7.2 Implied Contract
 - 2.1.7.3 Special Contracts
 - 2.1.7.4 Connection Agreements
 - 2.1.7.5 Payment By Building Owner

2.1.7.6 Opening and Closing Accounts

2.2 Disconnection

2.2.1 Disconnection and Reconnection – Process and Charges

2.2.2 Unauthorized Energy Use

2.3 Conveyance of Electricity

2.3.1 Limitations on the Guarantee of Supply

2.3.2 Power Quality

2.3.2.1 Power Quality Testing

2.3.2.2 Prevention of Voltage Distortion on Distribution

2.3.2.3 Obligation to Help in the Investigation

2.3.2.4 Timely Correction of Deficiencies

2.3.2.5 Notification for Interruptions

2.3.2.6 Notification to Customers on Life Support

2.3.2.7 Emergency Interruptions for Safety

2.3.2.8 Emergency Service (Trouble Calls)

2.3.2.9 Outage Reporting

2.3.3 Electrical Disturbances

2.3.4 Standard Voltage Offerings

2.3.4.1 Primary Voltage

2.3.4.2 Supply Voltage

2.3.5 Voltage Guidelines

2.3.6 Back-up Generators

2.3.7 Metering - General Information

2.3.7.1 General

2.3.7.2 Multi-Unit Sites

2.3.7.3 Interval Metering

2.3.7.4 Meter Reading

2.3.7.5 Final Meter Reading

2.3.7.6 Faulty Registration of Meters

2.3.7.7 Meter Dispute Testing

2.4 Tariffs and Charges

2.4.1 Service Connection

2.4.1.1 Customers Switching to Retailer

2.4.2 Energy Supply

2.4.2.1 Standard Supply Service (SSS)

2.4.2.2 Retailer Supply

2.4.2.3 Wheeling of Energy

2.4.3 Deposits

2.4.4 Billing

2.4.5 Payments and Overdue Account Interest Charges

2.5 Customer Information

2.6 General Information

- 2.6.1 House, Equipment and Vessel Moving
- 2.6.2 Customer Owned Primary Lines
- 2.6.3 Customer Owned Substations

SECTION 3 - CUSTOMER SPECIFIC

3.1 Residential Service

- 3.1.1 General Information
 - 3.1.1.1 Secondary Services in Overhead Distribution Area
 - 3.1.1.1.1 Services Over Swimming Pools
 - 3.1.1.2 New Infill
 - 3.1.1.3 Upgrades
 - 3.1.1.4 Standard Underground Services (Secondary)
 - 3.1.1.5 Large Residential Services (Secondary)
 - 3.1.1.6 Primary Residential Services (Standard & Large)
- 3.1.2 Early Consultation and Notification
- 3.1.3 Point of Demarcation
- 3.1.4 Access
- 3.1.5 Metering
- 3.1.6 Inspection

3.2 General Service

- 3.2.1 General Information
 - 3.2.1.1 Standard Overhead Services (Secondary)
 - 3.2.1.2 Standard Underground Services (Secondary)
 - 3.2.1.3 Large General Services (Secondary)
 - 3.2.1.4 Primary Services
 - 3.2.1.5 Transformation
- 3.2.2 Early Consultation
- 3.2.3 Point of Demarcation
- 3.2.4 Supply Voltage
- 3.2.5 Underground Service
- 3.2.6 Location of Transformers
- 3.2.7 Supply of Equipment
- 3.2.8 Short Circuit Capacity
- 3.2.9 Access
- 3.2.10 Metering
 - 3.2.10.1 Revenue Metering Specifications
 - 3.2.10.2 Meter Socket Specifications
 - 3.2.10.3 Commercial and Industrial Meter Cabinet Specifications
 - 3.2.10.4 Meter Cabinet
 - 3.2.10.5 Current Transformer Cabinet
 - 3.2.10.6 Combination Current Transformer and Potential Transformer Cabinet
 - 3.2.10.7 Meter Enclosed Switchgear
 - 3.2.10.8 Instrument Transformers
 - 3.2.10.9 Meter Cabinet Specifications
 - 3.2.10.10 Interval Demand

- 3.3 General Services (Above 50 kW)**
- 3.4 General Services (Above 1000 kW)**
- 3.5 Embedded Generation**
- 3.6 Embedded Market Participant**
- 3.7 Embedded Distributor**
 - 3.7.1 Contact Information
 - 3.7.2 Energy Supply
 - 3.7.3 Billing
 - 3.7.4 Ownership
 - 3.7.5 Assignment of Responsibility
 - 3.7.6 Normal Operations
 - 3.7.7 Communication
 - 3.7.8 Emergency Operations
 - 3.7.9 Metering and Faulty Protection
 - 3.7.10 Costs
 - 3.7.11 Force Majeure
- 3.8 Unmetered Connections**
 - 3.8.1 Street Lighting
 - 3.8.2 Traffic Control Signals
 - 3.8.3 Other Small Services
- 3.9. Small Metered Connections**
 - 3.9.1 Temporary Services (Construction Power)
 - 3.9.1.1 Metering
 - 3.9.2 Billboards

SECTION 4 - GLOSSARY OF TERMS

4.1 Definitions

SECTION 5 - RATES AND CHARGES

SECTION 1 – INTRODUCTION

This document provides information regarding the services offered by Haldimand County Hydro and conditions associated with the supply of electrical energy to Customers. These Conditions convey Haldimand County Hydro policy with respect to service to buildings and associated matters.

1.1 Identification of Distributor and Service Area

Haldimand County Hydro Inc., referred to herein as “Haldimand County Hydro” is a corporation incorporated under the laws of the Province of Ontario and a Distributor of electricity.

Haldimand County Hydro is licenced by the Ontario Energy Board (“OEB”) to supply electricity to Customers as described in the current Distribution Licence issued to Haldimand County Hydro by the OEB. Additionally, there are requirements imposed on Haldimand County Hydro by the various codes referred to in the Licence and by the Electricity Act, 1998 and Ontario Energy Board Act.

Haldimand County Hydro may only operate distribution facilities within its Licenced Service Area as defined in its Distribution Licence. This service area is subject to change with the OEB’s approval.

Nothing contained in this document or in any contract for the supply of electricity by Haldimand County Hydro shall prejudice or affect any rights, privileges, or powers vested in Haldimand County Hydro by law under any Act of the Legislature of Ontario or the Parliament of Canada, or any regulations thereunder.

1.2 Related Codes and Governing Laws

The supply of electricity or related services by Haldimand County Hydro 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 | } part of the Energy Competition |
| 2. Ontario Energy Board Act, 1998 | } Act, 1998 |
| 3. Distribution Licence | |
| 4. Affiliate Relationships Code | |
| 5. Transmission System Code | |
| 6. Distribution System Code | |
| 7. Retail Settlement Code | |
| 8. Standard Service Supply Code | |

In the event of a conflict between this document and the Distribution Licence or regulatory codes issued by the OEB, or the Energy Competition Act, 1998 (the “Act”), the provisions of the Act, the Distribution Licence and associated regulatory codes shall prevail in the order of priority indicated above. If there is a conflict between a Connection Agreement with a Customer and this Conditions of Service, this 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. Without limiting the foregoing, 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 of Ontario (E&USA) rulebook.

1.3 Interpretations

In these Conditions, unless the context otherwise requires:

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

1.4 Amendments and Changes

The provisions of this Conditions of Service and any amendments made from time to time form part of any Contract made between Haldimand County Hydro and any connected Customer, Retailer, or Generator and this Conditions of Service supercedes all previous conditions of service, oral or written, of Haldimand County Hydro or any of its predecessor municipal electric utilities as of its effective date.

In the event of changes to this Conditions of Service, a public notice shall be made in the form of either a notice in a local newspaper or a notice with the Customer's bill.

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

1.5 Contact Information

Haldimand County Hydro and its agents can be contacted 24 hours a day at (905) 765-5211 or 1 (877) 872-2570 or by fax at (905) 765-8211. Normal working hours are Monday to Friday between 8:30 am and 4:30 pm excluding statutory holidays. The Corporate mailing address is 1 Greendale Drive, Caledonia, Ontario, N3W 2J3. Haldimand County Hydro can also be contacted at info@hchydro.ca directly or through www.haldimandcountyhydro.ca.

1.6 Customer Rights

Haldimand County Hydro shall only be liable to a Customer and a Customer shall only be liable to Haldimand County Hydro for any damages that arise directly out of the willful misconduct or negligence:

- of Haldimand County Hydro in providing distribution services to the Customer;
- of the Customer in being connected to Haldimand County Hydro's distribution system; or
- of Haldimand County Hydro or Customer in meeting their respective obligations under this Conditions, their licences and any other applicable law.

Notwithstanding the above, neither Haldimand County Hydro 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.

The Customer or Embedded Generator shall indemnify and hold harmless Haldimand County Hydro, 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.

1.7 Distributor Rights

1.7.1 Access to Customer Property

Haldimand County Hydro shall have access to Customer property in accordance with section 40 of the *Electricity Act, 1998*.

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 situations, in a timely fashion. If the Customer does not take such action within a reasonable time, Haldimand County Hydro 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 Haldimand County Hydro, interfere with the proper and safe operation of Haldimand County Hydro's facilities or adversely affect compliance with any applicable legislation in the sole opinion of Haldimand County Hydro.

The Customer shall not use or interfere with the facilities of Haldimand County Hydro except in accordance with a written agreement with Haldimand County Hydro. The Customer must also grant Haldimand County Hydro 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 Haldimand County Hydro, for installing, maintaining and operating its equipment in, on, or about the Customer's premises. Haldimand County Hydro 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 Haldimand County Hydro has no control.

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

Customers will be required to pay the cost of repairs or replacement of Haldimand County Hydro'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 Distribution System Code 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 Haldimand County Hydro's distribution system. If the Customer does not take such action within a reasonable time, Haldimand County Hydro may disconnect the supply of power to the Customer. Haldimand County Hydro's policies and procedures with respect to the disconnection process are further described in this Conditions of Service.

1.7.5 Repairs of Customer's Physical Structures

The Customer is responsible for maintaining, repairing and replacing, in a safe condition satisfactory to Haldimand County Hydro, all the Customer's civil infrastructure on private property including but not limited to poles, underground conduits, cable chambers, cable pull rooms, transformer rooms, transformer vaults and transformer pads that Haldimand County Hydro deems required to house Haldimand County Hydro's Connection Assets.

1.8 Disputes

If a Customer or other Market Participant has a complaint about Haldimand County Hydro regarding services provided by Haldimand County Hydro under its Distribution Licence, the Customer may contact one of Haldimand County Hydro's Customer Service representatives at (905) 765-5211 or 1 (877) 872-2570, 24 hours a day.

Upon receipt of a complaint, a Haldimand County Hydro Customer Service representative will contact the Customer or other Market Participant to acknowledge receipt of the complaint and, if possible, to resolve the complaint, and will investigate and follow-up on the complaint as required to resolve the complaint. If a Customer or other Market Participant complaint cannot be resolved by contacting one of Haldimand County Hydro's Customer Service representatives, Haldimand County Hydro will refer the unresolved complaint to an independent third party complaints resolution agency that has been approved by the Ontario Energy Board. Until such time as the Ontario Energy Board approves such an independent third party complaints resolution agency, such complaints will be referred to the Ontario Energy Board, which has assumed this role.

SECTION 2 - DISTRIBUTION ACTIVITIES (GENERAL)

2.1 Connections

Under the terms of the Distribution System Code, Haldimand County Hydro has the obligation to either connect or to make an offer to connect any Customers that lie in its service area.

The Customer or their representative shall consult with Haldimand County Hydro concerning the availability of supply, the supply voltage, service location, metering, and any other details. These requirements are separate from and in addition to those of the Electrical Safety Authority. Haldimand County Hydro will confirm, in writing, the characteristics of the electric supply.

The Customer or their authorized representative shall apply for new or upgraded electric services and temporary power services in writing. The Customer is required to provide Haldimand County Hydro with 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.

Haldimand County Hydro shall make every reasonable effort to respond promptly to a Customer's request for connection. Haldimand County Hydro shall respond to a Customer's written request for a Customer connection within 15 calendar days of receipt of the written request. Haldimand County Hydro will make an offer to connect within 60 calendar days of receipt of the written request, unless other necessary information is required from the Customer before the offer can be made.

Haldimand County Hydro shall make every reasonable effort to respond promptly to a generator's request for connection. In any event Haldimand County Hydro 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 the distributor's control is required before the offer can be made.

Haldimand County Hydro shall make every reasonable effort to respond promptly to another distributor's request for connection. Haldimand County Hydro 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 the distributor to Haldimand County Hydro's distribution system shall be made within ninety (90) days of receiving the written request for connection, unless other necessary information outside the distributor's control is required before the offer can be made.

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

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

Haldimand County Hydro, in its discretion, may require a Customer, generator or distributor to enter into a Connection Agreement with Haldimand County Hydro including terms and conditions in addition to those expressed in this Conditions (refer to the sample in the Distribution System Code - Appendix D).

2.1.1 Building that Lies Along

For the purpose of this Conditions "lies along" means a Customer property or parcel of land that is directly adjacent to or abuts onto the public road allowance where Haldimand County Hydro has distribution facilities of the appropriate voltage and capacity.

Under the terms of the Distribution System Code, Haldimand County Hydro 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 Haldimand County Hydro's distribution system without an Expansion or Enhancement; and
- b) the service installation meets the conditions listed in the Conditions of Service of the Distributor that owns and operates the distribution line.

The location of the Customer's service entrance equipment will be subject to the approval of Haldimand County Hydro and the Electrical Safety Authority.

2.1.1.1 Connection Charges

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

- a) For Residential Customers, the Basic Connection Charge is recovered through Haldimand County Hydro's rates and covers the Standard Allowance to provide a basic connection consistent with the defined ownership demarcation point as outlined in Section 5 in this Conditions. This point may differ from the "operational demarcation point".

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

- b) For Non-Residential Customers, Haldimand County Hydro may recover the Basic Connection Charge either through Haldimand County Hydro's rates, or through a Basic Connection Fee levied from the Customer requesting the connection. The Basic Connection Fee is determined for each Customer Class as indicated in Section 5 of this Conditions.
- c) The Variable Connection Charge shall be calculated as the costs associated with the installation of Connection assets **above and beyond** the Standard Allowance for Basic Connection as described in Section 5. Haldimand County Hydro 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 the Standard Allowance and the Basic Connection for each Customer Class as identified in Section 5 of this Conditions. Standard fees are determined using historical data from previous year(s) for all completed projects in each Customer Class.

2.1.2 Expansions / Offer to Connect

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

- a) the Basic Connection Fee;
- b) the Variable Connection Fee;
- c) the Capital Contribution;
- d) the Security Deposit.

The cost associated with the Expansion is to be fair and reasonable and is in addition to any Basic and/or Variable Connection Charges. Refer to Section 5 for Basic and Variable Connection Fees of each Customer Class and the respective ownership demarcation point.

Haldimand County Hydro 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 Distribution System Code – Appendix B). At the discretion of Haldimand County Hydro, the capital costs for the Expansion may include incremental costs associated with the full use of Haldimand County Hydro'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 ("Estimated Incremental Demand").

In performing the economic evaluation, should the Net Present value (NPV) of the costs and revenues associated with the expansion be less than zero, a capital contribution in the amount of the shortfall is required. Haldimand County Hydro has the choice of either:

- a) collecting this shortfall from the Customer; or
- b) absorbing this shortfall.

2.1.2.1 Offer to Connect

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

If Haldimand County Hydro'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. Haldimand County Hydro 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 Distribution System Code, Haldimand County Hydro will inform the Customer that the Customer may obtain other bids from contractors pre-qualified by Haldimand County Hydro for the work eligible for other bids.

Haldimand County Hydro may charge a Customer that chooses to pursue an alternative bid any costs incurred by Haldimand County Hydro associated with the expansion project, including but not limited to the following:

- costs for additional design, engineering, or installation of facilities required to complete the project that were made in addition to the original offer to connect;
- costs for inspection or approval of the work performed by the contractor hired by the Customer.

2.1.2.2 Capital Contributions

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:** A 30 meter overhead service will be installed at no cost to the customer providing all work is done as per a Haldimand County Hydro layout. Services over 30 meters will receive a service allowance and the customer will be required to pay the difference. Meter provided at no

charge. A deposit if required as determined by Haldimand County Hydro will be required before start of work.

- Underground: A deposit as determined by Haldimand County Hydro will be required before start of work. All work is to be done as laid out on Haldimand County Hydro layout. Customer will be required to pay all costs over the overhead service allowance. Meter provided at no charge.

Class 2 - General Service, (Below 50 kW): No Transformation required on private property.

- Overhead or Underground: All work is to be done as laid out on Haldimand County Hydro's layout. Customer may be required to pay additional costs of underground. Services over 30 meters will receive a service allowance and the customer will be required to pay the difference.
- Single phase meter provided at no charge.

Class 3 - General Service (50 kW – 999 kW): *Capital contribution collected from Customer prior to start of work (based on Capital Contribution Calculation).*

- Haldimand County Hydro provides up to 1000 kVA transformer (over 1000 kVA transformer must be purchased by customer after approval from Haldimand County Hydro).
- New services over 200 kW must be interval metered (\$2000.00 interval meter charge applies and customer is responsible for costs of metering transformers and supplies).

Class 4 - General Service (1000 kW and above):*Capital contribution collected from Customer (based on Capital Contribution Calculation).*

Note: Customers who own a high-voltage switchgear and have a demand less than 1000 kW are included in Class 4. Customer provides transformer, \$2000.00 interval meter charge applies and customer is responsible for costs of metering transformers and supplies.

Class 5 – Large User: *Capital contribution collected from Customer (based on Capital Contribution Calculation)*

2.1.2.3 Settlement of Capital Contributions

The initial demand proposed by the Customer must be reasonable and shall be subject to acceptance by Haldimand County Hydro. However, if after two (2) years from the In-Service Date, the Customer's 12-months rolling average monthly demand is less than 90% of the Incremental Demand for the Expansion, the Customer and Haldimand County Hydro agree to:

- re-do the economic evaluation based on the Customer's actual 12-months average monthly demand;
- recalculate the amount of capital contribution;
- readjust accordingly the expected Incremental Revenue;
- the Customer or Haldimand County Hydro shall reduce the difference in the capital contribution to zero by paying the balance no later than 30 days after the date of Haldimand County Hydro's notice of capital contribution settlement.

2.1.2.4 Rebates Related to Expansions

In scenarios where Haldimand County Hydro is required to install new plant solely for the connection of a Customer, the Customer will be required to pay Haldimand County Hydro 100% of the calculated shortfall. If within 5 years from the connection date, 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 Haldimand County Hydro's rebate process.

2.1.2.5 Supply Agreement and Securities

To keep Haldimand County Hydro harmless as a result of Haldimand County Hydro agreeing to reduce the amount of capital contribution required for the Expansion, the General Service Class 4 and Class 5 customers (i.e. 1000 kW and above) shall enter into a Supply agreement and provide a security deposit to cover for the difference between the actual costs incurred by Haldimand County Hydro 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 in-service date. The residual debt, if any, is due 25 years after the in-service date, or upon termination of the Supply 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, trust company or credit union 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 Haldimand County Hydro and is to be provided **prior** to the connection of service.

2.1.3 Connection Denial

The Distribution System Code sets out the conditions for Haldimand County Hydro to deny connections. Haldimand County Hydro is not obligated to connect a building within its service area if the connection would result in any of the following:

- Contravention of existing laws of Canada and the Province of Ontario.
- Violations of conditions in Haldimand County Hydro's Licence.
- Use of a distribution system line for a purpose that it does not serve and that Haldimand County Hydro 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 Haldimand County Hydro's distribution system.
- A material adverse effect on the quality of distribution services received by an existing connection.
- Discriminatory access to distribution services.
- Potential increases in monetary amounts that already are in arrears with Haldimand County Hydro.
- If the person requesting the connection owes Haldimand County Hydro money for distribution services.
- If an electrical connection to Haldimand County Hydro's distribution system does not meet Haldimand County Hydro's design requirements.
- Any other conditions documented in Haldimand County Hydro'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 Haldimand County Hydro refuses to connect a building in its service area that lies along one of its distribution lines, Haldimand County Hydro shall inform the person requesting the connection of the reasons for the denial, and where Haldimand County Hydro is able to provide a remedy, make an offer to connect. If Haldimand County Hydro 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 inspected and approved by the Electrical Safety Authority and must also meet Haldimand County Hydro's requirements. Haldimand County Hydro requires notification from the Electrical Safety Authority of this approval prior to the 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 Electrical Safety Authority prior to reconnection.

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

Customer owned substations must be inspected by both the Electrical Safety Authority and Haldimand County Hydro.

Transformer rooms are not permitted by Haldimand County Hydro. All new underground installations must be padmounted transformer type installation.

Duct banks shall be inspected and approved by Haldimand County Hydro prior to the pouring of concrete and again before backfilling. The completed ducts must be rodded by the site contractor in the presence of a Haldimand County Hydro inspector, and shall be clear of all extraneous material. A mandrel, appropriately sized, to nominal diameter of duct, will be supplied by the contractor and be passed through each duct. In the event of ducts blocked any extraneous material, 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 duct banks must be authorized by

Haldimand County Hydro and carried out in accordance with all applicable safety acts and regulations.

Provision for metering shall be inspected and approved by Haldimand County Hydro prior to energization.

2.1.5 Relocation of Plant

When requested to relocate distribution plant, Haldimand County Hydro 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, Haldimand County Hydro is not obligated to relocate the plant. However, Haldimand County Hydro 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 a fair 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, Haldimand County Hydro has the right to have supply facilities on private property and to have easements registered against title to the property. Easements are required whenever Haldimand County Hydro's underground or overhead plant is to be located on private property or crosses over an adjacent private property to service a Customer other than the owner of that adjacent property.

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

The Customer will prepare at its own cost a reference plan and associated easement documents to the satisfaction of Haldimand County Hydro's solicitor prior to its registration and registering of the easement plan. Details will be provided upon application for service.

2.1.7 Contracts

2.1.7.1 Contract for New or Modified Electricity Service

Haldimand County Hydro shall only connect a Building for a new or modified supply of electricity upon receipt by Haldimand County Hydro of a completed and signed contract for service in a form acceptable to Haldimand County Hydro, payment to Haldimand County Hydro of any applicable connection charge, and an inspection and approval by the Electrical Safety Authority of the electrical equipment for the new service.

2.1.7.2 Implied Contract

In all cases, notwithstanding the absence of a written contract, Haldimand County Hydro has an implied contract with any Customer that is connected to Haldimand County Hydro's distribution system and receives distribution services from Haldimand County Hydro. The terms of the implied contract are embedded in Haldimand County Hydro's Conditions of Service, the Rate Handbook, Haldimand County Hydro's rate schedules, Haldimand County Hydro's licence, the Distribution System Code, the Standard Supply Service Code and the Retail Settlement Code, all as amended from time to time.

Any Person(s) who take or use electricity from Haldimand County Hydro shall be liable for payment for such electricity. Any implied contract for the supply of electricity by Haldimand County Hydro shall be binding upon the heirs, administrators, executors, successors or assigns of the Person(s) who took and/or used electricity supplied by Haldimand County Hydro.

In the absence of a contract for electricity with a tenant, or in the event the electricity is used by a Person(s) unknown to Haldimand County Hydro, then the cost for electricity consumed by such Person(s) is due and payable by the owner(s) of such property.

2.1.7.3 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.
- generation.

2.1.7.4 Connection Agreements

Haldimand County Hydro may require a Customer to enter into a Connection Agreement in a form acceptable to Haldimand County Hydro (Refer to the sample in the Distribution System Code – Appendix D).

An Embedded Generator and/or Embedded Retail Generator shall enter into a Connection Agreement in a form acceptable to Haldimand County Hydro (Refer to the Distribution System Code – Appendix E and F).

A Wholesale Market Participant shall enter into a Connection Agreement in a form acceptable to Haldimand County Hydro.

An Embedded Distributor shall enter into a Connection Agreement in a form acceptable to Haldimand County Hydro (Refer to the Distribution System Code – Appendix G).

Haldimand County Hydro shall make a good faith effort to enter into a Connection Agreement with a distributor connected to the distributor's distribution system in accordance with the requirements in the Distribution System Code issued by the Ontario Energy Board.

2.1.7.5 Payment by Building Owner

The owner of a Building is responsible for paying for the supply of electricity by Haldimand County Hydro to the owner's Building except for any supply of electricity to the Building by Haldimand County Hydro in accordance with a written request for electricity by an occupant(s) of the Building.

A Building owner wishing to terminate the supply of electricity to its Building must notify Haldimand County Hydro in writing. Until Haldimand County Hydro receives such written notice from the Building owner, the Building owner or the occupant(s), as applicable, shall be responsible for payment to Haldimand County Hydro for the supply of electricity to such Building. Haldimand County Hydro may refuse to terminate the supply of electricity to an owner's Building when there are occupant(s) in the Building (i.e. during certain periods of the winter).

2.1.7.6 Opening and Closing of Accounts

A Customer who wishes to open or close an account for the supply of electricity by Haldimand County Hydro shall contact Haldimand County Hydro's office by phone, by written request (including requests submitted by facsimile), or other means acceptable to Haldimand County Hydro.

The Customer shall be responsible for payment to Haldimand County Hydro for the supply of electricity to the property up to the date Haldimand County Hydro is notified of the termination of the account.

2.2 Disconnection

Haldimand County Hydro reserves the right 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 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 Haldimand County Hydro to perform planned inspections and maintenance.
- Failure of the Consumer or Customer to comply with a directive of Haldimand County Hydro that Haldimand County Hydro makes for purposes of meeting its licence obligations.

- Overdue amounts payable to Haldimand County Hydro for the distribution or retail of electricity.
- Electrical disturbance propagation caused by Customer equipment that are not corrected in a timely fashion.
- Any other conditions identified in this Conditions of Service document.

Haldimand County Hydro 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 Disconnection and Reconnection – Process and Charges

Immediately following the due date, steps will be taken to collect the full amount of the bill. If the bill is still unpaid sixteen calendar days after the due date (including seven calendar days after a Collection Notice, which advises customers of pending disconnection, has been given to the Customer), the service may be disconnected and not restored until satisfactory payment arrangements have been made, including costs of reconnection. Such discontinuance of service does not relieve the Customer of the liability for arrears or minimum bills for the balance for the term of contract, nor shall Haldimand County Hydro be liable for any damage to the Customer's premises resulting from such discontinuance of service. Collection notices will be in writing and if given by mail should be deemed to be received on the third business day after mailing.

Haldimand County Hydro will provide Fire Safety Notice and any other public safety notices or information bulletins issued by public safety authorities and provided to the distributor, which provide information to consumers respecting dangers associated with disconnection of electricity service. Safety notices will be sent with the Collection Notice, which is delivered to the customer 7 days prior to a disconnection, as well as the Disconnection Notice, which is left at the property after a disconnection.

Upon discovery that a hazardous condition or disturbance propagation (feedback) exists, Haldimand County Hydro will notify the Customer to rectify the condition at once. In case the Customer fails to make satisfactory arrangements to remedy the condition within seven calendar days after a disconnect notice has been given to the Customer, the service may be disconnected and not restored until satisfactory arrangements to remedy the condition have been made. Haldimand County Hydro shall not be liable for any damage to the Customer's premises resulting from such discontinuance of service. Collection notices, which advises customers of pending disconnection, has been given to the Customer, will be in writing and if given by mail shall be deemed to be received on the third business day after mailing.

Upon receipt of a Disconnection request by the Customer, Haldimand County Hydro will disconnect and/or remove Haldimand County Hydro's connection assets at the Customer's cost.

2.2.2 Unauthorized Energy Use

Haldimand County Hydro 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 Haldimand County Hydro including all costs incurred by Haldimand County Hydro arising from unauthorized energy use, including inspections, repair costs, and the cost of disconnection and reconnection.

2.3 Conveyance of Electricity

2.3.1 Limitations on the Guarantee of Supply

Haldimand County Hydro will endeavour 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. 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 the Distributor's supply.

During an emergency, Haldimand County Hydro may interrupt supply to a Customer in response to a shortage of supply, or to effect repairs on the distribution system, or while repairs are being made to Customer-owned equipment.

Haldimand County Hydro shall have rights to access to a property in accordance with section 40 of the *Electricity Act, 1998* and any successor acts thereto.

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

2.3.2 Power Quality

2.3.2.1 Power Quality Testing

In response to a Customer power quality concern, where the utilization of electric power affects the performance of electrical equipment, Haldimand County Hydro or a designated contractor 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, Haldimand County Hydro will recommend and/or take appropriate mitigation measures. Haldimand County Hydro will endeavour to control harmonics generated by its own system where these are found to be detrimental to the Customers. If Haldimand County Hydro is unable to correct the problem due to the impact on other Customers, then it is not obligated to make the corrections. Haldimand County Hydro will use

appropriate industry standards (such as IEC or IEEE standards) as a guideline. If the problem lies on the Customer side of the system, Haldimand County Hydro 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, Haldimand County Hydro may disconnect the supply of power to the Customer.

It is the responsibility of the Customer to provide protection from voltage variations and transient operations.

2.3.2.2 Prevention of Voltage Distortion on Distribution

Customers having non-linear load shall not be connected to Haldimand County Hydro's distribution system unless power quality is maintained by implementing proper corrective measures 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%.

2.3.2.3 Obligation to Help in the Investigation

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

2.3.2.4 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, Haldimand County Hydro may disconnect the supply of power to the Customer.

2.3.2.5 Notification for Interruptions

Although it is Haldimand County Hydro's policy to minimize inconvenience to Customers it is necessary to occasionally interrupt a Customer's supply to allow work on the electrical system. Haldimand County Hydro will endeavour to provide such Customers with reasonable notice of planned power interruptions. However, interruption times may change due to inclement weather or other unforeseen circumstances. Haldimand County Hydro shall not be liable in any manner to such Customers for failure to

provide such notice of planned power interruptions or for any change to the schedule for 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, Haldimand County Hydro may interrupt supply to a Customer in response to a shortage of supply or to effect repairs on Haldimand County Hydro's distribution system or while repairs are being made to Customer-owned equipment.

2.3.2.6 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 Haldimand County Hydro of their medical needs and their available backup power. These Customers are responsible for ensuring that the information they provide Haldimand County Hydro is accurate and up-to-date.

With planned interruptions, the same procedure as prescribed in section 2.3.2.5 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, Haldimand County Hydro will endeavour to contact these Customers but will not be liable in any manner to the Customers for failure to do so.

2.3.2.7 Emergency Interruptions for Safety

Haldimand County Hydro will endeavour 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 Haldimand County Hydro or the public, service may be interrupted without notice.

2.3.2.8 Emergency Service (Trouble Calls)

Haldimand County Hydro will exercise reasonable diligence and care to deliver a continuous supply of electrical energy to the Customer. However, Haldimand County Hydro 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 that Haldimand County Hydro's main source of supply has failed, the Customer should report these conditions at once to Haldimand County Hydro's switchboard by calling (905) 765-5211 or 1 (877) 872-2570.

Haldimand County Hydro operates a 24-hour a day phone line to provide emergency service to Customers. Haldimand County Hydro will initiate restoration efforts as rapidly as practicable.

2.3.2.9 Outage Reporting

Depending on the outage, duration and the number of Customers affected, Haldimand County Hydro 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

Haldimand County Hydro 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 this Conditions.

Voltage fluctuations and other disturbances can cause flickering of lights and other serious difficulties for Customers connected to Haldimand County Hydro's distribution system. Customers must ensure that their equipment does not cause disturbances such as harmonics and spikes that might interfere with the operation of adjacent Customer equipment. Equipment that may cause disturbances include large motors, welders and variable speed drives, etc. In planning the installation of such equipment, the Customer must consult with Haldimand County Hydro.

Some types of electronic equipment, such as video display terminals, can be affected by the close proximity of high electrical currents. Haldimand County Hydro 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 Haldimand County Hydro for both Haldimand County Hydro-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 wye, three phase, four-wire system. However, in some areas the primary voltage will be 8.3/4.8 kV grounded wye, three phase, four wire.

2.3.4.2 Supply Voltage

Depending on what voltage of plant “lies along” Haldimand County Hydro’s distribution system, the preferred secondary voltage will be at 120/240 V, single phase; 120/208 V, three phase; and 347/600V, three phase.

The limit of supply capacity for any Customer is governed by the Supply Voltage. General guidelines for supply from overhead street circuits are as follows:

- i) at 120/240 V, single phase up to 100 kVA demand load, or
- ii) 120/208 V, three phase, four wire or 347/600V, three phase, four wire up to 300 kVA demand load.

OR

Where street circuits are buried, the Supply Voltage and limits will be determined upon application to Haldimand County Hydro.

OR

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

- i) at 120/240 V, single phase, supply is available up to 100 kVA, or
- ii) at 120/208 V, three phase, four wire, supply is available for loads up to 1000 kVA demand load, or
- ii) at 120/208 V, three-phase, four-wire, supply is available for loads up to 1000 kVA demand load.

OR

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 Haldimand County Hydro.

2.3.5 Voltage Guidelines

Haldimand County Hydro 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,

- 5% for normal operating conditions
- 8% for extreme operating conditions

Definitions of these conditions are:

- a) Normal Operating Conditions. Where voltages lie within the indicated limits under this heading no improvement or corrective action is required. It is recognized that special situations may call for closer voltage control, but such cases are considered to be outside the application scope of this Standard; and

- b) Extreme Operating 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 should 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, improvements or corrective action should be taken out on an emergency basis. The urgency for such action will depend on many factors such as location and nature of load or circuit involved, extent to which limits are exceeded with respect to voltage levels and duration, etc.

Haldimand County Hydro shall practice reasonable diligence in maintaining voltage levels, but is not responsible for variations in voltage from external forces such as operating contingencies, exceptionally high loads and low voltage supply from the transmitter or host Distributor. Haldimand County Hydro shall not be liable for any delay or failure in the performance of any of its obligations under this Conditions of Supply due to any events or causes beyond the reasonable control of Haldimand County Hydro, including, without limitation, severe weather, flood, fire, lightning, other forces of nature, acts of animals, epidemic, quarantine restriction, war, sabotage, act of a public enemy, earthquake, insurrection, riot, civil disturbance, strike, restraint by court order or public authority, or action or non-action by or inability to obtain authorization or approval from any governmental authority, or any combination of these causes (“Force Majeure”).

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 Haldimand County Hydro’s system to the satisfaction of Haldimand County Hydro’s requirements.

Customers with permanently connected emergency generation equipment shall notify Haldimand County Hydro regarding the presence of such equipment.

2.3.7 Metering - General Information

Specifics to be determined further in Section 3.

Customers will provide a convenient and safe location, reserved solely for metering equipment with outside access, acceptable to Haldimand County Hydro and Electrical Safety Authority for the installation of Haldimand County Hydro revenue metering equipment, free of charge or rent.

Customers will allow, no one, except a properly identified employee or authorized agent of Haldimand County Hydro to remove, inspect or tamper with Haldimand County Hydro metering, service entrance equipment, or other plant located on the Customer’s premises.

Customers will allow Haldimand County Hydro employees and agents free access at all reasonable hours to Haldimand County Hydro meters, wires and other equipment.

Where safety or reliability of the electrical distribution system is at risk, free access will be required at all times.

All Haldimand County Hydro metering equipment located on the Customer's premises is in the care and at the risk of the Customer. If Haldimand County Hydro metering equipment is destroyed or damaged, other than by normal usage, it will be at the expense of the Customer to be repaired or replaced.

The Customer will provide and maintain all civil works on private property and other facilities to accommodate Haldimand County Hydro service equipment, as outlined further in the Service Sections of this manual.

2.3.7.1 General

Generally, metering will be at utilization voltage. Where Haldimand County Hydro provides primary transformation, primary voltage metering will be allowed only in special circumstances following full discussion with Haldimand County Hydro. However, primary transformation supplied and owned by the Customer must be primary-metered, unless the building qualifies for individual tenant metering.

The meter shall be located as near as possible to the service entrance box.

The meters shall be grouped where practical and be accessible from a public area. Either a dual locking arrangement or a key box arrangement will be required on the access door. In any case, a copy of the metering layout plan shall be forwarded to Haldimand County Hydro for review.

When a disconnect device has been locked and tagged in the "OFF" position by Haldimand County Hydro, under no circumstances shall anyone remove the lock and tag and energize it without first receiving approval from Haldimand County Hydro.

Regardless of any charges for metering installations, all metering equipment shall remain the property of Haldimand County Hydro and maintenance of this equipment shall be Haldimand County Hydro responsibility.

2.3.7.2 Multi-Unit Sites

Haldimand County Hydro will provide a single, bulk-meter point for all multi-unit sites.

Customers wishing to have multi-unit sites equipped with individual tenant metering may install their own additional meters or sub-metering. Owners of sub-metering systems, or any other electricity meters used for revenue billing purposes must register as a contractor with Measurement Canada and ensure that all regulatory requirements are met.

Haldimand County Hydro will allow individual metering for smaller multi-unit buildings that are equipped with a "hall" meter under the following conditions:

- Only municipality registered units may be individually metered.

Customers of residential type townhouse development may be given the option of bulk metering or individual metering at the Customer's expense.

2.3.7.3 Interval Metering

Interval meters will be installed for all new or upgraded services where the peak demand is forecast to be 500 kW or greater, or for any Customer wishing to participate in the spot market pass-through pricing. Prior to the installation of an interval meter, the Customer must provide a ½ inch conduit from their telephone room to the meter cabinet. Haldimand County Hydro will arrange for the installation of a telephone line, terminated in the meter cabinet for the exclusive use of Haldimand County Hydro 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 shall compensate Haldimand County Hydro 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 Haldimand County Hydro for the purpose of meter reading, meter changing, or meter inspection. Where premises are closed during Haldimand County Hydro's normal business hours, the Customer must, on reasonable notice, arrange such access at a mutually convenient time.

Haldimand County Hydro must, at a minimum, be provided with access to obtain two actual meter readings annually.

2.3.7.5 Final Meter Reading

When a service is no longer required, the Customer shall provide sufficient notice of the date the service is to be discontinued so that Haldimand County Hydro can obtain a final meter reading as close as possible to the final reading date. The Customer shall provide access to Haldimand County Hydro 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, Industry Canada. Haldimand County Hydro's revenue meters are required to comply with the accuracy specifications established by the regulations under the above Act.

In the event of incorrect electricity usage registration, Haldimand County Hydro 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 Haldimand County Hydro, due regard being given to any change in the characteristics of the installation and/or the demand. If Measurement Canada, Industry Canada determines that the Customer was overcharged, Haldimand County Hydro will reimburse the Customer for the amount incorrectly billed.

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. Haldimand County Hydro will correct the bills for that period in accordance with the regulations under the Electricity and Gas Inspection 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 Haldimand County Hydro without resorting to the meter dispute test.

Either Haldimand County Hydro or the Customer may request the service of Measurement Canada to resolve a dispute. If the Customer initiates the dispute, Haldimand County Hydro will charge the Customer a meter dispute fee if the meter is found to be accurate and Measurement Canada rules in favor of the utility.

2.4 Tariffs and Charges

2.4.1 Service Connection

Charges for distribution services are made as set out in the Schedule of Rates available from Haldimand County Hydro. Notice of Rate revisions shall be published in major local newspapers. Information about changes will also be mailed to all Customers with the first billing issued at revised rates.

2.4.1.1 Customers 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 the local Distributor with the same distribution requirements. Therefore, all service connections requirements applicable to the SSS Customers are applicable to third party retailers' Customers.

2.4.2 Energy Supply

The Ontario Energy Board approves all Haldimand County Hydro Inc. Service and connection rates, which are listed in the current "Schedule of Rates and Charges".

In addition to the monthly service charge for distribution services, the distribution volumetric charge, and competitive electricity charges, miscellaneous charges include:

- New Account set-up fee;
- returned cheque;
- collection visit;
- reconnection after hours;
- reconnection during regular working hours;
- Secondary Service installation;
- Temporary Service installation;
- pole relocation;
- arrears certificates;
- credit check fee;
- overdue account interest charges;
- street lighting;
- cogeneration charges;
- transformers;
- various equipment rentals; and
- service calls.

2.4.2.1 Standard Service Supply (SSS)

Haldimand County Hydro will provide Standard Supply Service. Standard Supply Service is the electricity that the Customer will automatically be provided with if he or she chooses NOT to sign with an electricity retailer. The cost of the commodity will be charged to consumers on a pass-through basis.

2.4.2.2 Retailer Supply

Customer transferring from Standard Service Supply (SSS) to a retailer shall comply with the Service Transfer Request (STR) requirements as outlined in sections 10.5 through 10.5.6 of the Retail Settlement Code.

All requests shall be submitted as electronic file and transmitted through EBT Express. Service Transfer Request (STR) shall contain information as set out in section 10.3 of the Retail Settlement Code.

If the information is incomplete, Haldimand County Hydro 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 Haldimand County Hydro distribution system are required to contact Haldimand County Hydro for technical requirements and applicable tariffs.

2.4.3 Security Deposits

Whenever required by Haldimand County Hydro, including, but not limited to, as a condition of supplying or continuing to supply Distribution Services, Customers shall provide and maintain security in an amount that Haldimand County Hydro deems necessary and reasonable.

Haldimand County Hydro may require a security deposit from a customer who is not billed by a competitive retailer under retailer-consolidated billing unless the customer meets the conditions to waive the deposit

Conditions to Waive Deposit

Customers shall have their deposit waived upon review of their payment history with Haldimand County Hydro.

Customer Type	Good Payment History
Residential	1 year
<50 kW Non-residential	5 years
All other classes not stipulated above	7 years

The time period that makes up the good payment history must be the most recent period of time and some the time period must have occurred in the previous 24 months.

In the absence of a payment history with Haldimand County Hydro, a Utility Waiver will be accepted from another Canadian Electrical Utility or Gas Utility. The waiver must meet the conditions that constitute a good payment history as described below and represent the timelines for Good Payment History.

Customers other than >5000 kW may provide permission for Haldimand County Hydro to perform a credit check. The cost of the credit check will be at the customer's expense.

Conditions of Good Payment History

A customer's good payment history will not be affected where during the relevant time period set out above:

- a) The Customer has received less than two collection notices, and/or
- b) Customer has given less than two insufficient payments by cheque or pre-authorized payment, and/or
- c) Customer has not received a disconnection notice, and/or
- d) Customer has not been disconnected for non-payment or unauthorized usage.

Haldimand County Hydro makes every attempt to contact our customer to notify customers of an outstanding balance. Seven days from the due date, a Past Due Notice is mailed. If no payment is received, or payment arrangements not made within seven days from the date of the Past Due Notice, a Collection Notice is mailed to customers. The Collection Notice advises our customers that payment must be received seven days from the notice date to avoid electrical service interruption and security deposit assessment. In the event Haldimand County Hydro is required to visit the property to either collect or disconnect, the account will be assessed for a security deposit. A Disconnection Notice will be left with the customer or at the property if a disconnection occurs. The Disconnection Notice outlines the requirements for full payment prior to reconnection, reconnection charges and the assessment of a security deposit.

Deposit Calculations

The maximum amount of the account security deposit will be calculated as 2.5 times the customer's actual or estimated average monthly load for the most recent 12 consecutive months within the past two years.

Where a customer's electric service has been disconnected for non-payment or it has been necessary to visit the property to collect, more than once in a relevant 12-month period, the customer's highest actual or estimated monthly load may be used to calculate the security deposit requirements.

Where service address history is absent, Haldimand County Hydro will determine the security deposit to be \$200 for Residential Service accounts and \$300 for <50 kW non-residential rate class. All customers >50kW non-residential rate class or greater will be assessed for a deposit utilizing electricity consumption for similar customers and premise types.

A customer >50 kW non-residential or who has a credit rating from a recognized credit rating agency, the maximum amount of security deposit shall be reduced by the following

Credit Rating (Using Standard and Poor's Rating Terminology)	Allowable Reduction in Security Deposit
AAA – and above or equivalent	100%
AA-,AA,AA+ or equivalent	95%
A-, From A, A+ to below A or equivalent	85%
BBB-, From BBB, BBB+ to below A or equivalent	75%
Below BBB- or equivalent	0%

Payment of Security Deposit

Except for Customers who meet the security deposit waiver conditions, all Customers are required to provide an account security deposit to Haldimand County Hydro, which, at Haldimand County Hydro's election, must be in the form of (i) cash or cheque or (ii) an irrevocable commercial letter of credit issued by a financial institution acceptable to Haldimand County Hydro. Haldimand County Hydro will not accept third party guarantees.

Haldimand County Hydro at the request of the customer will provide a maximum of 4 monthly installments to receive full deposit. Haldimand County Hydro reserves the right to disconnect the supply of electrical energy for causes not limited to but including, overdue amounts payable to Haldimand County Hydro for the distribution of electricity as per section 2.2 of our conditions of service.

Review of Deposit

Haldimand County Hydro will review deposit requirements at a minimum of once per calendar year. During the review process, customer's payment histories will be reviewed to identify customers who qualify to have their deposit returned as a credit to their current account.

During the course of normal billing and collection activities, deposits may be reassessed and applied and payable with the next bill due date.

Customer's >5000 kW who meet the conditions of a good payment history, may have up to 50% of their deposit returned as a credited to their account. Customers may elect to provide a credit rating to qualify for a greater deposit reduction.

Customer's may request in writing to Haldimand County Hydro to review their security deposits requirements. *Customers may not request review of their deposit paid after February 2, 2004 until February 1, 2005.*

Deposit Interest Calculations

Interest shall accrue monthly on security deposits made by way of cash or cheque commencing upon the receipt of the total deposit required by Haldimand County Hydro. The interest rate shall be at the Prime Business Rate as published on the Bank of Canada website less 2 percent, updated quarterly. Haldimand County Hydro will credit interest to the customers deposit on hand or on return of deposit or closure of the account.

Return of Deposits

When it is determined that some or all of the security deposit is to be returned to the customer, the amount will be credited back to the customers account. When the account is closed and the customer has no active account with Haldimand County Hydro Inc., any remaining credit on the account shall be refunded back to the customer within six weeks of the final bill date.

Account security deposits will not be applied to active account arrears and shall not constitute payment of an outstanding account, in whole or in part.

2.4.4. Billing

Haldimand County Hydro may, at its option, render bills to its Customers on either a monthly, every two months, quarterly or annual basis. Bills for the use of electrical energy may be based on either a metered rate or a flat rate, as determined by Haldimand County Hydro.

A Customer may elect aggregated billing for multiple services provided all of the following conditions are met:

- The premises and businesses are situated on one contiguous parcel of land i.e. not separated by public roadway.
- All premises are under one ownership
- The services are supplied at the same voltage
- The meters are of the interval type, allowing logical totalization of the coincident demands. If interval meters are not already in place, the Customer will install the necessary equipment, at the Customer's own cost, to Haldimand County Hydro specifications.

The Customer may dispute charges shown on the Customer's bill or other matters by contacting and advising Haldimand County Hydro of the reason for the dispute. Haldimand County Hydro will promptly 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, overdue interest charges will apply. Where a partial payment has been made by the Customer on or before the due date, the interest charge will apply only to the amount of the bill outstanding at the due date.

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

Haldimand County Hydro 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.

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

Customers will be required to pay special charges, on request, which may arise from a variety of conditions such as:

Transfer Charge. A change of occupancy charge will apply to all accounts taken over by a new Customer.

Collection Charge. A collection charge will apply when an account is overdue and collection procedures are initiated.

Reconnection Charge. A Consumer disconnected for non-payment shall be required to pay a reconnection fee.

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.

Haldimand County Hydro 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 IMO or the OEB. Haldimand County Hydro may charge a fee that has been approved by the OEB for all other requests for aggregated information.

At the request of a Customer, Haldimand County Hydro 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, Haldimand County Hydro 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 Haldimand County Hydro shall provide load forecasts or any other information related to the embedded distributor's system load to Haldimand County Hydro, as determined and required by Haldimand County Hydro. 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 a Distributor's licence obligations.

2.6 General Information

2.6.1 House, Equipment and Vessel Moving

All costs incurred by Haldimand County Hydro relating to a house, equipment or County Hydro's costs will be provided based on the proposed route, and the dimensions of the house, equipment or vessel being moved (loaded height not to exceed 21 feet or 6.4 meters).

A deposit based on the estimated cost, will be required prior to moving.

Any house, equipment or vessel moving may or may not be approved by Haldimand County Hydro.

All requests for house moving must be accompanied with proper permits and licences. If the height of the house being moved is higher than provided for in the estimate, the move will be cancelled until a new estimate is done based on the actual height.

2.6.2 Customer Owned Primary Lines

Owners of private primary lines are encouraged to perform regular tree maintenance to their circuitry so that public safety and system reliability are not compromised.

To facilitate and encourage the maintenance of these lines, it is Haldimand County Hydro's policy to provide one power interruption, at no charge, each year at the customers substation. This no charge service will occur during normal working hours, Monday to Friday, 7:30 a.m. to 3:30 p.m., holidays excepted.

For power interruptions arranged on weekends and for times other than as outlined above, there will be a charge to offset the cost of overtime paid to Haldimand County Hydro crews.

2.6.3 Customer Owned Substations

Owners of private substations are encouraged to perform regular maintenance to the electrical equipment so that inconvenience to themselves and to other customers is not caused through equipment failure.

To facilitate and encourage the maintenance of this equipment, it is Haldimand County Hydro's policy to provide one power interruption, at no charge, once each year at the Customer's substation. This no charge service will occur during normal working hours, Monday to Friday, 7:30 a.m. to 3:30 p.m., holidays excepted.

For power interruptions arranged on weekends and for times other than as outlined above, there will be a charge to offset the cost of overtime paid to Haldimand County Hydro crews.

SECTION 3 - CUSTOMER SPECIFIC

3.1 Residential Service

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.

3.1.1 General Information

There shall be only one service to a building except for semi-detached buildings. For semi-detached buildings with required fire separation, there may be two services.

Standard residential services will include all services up to and including 200 amp, 120/240 volt, (1) single phase, (3) three wire. Large residential services will include all services from 201 amp up to and including 400 amp, 120/240 volt, (1) single phase, (3) three wire.

In circumstances where multiple services are installed to a single dwelling and one service is to be upgraded, the upgraded service will replace all existing services.

Where revenue metering is located inside a residence, it will be relocated by the owner to the exterior of the building at the time of upgrading.

Infill residential services are those new residential services not considered to be part of a subdivision development by the Municipality of Haldimand County.

Infill residential services may be installed underground.

For exceptionally long underground or overhead services, Haldimand County Hydro may require the installation to be constructed to Electrical Safety Authority requirements and calculations provided detailing voltage drop.

Where upgrades are required to existing standard residential services, the upgrade will be allowed to remain overhead provided adequate ampacity standard conductor is available.

In circumstances where multiple services are installed to a single dwelling, and one service is to be upgraded, the upgraded service will replace all existing services.

In circumstances where multiple services are required (i.e.: Granny flats, Quadraplex), a single service of a maximum 200 amps is permitted to supply a gang type meter base. Connected service sizes will require Electrical Safety Authority approval.

3.1.1.1 Secondary Services in Overhead Distribution Area

Where Haldimand County Hydro Inc. specifies that the building is in an overhead distribution area, the following shall apply in addition to Section 5:

- the maximum Service Entrance capacity that will be connected overhead is 400 amperes;
- the Customer is responsible for the supply and installation of the portion of the service beyond the first point of connection to customer-owned equipment;
- if a pole line or other attachments are required on the Customer's property to support the service wires, these shall be erected and maintained by the Customer. This pole line shall be in accordance with Haldimand County Hydro Inc. specifications and with the Electrical Safety Code;
- the Customer is also responsible for the provision of pole or structure and dead-end terminations suitable for terminating the incoming aerial service, and any guying required to make it safe and serviceable; and
- at the Customer's request and where practical, secondary services 200 amperes and less may be installed underground to Haldimand County Hydro's overhead distribution system. In this case the Customer, at his own expense, shall install the entire service from the service entrance at the building to Haldimand County Hydro's distribution pole. If there is no pole on the same side of the street as the building, then Haldimand County Hydro will provide one on the street right-of-way. Haldimand County Hydro will bring an overhead service to this pole. All work by the Customer must be in accordance to Haldimand County Hydro specifications and the Electrical Safety Code.

3.1.1.1.1 Services Over Swimming Pools

Although the Ontario Electrical Safety Code allows electrical conductors to be located at adequate height, Haldimand County Hydro will **not** allow electrical conductors to be located above swimming pools.

When a new swimming pool is to be installed it will be necessary to relocate, at the property owner's expense, any electrical conductors located directly over the proposed pool location.

Where overhead service conductors are in place over an existing swimming pool, Haldimand County Hydro will provide up to 30 metres of overhead service conductors, at no charge, to allow rerouting of the service. The property owner will pay any other costs.

3.1.1.2 New Infill

Where for technical reasons, underground servicing can not be completed, Haldimand County Hydro will provide conductor for new infill standard overhead residential services, from point of supply to service attachment point. Any material, labour, and installation costs provided by Haldimand County Hydro or its agent will be at the owners expense. The installation cost of will be calculated by Haldimand County Hydro at the time of designing the customer service layout.

For exceptionally long overhead services, Haldimand County Hydro may require the installation to be constructed by the customer to Electrical Safety Authority requirements and calculations providing details on voltage drops.

3.1.1.3 Upgrades

Haldimand County Hydro will provide material, installation and labour for the upgrade of existing overhead standard residential services from the point of supply to the first attachment point on customer property.

Standard overhead conductor to be #2 triplex, 1/0 triplex for supply of electric heat type customers.

Meter base minimum size requirement will be dictated as per main service capacity.

Where revenue metering is located inside a residence, it will be relocated by the owner to the exterior of the building at the time of upgrading.

3.1.1.4 Standard Underground Services (Secondary)

Standard underground secondary services will be terminated as shown on Haldimand County Hydro's layout sheet.

Haldimand County Hydro Installed. Haldimand County Hydro will supply, install and maintain conductor for new infill standard underground residential services from point of supply to meter location. All material, labour, and installation costs will be at the owner's expense. Cost of installation will be calculated by Haldimand County Hydro at the time of designing the customer service layout.

Haldimand County Hydro's Contractor shall provide underground trenching in accordance to Haldimand County Hydro specification.

Haldimand County Hydro's Contractor will obtain utility locates and permission from relative road authorities required for trenching.

All meter bases will be of 200 amp capacity to allow up to 250 MCM for underground cable connections. Minimum size meter base to be used is 17 1/2" x 10 1/8" x 4 1/2" for underground services.

Customer Installed. All utility locates and permissions from the relevant road authority required for the trenching are the responsibility of the property owner, as is the proper location of the trench with regard to neighbouring properties.

Customer supplied, installed and maintained conductor to be approved by Haldimand County Hydro and the Electrical Safety Authority.

The trench must be inspected and approved by Haldimand County Hydro and the Electrical Safety Authority.

Up to and including 200 ampere services (max 4/0 conductor) we require you to provide 3 meter lengths of 2" PVC conduit, complete with six steel straps, and the appropriate weatherhead, for cover up at the pole. Customer is to provide enough conductor to connect. Instances where 250mcm conductor is required, the customer is to provide 2 1/2" conduit.

Minimum size meter base to be used is: 17 1/2" x 10 1/8" x 4 1/2" for underground services.

Haldimand County Hydro will not consider themselves liable for any problems resulting from the cable size selected, or to be responsible for the detection and/or repair of any defects in the cable(s).

Voltage problems resulting from the cable selected is the responsibility of the owner.

Haldimand County Hydro, where possible at the request of the customer, will locate cable faults for a fee, but the repair and/or replacement of damaged cables will remain the responsibility of the customer.

3.1.1.5 Large Residential Services (Secondary)

Refer to Section 3.2.1.3

3.1.1.6 Primary Residential Services (Standard & Large)

Refer to Section 3.2.1.3

3.1.2 Early Consultation and Notification

Well in advance of installation commencement, the Customer shall make a request for electrical service. Such request must provide adequate lead time to permit acquisition of major materials. This shall apply for the installation of a new service and the upgrade of an existing service. At the time the request is made, the Customer shall submit the following:

New Residential Service:

- address (municipal address and street name);
- name of owner and electrician;
- a site plan to scale, showing the building in relation to existing and proposed property lines, other buildings, streets and driveways, and the location of other services, gas, telephone, water and cable T.V.;
- amperage of service required;
- preferred location of service entry as per Section 3.1.6 requirements;
- type of heat and any significant loads.

Upgrade of an Existing Residential Services:

- address (municipal address and street name);
- name of owner and electrician;
- amperage of service required;
- preferred location of service entry as per Section 3.1.6 requirements;
- type of heat and any significant loads.

Haldimand County Hydro will review the request and advise the Customer as to whether or not his / her request has been accepted or denied. If the request is denied, Haldimand County Hydro will give reasons for denying the request and offer assistance in modifying the proposed service.

The Customer or Haldimand County Hydro may request a site meeting to review the service. In consultation with the Customer, Haldimand County Hydro will make the final determination of where the service will connect to Haldimand County Hydro distribution system, the route that the service will take, and the location of the Service Entrance at the building.

3.1.3 Point of Demarcation

A residential customer delivery point is at the meter for underground installations if the conductor is owned and maintained by Haldimand County Hydro and the service stack for overhead installations. This supply point might be located on an adjacent property from which the Distributor has an authorized easement. In all cases the final delivery point will be the decision of the Distributor.

The location of supply (connection to the distribution system) service entrance point and meter base will be established through consultation with Haldimand County Hydro for both new and upgraded electrical services. Failure to comply may result in relocation of the service at the owner's expense.

For customer supplied, installed and maintained conductor the point of supply is considered to be the connection point to Haldimand County Hydro distribution system.

3.1.4 Access

Service locations requiring access to adjacent properties (mutual drives, narrow side setbacks, etc.) will require the completion of an easement and a "Letter of Permission" from the property owner(s) involved.

The Customer will provide unimpeded and safe access to the Distributor at all times for the purpose of installing, removing, maintaining, operating or changing metering and distribution equipment.

3.1.5 Metering

Meter sockets will be directly accessible from the street by Haldimand County Hydro staff and mounted on the exterior of the building within 10ft (3m) of the front face of the building and 5ft, 6in (1.68m) from final grade to centre of the meter. Meter sockets will be installed ahead of (on the line side of) the main disconnect switch. Meter sockets found to be inaccessible by Haldimand County Hydro will be relocated at the owners expense.

3.1.6 Inspection

All electrical installations inside the home and out to the delivery point must be inspected and approved in accordance with Haldimand County Hydro and Electrical Safety Authority requirements. Haldimand County Hydro requires notification from the Electrical Safety Authority prior to energization.

Haldimand County Hydro requires a minimum (2) two days notification prior to date of energization.

3.2 General Service

Commercial buildings are defined as buildings which are used for purposes other than single family dwellings.

3.2.1 General Information

One single phase and/or one three phase general service per lot, per customer.

Where upgrades are required to existing general services, the upgrade will be allowed to remain overhead provided overhead conductor ampacity is available.

In circumstances where multiple services are installed to a general service customer, and one service is to be upgraded, the upgraded service will conform to one single phase and/or one three phase general service per lot, per customer.

3.2.1.1 Standard Overhead Services (Secondary)

Haldimand County Hydro will supply, install and maintain overhead service conductors from the point of supply to the delivery point at the owners expense. For exceptionally long overhead services, Haldimand County Hydro may require the installation to be constructed to Electrical Safety Authority requirements and calculations providing details on voltage drop.

allowable limit will be 600 amp, 120/240 volt, single (1) phase, three (3) wire, and 400 amp, 120/208 volt or 347/600 volt, three (3) phase, four (4) wire services.

Where upgrades are required to existing general services, the upgrade will be allowed to remain overhead provided overhead conductor ampacity is available.

3.2.1.2 Standard Underground Services (Secondary)

Standard underground secondary services will be terminated as shown on Haldimand County Hydro's layout sheet.

Standard underground secondary services will be installed in either of the following manners:

Haldimand County Hydro Installed. Haldimand County Hydro will supply, install and maintain conductor for new infill standard underground residential services from point of supply to meter location. All material, labour, and installation by Haldimand County Hydro or its agent will be at the owners expense. Cost of installation will be calculated by Haldimand County Hydro at the time of designing the customer service layout.

- Under normal operating load conditions, total length of 3/0 AL underground cable not to exceed 76m in length. 250MCM will be used for services not to exceed 106m in length. There are a maximum of 18 individually meter suites.
- 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.

All measurements are to initiate from point of transformation.

All meter bases will be of 200 amp capacity to allow up to 250MCM for underground cable connections. Minimum size meter base to be used is:

- 17 1/2" x 10 1/8" x 4 1/2" for underground services.
- Jumbo meter base 18" x 12" x 4 7/8" required for larger than 3/0 services.

Customer Installed. All utility locates and permissions from the relevant road authority required for the trenching are the responsibility of the property owner, as is the proper location of the trench with regard to neighbouring properties.

Customer supplied, installed and maintained conductor to be approved by the Electrical Safety Authority per Haldimand County Hydro's layout sheet.

The trench must be inspected and approved by the Electrical Safety Authority.

Up to and including 200 ampere services (max 4/0 conductor) we require you to provide 3 meter lengths of 2" PVC conduit, complete with six steel straps, and the appropriate weatherhead, for cover up at the pole. Customer is to provide enough conductor to connect. Instances where 250mcm conductor is required, the customer is to provide 2 1/2" conduit.

Minimum size meter base to be used is: 17 1/2" x 10 1/8" x 4 1/2" for underground services. Jumbo meter base 18" x 12" x 4 7/8" required for larger than 3/0 conductor.

Haldimand County Hydro will not consider themselves liable for any problems resulting from the cable size selected, or to be responsible for the detection and/or repair of any defects in the cable(s).

Voltage problems resulting from the cable selected is the responsibility of the owner.

Haldimand County Hydro, where possible at the request of the customer, will locate cable faults for a fee, but the repair and/or replacement of damaged cables will remain the responsibility of the customer.

3.2.1.3 Large General Services (Secondary)

Where general services are required to be larger than 200 amps, the maximum allowable limit will be 600 amp, 120/240 volt, (1) single phase, (3) three wire service.

All large general services are to be supplied, installed and maintained to Haldimand County Hydro and Electrical Safety Authority specification and requirements at the customers expense.

For 400 amp 120/240 volt single phase services, the owner will supply and install a self contained meter base complete with a 4 Jaw transformer rated meter socket with self shorting CT link on left side and a 400 & 400:5, 3 wire bar type CT transformers.

APPROVED 400 AMP METER SOCKET
Micro Electric Cat #JS4A-4-400:5

Note: Meter socket is adaptable to both overhead and underground services.

Connection of meter base to secondary service wires is the responsibility of the owner.

3.2.1.4 Primary Services

General Information. Where it is determined through consultation with Haldimand County Hydro that a primary supply is required, the customer will supply, install and maintain the service to Haldimand County Hydro and Electrical Safety Authority specifications and requirements at the owners expense.

It is the customers responsibility to ensure that all transformers and poles located on private property are kept clear of any obstacles in order to facilitate regular and emergency maintenance.

Customers will supply, maintain and retain ownership of primary and secondary cables, poles, anchors, secondary terminations, grounding and transformer pads. For underground installations refer to DWG 5.12.

Any repairs completed on customer owned equipment will require Electrical Safety Authority approval.

Underground. Cables terminating on supply pole will be, where applicable, rise on the opposite side of the flow of traffic.

Secondary termination connectors (compression type AL/CU 2 hole NEMA style pad for 1/2" bolt) to be supplied, installed, and maintained by the customer. Haldimand County Hydro may at its discretion install secondary terminations if requested.

Primary cables terminating on poles up to 45 feet require 13m of approved cable, poles in excess of 45feet will require consultation with Haldimand County Hydro.

Primary cables will require hypotential testing, at the owners expense.

Haldimand County Hydro will supply, install and connect primary cable terminations complete with required cable protection at the owners expense.

Haldimand County Hydro will fault locate and repair primary cables at the customers request and expense, in order to assure restoration of service in a reasonable time frame.

Overhead. The customer will supply, install and maintain the primary services framed to 27.6/16kV standards from point of supply to Haldimand County Hydro and Electrical Safety Authority requirements.

Haldimand County Hydro will terminate and install primary conductor from the point of supply at the customers expense.

3.2.1.5 Transformation

General Information. Transformation will be required to be installed within 10ft (3m) of an accessible road way capable of carrying heavy trucks. This roadway is to facilitate the installation, repair or replacement of the transformer by Haldimand County Hydro approved personnel. This roadway when required will be installed and maintained by the customer.

In cases of padmount transformer installations near roadways, the transformer door will be located in such a manner as to open facing on-coming traffic.

Transformation will be sized in accordance to the available main service kVA capacity. In circumstances where transformation and main service capacity are not similar, it will be the discretion of Haldimand County Hydro as to the appropriate sizing.

Transformers up to 1000 kVA will be supplied and installed by Haldimand County Hydro. Transformers greater than 1000 kVA will be purchased by the owner upon approval from Haldimand County Hydro in accordance with Haldimand County Hydro Transformer Specifications.

Transformation to other service voltages (as specified in Section 3.2.4) will be supplied, installed and maintained by the owner in accordance with Haldimand County Hydro standards and Electrical Safety Authority approval.

Primary supplies to padmount transformers or customer owned substations will be one of the following as determined by Haldimand County Hydro:

- 4,800/8,320 volts - 3 phase, 4 wire
- 16,000/27,600 volts - 3 phase, 4 wire

Dual voltage transformation will be required for primary voltages other than 16,000 Grd Y/27,600 volts, in order to facilitate voltage conversions.

When transformers are rated at or less than:

- 100 kVA single (1) phase
 - 1000 kVA three (3) phase padmount
- the transformers will be provided by Haldimand County Hydro.

3.2.2 Early Consultation

Prior to the establishing new general service details to a building or lot, Haldimand County Hydro will require the following information from the owner:

- a grading and site plan showing the building(s) in relation to existing and proposed property lines, other buildings, streets and driveways, and the location of other sources, gas, telephone, and water;
- a floor plan indicating unit numbers and corresponding service requirements;
- amperage of main source and/or sub services;
- voltage level;
- metering requirements - individual or bulk;
- a single line diagram showing the provision for metering facilities and a listing of all significant loads such as lighting, motors, cooling, heating, welders, etc.;
- requested energization date;
- preferred location of electrical room, and routing of primary conductors.

Haldimand County Hydro will review the request and advise the Customer as to whether or not his / her request has been accepted or denied. If the request is denied, Haldimand County Hydro will give reasons for denying the request and offer assistance in modifying the proposed service.

The Customer or Haldimand County Hydro may request a site meeting to review the service. In consultation with the Customer, Haldimand County Hydro will make the final determination of where the service will connect to Haldimand County Hydro distribution system, the route that the service will take, and the location of the Service Entrance at the building.

3.2.3 Point of Demarcation

A general service customer delivery point is dependent on customer ownership in the applicable general service section. For the purposes of this document, the point of supply will be:

1. For customer owned conductor, the point of connection will be Haldimand County Hydro distribution system.
2. For utility owned conductor, the point of connection will be the service attachment point and/or meter.

3.2.4 Supply Voltage

The service voltage will be established by the owner and will be one of the following:

- 120/240 volts - 1 phase 3 wire (maximum 600 amp)
- 120Y/208 volts - 3 phase 4 wire
- 347Y/600 volts - 3 phase 4 wire

3.2.5 Underground Service

All new general services will be serviced underground from a primary or secondary point of supply. In rural areas overhead primary services will be permitted.

3.2.6 Location of Transformers

The location of the supply point, primary cables, transformer, and metering will be established through consultation with Haldimand County Hydro for both new and upgraded services. Failure to comply may result in relocation of the service at the owner's expense.

3.2.7 Supply of Equipment

The Distributor will supply, install and maintain equipment as specified in the applicable general service section.

The owner will supply, install and maintain equipment as specified in the applicable general service section.

3.2.8 Short Circuit Capacity

The Owner shall ensure that his service entrance equipment has an adequate short-circuit interrupting capability. Haldimand County Hydro will advise, on request, the maximum available short-circuit symmetrical in-rush Amperes at any specific location.

3.2.9 Access

Service locations requiring access to adjacent properties (mutual drives, narrow side setbacks, etc.) will require the completion of an easement and a "Letter of Permission" from the property owner(s) involved.

The Customer will provide unimpeded and safe access to the Distributor at all times for the purpose of installing, removing, maintaining, operating or changing metering and distribution equipment.

3.2.10 Metering

The owner will make provisions acceptable to Haldimand County Hydro for revenue metering equipment.

This provision could be one, or a combination of the following as established by Haldimand County Hydro for each service:

- appropriate meter socket; as specified further in this Section.
- a lockable metal enclosure, with removable back plate of dimensions; as specified further in this Section.
- a lockable compartment within metal enclosed switchgear to accommodate Haldimand County Hydro instrument transformers, as specified further in this Section.

Metering will be installed as per Revenue Metering Specifications as outlined further in this Section.

Prior to energization of service, Haldimand County Hydro will require notification of approval from the Electrical Safety Authority.

3.2.10.1 Revenue Metering Specifications

Haldimand County Hydro will install revenue meters, instrument transformers, test panels and all interconnecting wiring.

The owner will provide at his expense, as outlined further in this section:

- Space acceptable to Haldimand County Hydro, as outlined further in this section, for the installation of revenue metering equipment.
- Where metering equipment is required to be installed in a locked environment, the customer shall supply Haldimand County Hydro with a key.
- Facilities for attachment including meter sockets.
- A pad lockable metal enclosure with removable back plate.
- Installation of conduit for instrument wiring, where required.
- All metering installations and/or rooms must be inspected and approved by the Electrical Safety Authority to Haldimand County Hydro requirements.
- All meters shall be grouped in a central location which is readily accessible to and approved by Haldimand County Hydro.
- If electrical service room is to be located above the main floor level, a stairway built in accordance with the Ontario Building Code shall be installed.

Note: Ladders are not acceptable.

All locations accessible to the general public will have a lockable enclosure or room for the service equipment and meters provided by the owner as follows:

- An electrical room;
- A metal metering cabinet approved by Haldimand County Hydro; or
- A metal enclosed switchgear approved by Haldimand County Hydro and the Electrical Safety Authority.

All locations will be clear and safe with working space of not less than 1.2m (48").

Where the possibility of danger exists to workmen, or damage to equipment from moving machinery, vibration, dust, fumes or moisture, protective arrangements shall be provided by the customer to the approval of Haldimand County Hydro.

3.2.10.2 Meter Socket Specifications

120/240V, single (1) phase three (3) wire services up to and including 200A require:

- A 4 JAW, square type meter socket base.

120/240V, single (1) phase three (3) wire 400A service will require:

- A 4 Jaw 400 and 400:5, 3 wire, bar type current transformer rated meter base complete with self shorting device on the left side, 400:5 current transformers and twin covers suitable for 120/240V (1) single phase service is required.

APPROVED 400 AMP METER SOCKET
Micro Electric Cat #JS4-2

Note: Services with suspected poor power factor will be required to install the appropriate meter facilities for metering both watt and kVA demand.

120/208V, two (2) phase with a neutral wire service up to and including 200A require:

- A 5 JAW, square type meter socket base (5th JAW to be installed in the 9 o'clock position).

- To be installed on the load side of the disconnect switch supplying each individual service.

600Y/347 or 208Y/120V, three (3) phase, four (4) wire services up to and including 200A require:

- A 7 JAW, square type meter socket base complete with an isolated neutral connection.
- 208Y/120V services meter sockets will be allowed to be installed on the exterior of the building on the load side of the disconnect switch.
- 600Y/347V services meter sockets are to be installed on the load side of the disconnect switch supplying each individual service.

Meter mounting height shall be 5'6" (1.68meters) from final grade to center of meter.

The customer/contractor shall permanently and legibly identify all metered services with respect to municipal address and/or unit #. The identification shall apply to all disconnect switches, and meter mounting devices.

Services will not be connected unless service identification on the disconnect switches and meter mounting devices, correspondence with the appropriate addresses and/or unit #'s. Owners of the multiple unit buildings are required to inform Haldimand County Hydro of any changes made to municipal address and/or unit #.

Where required by these conditions of supply, the owner shall supply, install and maintain a meter cabinet to Haldimand County Hydro specifications.

3.2.10.3 Commercial and Industrial Meter Cabinet Specifications

208Y/120V (3) three phase, four wire service over 200A require:

- Current Transformer Cabinet as outlined further in this Section.

600Y/347V (3) three phase, (4) four wire service over 200A require:

- Combination Current Transformer and Potential Transformer Cabinet as outlined further in this Section.

3.2.10.4 Meter Cabinet

The meter cabinet will be supplied to Haldimand County Hydro specifications at the customers expense.

A voice grade telephone line is to be installed from customers main telecommunication panel to meter cabinet by the customer for Haldimand County Hydro remote interrogation.

3.2.10.5 Current Transformer Cabinet

30" (762mm)w x 30" (762mm)h x 10" (254mm)d CEMA/NEMA-1 current transformer cabinet for services up to 800A.

Current transformer cabinet is to be complete with the provision for padlocking and a removable steel back plate.

Notes:

- Current transformer cabinet is to be installed on the load side of the main disconnect switch.
- Top of current transformer cabinet is to be mounted at a height of 6' (1828mm) from final grade.
- Current transformer cabinet location must not exceed a distance of 50' (15.2m) from the meter cabinet.
- The location of the indoor current transformer cabinet is to be readily accessible to and approved by Haldimand County Hydro.
- Electrical contractor to supply, mechanical conductor termination lugs for current transformers.
- Removable back plate must be submitted to Haldimand County Hydro at least ten (10) working days prior to the date of energizing.
- 1 1/4" (32mm) PVC conduit to be installed in one continuous run from current transformer cabinet to meter cabinet complete with a minimum of 1/4" poly rope from current transformer to meter cabinet. Access type fittings are not acceptable.
- Back plate to be marked, top line, and load for current transformer polarity.
- Line side conductors are to enter at center left and center right of current transformer cabinet.

3.2.10.6 Combination Current Transformer and Potential Transformer Cabinet

36" (914mm)w x 36" (914mm)h x 10" (254mm)d CEMA/NEMA-1 current transformer cabinet for services up to 800A.

Current transformer cabinet is to be complete with the provision for padlocking and a removable steel back plate.

Notes:

- Current transformer cabinet is to be installed on the load side of the main disconnect switch.
- Top of current transformer cabinet is to be mounted at a height of 6' (1828mm) from final grade.
- Current transformer cabinet location must not exceed a distance of 50' (15.2m) from the meter cabinet.
- The location of the indoor current transformer cabinet is to be readily accessible to and approved by Haldimand County Hydro.
- Electrical contractor to supply, install and connect conductor termination lugs for current transformers.

- Removable back plate must be submitted to Haldimand County Hydro at least ten (10) working days prior to the date of energizing.
- 1 1/4" (32mm) PVC conduit to be installed in one continuous run from combination current transformer and potential transformer cabinet to meter cabinet. Access type fittings are not acceptable. The contractor is to install a minimum of 1/4" poly rope from current transformer to meter cabinet.
- Line side conductors are to enter at center left and center right of current transformer cabinet.

3.2.10.7 Meter Enclosed Switchgear

The following regulations apply to the installation of instrument transformers and metering equipment within metal enclosed switchgear.

Haldimand County Hydro will, install revenue meters, instrument transformers, test panels and all interconnecting wiring.

The owner shall:

- Consult with Haldimand County Hydro regarding metering equipment to be provided, which may include:
 - potential transformers
 - current transformers
- Haldimand County Hydro will use Schlumberger MV-7 current transformers or
- similar bar type CT's for services up to 1200 amps (347/600V)
- terminal test block
- All metal enclosed switchgear metering compartments will be equipped with a neutral bus bar for provision of connecting metering equipment.
- Submit two (2) copies of the manufactures switchboard drawings for approval. Drawing to indicate provisions for Haldimand County Hydro metering arrangement complete with dimensions.
- Install meter cabinet and conduit.

3.2.10.8 Instrument Transformers

Instrument transformers shall be supplied and installed by Haldimand County Hydro in a separate switchgear compartment on the load side of a main switch to permit removal or replacement of equipment. The compartment door shall have provision for a Haldimand County Hydro padlock.

3.2.10.9 Meter Cabinet Specifications

Meter cabinet to be installed as outlined earlier in this Section.

3.2.10.10 Interval Demand

Haldimand County Hydro will install, at the owners expense, interval metering on all new 3 phase, 4 wire services, with a usage greater than 500kW.

A 13mm (1/2in.) conduit from the telephone entrance equipment and a 1 ML direct dial voice quality telephone line supplied and maintained by the Customer which is active 24 hours a day to the metering location extension jack which is mounted on the metering board. This phone line must be installed and functioning prior to the new service being energized.

A voice grade telephone line, for the purpose of remote interrogation, will be supplied by the customer .

Existing services will, at the owners expense, be considered for interval metering if a review of the customers usage for the previous year shows a consistent demand greater than 500kW. A voice grade telephone line, for the purpose of remote interrogation, will be supplied by the customer.

3.3 General Services (Above 50 kW)

A customer classified as being over 50kW by is one that identified the billing system as registering over 50kW on a demand meter.

3.4 General Services (Above 1000 kW)

A customer is classified as being above a 1000kW if they have a service of 1200 amps (347/600 volts) or larger.

Customer Owned

Installations with a capacity of larger than:

1000 kVA three (3) phase

the transformers shall be supplied and installed by the owner to Electrical Safety Authority and Haldimand County Hydro requirements.

The customer will supply Haldimand County Hydro with a least three (3) quotes from approved transformer manufacturers detailing transformer losses as per CSA C802.

Haldimand County Hydro reserves the right to select the most suitable transformer accordingly to final transformer loss calculation. This procedure will ensure that the supplied transformer will best meet Haldimand County Hydro system requirements and are not necessarily based on purchase price alone.

3.5 Embedded Generation

Haldimand County Hydro will provide a connection to the Haldimand County distribution system where it is technically feasible for embedded generators for the purpose of selling energy or for load displacement within the customers premise. The cost of the connection and related protection to assure the safety of the public, employees and security of the system will be charged to the customer. The requirements for embedded generation are set out in the Embedded Generation Agreement which must be signed between Haldimand County Hydro and the embedded generator. Haldimand County Hydro and the Generator must comply with regulators relating to Generation.

3.6 Embedded Market Participant

Embedded Market Participants are subject to the terms and conditions of the Independent Electricity Market Operator. Market participants are responsible for all LDC charges as approved by the Ontario Energy Board.

3.7 Embedded Distributor

The following terms and conditions apply to the connection of an Embedded Distributor.

3.7.1 Contact Information

The contact information will be reviewed annually. Each Party will notify each other by November 1 of each year to confirm or update such information. If either party proposes to make a change affecting the embedded connected point, then notice of such change will be given in writing. Such notice will be given a minimum of thirty (30) days prior to any planned implementation of the change. Any change will require the approval of both Parties.

The Customer acknowledges and agrees that Haldimand County Hydro may provide any information provided by the Customer under the terms of the Standard Embedded Distributor Agreement to Haldimand County Hydro's representatives, provided that Haldimand County Hydro:

- provides such information to only those of Haldimand County Hydro's representatives who need to know the information; and
- has directed such representatives to use the information in accordance with the terms hereof.

3.7.2 Energy Supply

As the Host Distributor, Haldimand County Hydro reserves the right to limit the amount of energy that it agrees to supply the Customer at each embedded connection/delivery point, and this amount shall be agreed upon by both Parties.

The Customer shall notify and include Haldimand County Hydro in any discussion, planning and interconnection design of any proposed embedded generation facility that the Customer proposes to connect to its portion of the distribution system.

3.7.3 Billing

Haldimand County Hydro shall bill the Customer on a billing cycle each month for the provision of distribution services by Haldimand County Hydro, and for all other applicable charges approved or authorized by the Ontario Energy Board, pursuant to Haldimand County Hydro's rate orders or any codes issues by the Ontario Energy Board.

Haldimand County Hydro shall settle non-competitive electricity services based on the rates approved by the Ontario Energy Board and by the requirements of the Retail Settlement Code. Haldimand County Hydro shall adjust the Customer's usage by the applicable total loss factor for purposes of determining the Customer's noncompetitive electricity costs.

If the Customer is not a Wholesale Market Participant, then Haldimand County Hydro shall provide revenue metering for the settlement and monthly billing of the Customer. If the Customer is or becomes a Wholesale Market Participant Distributor, then the Independent Market Operator shall settle the Customer's monthly energy bill.

If the Customer is or becomes a Wholesale Market Participant Distributor, then the Corporation shall act as the default Metering Service Provider (MSP) and as such, enter into a Metering Service Provider Agreement with the Customer.

3.7.4 Ownership

All Haldimand County Hydro-owned equipment, including the revenue metering equipment and instrument transformers, shall continue to be vested in Haldimand County Hydro, unless the Parties have specified otherwise in the Embedded Distributor Agreement. (Note: presently Hydro One may own the wholesale metering installation.).

All Customer equipment and facilities shall continue to be vested in the Customer, unless the Parties have specified otherwise in the Embedded Distributor Agreement.

3.7.5 Assignment of Responsibility

The electrical distribution systems shall be under the operating control of a controlling authority at all times.

The responsibility for regular maintenance of equipment rests with the owner. Haldimand County Hydro and the Customer shall ensure that only qualified persons perform the operation and maintenance of their respective electrical distribution systems.

Each Party shall be responsible for maintenance, protection and power quality of each Party's portion of the shared distribution feeder that each party owns. Each Party shall ensure that its portion of the feeder has proper fault protection and voltage within proper limits.

Haldimand County Hydro and the Customer shall maintain their respective equipment in efficient condition with proper devices, according to electrical distribution utility standards. If, in the opinion of Haldimand County Hydro or the Customer, maintenance is not properly performed, the identifying Party will notify the other in writing.

3.7.6 Normal Operations

Control Authorities will inform each other at least seven calendar days in advance of any planned work which would have an effect on the other Parties electrical distribution systems. Applications for work involving load interruptions shall be initiated at least ten (10) calendar days in advance, to permit proper notification of other customers who would be interrupted for, and the co-ordination of, switching on the equipment under its control.

The control authority of the equipment under its control shall issue work protection on the equipment when work is done on that equipment. Each control authority is responsible for establishing a safe work environment, in accordance with industry standards, for their forces while carrying out planned or emergency maintenance.

Each Party is responsible for providing isolation at devices under their operating control to assist the other Party.

3.7.7 Communication

Communications between controlling authorities must be readily available to deal with routine and unforeseen system conditions.

The Controlling Authority of each Party agrees to communicate for the following reasons:

- For normal operating communications with regard to outage planning, work protection and switching, etc.
- Provide each other with information relative to prearranged outages, power interruptions or system problems which materially affect the supply of power to each others distribution system.
- Provide each other with information relative to feeder trips or reclosure operations caused by equipment under each Parties ownership or control.
- Following an A/ or A/R/A during regular working hours Haldimand County Hydro's Controlling Authority will not authorize the Hydro One Controlling Authority to reenergize a feeder owned by Haldimand County Hydro until contact has been made with the Customer's Controlling Authority.
- Following an A/ or A/R/A after regular working hours, and if no "Hold Off" is in effect, Haldimand County Hydro has authorized the Hydro One Controlling Authority to allow one minute prior to attempting re-energization. After one attempt at reenergization, no further attempts to re-energize a feeder owned by Haldimand County Hydro will be made until contact has been made with the Customer and Hydro One. It will be the responsibility of the Hydro One Controlling Authority to contact Haldimand County Hydro's Controlling Authority after hours.

- When a permanent fault occurs on a feeder which supplies Haldimand County Hydro and Customer load, the Haldimand County Hydro Controlling Authority will notify the Customer's Controlling Authority during regular working hours, and the Customer's Line Superintendent on call for after hours permanent faults. Once communication is established and the location of the fault is not known, Haldimand County Hydro and/or Customer staff will be dispatched to patrol their systems, and may assist each other in sectionalizing the faulted feeder.

Since Haldimand County Hydro and the Customer each own portions of, and share, a common feeder, both Parties agree to provide each other with the following information:

- Haldimand County Hydro shall provide the Customer with fault current information and protection settings of upstream protective devices.
- The Customer shall provide Haldimand County Hydro with load forecasting information.
- Haldimand County Hydro and the Customer agree to maintain phase balance within generally acceptable industry standards.
- Haldimand County Hydro and the Customer agree to adhere to generally acceptable standards pertaining to power quality and voltage levels on the section of feeder each Party owns.
- Haldimand County Hydro and the Customer agree to provide each other, on request, with maintenance schedules and records on the section of feeder each party owns.

3.7.8 Emergency Operations

Each Party will co-operate fully in case of emergencies in order to facilitate restoration of the system back to normal, and to permit the organization of possible repairs.

On the request of one Controlling Authority, the other Controlling Authority's staff or agents will provide the required timely isolation of equipment as required for emergency switching, or to establish a Condition Guarantee.

3.7.9 Metering and Fault Protection

Haldimand County Hydro agrees to deliver electricity to the Customer's distribution system through a bulk meter or interval meter for settlement purposes.

If the Customer is, or becomes, a Wholesale Market Participant Distributor registered with the Independent Market Operator, the Customer will be responsible for the wholesale metering installation(s) metering data as per the Ontario Market rules.

Haldimand County Hydro shall have read-only access to such wholesale metering installations.

The Parties shall act at all times in accordance with the Distribution System Code, for situations where Haldimand County Hydro or the Customer provides distribution services through a load transfer.

Haldimand County Hydro and the Customer shall each manage its own portion of a supply feeder, and ensure that its portion of the feeder has proper fault protection and voltage within proper limits in accordance with industry standards.

The owner of the feeder breaker would be responsible for maintaining appropriate relay settings for overall feeder protection, and both Haldimand County Hydro and the Customer would be responsible to provide the required information to accomplish this.

3.7.10 Costs

Once the request for connection has been approved, and upon receipt of a Purchase Order or equivalent from the Customer, Haldimand County Hydro shall prepare detailed engineering specifications for required system enhancements, obtain cost estimates for the specified work, and determine cost-sharing arrangements.

Haldimand County Hydro agrees to provide the Customer, in writing, a Project Description and Letter of Intent that includes:

1. a description of the work to be performed by Haldimand County Hydro Inc.
2. a summary of the work to be performed by the Customer
3. Haldimand County Hydro Inc.'s capital investment in the project; and
4. the Customer's financial contribution to the package.

Haldimand County Hydro Inc. shall only be liable to the Customer, and the Customer shall only be liable to Haldimand County Hydro Inc., for any damages which arise directly out of the willful misconduct or negligence:

- of Haldimand County Hydro Inc. in providing distribution services to the Customer;
- of the Customer in being connected to Haldimand County Hydro Inc.'s distribution system; or
- of Haldimand County Hydro Inc. or the Customer in meeting their respective obligations under the Distributed System Code, their licences, and any other applicable law.

The Distributor-Customer agrees to take out liability insurance in the amount of \$5,000,000 to which the Corporation of the Municipality of Haldimand County and Haldimand County Hydro Inc. are added as additional named insured, and to provide proof of such insurance.

Despite the above, neither Haldimand County Hydro Inc. nor the Customer shall be liable under any circumstances whatsoever for any 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 3.7.3.

3.7.11 Force Majeure

Subject to the items below, neither Party shall be held to have committed an event of default in respect of any obligation under the Embedded Distributor 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 obligation under the DSC and the Embedded Distributor 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 the Embedded Distributor 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 Embedded Distribution 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, mitigate its effects, and resume full performance under the Embedded Distributor Agreement and the DSC shall not apply to strikes, lockouts or labour disputes.

3.8 Unmetered Connections

3.8.1 Street Lighting

Street lighting is owned by the Corporation of the Municipality of Haldimand County and maintained by their authorized contractor, which may be Haldimand County Hydro Inc. Attachment of street lights to Haldimand County Hydro Inc.-owned poles and electrical supply to street lights is subject to approval of Haldimand County Hydro Inc.

The service to streetlights will be unmetered. Street lighting is supplied at a rate to be approved by the OEB. Energy consumption will be based on connected wattage information submitted by the Customer and calculated as per hours of use, subject to the approval of Haldimand County Hydro Inc. It is the responsibility of the Customer to report to Haldimand County Hydro Inc. in writing any change of consumption.

3.8.2 Traffic Control Signals

This section pertains to the supply of electrical energy to various traffic control signals and crosswalks. These are devices owned and maintained by the local municipalities. The method of supply will vary, and will be established for each application through consultation with Haldimand County Hydro Inc. Where transformation does not exist, it will be provided and considered an expansion of the system. A capital contribution may be required.

The service will be unmetered. This service will be classed as a General Service Customer under 50 kW. The rates charged will be as per Under 50 kW General Service Class, as approved by the Ontario Energy Board. Energy consumption will be based on connected wattage information submitted by the Customer and calculated as per hours of use. It is the responsibility of the Customer to report to Haldimand County Hydro Inc. in writing any change of consumption to the installation.

Service conductors will be supplied by the Road Authority. Prior to energization of service, Haldimand County Hydro Inc. will require connection authorization from the Electrical Safety Authority.

3.8.3. Other Small Services

This section pertains to the supply of electrical energy for telephone booths, cable T.V. amplifiers, and similar small-unmetered loads.

The service voltage will be 120 volts, single (1) phase, two (2) wire.

The method and location of supply will vary and will be established for each application through consultation with Haldimand County Hydro.

The service will be unmetered. Energy consumption will be based on connected wattage information submitted by the customer and calculated as per hours of use.

Where transformation does not exist a contribution in aid of will be required.

Service conductors will be supplied by the owner.

Prior to energization of service, Haldimand County Hydro will require notification of approval from the Electrical Safety Authority.

3.9 Small Metered Connections

3.9.1 Temporary Services (Construction Power)

This section pertains to the supply of electrical energy on a temporary basis to facilitate construction work. This includes pole mounted service equipment, trailers, cranes and similar applications.

Such services would be in place for a period of less than 12 months, extensions will be at the discretion of Haldimand County Hydro.

All other temporary services will be dealt with as general services outlined in Section 3.2. For applicable charges refer to Section 5.

At the discretion of Haldimand County Hydro one or more temporary services may be provided for a construction project.

The nominal service voltage will be one of the following:

- 120/240 volts, 1 phase, 3 wire (Max. 200 amp)
- 120/208 volts, 3 phase, 4 wire (Max. 200 amp)
- 347/600 volts, 3 phase, 4 wire (Max. 400 amp)

The location of the service entrance point and metering details will be established through consultation with Haldimand County Hydro. Failure to comply may result in modifications at the owner's expense.

The owner will pay the total cost of the temporary service installation and removal, prior to the commencement of any work being initiated by Haldimand County Hydro.

Primary or secondary pole lines required to be constructed on private property will be the responsibility of the customer. All pole lines will be built in accordance to Ontario Electrical Safety Code and be approved by the Electrical Safety Authority.

The following information will be provided by the owner:

- requested energization and removal dates;
- amperage of service;
- preferred voltage;
- preferred point of service entrance;
- estimated kilowatt demand;
- a listing of all significant loads such as large motors;
- a site plan showing the location of the delivery point relative to lot lines and the street.

3.9.1.1 Metering

The owner will make provision, acceptable to Haldimand County Hydro, for revenue metering equipment. The provision for metering could be one or a combination of the following as established by Haldimand County Hydro:

- approved meter sockets as outlined in Section 3.2.10;
- a lockable metal enclosure as outlined in Sections 3.2.10.

The metering equipment location will be agreed upon through consultation with Haldimand County Hydro. The location allocated for Haldimand County Hydro metering equipment, shall be directly accessible to Haldimand County Hydro staff and shall be subject to satisfactory environmental conditions some of which are:

- safe and adequate working space not less than 1.2m (48") in front of equipment;
- protected against the adverse effects of moving machinery, vibration, dust, moisture or fumes.

Prior to energization of service, Haldimand County Hydro will require notification of approval the Electrical Safety Authority. The service entrance and metering provision shall be inspected and accepted by Haldimand County Hydro prior to energization.

3.9.2 Billboards

This section pertains to the supply of electrical energy for illumination of bill boards for which services from an adjacent structure is not readily available.

The nominal service voltage will be 120/240 volts, single (1) phase, three (3) wire.

The method and location of supply will vary and will be established for each application though consultation with Haldimand County Hydro.

The service will be metered.

Where transformation does not exist a capital contribution will be required.

Service conductors will be supplied by the owner.

Prior to energization of service, Haldimand County Hydro will require notification of approval from the Electrical Safety Authority.

SECTION 4 - GLOSSARY OF TERMS

4.1 Definitions

Sources for Definitions:

A	Electricity Act, 1998, Schedule A, Section 2, Definitions
MR	Market Rules for the Ontario Electricity Market, Chapter 11, Definitions
TDL	Transitional Distribution Licence, Part I, Definitions
TTL	Transitional Transmission Licence, Part I, Definitions
DSC	Distribution System Code Definitions
RSC	Retail Settlement Code Definitions

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

“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 IMO 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 Haldimand County Hydro 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 percent lower or 30 percent 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;

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

“Conditions of Service” means the document developed by a distributor in accordance with subsection 2.4 of the Code that describes the operating practices and connection rules for the distributor; (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 results 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 voltages 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” means the code, approved by the Board, and in effect at the relevant time, which, among other things, establishes the obligations of the distributor 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)

“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)

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

"electric service" means the Customer's conductors and equipment for energy from Haldimand County Hydro; “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 IMO-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 IMO-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 of 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)
apartments 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, R, TDL, DSC)

“geographic distributor,” with respect to a load transfer, means the distributor that is licenced 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)

“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;

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

“IMO-controlled grid” means the transmission systems with respect to which, pursuant to agreements, the IMO 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)

"large user" means a Customer with a monthly peak demand of 5000 kW or greater, regardless the demand occurs in the peak or off-peak periods, averaged over 12 months;

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

“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 Haldimand County Hydro’s incoming cables, bus duct, disconnecting and protective equipment for a Building or 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/86-131; (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 IMO that are not deemed by the Board to be competitive electricity services plus costs for distribution services, other than Standard Supply Service (SSS); (RSC)

"normal operating conditions" means the operating conditions comply with the standards set by the Canadian Standards Association ("CSA") Standard CAN3-C235- 87 (latest edition);

“Ontario Energy Board Act” means the Ontario Energy Board Act, 1998, S.O. 1998, c.15, 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)

“performance standards” means the performance targets for the distribution and connection activities of the distributor 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 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; (DSC)

"plaza" means any Building containing two or more commercial business tenants;

“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 1000 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 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 50kW supplied to single family dwelling units that is for domestic or household purposes, including seasonal occupancy. At Haldimand County Hydro'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)

"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 1000 Volts;

"service agreement" means the agreement that sets out the relationship between a licenced 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 the distributor is authorized by its licence to distribute electricity; (A, TDL, DSC)

"service date" means the date that the Customer and Haldimand County Hydro mutually agree upon to begin the supply of electricity by Haldimand County Hydro;

"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 1000 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 Haldimand County Hydro'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)

"unaccounted for energy" means all energy losses that can not be attributed to distribution losses. These include measurement error, errors in estimates the document approved by the Board that outlines of distribution losses

SECTION 5 - RATES AND CHARGES

Residential single Service	
Overhead 200 A Max	Up to 30m OH service lines from service point of entry to delivery point. Including, connections. Also includes transformation.
Charge Notes	Free Basic Service
Demarcation Point	Top of Customer's Service Mast
Underground Residential Service	
Underground (Not Requiring Transformation Facilities on customer's property)	Equivalent Credit for Estimated Costs of a Basic overhead service (30 metre overhead service)
Demarcation Point	Line side of Customer's meter base
Costs	Customer charged actual costs
General Comments:	Services over 250 feet require 250 mcm wire

Residential Services Requiring Transformation on Customer Property	
Overhead - Single Service	Customer supplies and owns service, including poles
Costs	Customer pays all costs over "basic" service cost
Underground - Single Service	Customer provides all wire, civil work and transformer pad
Other Notes	Customer supplies and owns service
Costs	Customer pays the difference between overhead and padmount transformer
Demarcation Point	Bottom of switch on Utility pole

Class 2 General Service 0 – 50 kW Single Service	
Overhead - Single Service	Up to 30 m OH service lines from point of entry to delivery point, including connections. Transformation supplied.
Costs	Variable (based on Capital Contribution formula)
Demarcation Point	<u>Top</u> of Customer's Service Mast
Customer Owned Underground Service (Not Requiring Transformation Facilities on customer's property)	Installation and Connection of Customer Owned Service on pole (customer provides civil work)
Other Notes	Customer supplies and owns service
Costs	Variable (based on Capital Contribution formula)
Demarcation Point	Connections on Utility pole

Class 3 General Service 50 kW – 999kW	
Overhead - Single Service <150 kW Demand	For up to 400 amp services - 30m OH service lines from service point to delivery point. Including, connections. Maximum 400 amp for OH service.
Other Notes	Max Service Size 600 A 120/240, 4 00 A 208Y/120 V, 400 A 347/600 V
Costs	Customer charged actual cost, credited for one transformer.
Demarcation Point	Top of Customer's service mast
Customer Owned Underground Service (Not Requiring Transformation Facilities on customer's property)	Installation and Connection of Customer Owned Service on pole
Costs	Variable (based on Capital Contribution formula)
Demarcation Point	Secondary connections on utility pole.
Underground Primary Service (Requiring Transformation Facilities on customer's property)	Up to 1000 kVA transformer supplied. Customer supplies civil work, pays for all primary cable and transformer capital contribution.
Interval Meter Min Limit	200 kW

Costs	Variable (based on Capital Contribution formula)
Interval Meter Cost	\$2,000.00
Demarcation Point	Bottom of switches on last Utility pole

Class 4 General Service > 1000 kW Single Service	
Overhead Primary - Single Service	Up to 30m OH primary wire. Primary metering equipment paid for by customer.
Metering Notes	Customer supplies Cabinet and phone line Haldimand County Hydro supplies metering.
Costs	Interval meter charge + Variable (based on Capital Contribution formula)
Customer Owned Primary Underground Service	Primary Connections at Haldimand County Hydro riser pole.
Costs	Interval meter charge + Variable (based on Capital Contribution formula)
Demarcation Point	Bottom of switches on last Utility pole (or load side of inline switches)

Commercial and Industrial Plazas	
Underground Primary Service (Requiring Transformation Facilities on customer's property)	Owner responsible for all primary cable or switchgear, repairs and maintenance,
Costs	Variable (based on Capital Contribution formula)
Customer Owned Primary Underground Service with Customer owned transformer >1000 kVA	Primary Connections at Haldimand County Hydro riser pole.
Costs	Variable (based on Capital Contribution formula)
Demarcation Point	Bottom of switches on last Utility pole (or load side of inline switches)

Apartment or Office Buildings	
Underground Primary Service (Requiring Transformation <1000 kVA Facilities on customer's property)	Owner responsible for all primary cable repairs and maintenance by Haldimand County Hydro, Switchgear as required
Metering Comments	Maximum of two meters to be provided by Haldimand County Hydro At no cost to developer. Additional meters provided at owners expense
Costs	Variable (based on Capital Contribution formula)
Customer Owned Primary Underground Service with Customer owned transformer >1000 kVA	Owner responsible for all primary cable repairs and maintenance by Haldimand County Hydro, Switchgear as required
Metering Comments	Maximum of two meters to be provided by Haldimand County Hydro at no cost to developer. Additional meters provided at owners expense
Costs	Variable (based on Capital Contribution formula)
Demarcation Point	Bottom of switches on last Utility pole (or load side of inline switches)

Row Type Multiple Dwellings	
Overhead	Up to 30m OH service lines from service point of entry to delivery point, including, connections. Transformation supplied
Charge Notes	Variable (based on Capital Contribution formula)
Demarcation Point	Customer meter base
Underground Service (Not Requiring Transformation Facilities on customer's property)	Equivalent Credit for Actual Costs of an overhead service from point of entry to delivery point less credit for 30 metres of overhead service .
Demarcation Point	Customer meter base
Charge Notes	Variable (based on Capital Contribution formula)

Underground Primary Service (Requiring Transformation Facilities on customer's property)	Single Phase padmount transformers are supplied by Haldimand County Hydro at the developer's cost and assumed by Haldimand County Hydro after the maintenance period is completed
Charge Notes	Variable (based on Capital Contribution formula)
Other Notes	Owner cost responsible for all primary cable repairs and maintenance.
Demarcation Point	Bottom of Utility owned switch.

Downtown Core – Underground Services Permitted Only	
Underground Service less than 1200 Amps 120/208 Volts	6 m. of underground service cable and conduit from property line to point of entry plus 3 m of cable within the building to customer's main disconnect switch
Charge Notes	Free Basic Service + Variable Charge
Underground Primary Service up to 1000 kVA (Requiring Transformation Facilities on customer's property)	Up to 1000 kVA padmount transformer supplied by Haldimand County Hydro. Owner cost responsible for all primary cable repairs and maintenance.
Charge Notes	Variable (based on Capital Contribution formula)
Underground Primary Service >1000 kVA Customer owned Substation	Primary Connection to Switches or Fuses at Haldimand County Hydro riser pole.
Charge Notes	Variable (based on Capital Contribution formula)
Demarcation Point	Utilities switchgear or bottom of Utility owned switch.

Temporary Service	Comment: Temporary Service is defined as a short duration service typically up to 12 months
Overhead -Single Service	Up to 30m OH service lines from service point of entry to delivery point. Including, connection and removal. Transformer is extra
Charge Notes	\$246 Minimum charge
Customer Owned Underground Service (Not Requiring Transformation Facilities on customer's property)	Installation, Connection and removal of Service up to 30 m. of UG cable property line to meter location to padmount transformer
Charge Notes	Variable Costs

Residential Subdivisions	
Underground Primary Services	Developer Designs & Installs all plant to Haldimand County Hydro specs. Engineering, Inspection, Testing, Connection and Services from property line to meter socket chargeable to customer
Charge Notes	\$480/service + Variable Costs
Demarcation Point	Utilities switchgear or bottom of Utility owned switch.

Flat Rate UnMetered Services	
All new services MUST be metered other than County Streetlights and Cable TV power suppliers.	

Roadway Lighting Unmetered Services	
Overhead - Single Light Service - Not requiring transformation	Connection and Disconnection Transformer is extra. Requires ESA inspection.
Charge Notes	All costs are responsibility of light owner
Customer Owned Underground Service to Haldimand County Hydro Riser Pole	Connection and Disconnection By Haldimand County Hydro. Transformation is extra
Charge Notes	All costs are responsibility of light owner
Customer Owned Underground Service to Haldimand County Hydro Padmount transformer Not Requiring Transformation Facilities on customer's property)	Connection and Disconnection by Haldimand County Hydro. Transformation is extra
Charge Notes	All costs are responsibility of light owner
Demarcation Point	Last Utility owned connection