Conditions of Service

Halton Hills Hydro Inc.

Revised January 2018

Providing Halton Hills with Electricity Distribution Excellence in a Safe and Reliable Manner

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HALTON HILLS HYDRO INC.

CONDITIONS OF SERVICE

Preface

The Distribution System Code ("DSC") requires that each distributor produce a "Conditions of Service" document. The purpose of this document is to provide a means for communicating the types and level of service available to the Customers within Halton Hills Hydro Inc.'s service area. The DSC requires that the Conditions of Service be readily available for review by the general public. In addition, the most recent version of the document must be filed with the Ontario Energy Board ("OEB") for the purpose of facilitating dispute resolutions in the event that a dispute cannot be resolved between the Customer and Halton Hills Hydro Inc. ("HHHI").

Halton Hills Hydro Inc.'s Conditions of Service document is based on the template presented in Appendix A of the DSC and is organized as follows:

- **Section 1 - Introduction:** contains references to the legislation that covers the Conditions of Service, the rights of the Customer and of Halton Hills Hydro Inc., and the dispute resolution process.
- **Section 2 - Distribution Activities (General):** contains references to services and requirements that are common to all Customer classes. This section covers items such as Rates, Billing, Hours of Work, Emergency Response, Power Quality, Available Voltages, and Metering.
- **Section 3 - Customer Class Specific:** contains references to services and requirements specific to individual Customer classes. This section covers items such as Service Entrance Requirements, Demarcation Point, Special Contracts, etc.

Other sections in the document include the **Appendices**.

Subsequent changes will be incorporated with each submission to the OEB. Comments on the Conditions of Service or subsequent revisions can be emailed to RegulatoryAffairs@haltonhillshydro.com.

Halton Hills Hydro Inc. will file, with the OEB, a summary of public comments received from Customers about the Conditions of Service and any subsequent changes.

Table of Contents

APPENDICES

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1. Introduction

1.1. Identification of Distributor and Service Area

Halton Hills Hydro Inc., referred to herein as "HHHI", is a corporation incorporated under the laws of the Province of Ontario and a distributor of electricity.

HHHI is licensed by the Ontario Energy Board ("OEB") to supply electricity to Customers as described in the Electricity Distribution License issued to HHHI on November 17, 2003 with subsequent amendments, the most recent being June 26, 2017 and expiring November 16, 2023. HHHI is subject to additional requirements imposed by the various codes referred to in the Distribution License and by the *Electricity Act, 1998* and the *Ontario Energy Board Act, 1998*.

HHHI may only operate distribution facilities within its Licensed Territory as defined in its Distribution License. This service area is subject to change with OEB approval. Please refer to Appendix A – Company Specifics for licenced area.

Nothing contained in these Conditions of Service or in any contract for the supply of electricity by HHHI shall prejudice or affect any rights, privileges, or powers vested in HHHI by law under any Act of the Legislature of Ontario or the Parliament of Canada, or any regulations hereunder.

1.2. Related Codes and Governing Laws

The supply of electricity or related services by HHHI to any Customer or Consumer shall be subject to various laws, regulations and codes, including the provisions of the latest editions of the following Acts, Codes and Licences:

- *Electricity Act, 1998* ("the Act")
- *Ontario Energy Board Act, 1998* ("OEB Act")
- Electricity Distribution Licence ("Licence")
- Affiliate Relationships Code ("AFC")
- Distribution System Code ("DSC")
- Retail Settlement Code ("RSC")
- Standard Supply Service Code ("SSSC")
- Transmission System Code ("TSC")
- Electricity Distribution Rate Handbook ("EDR")
- *Electricity and Gas Inspection Act*
- Ontario Electrical Safety Code ("OESC")
- *Public Service Works on Highways Act*
- *Building Code Act*
- *Municipal Freedom of Information and Protection of Privacy Act* ("MFIPPA")

- Ontario Regulation 22/04 Electrical Distribution Safety ("O.Reg. 22/04")
- *Weights and Measures Act*
- *Accessibility for Ontarians with Disabilities Act*

In the event of a conflict between the Conditions of Service and any of the Codes or Acts listed above, the Code or Act listed above shall prevail. In the event of a conflict between any of the Codes and any of the Acts listed above the Acts listed above shall prevail.

In the event of a conflict between the Conditions of Service and a Connection Agreement executed by the Customer and HHHI, the Connection Agreement 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 Electric Utility Safety Association (EUSA) rulebook.

1.3. Interpretations

In these Conditions of Service, unless the context otherwise requires:

(i) headings, paragraph numbers and underlining are for convenience only and do not affect the interpretation of these Conditions; and
(ii) words referring to the singular include the plural and vice versa; and
(iii) words referring to a gender include any gender; and
(iv) the word "person" includes not only a natural person but also a firm, a body corporate, an unincorporated association and an authority; and
(v) the word "its" may mean "his", "her" or "their"; the words "including", "include(s)" and "included" shall be interpreted as being without limitation; and
(vi) a reference to a person includes a reference to the person's heirs, executors, administrators, successors, substitutes (including, but not limited to, persons taking by notation) and assigns; and
(vii) an agreement, representation or warranty on the part of or in favour of two or more persons binds or is for the benefit of them jointly and severally; and
(viii) specified periods of time refer to business days, unless specifically stated otherwise, and the number of days from a given day or the day of an act or event is to be calculated exclusive of the given day or day of the act or event; and
(ix) a reference to a day is to be interpreted as the period of time commencing at midnight and ending 24 hours later and does not include weekends and

Public Holidays, unless specified; and

(x) where "meter read or reading" is used in this document it means the collection of data either manually, automatically or remotely by written, verbal or electronic means.

1.4. Amendments and Changes

Amendments to the Conditions of Service may be required from time to time. The most recent version of HHHI's Conditions of Service, filed with the OEB, will supersede all previous oral or written Conditions of Service of HHHI, or those of its predecessor municipal electrical utilities.

When changes or amendments are made to the Conditions of Service, HHHI will provide notice to customers in accordance with the requirements of the DSC. Methods of notification may include notice of changes to the Conditions of Service on its corporate website, bill insert, electronic mail and/or message on the customer's bill. The Customer may obtain a printed version of the current document by contacting HHHI's head office during normal business hours, Monday to Friday, between 8:30a.m. and 4:30p.m. A reasonable fee for providing the Customer with a hard copy of this document may apply. The current version of the Conditions of Service is posted on the HHHI's website (www.haltonhillshydro.com).

1.5. Company Specifics for Contract Information

Please refer to Appendix A – Company Specifics for contact Information.

1.6. Customer Rights and Obligations

The Customer has the right to access HHHI's distribution system and services in accordance with these Conditions of Service and all applicable Acts, Regulations, and Codes.

1.6.1. Right to Purchase Energy

Customers have a right to purchase electricity under the following:

(i) Section 29 of the *Electricity Act*; and

(ii) HHHI's Licence; and

(iii) the requirements of all Acts, Regulations and Codes listed in Section 1.2 of these Conditions of Service.

A Customer who does not wish to purchase electricity from HHHI must advise HHHI a minimum of forty-eight (48) hours prior to cessation of service.

1.6.2. Customers with Disabilities

HHHI abides by the *Accessibility for Ontarians with Disabilities Act.* Customers with disabilities have the right to fully benefit from the same services, in the same place and in the same or similar way as other customers. Alternative measures, rather than integration, may be necessary in the event that the specific option cannot be provided at the time. If HHHI is unable to remove a barrier to accessibility, HHHI will consider any possible option that can be done to provide services to people with disabilities.

All policies, practices and procedures used in delivering goods and services must uphold the accessible customer service principles of:

(i) Independence - all customers, including those with disabilities, shall be able to access goods and services, to the greatest extent possible, with unobstructed independence; and

(ii) Dignity - all customers, including those with disabilities, will be treated with respect; and

(iii) Equality of Opportunity - all customers, including those with disabilities, are to receive goods and services equally, and the goal of the organization is to have all customers equally enjoy the benefits of the goods and services provided.

1.6.3. Accuracy of Information

The Customer has an obligation to provide HHHI with information that is true, complete, and correct. The information supplied will be used to provide Customer service, deliver and/or supply energy, manage Customer accounts and assess credit history regarding the need for a security deposit. HHHI may verify the accuracy of all information provided and may obtain additional credit information from a credit-reporting agency as required. If HHHI is unable to establish the identity of the Customer based upon the information provided by the Customer, HHHI may disconnect the Customer in accordance with Section 2.2 of these Conditions of Service.

1.6.4. Accounts with more than one Person

If an account is opened in more than one person's name, all such persons are Customers and are jointly and severally responsible for compliance with these Conditions of Service and to pay all rates and charges in accordance with these Conditions of Service.

1.6.5. Customers' Right to Access of Meter Information

The Customer has the right to read and interrogate its meter and has the right of access to meter consumption readings, or to assign these rights to others, in accordance with Section 11 of the RSC and any other relevant technical specifications, Regulations and Codes.

1.6.6. Registration/Deregistration as a Wholesale Market Participant

In order for HHHI to make the necessary changes to its billing systems, Customers who wish to register or de-register with the IESO as a Wholesale Market Participant shall notify HHHI in writing at least sixty (60) days in advance and complete the necessary documentation.

1.6.7. Space and Access

The Customer shall provide HHHI, free of charge or rent, a convenient, obstruction free, and safe place for HHHI's Facilities and Equipment, for example, a Meter Installation, on the Customer's premises. HHHI assumes no risk thereby and under no circumstances will HHHI be liable for any damages resulting from, arising out of or related to the presence of the HHHI Facilities and Equipment.

The Customer shall not, themselves, nor allow anyone other than an employee or authorized agent of HHHI, or a person lawfully entitled to do so, to repair, remove, replace, alter, inspect or tamper with HHHI Facilities and Equipment on the Customer's premises.

In addition to HHHI's rights under Section 40 of the *Electricity Act, 1998*, HHHI employees and HHHI's authorized agents may enter the Customer's property at any time for any of the following purposes:

(i) install, inspect, read, calibrate, maintain, repair, alter, remove, or replace all or any part of a Meter Installation; or
(ii) inspect, maintain, repair, alter, remove, replace, or disconnect wires or other facilities used to transmit or distribute electricity; or
(iii) inspect, maintain, repair, alter, remove, and replace HHHI Facilities and Equipment; or
(iv) perform switching operations; or
(v) interrupt the Customer's supply or generation to maintain or improve the supply system, allow field staff to work safely, or to provide new or upgraded services to other Customers.

HHHI will use reasonable efforts to exercise this power of entry during normal business hours. The HHHI employee or authorized agent exercising this power of entry will identify himself with proper identification upon request.

Where HHHI has requested key access for Meter Installations or meter rooms inside the Customer's premises, key access shall be provided to HHHI. Any exceptions to this requirement are subject to HHHI's written approval. HHHI may require that a Customer relocate an inaccessible Meter Installation to an accessible location at the Customer's expense.

1.6.8. Customer Equipment

The Customer is responsible for installation and maintenance of Customer Equipment, including vegetation maintenance, around the Customer's power lines. Customer Equipment includes, but is not limited to, power lines, poles and the meter base.

The Customer will comply with all aspects of the Ontario Electrical Safety Code (OESC) with respect to ensuring that equipment is installed, 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, HHHI may disconnect the supply of power to the Customer.

The Customer will take note that for certain high voltage connections, as noted in Appendix E – Customer Owned Substation, HHHI's requirements may exceed and be in addition to the requirements of the OESC, up to the operational demarcation point. These requirements will be clearly spelled out by HHHI during the consultation phase and as a condition of approval of the Customer's design(s).

Where applicable, Customer Equipment shall be subject to the reasonable acceptance of HHHI and the approval of the Electrical Safety Authority ("ESA"). HHHI's approval of any Customer Equipment is solely for the purposes of HHHI's protection of its Distribution System. The Customer is solely responsible for protecting its own property.

1.6.9. Equipment Repair and Maintenance

The Customer shall inspect the Customer Equipment at regular intervals. Clearances must conform to the OESC. The Customer shall repair or replace, in a timely fashion, any Customer Equipment, including, but not limited to, poles and transformer foundation and grounding, that may affect the safety, integrity or reliability of the Distribution System. If the Customer does not take such action, HHHI may disconnect the supply of power to the Customer. HHHI's policies and procedures with respect to the disconnection process are further described in

Section 2.2. of these Conditions of Service.

If the Customer does not carry out its repairs within a reasonable time, or the repairs are not considered adequate by HHHI or an inspection authority, HHHI may disconnect the supply of electricity to the Customer and/or carry out the repairs at the Customer's expense, and HHHI shall not be liable to the Customer for any damages arising as a result thereof, other than physical damage to the Customer Equipment arising directly from entry on the Customer's property.

Customers wanting to install or remove Neutral Ground Resistors ("NGR") on the secondary side of the service transformer shall inform HHHI of their intentions and obtain HHHI's permission before proceeding.

1.6.10. Tree and Vegetation Management

Subject to any prior agreements, Customers are responsible for all initial and continued tree trimming, tree and brush removal for all new and existing Secondary and Primary Services on a Customer's property. Clearances must conform to the OESC. HHHI strongly recommends that a certified utility arborist or a qualified electrical contractor be hired for this work.

Customers shall not plant any trees, flowers, or other forms of vegetation within 3.0 meters of HHHI's owned pad mounted equipment.

1.6.11. Right to Disconnect

HHHI will, upon at least ten (10) days prior notice from the Customer, once each calendar year, and during normal business hours, disconnect and reconnect the Customer's service, for the Customer to upgrade or maintain Customer Equipment for safety reasons, including, but not limited to, the safe clearance of trees and vegetation from Customer lines.

For the period of isolation, the customer will still be required to pay all fixed monthly charges applicable to the service.

1.6.12. Responsibility for Damage to HHHI Facilities and Equipment

HHHI Facilities and Equipment located on the Customer's premises are in the care of and at the risk of the Customer. If any of HHHI's Facilities and Equipment are damaged or destroyed by fire or any other cause other than ordinary wear and tear, the Customer shall pay HHHI either, at HHHI's sole discretion, the value of said HHHI Facilities and Equipment or the cost of repairing or replacing same.

The Customer shall not build, or cause to be built, plant, place or maintain any structure, tree, shrub or landscaping or other item that would or could result in the obstruction of access to, the operation of or endanger all or any part of the HHHI Facilities and Equipment, interfere with the proper and safe operation of all or any part of the HHHI Facilities and Equipment or all or any part of the Distribution System or any part thereof or affect HHHI's compliance with any applicable Acts, Regulations or Codes.

1.6.13. Testing Customer Load

The Customer shall allow HHHI to install and use meters and other equipment to conduct tests to determine the electrical characteristics of the Customer's load.

1.6.14. Automatic Reclosing Facilities

In order to restore the Distribution System, HHHI installs facilities for automatic reclosing of circuit breakers and re-closers, and from time to time may change the reclosing time of any such reclosing facilities. The Customer shall be responsible for providing at their expense:

(i) adequate protective equipment for any electrical apparatus which might be adversely affected by reclosing facilities; and

(ii) such equipment as may be required for the proper reconnection of any apparatus or equipment of the Customer, without adversely affecting the proper functioning of the reclosing facilities.

Failure to comply with the above will result in the Customer being held liable for all damages.

1.6.15. Customer's Consent to Cross Private Property

A building or property owner wanting an electrical service connected to the distribution system is obligated to provide consent, in writing, permitting HHHI plant and equipment to be placed on that property.

If access to private property, other than the property in question, is required, the Customer seeking service will obtain the necessary registered easements in favour of HHHI and shall incur all costs associated with obtaining the easement. For details on easements, refer to Section 2.1.6. of these Conditions of Service.

1.6.16. Customer's Obligation to Install and Maintain Civil Works

The Customer is responsible to install and maintain all civil works (including, but not limited to, vaults, pads, pulling chambers, underground conduits) on Customer's property in which and on which HHHI has installed its electrical distribution assets. Where the Customer has requested that HHHI install electrical distribution assets in a location on the Customer's property with limited access such as a vault, the Customer shall be responsible to provide HHHI with access to the vault, during HHHI office hours, to install, inspect, maintain, repair and replace HHHI's equipment.

The Customer shall also be responsible to maintain such a vault in good condition and shall make any repairs requested by HHHI to the vault, its seals, drains, pumps, ventilation fans and structure. Customer shall respond forthwith to HHHI's request to provide access, repair or maintain any civil structures on Customer's property.

1.6.17. Customer's Obligation to Notify HHHI of Changes to Load and other Equipment Installations

Changes to customer load (both increases and decreases) can have an effect on the efficiency and reliability of the distribution system. HHHI is able to adapt the system for the changes, when notified. It is the responsibility of the customer to notify HHHI of significant changes to their load to ensure the reliability of the distribution system. Examples of significant changes may include, but are not limited to, electric vehicle charging stations, battery storage devices (ie Tesla Powerwall), generation, hot tubs. Customers should contact HHHI by email at inquiries@haltonhillshydro.com or call 519-853-3701 to report changes to their load.

1.6.18. Preparing the Distribution System for Electric Vehicles (EV)

If a customer installs or is planning to install an EV at home, the customer is responsible for notifying HHHI of the address, the type of vehicle purchased and the charger installed. EV chargers draw significant electricity (Example - a level 2 charger can draw as much as an entire house) and it is important that HHHI is aware of charger locations on the Distribution System. Knowledge of EV charger locations and specification allows HHHI to maintain the Distribution System in the safest and most reliable manner and plan for future load growth. Customer can notify HHHI of EV charger installations by email at inquiries@haltonhillshydro.com or calling the Engineering Clerk at 519-853-3700 extension 213 with the following information:

1. The address of the EV charger installation; and
2. The manufacturer, year and model of the electric vehicle; and

3. The manufacturer and model of charger being used including its power requirement; and

4. Anticipated time of day for vehicle charging.

As the home owner, it is important to retain the services of a licensed electrician to assess the house and determine if it can handle the model of charger and vehicle of choice. Depending on the size of the service, transformer supplying the service, and level of charger to be installed, a service upgrade may be required. A licensed electrician and HHHI can help determine if a service upgrade is necessary. If a service upgrade is required, the customer will need to contact HHHI's Engineering Department at 519-853-3700 extension 213 to request a technical service layout. HHHI engineering technicians will schedule a meeting with the customer and provide a list of requirements necessary to complete the installation, where a service upgrade is required.

Prior to connecting and using an EV charger, it is recommended that the customer have the installation inspected by the Electrical Safety Authority (ESA).

1.7. HHHI's Distributor Rights and Obligations

1.7.1. Access to Customer Property

HHHI shall have access to Customer's property in accordance with Section 40 of the *Electricity Act, 1998*.

1.7.2. Safety and Reliability of Equipment

HHHI has the right to report to the ESA any unattended or uncorrected electrical deficiencies or substandard clearances involving private customer owned equipment which may come to its attention through the normal course of HHHI's business. Where, in the opinion of HHHI, the deficiency or substandard clearance is of a nature to constitute an immediate threat to HHHI's equipment or system, or to public safety, HHHI reserves the right to disconnect the service or otherwise remove the threat without prior notice. HHHI will not be liable to the Customer for any damages arising as a result thereof, other than physical damage to facilities arising directly from entry to the Customer's property.

HHHI will request the immediate cessation of, or alteration of procedures or report to the Ministry of Labour, any work practice or work procedure which in its sole opinion violates the limits of approach to HHHI's equipment and/or constitutes a threat to HHHI's equipment or system. Failing a satisfactory response from the constructor involved, or in the event the perceived violation is of a material nature,

HHHI will report the incident to the Ministry of Labour out of due regard for worker safety, public safety, and HHHI's system security.

1.7.3. Tree and Vegetation Management and Removal of Obstructions

To ensure public safety and the continued reliable operation of the Distribution System HHHI maintains its rights of way on a continued and cyclical basis. The timing of this periodic re-clearing of existing rights of way is determined by system assessments, rights of way limitations, storm damage, diseased trees, and vegetation type. Re-clearing of rights of way typically affects trees and vegetation on private property. HHHI will endeavour to notify and discuss the planned re-clearing of existing rights of way with property owners, prior to performing the work, in order to mitigate the impacts to the environment and the property. However, in the event of safety hazard or power restoration, HHHI may be unable to notify the property owner prior to performing the work.

In any event, pursuant to subsection 40(4) of the *Electricity Act, 1998*, HHHI may enter any land for the purpose of cutting down or removing trees, branches or other obstructions, if in the opinion of HHHI, it is necessary to do so to maintain the safe and reliable operation of the Distribution System.

1.7.4. Ability to Transfer Arrears from One Account to Another

HHHI shall have the right to transfer arrears for Distribution Services, electricity supplied, or other services provided by HHHI from one account in a Customer(s) name to any other account in that same Customer(s) name irrespective of rate classification or whether either account is in the name of another person(s) in addition to the Customer.

1.7.5. Underground Cable Locating

HHHI will provide free cable locating for HHHI owned cables during normal business hours.

If the Customer will be exposing primary cable, charges may apply at HHHI's discretion for isolation. If isolation is not practical, then charges may apply for a HHHI representative to stand by during the Customer's work.

1.7.6. Planned Interruptions

From time to time, HHHI will find it necessary to interrupt the continuous supply of electrical energy to Customers, to allow for the performance of work on its electrical system or to prevent electrical hazard to others. HHHI will minimize

such interruptions as much as practical, in respect for the inconvenience to its Customers. When interruptions are necessary, reasonable notice will be provided. Whenever practical, arrangements may be made with the Customer to minimize any inconvenience.

Notice cannot be provided where work is of an emergency nature involving risk of personal injury or damage to equipment or property.

1.7.7. Direction to make Corrective or Preventative Action

HHHI may direct a Customer connected to the Distribution System to take corrective or preventive action on the Customer's electric system when there is a direct hazard to the public or the Customer is causing or could cause adverse effects to the reliability of the Distribution System.

The Customer will be responsible for all expenses related to any corrective or preventative actions.

1.7.8. Safety

HHHI has a comprehensive set of safety policies and work practices that its' staff is required to abide by in the course of their work. These policies and practices may limit HHHI's response to customer trouble calls under adverse weather conditions. HHHI reserves the right, in its sole discretion, to suspend repairs to its system until safe working conditions for its staff can be assured.

If HHHI's service territory encompasses areas in which travel over water or ice is necessary to reach customer premises, HHHI will not permit its staff to travel over water except during daylight hours and in relatively calm conditions. HHHI also imposes restrictions on travel over ice during freeze up and spring thaw or during any period that ice conditions might be unsafe. Customers in water bound locations should be prepared for delays in HHHI's response to trouble calls.

1.8. Disputes

Eligible complainants include all consumers and market participants that rely on the services of HHHI connections. These include, but are not limited to, electricity consumers, land developers, electricity retailers, embedded generators and distributors.

Should Consumers or other market participants listed above have a complaint about HHHI regarding services provided by HHHI under its License, the party may contact one of HHHI's Customer Care Representatives at (519) 853-3701 or (905) 453-2222 during regular business hours, Monday to Friday, between 8:30a.m. and 4:30p.m., or e-mail

the complaint to inquiries@haltonhillshydro.com.

Where the Complainant takes supply from a Retailer who also bills the Complainant, then the Complainant shall refer first to the Complainants Retailer. If the Customer is billed by HHHI, as either a Standard Supply Customer or Distributor Bill Ready Customer, then the Complainant must first refer the complaint to HHHI's Customer Care Department.

HHHI's administrative procedure for resolving complaints from consumers and other market participants regarding services provided under the terms of HHHI's Licence granted by OEB and all applicable Acts, Regulations and Codes, is as follows:

Step 1:

All complaints to HHHI will be addressed to the Customer Care Department for recording, follow-up and referral purposes. Written complaints will be considered formal and will be recorded and acted on in accordance with the provisions of HHHI's Licence and all applicable Acts, Regulations and Codes. For the purpose of formal complaint record keeping, a complaint must:

(i) Relate to service provided by HHHI; and
(ii) Be received in writing, either by e-mail or hard copy; and
(iii) Contain an expression of dissatisfaction, or a formal allegation against a party.

Contact information can be obtained by calling the Customer Care Department at (519) 853-3701 during normal business hours, or e-mail a request to inquiries@haltonhillshydro.com.

Step 2:

Recording of the complaint by the Customer Care Department will show the name of the Complainant, the date received, the date the complaint was referred or resolved and the nature of the dispute resolution.

Step 3:

A representative of the Customer Care Department will make telephone contact with the Complainant within ten (10) working days of the complaint being received. The Complainant is required to volunteer pertinent information over the phone, by mail, by e-mail or by facsimile, which will help in the resolution of the issue.

Step 4:

During the following seven (7) days, the Customer Care Representative will seek a resolution to the issue, which is satisfactory to both HHHI and the Complainant. All offers of resolution sent and received by HHHI will be documented and recorded on file.

Step 5:

If the Complainant is not satisfied with the explanation or resolution, the Complainant may request that the issue be escalated to higher levels in the HHHI organization including the Customer Care Supervisor, Controller, Engineering Supervisor or Manager of Operations. If the Complainant is still not satisfied with the explanation or resolution, then they can be referred to the Chief Financial Officer or the President and Chief Executive Officer of HHHI. If the Complainant still feels that the dispute cannot be resolved, then the dispute can be referred to the OEB.

Step 6:

For disputes that cannot be resolved through the above process, the Complainant and HHHI have the option of pursuing the complaint by agreeing to acquire the services of a mutually acceptable independent arbitrator. The arbitrator must be chosen from a list of arbitrators approved by the OEB. The decision of the arbitrator will be considered binding on both parties. Costs for this process will be shared equally between the Complainant and HHHI. Once selected, the Arbitrator shall communicate directly with the Complainant and HHHI regarding information gathering, meeting dates and the final decision to resolve the issue. Until such time as the OEB approves such an independent third party complaints resolution agency, such complaints will be referred to the OEB, which has assumed this role.

Where disputes regarding meters, meter readings or determination of billing amounts between the Complainant and HHHI are not resolved, then either the Complainant or HHHI may refer the matter to Measurement Canada as Arbiter, for review and resolution. The decision of Measurement Canada, including any appeals provided for in the *Electricity and Gas Inspection Act* and Regulations, shall be considered binding on both the Complainant and HHHI.

1.9. Liabilities

HHHI shall only be liable to a Customer or Embedded Generator for any loss or damages that arise out of the wilful misconduct or negligence of HHHI in distributing electricity to the Customer or Embedded Generator.

The Customer shall have care and control of HHHI distribution assets located on Customer's property and in the event such equipment is damaged or destroyed by fire or any cause other than ordinary wear and tear, the Customer shall be liable to HHHI for the cost of its repair or replacement.

Neither HHHI nor the Customer or Embedded Generator shall be liable for any loss of profits, revenues, business interruptions, loss of contract, loss of goodwill or for any indirect, incidental, consequential damages including any punitive or exemplary damages whether such losses or damages arise in contract, tort or otherwise.

The Customer or Embedded Generator shall indemnify and hold harmless HHHI and it's Directors, officers, employees and agents, from any claims by third parties in connection with the provision of electrical distribution services, except where such loss or damage arises out of HHHI's wilful misconduct or negligence.

HHHI shall assume no risk nor be liable for damages arising from the presence of its equipment on the Customer's property.

1.10. Force Majeure

Other than for any amounts due and payable by the Customer to HHHI or by HHHI to the Customer, neither HHHI nor the Customer shall be deemed to have committed an event of default in respect of any obligation under these Conditions of Service if prevented from performing that obligation, in whole or in part, because of a Force Majeure Event.

HHHI shall not be liable for any delay or failure in the performance of any of its obligations under these Conditions of Service due to any Force Majeure Event.

If a Force Majeure Event prevents either party from performing any of its obligations under these Conditions of Service for Force Majeure Events other than those related to Acts of God, that party shall:

(i) promptly notify the other party of the Force Majeure Event and a good faith assessment of the effect that the event will have on the former party's 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 practical; and

(ii) not be entitled to suspend performance of any of its obligations under these Conditions of Service to any greater extent or for any longer time than the Force Majeure Event requires it to do; and

(iii) 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; and

(iv) keep the other party continually informed of its efforts; and

(v) provide written notice to the other party when it resumes performance of any obligations affected by the Force Majeure Event; and

(vi) if the Force Majeure Event is a strike, lockout or other labour dispute involving HHHI's employees or authorized agents, HHHI shall be entitled to discharge its obligations to notify its Customers in writing by means of

placing a notice in the local newspaper, and, notwithstanding (iii) above, the settlement of any strike, lockout or labour dispute involving HHHI's employees or authorized agents shall be within the sole discretion of HHHI or its authorized agents, none of whom shall be under any of the obligations in (iii) above.

1.11. Coming into Force

These Conditions of Service are effective as of January 1, 2018.

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2. Distribution Activities (General)

2.1. Connections

2.1.1. Building that Lies Along

For the purpose of this document "lies along" means a Customer property or parcel of land that is directly adjacent to or abuts onto a public road allowance where HHHI has distribution facilities of the appropriate voltage and capacity.
HHHI will connect a building or facility that “lies along” its distribution line, provided:

(i) the building can be connected to HHHI’s distribution system without an Expansion or Enhancement to HHHI’s distribution system; and
(ii) the service installation meets the conditions listed herein and as may be otherwise or additionally identified by HHHI; and
(iii) the Customer's service entrance equipment is in a location as identified and approved by HHHI; and
(iv) the Customer has obtained the approval of the ESA.

HHHI has the obligation to either connect or to make an Offer to Connect for any Customers that lie in its service areas. The Customer or a representative will consult with HHHI concerning the availability of supply, the supply voltage, service location, metering, and all other details. These requirements are in addition to those of the ESA.

Where a Customer makes a written request to HHHI to connect a building that lies along HHHI’s Distribution System, HHHI shall provide a Basic Connection for all Customers, excluding those who want to connect an Embedded Generation Facility. The Basic Connection consists of:

(a) supply and installation of standard overhead transformation, according to the Customer’s rate class, which includes secondary bus; and
(b) supply and installation of standard metering; and
(c) an estimate and layout for the new service; and
(d) connection of the Secondary or Primary Service at the described Ownership Demarcation Point and the Operational Demarcation Point; and
(e) (for year-round residential and seasonal residential classes only) supply and installation of up to 30 metres of #2 triplex or an equivalent credit toward upgraded overhead or underground conductor.

A Basic Connection does not include the following additional costs, for which the Customer shall pay HHHI:

A. for year-round residential and seasonal residential Customer classes – the cost difference between overhead and underground secondary wire; and
B. incremental costs associated with the supply and installation of underground transformation; and
C. the supply and installation of poles, anchors, all secondary conductor over 30 metres, hardware, and structures, as required on Customer's property; and
D. the costs of all changes required to the Distribution System exclusive of the secondary bus installation. These costs include pole changes, anchoring or hardware changes.

Where applicable and at their own expense, Customers will also be responsible for:

- the supply of tree and vegetation management on the Customer's property; and
- any easements or property agreements as required by HHHI; and
- the cost of any fees, permits, or other permissions required to connect the service.

The terms above may also apply to a Customer requiring an increase to its existing service capacity which does not trigger changes to the main Distribution System serving that Customer.

Should HHHI determine that this Basic Connection has been utilized to connect an Embedded Generation Facility within five years of the date of the original Basic Connection, HHHI will invoice the customer for the full connection costs incurred.

2.1.1.1. Offer to Connect

HHHI will respond to requests for Connection within the following timeframes:

(i) Customers (excluding Embedded Distributors and Embedded Generators) - no later than fifteen (15) calendar days after receipt of the request. At this time, HHHI will specify any information that must be provided and any obligations that must be met, by the Customer in order for HHHI to process the request. An offer to connect will be made by no later than sixty (60) calendar days following HHHI's receipt of all necessary information and the Customer's meeting of all its obligations.

(ii) Embedded Distributors - no later than thirty (30) calendar days after receipt of the request. At this time, HHHI will specify any information that must be provided and any obligations that must be met, by the Customer in order for HHHI to process the request. An offer to connect will be made by no later than ninety (90) calendar days following HHHI's receipt of all necessary information and the Customer's meeting all of its obligations.

(iii) Customers requesting to connect an Embedded Generation Facility - within the timeframes set out in the DSC.

HHHI's initial "offer to connect" will include, at no cost to the Customer:

(a) a statement as to whether the offer is a firm offer or is an estimate of the costs that would be revised in the future to reflect actual costs incurred; and
(b) a reference to these Conditions of Service and information on how the Customer requesting Connection may obtain a copy of them; and
(c) a statement as to whether a capital contribution will be required from a Customer; and
(d) a statement as to whether HHHI will require an Expansion deposit from the Customer, and the amount of the Expansion deposit that the Customer will have to provide; and
(e) a description of the Connection charges that would apply and a statement whether they will be charged separately from the capital contribution, and, if known, the amount of those connection charges; and
(f) the amounts to be paid by the Customer to HHHI if the Customer is being added to a Single or Three Phase line constructed on or after January 1, 1993; and
(g) any additional information pertinent to the offer.

If HHHI will require a Customer to pay a capital contribution, HHHI will, in addition to complying with the above, also include in its initial offer, at no cost to the Customer:

A. the amount of the capital contribution that the Customer will have to pay for the Expansion; and
B. the calculation used to determine the amount of the capital contribution to be paid by the Customer, including all of the assumptions and inputs used to produce the

economic evaluation as described in these Conditions of Service; and

C. a statement as to whether the offer includes work for which the Customer may obtain an alternative bid and, if so, the process by which the Customer may obtain the alternative bid; and
D. a description of, and costs for, the contestable work and the incontestable work associated with the Expansion, broken down into the following categories:
    - labour (including design, engineering and construction)
    - materials
    - equipment
    - overhead (including administration); and
E. an amount for any additional costs that will occur as a result of the alternative bid option being chosen (including, but not limited to, inspection costs); and
F. if the offer is for a residential Customer, a description of, and the amount for, the cost of the basic connection that has been factored into the economic evaluation; and
G. if the offer is for a non-residential Customer and if HHHI has chosen to recover the non-residential basic connection charge as part of its revenue requirement, a description of, and the amount for, the connection charges that have been factored into the economic evaluation.

2.1.1.2. Overhead Services

All new services or service upgrades must be installed to underground standards. Where permitted by HHHI, customers having an overhead service and who are upgrading their service may keep their service overhead but all upgrades must be installed to current standards. Overhead servicing standards may be more prevalent in areas designated as rural by the Municipality. HHHI may also permit overhead installations in certain instances where the ground conditions or terrain make underground installations technically unreasonable. Such instances will be subject to Municipal approval and at HHHI's sole discretion.

(i) <u>Residential Service at Secondary Voltage</u>

The cost of a basic connection is called the Basic Connection Allowance ("BCA"). The BCA is calculated on the basis of two components: (i) the installed cost of transformer capacity sufficient for a 200 amp service and (ii) the installed cost of thirty (30) meters of overhead wire.

The amount of the BCA that applies in any individual case will depend on whether a transformer is already available for service at that location. If HHHI must install a new transformer or upgrade an existing installation, the transformer component of the allowance will be applied as well as the wire allowance. If no transformer work is required, the allowance will be the wires component only.

(ii) Residential Service at Primary Voltage

In cases where HHHI determines that a customer connection point is too far from HHHI's system for a secondary service, the Customer will be required to construct a private primary service from HHHI's system connection point to the service entrance point. HHHI will charge the Customer for the actual cost of the primary service. Ownership will be as specified in Appendix C – Point of Demarcation.

(iii) General Service at Secondary Voltage

For service upgrades or where permitted by HHHI, HHHI will supply and install secondary overhead wire from its system on the road allowance to the Customer's service entrance mast and make the final connection to its system. This only applies where the demarcation point is the connections at the Customer's service mast. HHHI will charge the Customer for the actual cost of the connection.

(iv) General Service at Primary Voltage

In cases where HHHI determines that a customer connection point is too far from HHHI's system for a secondary service, the Customer will be required to construct a private primary service from HHHI's system connection point to the service entrance point. HHHI will charge the Customer for the actual cost of the primary service. Ownership will be as specified in Appendix C – Point of Demarcation.

2.1.1.3. Underground Services

All new services or service upgrades must be installed to underground standards. Underground service is standard in most of HHHI's service territory. Any exceptions must be approved by HHHI's Engineering Department.

(i) Residential Service at Secondary Voltage

Underground services are more costly to install than overhead services. HHHI provides a credit to the customer for the BCA described under the overhead service Section 2.1.1.2. (i). of these Conditions of Service and collects the difference between this amount and the actual cost of the underground service from the customer.

(ii) General Service at Secondary Voltage

Where new underground service is required, the Customer will be responsible for supplying and installing the secondary cable and any civil works necessary to house the cable. HHHI will make the final connection to its system and the Customer will be charged the actual costs of this work. Ownership will be as specified in Appendix C – Point of Demarcation.

(iii) General Service at Primary Voltage

In cases where HHHI determines that a customer connection point is too far from HHHI's system for a secondary service, the Customer will be required to construct a private primary service from HHHI's system connection point to the service entrance point. HHHI will charge the Customer for the actual cost of the primary service. Ownership will be as specified in Appendix C – Point of Demarcation.

2.1.2. Expansions

When HHHI is required to add new Facilities and Equipment, alter existing HHHI Facilities and Equipment, or increase the capacity of the Distribution System to connect a new Customer (an "Expansion"), HHHI will perform an economic evaluation to determine the Customer's share, if any, of the equipment, labour, material and on-going maintenance costs of the Expansion (the "Expansion Costs"). If the present value of the future revenue is not sufficient to recover the Expansion Costs, the Customer will be required to pay a capital contribution. The capital contribution will not exceed the Customer's share of the difference between the present value of the Expansion Costs and the present value of the projected revenue.

Expansion Costs include, but are not limited to:

(i) the capital cost of expanding or modifying the distribution system to accommodate the customer connection. These modifications include, but are not limited to, additions or capacity increases to existing distribution lines, stations, transformers, secondary busses, services and land or land rights and are referred to as “Capital Costs”; and

(ii) the incremental operating, maintenance and administration costs attributable to the addition of new customers to the system. HHHI’s average system operating, maintenance and administration costs are used for this purpose and referred to as “OM&A Costs”; and

(iii) the historical system enhancement cost estimate per volume attributable to system expansions. This is the three (3) to five (5) year rolling average of actual enhancement costs incurred by HHHI in system expansions. The amount is set annually and referred to as “Enhancement Costs”; and

(iv) when the Offer includes the final service connection and the service connection is not covered in a separate Offer, a credit for the residential BCA will be applied in the model to recognize the amount of connection cost already included in the rates.

Note that for Embedded Generators, there is no revenue or avoided costs attached to the project’s production or outflow, and all costs become the Customer’s costs.

HHHI performs the Economic Evaluation using a Discounted Cash Flow Model consistent with Appendix B of the DSC.

HHHI will make an Offer to Connect and prepare the design and estimate for such an Offer at the Customer’s expense. If the Customer revises plans and requests a revised Offer, HHHI may do so at the Customer's expense.

Where an Expansion is required to connect a Renewable Energy Generation Facility, HHHI shall comply with Section 3.2.5A and 3.2.5B of the DSC.

2.1.2.1. Offer to Connect

Based on the results of its economic evaluation, HHHI will make an "Offer to Connect" that will, at a minimum, contain:

(i) a description of work required to build the Expansion to connect the Customer if a capital contribution is required from the Customer; and

(ii) a firm price for the cost of Expansion that would be revised in the event the nature or scope of the expansion changes; and

(iii) a statement of the capital contribution to be charged to the Customer to construct the Expansion along with the calculation used to determine the amount of the capital contribution including all of the assumptions and inputs used in the discounted cash flow model; and

(iv) a description and statement of the connection charges that would apply; and

(v) identification of work for which the Customer may seek alternative bids (the "Contestable Work") along with the process to be followed to obtain an alternative bid; and

(vi) a description of, and costs for, the contestable work and the uncontestable work associated with the expansion broken down into the following categories:

- labour
- materials
- equipment
- overheads; and

(vii) the amount of any additional costs that will apply as a result of the customer electing an alternative bidder to complete the contestable work. These costs would include, but are not limited to, engineering design costs, coordination of HHHI work with the contractor's work, inspection of the contractor work to ensure that it meets HHHI design and construction standards and the costs of making the final connection to HHHI's system; and

(viii) For residential customers, a description and the amount of the basic connection allowance; and

(ix) terms and conditions for payments and deposits required; and

(x) any additional information pertinent to the offer.

Once a Customer accepts an Offer to Connect, HHHI will provide, upon the Customer's request, an itemized list of the costs for the major items in each of the categories referred to in 2.1.2.1. (vi) of these Conditions of Service. If the Customer has not chosen an alternative bid for the work, the list will include all of the work involved in the expansion. If the

Customer has chosen an alternative bid for the work, the list will include only the uncontestable work to be performed by HHHI. The customer will be charged the actual cost of preparing the itemized list.

2.1.2.2. Revenue Horizon

HHHI uses a revenue horizon of up to twenty-five (25) years to project expected forecasted revenues based on the forecasted load from the Expansion. The load forecast and the revenue horizon used for the economic evaluation are at the sole discretion of HHHI.

2.1.2.3. Capital Cost Recovery Agreement/Connection Cost Agreement

For an Expansion where HHHI is required to make an investment in the Distribution System, the Customer may be required to execute a Capital Cost Recovery Agreement, which may include a revenue guarantee or a requirement that the Customer provide an Expansion Deposit.

Where an Expansion is required in order to connect an Embedded Generation Facility other than a Micro-embedded Generation Facility, the terms associated with the Expansion will be included in the Connection Cost Agreement.

2.1.2.4. Staking and Engineering Fees

HHHI will provide staking and design at the Customer's expense. This payment will be recognized in the discounted cash flow calculation.

2.1.2.5. Alternative Bids

Customers may seek alternative bids for the Expansion facilities from Qualified Contractors if the offer meets the following conditions:

(i) the project requires a capital contribution from the Customer; and

(ii) the construction work will not involve work on existing circuits.

The use of an alternative bid contractor does not in any way alter the Offer to Connect, including the amount the customer is required to contribute to the Expansion. Customers using an alternative are required to provide HHHI with the full details of the alternative bid, broken down into categories as identified by HHHI and in order to meet OEB regulatory accounting requirements.

If the alternative bid is lower than the cost used in the economic evaluation, HHHI will use the alternative, lower cost, bid price from the contractor in lieu of HHHI's firm price for that work in order to recalculate the economic evaluation, and the Customer's capital contribution.

At the request of the Customer, HHHI will provide a list of Qualified Contractors who can perform the work eligible for an alternative bid, and will ensure the customer and contractor have the detailed scope of work as prepared by HHHI for their bidding purposes.

The Customer will be responsible for:

(a) selecting, hiring, and paying the Qualified Contractor for the costs of the work eligible for the alternative bid; and
(b) ensuring their Qualified Contractor attends a Contractor orientation meeting, pre-construction and post-construction meetings hosted by HHHI at no cost to HHHI; and
(c) assuming full responsibility for the construction of the alternative bid aspect of the Expansion project; and
(d) administering the contract; and
(e) obtaining all provincial, municipal, and other permits and licenses as may be required to perform for the construction; and
(f) obtaining locates; and
(g) making all arrangements with joint use utilities for the orderly installation of HHHI's equipment with their equipment installation; and
(h) construction of the System Expansion (line extension) in full adherence to HHHI's designs, standards, and work practices. HHHI will have previously approved the equipment used on its distribution system in compliance with Ontario Regulation 22/04. As such, item 2.1.2.5 (h) shall include, but not be limited to, using materials approved by HHHI and/ or provided by HHHI; and
(i) remunerating HHHI for design, engineering, administration, inspection, monitoring, interconnection costs, and approval costs where these costs result from the use of an alternative bid process; and
(j) paying for all applicable ESA inspection fees.

The customer will also be responsible for paying certain additional deposits as set out in Section 2.1.2.5.2. of these Conditions of Service.

HHHI will be responsible for:

A. providing the design specifications for the construction; and
B. providing materials where prescribed in the scope of work; and
C. obtaining all municipal and regulatory approvals for the design of the proposed work and equipment locations; and
D. the staking of the proposed works (poles, anchors, trench routes, etc.) as noted on the engineering design produced by HHHI; and
E. obtaining design coordination and acknowledgement of HHHI's plans from all joint use parties; and
F. inspection and authorization of the contractor's work for connection.

It is understood that at all times the work being performed by the contractor constitutes a supply and installation of HHHI's equipment, not the Customer's equipment, and that as the equipment and facilities are installed by the contractor and connected by HHHI, HHHI accepts full and exclusive ownership and operating care, save and except for any workmanship guarantees the Customer must provide HHHI.

A list of approved contractors is available upon request by contacting HHHI's Engineering Clerk at (519) 853-3700 extension 213 or by request through inquiries@haltonhillshydro.com .

2.1.2.5.1. Transfer Price for Contestable Work

Where a Customer has elected to have the expansion work performed under an alternative bid process, HHHI will reflect a transfer price for the amount of the alternative bid work in its economic model, after the work has been inspected and accepted by HHHI. The transfer price will be based on the Customer's actual cost of construction or the amount set out in HHHI's price to perform the contestable work, whichever is lower. If the Customer does not provide HHHI with cost information on a timely basis, HHHI will use the price it provided to the Customer for the work, as the transfer price.

The transfer price will be used to carry out a final economic evaluation of the expansion project, once the facilities are energized, in order to determine the actual capital contribution (if any) that the Customer will be required to pay. HHHI takes a net payment approach to transfer price and capital contributions and settles once with the Customer, for all amounts owed or owing at the end of the expansion and connection process.

2.1.2.5.2. Expansion Deposits

Where Expansion Deposits are required by HHHI, payment can be made by any of the following methods:

- Certified cheque payable to HHHI; or
- Irrevocable Letter of Credit from a Bank (as defined in the *Bank Act*) guaranteeing payment upon presentation to the issuer.

The Expansion Deposit will consist of two parts, (i) Forecast Deposit; and (ii) Construction Deposit.

(i) Forecast Deposit

(a) A Forecast Deposit may be taken for any projects where HHHI determines there is some risk that the proposed new connections or loads may be delayed or not appear at all.

(b) In general, a Forecast Deposit will be taken for loads where HHHI determines a reasonable uncertainty is involved and for connections proposed to be made more than one year after construction of the expansion.

(c) The Forecast Deposit will be based on the present day value of the proposed revenue which would result from the load or connections HHHI believes to be uncertain.

(d) The Forecast Deposit will be returned to the Customer in increments proportional to the actual connections or load, as the case may be, that materialize during the Customer connection horizon defined in the economic evaluation. If forecasted connections or demand do not materialize within this horizon, the balance of the expansion deposit will be forfeited to HHHI as liquidated damages and not as a penalty.

(ii) Construction Deposit

(a) The Construction Deposit may be taken where a customer has elected an alternative bid contractor to perform the contestable work.

(b) The construction deposit will be based on HHHI's estimated cost to construct the expansion.

(c) HHHI may retain a Construction Deposit in order to complete, repair or bring up to standard the facilities constructed by the contractor that do not meet the proper design and technical standards applicable to the expansion or to ensure that the facilities operate properly when energized.

(d) The balance of the Construction Deposit will be returned to the Customer once the expansion facilities installed by the alternative bid contractor, or as completed, repaired and brought up to standards by HHHI, have been fully energized and finally accepted for performance by HHHI.

(e) In addition, where the Customer has elected to have the expansions facilities constructed under an alternative bid process, HHHI will retain ten percent (10%) of the Construction Deposit, known as the Warranty Holdback, for a period of two (2) years to pay for the costs of any repairs needed in the expansion facilities. The beginning of the two year warranty period is either the date that the last of the forecasted connections in the expansion project occurs or the date the actual demand reaches the last forecasted demand or the end of the customer connection horizon, whichever comes first.

2.1.2.5.3. Capital Contribution Policy

HHHI has established capital contribution policies by customer class as follows:

(i) Residential – capital contributions are only required when the cost of connection exceeds the BCA.

(ii) General Service – a capital contribution will be required for connection assets that will be owned by HHHI. In the case of a connection that also requires a system expansion, the amount of the contribution will be determined by applying the economic evaluation model.

In the event that a Customer(s) is added to an Expansion that was constructed and paid for by another Customer, within the connection horizon used in the related economic evaluation, HHHI will use the economic evaluation to recalculate the capital contribution of both the original and the new Customer(s), based on the forecasted load and revenue of the new Customer(s).

The additional Customer(s) will contribute their fair share of the original Expansion costs, prior to the connection for the shared portion of the line, and the original contributor will be entitled to a rebate without interest, based on the apportioned benefit for the remaining period. The apportioned benefit will be determined by considering such factors as the relative load level and the relative line length (in proportion to the line length being shared by both parties). No rebates will occur after the connection horizon has expired.

HHHI will make its best efforts, through its normal and reasonable business practices, to monitor and be aware of all situations on its system that may fall under this provision, however, HHHI will not be liable in any way for any such cost sharing/rebate situation which a Customer may discover after the connection horizon has expired.

2.1.2.5.4. Private Ownership of Alternative Bid Construction

As a condition of Connection, the following apply to guide ownership of assets.

2.1.2.5.4.1. Lines on Road Allowance

HHHI will assume ownership of Distribution lines constructed on the road allowance, except where HHHI determines that it foresees no future use for these assets. This provides HHHI with better planning and control of its Distribution System in its' service territory, may provide opportunities to connect other Customers without unnecessary duplication of infrastructure and enhances safety and reliability.

Lines constructed on a road allowance where HHHI has no distribution assets may be owned by the Customer only if HHHI determines that it has no foreseeable use for such assets and HHHI agrees in writing to Customer ownership.

Lines constructed, in whole or in part, on a road allowance and which are to be transferred to HHHI, must be constructed to HHHI's design standards. The Customer must provide any required easements and cutting rights if the customer is the owner of the lands; where third parties are owner of the lands, the customer must obtain easements and cutting rights on HHHI's behalf, prior to transfer.

The provisions in Section 2.1.2.5.4.1 do not apply to "joint use" arrangements with other utilities (including, but not limited to, distributors, telephone companies, and cable providers) or Generators, where a contractual arrangement is in place between HHHI and such utilities or Generators to allow them to make attachments and maintain occupancy on HHHI assets.

2.1.2.5.4.2. Lines on Private Property

Normally, line constructed on private property shall be owned and maintained by the Customer. However, a line that has been constructed to HHHI's design standards shall be transferred to HHHI, at the discretion of HHHI, with any required easements and cutting rights, where such line supplies more than one Customer or where there is a physical indication of a possible new connection. The Customer shall provide an access road when requested by HHHI.

When a Customer separates part of its service such as through a land separation or sale of a business, there are three options for the supply to the new customer as follows:

(i) the line must be brought up to HHHI's design standards, and ownership is transferred to HHHI along with any required easements and cutting rights; or
(ii) the Customers agree on a shared supply arrangement between themselves; or
(iii) a new line is constructed, at the Customer's cost, to supply the new customer.

In situations where another Customer requests connection to a Customer- owned line and the owner agrees to transfer ownership of the line to HHHI, the new Customer will be responsible for the costs to bring the line up to HHHI's design standards and the costs of any easements and cutting rights required by HHHI.

2.1.2.5.4.3. Lines on Crown Land

Lines on Crown Land shall be treated similar to lines on Private Property.

2.1.2.5.4.4. Lines on Unopened Road Allowance

Lines on unopened road allowances shall be treated in a similar manner as lines on Private Property. In cases where an unopened road separates two opened roads, HHHI may agree to take over the ownership of the new distribution line if the line is constructed to HHHI design standards and any easements and cutting rights needed for HHHI to maintain the line are provided to HHHI.

2.1.2.5.4.5. Other Restrictions

Lines which are to be transferred to HHHI must be constructed to HHHI's design standards and HHHI must agree with the route selection, taking into consideration factors such as operation and maintenance, reliability and restoration times.

In order for HHHI to properly operate and maintain the circuits, the height of the poles must be within HHHI's normal distribution lines standards. Poles heights shall be limited to a maximum of four (4) 3-phase power circuits with proper separation space as per standards and a 0.67 meter space for a communication circuit. Communication attachments shall be no less than 1.0 meters below the neutral conductor.

2.1.2.6. Allocated Cost of Connection – Embedded Generation Facilities

Generators are responsible for paying HHHI the cost of the connection of the Embedded Generation Facility which HHHI will allocate to the Generator in accordance with the requirements of the Distribution System Code. Generators are required to execute a Connection Cost Agreement with HHHI.

Other than any assets specifically identified in a Connection Cost Agreement that will be owned by the Generator, HHHI will own and maintain:

(i) all assets constructed or installed by HHHI; and
(ii) any contestable work assets constructed or installed by the Generator that HHHI requires be transferred to HHHI.

2.1.2.7. Rebates for Customers who paid a Capital Contribution

If a Customer is added, within five years of the original in service date of the Expansion facilities (the "Connection Horizon"), to an Expansion that was constructed and paid for by another Customer(s), subject to Section 3.2.27A of the DSC, HHHI shall calculate the rebate amount payable to the initial Customer(s) in accordance with the requirements of the DSC. The apportioned benefit will be determined by considering such factors as the relative load level and the relative line length (in proportion to the line length being shared by both parties). HHHI shall collect the rebate amount from the un-forecasted Customer(s) and shall pay said amount to the initial Customer(s).

HHHI will make its best efforts, through its normal and reasonable business practices, to monitor and be aware of all situations on its system that may fall under this provision, however, HHHI will not be liable in any way for any such cost sharing/rebate situation which a Customer may discover after the connection horizon has expired.

2.1.3. Connection Denial

HHHI may deny Connection to any Customer for any of the following reasons:

(i) refusal by the Customer to sign and deliver any agreements required to be executed by the Customer under these Conditions of Service; or

(ii) the Connection will represent a contravention of the laws of Canada or Ontario; or

(iii) the Connection will cause HHHI to be in violation of the conditions in the Licence; or

(iv) the Connection will have an adverse effect on the reliability or the safety of the Distribution System; or

(v) the Connection will cause a material decrease in the efficiency of the Distribution System; or

(vi) the Connection will have a material adverse effect on the quality of the Distribution service received by an existing Customer, which effect could include voltage flicker, harmonics and power outages; or

(vii) the Connection will result in the discriminatory access to Distribution services by other Customers; or

(viii) the person requesting the Connection is currently in arrears for Distribution services, electricity supplied, or other services provided by HHHI; or

(ix) the Customer refuses or is unable to provide current and valid identification or references, if requested; or

(x) the Connection is not in compliance with these Conditions of Service; or

(xi) the Connection does not meet HHHI's design requirements; or

(xii) the Connection will impose an unsafe situation to workers or the public beyond the normal risks inherent in the operation of the Distribution System; or

(xiii) the Connection will result in the inability of HHHI to perform planned inspections or maintenance; or

(xiv) by order of the Electrical Safety Authority; or

(xv) the Customer does not have the requisite approval(s) of the Electrical Safety Authority for the Connection; or

(xvi) the premises being connected are the subject of a stop work order under the *Building Code Act* (Ontario).

HHHI shall notify the Customer of the Connection denial with reasons in writing. Remedies will be suggested to the Customer where HHHI is able to do so. If it is not possible for HHHI to resolve the issue, it is the responsibility of the Customer to do so before a Connection will be made.

2.1.4. Inspections Before Connections

All Customer electrical installations shall be inspected and approved by the Electrical Safety Authority before Connection to the Distribution System. HHHI requires notification from the Electrical Safety Authority of this approval prior to Connection of a Customer.

Where HHHI has required the Customer to perform specified work associated with the installation of connection assets on the Customer's premises, the Customer shall obtain acceptance by HHHI of said work as a prerequisite to Connection to the Distribution System.

Before connecting to HHHI's Distribution System, HHHI will exercise its obligation to inspect all electrical connections and provisions for metering to ensure that they satisfy all technical requirements, unless a protective device that has been accepted by HHHI separates the Connection.

HHHI may at any time re-inspect any electrical connection or meter installation notwithstanding any previous inspection and acceptance of the installation.

Inspection requirements also apply to reconnections noted in Section 2.2.6. of these Conditions of Service.

2.1.5. Relocation of HHHI Facilities and Equipment

HHHI's standard construction for its main power supply system on public roadways, major corridors and rights-of-way, railways, and commercial/industrial parks is an improved appearance overhead system. HHHI's standard construction for new residential developments is underground.

When requested to relocate its plant, HHHI will do so in accordance with its rights and obligations under relevant Acts and Regulations including the *Public Service Works on Highways Act* (Ontario) for road authorities, existing documented agreements, conditions of easement, and the law. In the event such laws or agreements are not applicable, HHHI is not obligated to relocate its plant.

Customers may from time to time request that HHHI's plant, such as poles or pad mounted equipment, be relocated to suit their plans. HHHI will attempt to accommodate all such requests, where feasible, but any relocation or associated work will be done at the Customer's expense.

The use of underground construction standards may be an option in some of the above instances subject to physical space requirements, land rights and easements, access for construction, maintenance, routine operating requirements, and subject to the requesting party bearing the full incremental costs of doing so.

All costs of relocating HHHI's plant or placing HHHI's plant underground, including costs of land or land rights acquisition will be borne by the requesting party unless an existing agreement provides otherwise.

2.1.6. Easements

2.1.6.1. Unregistered Rights

Section 46 of the *Electricity Act* provides that all property that is subject to unregistered rights prior to April 1, 1999, will continue to be subject to the right until the right expires or until it is released by the holder of the right.

2.1.6.2. Registered Easements and Owner Agreement

Registered Easements are required when:

(i) property belonging to a third party lies between HHHI's lines and the Customer's delivery point. In this case, the Customer must obtain a registered easement from the third party(s) for the installation and maintenance of whatever plant is necessary to supply the service; and

(ii) multiple buildings on private property require that HHHI installs a Distribution System to provide service. In this case, the property owner must provide a registered easement to permit installation and maintenance of the system.

HHHI requires, but is not limited to, registered easements for facilities under any of the following conditions:

(a) any single or multi-phase line, underground or submarine cables, poles, anchors, or aerial occupation where the line crosses Private Property, including any common service taps;

(b) anchors on Private Property supporting Facilities and Equipment of HHHI which are located on adjacent property or the road allowance; and

(c) any new facilities and equipment being added to HHHI Facilities and Equipment which are the subject of an existing unregistered easement that does not include replacement or maintenance of the existing HHHI Facilities and Equipment.

Where HHHI does not require registered easements, owner agreements are required for HHHI Facilities and Equipment.

2.1.7. Contracts

2.1.7.1. Contract for New or Modified Electricity Service

HHHI shall only connect a Customer for a new or modified supply of electricity upon receipt by HHHI of the following:

- a completed and signed contract for service in a form acceptable to HHHI; and
- payment to HHHI of any applicable connection fee; and
- an inspection and approval by the Electrical Safety Authority of the electrical equipment for the new or modified service; and
- a Connection Agreement as requested or required pursuant to Section 2.1.2.3. of these Conditions of Service

2.1.7.2. Implied Contract

In all cases, notwithstanding the absence of a written contract, HHHI has an implied contract with any Customer that is connected to HHHI's Distribution System and receives distribution services from HHHI. The terms of the implied contract are embedded in HHHI's Conditions of Service, the EDR, HHHI's rate schedules, HHHI's Licence, the DSC, the

SSSC and the RSC, all as amended from time to time.

The acceptance of supply of electricity or related services from HHHI constitutes a binding contract with HHHI, which includes these Conditions of Service and all terms thereunder. The person accepting the supply of electricity or related services shall be liable for payment for same, and shall be binding upon such person's heirs, administrators, executors, successors or assigns. If an account is in the name of more than one person, all such persons are Customers and are jointly and severally responsible for compliance with these Conditions of Service for the purposes of Implied Contracts.

2.1.7.3. Special Contract

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

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

2.1.7.4. Capital Cost Recovery Agreement

Where HHHI is entitled under these Conditions of Service to recover all or part of the costs of a Connection and/or requires that a Customer provide a revenue guarantee, the Customer must execute a Capital Cost Recovery Agreement ("CCRA"). The CCRA shall be executed before HHHI commences any construction activities in respect of the Connection. The CCRA will describe the work to be performed by HHHI in respect of the Connection and any other conditions set forth in HHHI's offer to connect, together with the applicable payment terms (including revenue guarantees and/or capital contribution where applicable). Key provisions of the CCRA are described in Section 2.1.2.3. of these Conditions of Service.

2.1.7.5. Subdivision and Condominium Connections

Customers proposing to expand or develop an industrial/commercial or residential subdivision or to develop a condominium shall be required to execute a Subdivision Agreement/Multi-Service Connection Cost Agreement. Contact HHHI's Engineering Department for further details.

2.1.7.6. Connection Cost Agreement

All Generators who wish to connect an Embedded Generation Facility to the Distribution System are required to enter into a Connection Cost Agreement with HHHI.

2.1.7.7. Connection Agreement

If there is a conflict between a Connection Agreement with a Customer, Generator, Wholesale Market Participant or Embedded Distributor and these Conditions of Service, the Connection Agreement shall govern.

2.1.7.7.1. Embedded Generation Facilities

HHHI may require an Embedded Generation Customer to enter into a Connection Agreement in a form acceptable to HHHI. Until such time as the Customer and HHHI jointly execute such a Connection Agreement, the Customer shall not be permitted to interconnect their Embedded Generation Facility to the Distribution System. An example of such Connection Agreements can be found in the appendices of HHHI's Guidelines for Applicants Connecting Distributed Generation located on HHHI's website, www.haltonhillshydro.com or email generation@haltonhillshydro.com.

2.1.7.7.2. Embedded Distributors

An Embedded Distributor shall enter into a Connection Agreement in a form acceptable to HHHI. Until such time as the Embedded Distributor executes such a Connection Agreement with HHHI, the Embedded Distributor shall be deemed to have accepted and agreed to be bound by all of the terms in these Conditions of Service that apply to such Embedded Distributor.

HHHI shall make a good faith effort to enter into a Connection Agreement with a distributor connected to HHHI's Distribution System in accordance with the requirements of the DSC issued by the Ontario Energy Board.

2.1.7.8. Payment by Building Owner

A Building owner wishing to terminate the supply of electricity to its Building must notify HHHI in writing. Until HHHI receives such written notice from the Building owner or its authorized representative, the Building owner and/or the occupant(s), as applicable, shall be responsible for payment to HHHI for the supply of electricity to such Building. HHHI 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).

Effective April 1, 2011, after closure of an account opened pursuant to a request, directly or indirectly, from an occupant of the property other than the owner or its authorized representative, HHHI shall not seek to recover any charges for service provided to a rental unit in a residential complex or residential property from the owner of the residential complex or residential property, unless the owner has agreed to assume responsibility for those charges. An owner, either personally or through an authorized representative, may enter into an agreement with HHHI whereby the owner agrees to assume responsibility for paying for continued service to the rental unit after closure of an occupant account. Where the owner has not agreed to assume responsibility for charges for continued service, HHHI may disconnect the service without notice. HHHI will not be responsible for any liabilities or damages, which may occur as a result of the service being disconnected. Where a non-residential property has been vacated by an occupant of the property, and HHHI has not been notified that a new occupant should be billed for the electricity supplied to the property and the owner has not submitted a written request to disconnect the electricity supply, HHHI will bill the owner for the electricity supply to the property until such time as HHHI is notified by the owner or a new occupant that the occupant should be billed for the electricity supply.

2.1.7.9. Opening and Closing of Accounts

A Customer who wishes to open or close an account for the supply of electricity by HHHI shall contact HHHI's Customer Care Department by phone during office hours at (519) 853-3701, by written request (including requests submitted by facsimile), by email to inquiries@haltonhillshydro.com, or other means acceptable to HHHI. The Customer shall be responsible for payment to HHHI for the supply of electricity to the property up to the date provided to HHHI by the Customer. Should the customer fail to notify HHHI until after the date of closing, the customer may be responsible for payment for the supply of electricity for up to two (2) business days after the notification was received by HHHI.

2.1.7.10. Access Agreement

Customers requiring ongoing access to HHHI Facilities and Equipment, to operate or maintain Distribution equipment including wholesale revenue metering, must enter into an Access Agreement. Contact HHHI's Engineering Department for further information.

2.2. Disconnections

HHHI reserves the right to physically disconnect or limit the amount of electricity that a Customer can consume for any of the following reasons:

(a) failure to pay HHHI any amounts due and payable for the Distribution of electricity or for supply of electricity under Section 29 of the *Electricity Act*; or
(b) failure to pay HHHI any amounts due and payable on HHHI-consolidated bill; or
(c) failure to pay any Connection costs due and payable; or
(d) failure to notify HHHI of Customer responsibility for electricity account when a new party moves into an existing connected property and consumes electricity; or
(e) non-payment of security deposits identified as a Condition of Service or a condition of continuing service; or
(f) contravention of the laws of Canada or Ontario; or
(g) imposition of an unsafe worker situation beyond normal risks inherent in the operation of the Distribution System; or
(h) adverse effect on the reliability and safety of the Distribution System; or
(i) a material decrease in the efficiency of the Distribution System; or
(j) a material adverse effect on the quality of Distribution services received by an existing Connection; or
(k) inability of HHHI to perform meter reading (manually, automatically or remotely), planned inspections, maintenance, repairs or replacement of all or any part of a Meter Installation; or
(l) failure of the Customer to comply with a directive of HHHI that HHHI makes for the purposes of meeting its Licence obligations; or
(m) failure of the Customer to comply with any requirements in these Conditions of Service or a term of any agreement made between the Customer and HHHI, including, but not limited to, a Connection Agreement, Connection Cost Agreement or a Connection and Cost Recovery Agreement; or
(n) failure of the Customer to enter into a Connection Agreement required by these Conditions of Service; or
(o) in compliance with a court order; or
(p) by order of the Electrical Safety Authority; or
(q) by order of the IESO; or
(r) tampering with HHHI facilities and equipment.

2.2.1. Use of Load Limiter

If a bill remains unpaid in whole or in part twenty-one (21) calendar days after the due date and at least seven (7) calendar days after a written notice has been provided to the Customer by personal service, prepaid mail or by posting notice on the property in a conspicuous place, HHHI may fully interrupt or limit the distribution of electricity to the Customer.

HHHI may install a load limiter control device instead of disconnecting supply to a customer for non-payment provided that HHHI complies with the provisions set out in sections described below.

HHHI will provide written notice and an explanation of the effect of the load limiter at least seven (7) days in advance of a load limiter being installed, provided the outstanding payment is not received within that time. The written notice informs the customer that billing and payment options are available to all residential customers and that special programs and financial assistance may be available for eligible low-income customers, along with HHHI contact information where customers may obtain further information.

When HHHI installs a load limiter device, either for nonpayment or at the Customer's request, HHHI shall provide a written notice to the Customer detailing the operation of the device, the maximum capacity of the device, how to reset the device if the maximum capacity is exceeded, as well as a telephone number for the Customer to obtain further information and an emergency telephone number to contact if the capacity is exceeded and the Customer cannot manually reset the device for any reason. HHHI will also provide to the customer:

(i) the Fire Safety Notice of the Office of the Fire Marshal; and

(ii) additional public safety notices or information bulletins issued by public safety authorities and provided to HHHI, which provide information to Consumers respecting dangers associated with the disconnection of electricity service, as available.

A load control limiter device will not be installed at a residential Customer's property during the course of an arrears payment agreement, unless the agreement has been terminated in accordance with the provisions of the DSC.

Where HHHI had previously installed a load control limiter device for non-payment and the residential Customer then enters into an arrears payment agreement, HHHI shall remove the device within two (2) business days of the Customer entering into an arrears payment agreement. HHHI shall remove a load control limiter device within two (2) business days of an outstanding account being paid in full.

2.2.2. Disconnection Process for Reasons Other than Non-Payment

Notice of disconnection to a Customer, for reasons other than non-payment and subject to HHHI's rights in Section 2.2. of these Conditions of Service, will be provided by personal service, prepaid mail or by posting notice on the property in a conspicuous place. If the Customer does not remedy the situation that gave rise to HHHI's right to disconnect the Customer from the Distribution System within the time period specified by HHHI in the notice, HHHI may disconnect the Customer from the Distribution System or interrupt the distribution of electricity to the Customer on or after the date specified in the notice.

2.2.3. Immediate Disconnection without Notice

HHHI may immediately disconnect a Customer, without notice, in accordance with a court order, a request by a fire department or for emergency, public safety, system reliability reasons or in order to inspect, maintain, repair, alter, remove, replace or disconnect wires or other facilities used to distribute electricity or where there is an energy diversion, fraud or abuse on the part of the Customer.

2.2.4. Disconnect Provision for Low-income Customers

HHHI shall suspend any disconnection action for a period of twenty-one (21) days from the date of notification by a registered charity, social service agency or government agency that partners with a given distributor to assess Emergency Financial Assistance eligibility that it is assessing a residential Customer for the purposes of determining whether the Customer is eligible to receive such assistance, provided such notification is made within ten (10) days from the date on which the disconnection notice is received by the Customer. Where a residential customer had requested, prior to the issuance of the disconnection notice, that the distributor also provide a copy of any disconnection notice to a third party, the distributor shall suspend any disconnection action for a period of twenty-one (21) days from the date of notification by the third party that he, she or it is attempting to arrange assistance with the bill payment, provided such notification is made within ten (10) days from the date on which the disconnection notice is received by the customer.

Despite Section 2.2. of these Conditions of Service, upon notification by a registered charity, social service agency or government agency that partners with a given distributor to assess Emergency Financial Assistance eligibility, that a Customer is not eligible to receive such assistance, or if another third party who was considering the provision of bill assistance decides not to proceed, the distributor may continue its disconnection process. Distributors will have up to eleven (11) days to act on the previous disconnection notice and must make a further reasonable effort to contact the Customer in accordance with section 4.2.2.4 of the DSC, prior to executing disconnection.

2.2.5. Liability for Disconnection

Disconnection does not relieve the Customer of the liability for arrears or minimum bills for the balance of the term of the contract. Under no circumstances will HHHI be liable for any damage resulting from, associated with or related to the Disconnection or the limitation of distribution of electricity, including damage to the Customer or the Customer's premises and any business or other losses suffered by the Customer as a result of the disconnection.

2.2.6. Reconnection

Where the reason for the Disconnection has been remedied to HHHI's satisfaction, HHHI shall reconnect a Customer. All costs, including inspections, associated with the disconnection and reconnection shall be paid for by the Customer prior to reconnection of the service.

Under any of the following circumstances, HHHI requires that the Customer obtain the approval of the Electrical Safety Authority prior to HHHI reconnecting the service:

(i) where HHHI has reason to believe that the wiring may have been damaged or altered; or
(ii) where service was disconnected for modification of Customer wiring; or
(iii) where service has been disconnected for a period of six months or longer; or
(iv) where the service was disconnected as a result of an adverse effect on the reliability and safety of the Distribution System; or
(v) where it is a requirement of the Electrical Safety Code.

2.2.7. Disconnection and Reconnection Related Charges

Unless specified elsewhere in these Conditions of Service, a charge shall apply in cases where it is necessary for HHHI to make a trip to the Customer's premises to collect payment for an overdue account prior to disconnecting the service, installing a Load Limiter or reconnecting the service. The Customer will also be responsible for any incidental charges.

2.2.8. Unauthorized Energy Use

HHHI reserves the right to disconnect the distribution of electricity to a Customer, without notice, for causes including energy diversion, fraud or abuse on the part of the Customer. Service will not be reconnected until the Customer rectifies the condition and pays all uncollected charges, and costs incurred by HHHI arising from unauthorized energy use including inspections and repair costs, and the cost of disconnection and reconnection.

Unauthorized energy use may result in criminal and/or civil charges.

2.2.9. Service Removal

Where a Customer or property owner requests service cancellation, HHHI will remove certain delivery equipment, such as power lines, transformer and meter. If reconnection is requested, the Customer will incur a cost to reinstall appropriate delivery equipment and shall follow the steps and processes for new connections set out in these Conditions of Service.

2.2.10. Unauthorized Service Modifications

All costs incurred by HHHI arising from unauthorized service modifications will be the responsibility of the account holder and may result in criminal and/or civil charges.

2.3. Conveyance of Electricity

2.3.1. Limitations on Supply of Electricity

HHHI will endeavour to use reasonable diligence in providing a regular and uninterrupted supply of electricity, but does not guarantee a constant supply or the maintenance of unvaried frequency or voltage, and will not be liable in damages, including financially, to the Customer, by reason of any failure in respect thereof. Customers requiring a higher degree of security than that of normal electricity supply are responsible for the provision of their own back-up or standby facilities. Customers may require special protective equipment at 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 HHHI's electricity supply. During an emergency, HHHI may interrupt supply to a Customer in response to a shortage of supply of electricity, or to effect repairs on its Distribution System, or while repairs are being made to Customer-owned equipment. HHHI shall have

right to access property in accordance with Section 40 of the *Electricity Act, 1998* and any successor Acts. To assist with Distribution System outages or emergency response, HHHI may require that a Customer provides HHHI with emergency access to Customer-owned distribution equipment that normally is operated by HHHI or HHHI -owned equipment on Customer's property.

2.3.2. Power Quality

HHHI shall not be held liable for the failure to maintain supply voltages within standard levels due to a Force Majeure event as defined in Section 1.10. of these Conditions of Service. Customers who may require an uninterrupted power supply or a supply completely free from fluctuation and disturbance must provide their own power conditioning equipment for these purposes.

HHHI attempts to maintain voltage variation limits, under normal operating conditions at the Customer's delivery points, as specified by the Canadian Standards Association standard C235, latest edition. In the event that normal operating conditions are disrupted, action will be taken to restore service to within voltage variation limits as specified by CSA.

In response to a Customer's concern, where the utilization of electric power adversely affects the performance of electrical equipment, HHHI will investigate and attempt to identify the cause. Depending on the circumstances, this may include the review of relevant power interruption data, trend analysis or use of diagnostic measurement tools. Investigative measures provided by HHHI may include, but are not limited to:

(i) Review of the Customer's consumption history including, but not limited to, hourly data where available; and/or
(ii) A Meter Read to verify the accuracy of previous reads; and/or
(iii) Conduct a power quality survey by installing service monitoring equipment (Data Logger) at or as near as possible to the Customer's service entrance,
- For residential single-phase customers with a four-jaw socket type meter base, a Data Logger is normally installed at the metering point,
- For Customers with three-phase services such as commercial or industrial, a Data Logger is normally installed in or as near as possible to the main disconnect; and/or

(iv) Install monitoring equipment on the line side of the Customer's service to monitor the distribution system; and/or
(v) Other suitable means HHHI deems applicable to address the Customer's concerns.

For the safety of the HHHI personnel installing monitoring equipment on private property, prior to the installation the Customer shall ensure the area is free of debris, is well lit, the floor is not wet, and their loading is reduced as much as possible (for meter base logger installations). Where monitoring equipment is to be installed inside (ie three-phase services), the room where the equipment will be installed must be well ventilated and have at least one (1) man door that can remain open during the installation.

HHHI will not install monitoring equipment on private property if, in the opinion of HHHI, it is unsafe to do so. In the event of deemed unsafe conditions, HHHI will inform the Customer of remedial measures necessary to make the area of the installation safe. Any remedial measures needed on private property will be paid for by the Customer. HHHI will only continue with the installation of monitoring equipment if, in the opinion of HHHI, the remedial measures on the property have been completed and it is deemed safe.

HHHI will perform and pay for any remedial measures necessary should the location of the monitoring equipment installation be located or "lies upon" Customer property or parcel of land that is directly adjacent to or abuts onto a public road allowance where HHHI has distribution facilities of the appropriate voltage and capacity.

In conducting a review of the Customer's concerns, HHHI will consult applicable industry standards and good utility practice as guidelines. HHHI will provide the Customer with a report as a means of communicating to the Customer the findings of the assessment and if applicable the Power Quality Survey.

If the conclusions of the Assessment and/or Survey indicate that the Customer's power quality issue is being created by the Distribution System, HHHI will implement corrective measures. If, however, the corrective measures would adversely affect other Customers, HHHI reserves the right to not correct the problem or try to determine other corrective measures.

If the conclusions of the Assessment and/or Survey indicate that the Customer's power quality issue is internal to the Customer's location, HHHI will not perform any corrective measures. HHHI is not obligated to identify sources of potential concerns on the Customer's side of the *Point of Demarcation*.

Under normal circumstances, investigation by HHHI into a Customer's power quality concern is done at no cost to the Customer. If, however, a situation arises where extraneous work is required on the part of HHHI to determine where the problem lies, the Customer may be required to reimburse HHHI for a portion or all of HHHI's expenses.

2.3.2.1. Prevention of Voltage Distortion on the Distribution System

Customers having non-linear load shall not be connected to HHHI'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 (latest edition). The limit on individual voltage harmonic distortion is 3%, while the limit on total voltage harmonic distortion is 5%. These or higher levels of harmonics may result in erratic, sometimes subtle, malfunctions of the equipment that can, in some cases, have serious consequences. Instruments can be affected similarly, giving erroneous data or otherwise performing unpredictably.

2.3.2.2. Obligation to Help in the Investigation

During the course of a power quality investigation being performed by HHHI or its representative, the Customer is obligated to aid HHHI by providing required equipment information, relevant data and necessary access for the monitoring of equipment.

2.3.2.3. Timely Correction of Deficiencies

If an undesirable system disturbance is a result of a Customer's equipment, the Customer will be required to cease operation of the equipment until the Customer, at the Customer's expense, has taken satisfactory remedial action. If the Customer does not take such action within a reasonable time, HHHI reserves the right to disconnect the supply of power to the Customer until HHHI is satisfied the deficiency has been addressed. The Customer may be responsible for all costs incurred by the utility in its efforts to identify and correct the source of the disturbance.

2.3.2.4. Power Quality Disturbances

Voltage fluctuations and other disturbances can cause flickering of lights and other serious difficulties for Customers connected to HHHI'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 includes, but is not limited to, large motors, welders and variable speed drives. In planning the installation of any such equipment, the Customer must consult with HHHI.

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

2.3.2.5. Voltage Fluctuations

Voltage fluctuations and other disturbances can cause flickering of lights and other serious difficulties for Customers connected to HHHI's Distribution System. Equipment that may cause disturbances include, but are not limited to, large motors, welders, arc furnaces and variable speed drives. The Customer is responsible to ensure their equipment does not introduce voltage disturbances onto HHHI's system that could adversely affect other Customers. Should the Customer's equipment cause a disturbance onto HHHI's system that affects the quality of service to other Customers, the operation of the disturbance causing equipment must be discontinued immediately.

HHHI shall practice reasonable diligence in maintaining voltage levels as specified by CSA standard C235 (latest revision), 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. HHHI shall not be liable for any delay or failure in the performance of any of its obligations under these conditions of supply due to any events or causes beyond the reasonable control of HHHI, 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, lockout, labour dispute, 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").

2.3.2.6. Notification of Interruptions

Although it is HHHI's policy to minimize inconvenience to Customers, it is necessary to occasionally interrupt a Customer's supply of electricity to allow for maintenance on HHHI's electrical system. HHHI will endeavor to provide such Customers with reasonable notice of planned power

interruptions. However, interruption times may change due to inclement weather or other unforeseen circumstances. HHHI 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. During an emergency, HHHI may interrupt supply of electricity to a property without notice in response to a shortage of supply of electricity or to effect repairs on HHHI's Distribution System or while repairs are being made to Customer-owned equipment, or to conduct work of an emergency nature involving the possibility of injury to persons or damage to property or equipment.

2.3.2.7. Customers on Life Support

Customers who require an uninterrupted source of power for life support equipment must provide their own equipment for these purposes.

2.3.2.8. Emergency Interruptions for Safety

HHHI will endeavour to notify Customers prior to interrupting the supply of electricity. 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 potentially damaging to HHHI or the public, the supply of electricity may be interrupted without notice.

2.3.2.9. Emergency Service (Trouble Calls)

HHHI will exercise reasonable diligence and care to deliver a continuous supply of electricity to the Customer. However, HHHI cannot guarantee a supply that is free from interruption. When power is interrupted, the Customer should first ensure that the power supply interruption is not due to internal issues (ie blowing of fuses). 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 HHHI's main source of supply has failed, the Consumer should report these conditions at once to HHHI's Call Centre as provided in Appendix A of these Conditions of Service. HHHI operates a Call Centre 24 hours a day to provide emergency service to Customers. HHHI will initiate restoration efforts as quickly as possible upon notification.

2.3.2.10. Outage Reporting

Depending on the outage, duration and the number of Customers affected, Corporate Communications of HHHI may issue a news release and/or

update HHHI's website and social media feeds to advise the general public of the outage.

2.3.3. Electrical Disturbances

HHHI shall not be held liable for the failure to maintain supply voltages within standard levels due to a Force Majeure event as defined in Section 1.10. of these Conditions of Service.

2.3.3.1. Single-Phasing/Automatic Reclosing

All Customers must be aware that HHHI's Distribution System has automatic protective devices which may momentarily interrupt and instantly restore electrical supply, and that this may occur on any one (1), two (2), or all three (3) phases of the supply. In certain circumstances, it will be normal for a loss of supply to occur for a short time in one (1) or two (2) phases only, until supply is manually restored or completely interrupted. The Customer must take these conditions into account when designing, purchasing and operating sensitive equipment such as computers and motors. HHHI will not be liable in any way for damages due to such operations.

2.3.3.2. Voltage and Current Harmonics

Harmonic voltages and currents can be generated by large rectifiers, inverters, arc furnaces, static VAR systems and other non-linear loads. These harmonics may interfere with the operation of HHHI's Distribution System by conductive interference and/or may interfere with communication systems by inductive interference.

HHHI will follow Good Utility Practice for establishing limits on harmonic current emissions and voltage distortions.

If Customer's equipment is a source of unacceptable harmonics, voltage flicker, voltage level or other disturbance on HHHI's Distribution System, the Customer is obligated to provide HHHI with any requested equipment information, relevant data and necessary access for monitoring the equipment.

2.3.3.3. Voltage Fluctuations

HHHI will limit the operation of all equipment that results in substantial voltage variations to a maximum number of operations. As a reference

baseline, HHHI will reference CSA C235-83 for the determination of allowable voltage variances on the Distribution System. Where possible, equipment will not be installed or operated at any point above the "Border Line of Irritation" curve.

2.3.3.4. Frequency Fluctuations

The frequency of AC power on the Distribution System will be dictated by the supply frequency on the transmission system to which the Distribution System is connected.

2.3.3.5. Over-voltages

In general, HHHI will follow Good Utility Practice in accordance with CSA C235-83 to minimize the magnitude and extent of short-term over-voltages.

2.3.3.6. Stray or Tingle Voltage

Varying amounts of low-level voltage often exist between the earth and electrically grounded farm equipment such as metal stabling, feeders, milk pipelines or even wet concrete floors. Usually, these voltage levels present no harm to animals. However, if an animal touches two pieces of equipment that are at different voltage levels, a small electric current passes through the animal. This is known as stray voltage. Stray voltage can be produced by a wide variety of off- farm and on-farm sources.

Using dairy cows as an example, reported symptoms include:

- Reluctance to enter milking parlour
- Reduced water or feed intake
- Nervous or aggressive behaviour
- Uneven and incomplete milkout
- Increased mastitis
- Lowered milk production
- Reduced growth

These same symptoms can also be the result of other non-electrical farm factors. For example, disease, poor nutrition, unsanitary conditions, or milking machine problems can produce some of the same symptoms in farm animals as stray voltage. Farmers should consider and investigate all possibilities, including stray voltage, when attempting to resolve these symptoms.

Off-the-farm sources:
In a properly functioning electrical distribution system, some voltage will always exist between the neutral system (ground conductors) and the earth. The level of this NEV (neutral-to-earth voltage) can change on a daily or seasonal basis, depending on changes in electrical loading, environmental conditions and other factors. For safety reasons, HHHI's neutral system is connected to a farm's grounding system. While this bond protects people and animals from shocks caused by faulty electrical equipment and lightning strikes, it also results in a stray voltage equal to a fraction of the NEV appearing on grounded farm equipment such as feeders, waterers, metal stabling, metal grates, milk pipelines and wet concrete floors.

On-the-farm sources:
Poor or faulty farm wiring, improper grounding, unbalanced farm system loading, defective equipment or voltages from telephone lines or gas pipelines are all possible sources.

For additional information on the effects of stray voltage on livestock see the Ontario Ministry of Agriculture website, http://www.omafra.gov.on.ca.

If a stray voltage problem is suspected, contact the HHHI Engineering Clerk at 519-853-3700 extension 213 to set up an appointment for stray voltage measurement testing by HHHI staff at the location. HHHI provides up to four (4) hours of stray voltage testing at the Customer's premises without charge.

2.3.3.7. Customer Responsibility

Customers shall ensure that their electrical equipment does not cause any unacceptable voltage fluctuations, voltage unbalance, harmonics, or other disturbances that could negatively affect other Customers connected to the Distribution System, or HHHI Facilities and Equipment. Examples of equipment capable of causing disturbances could be, but not limited to, large motors, welders, and variable speed drives. In planning the installation of such equipment, the Customer must consult with HHHI.

The Customer's equipment shall comply with the limitations for permissible distortion caused by harmonic currents and voltages described in CAN/CSA- C61000-3-6 from the Canadian Standards Association.

If HHHI determines that unacceptable conditions are being caused by any Customer equipment, HHHI will instruct the Customer to take appropriate remedial action to correct the condition. Depending on the severity of the

electrical disturbance, HHHI may require that such equipment be disconnected from the Distribution System, in accordance with Section 2.2. of these Conditions of Service, until corrective measures are performed to the satisfaction of HHHI.

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

Any dispute under this section shall be resolved in accordance with Section 1.8. of these Conditions of Service.

Phase Balancing:
The Customer will take and use the power such that the current will be taken from the three phases equally, as far as practicable. If, at any time, the unbalance in current is greater than 10% and in HHHI's opinion excessive, the Customer agrees to make, at its own expense and upon request, the changes necessary to reduce the unbalance in current to an acceptable value.

Electrical Fluctuations and Interference:
The Customer shall operate in such a manner as not to cause disturbance, fluctuations or interference on HHHI's Distribution System, interference with communication systems or control circuits of HHHI or of any other third party. The Customer will perform remedial measures, at the Customer's sole expense, by way of installing suitable apparatus or otherwise as may be necessary, to reduce any disturbance or fluctuations or interference to a tolerable level. In any event, the Customer shall indemnify HHHI from all claims and demands made against HHHI by any third party in consequence of failure by the Customer to perform its obligations under this section.

2.3.4. Standard Voltage Offerings

Standard Voltage Offerings by HHHI are Sub-transmission, Distribution and Standard Secondary. The details of each are list below.

(i) Sub-transmission Voltage
- 44kV, 3-Phase, 3-Wire; or
- 27.6kV/16,000 V, 3-Phase, 4-Wire

(ii) Distribution Voltage
- 4.16kV/2400V 3 Phase, 4-Wire; or
- 8.32kV/4800V 3-Phase, 4-Wire; or
- 27.6kV/16000V 3 Phase, 4-Wire

(iii) Standard Secondary

Where HHHI retains ownership of transformers, the secondary voltage supplied to the Customer shall be one of the following:

- 120/240V, 1-Phase, 3-Wire; or
- 120/208V, 3-Phase, 4-Wire; or
- 347/600V, 3 Phase, 4-Wire

2.3.5. Voltage Guidelines

HHHI attempts to maintain voltage variation limits, under normal operating conditions at the Customer's delivery points, as specified by the Canadian Standards Association C235, latest edition (Adaption of CSA CAN-3-C235-83 Table 3 "Recommended Voltage Variation Limits for circuits up to 1000V, at Service Entrances" for standard secondary voltage supply offerings). The voltage variation limits are shown below in Table 1.

Table 1 – Voltage Variation Limits Applicable at Service Entrances

Nominal System Voltages	Voltage Variation Limits Applicable at Service Entrances			
	Extreme Operation Conditions			
		Normal Operating Conditions		
120/240	106/212	110/220	125/250	127/254
120/208Y	110/190	112/194	125/216	127/220
347/600Y	306/530	318/550	360/625	367/635
600 (delta)	530	550	625	635

Refer to CSA standards for additional details and other voltages not supplied by HHHI.

2.3.6. Emergency Backup Generation Facilities

Emergency backup generation is installed by Customers for backup of load when utility power supply is not available. Customers installing backup generation facilities must notify HHHI prior to installation. A Customer with portable or permanently connected emergency backup generation shall comply with all applicable criteria of the Ontario Electrical Safety Code (OESC) and in particular, shall ensure that its Emergency Backup Generation Facility does not back feed into the HHHI's Distributor System. A Customer with an Emergency Backup Generation Facility, in open-transition mode, shall further ensure that its facility

does not parallel with, nor adversely affect, HHHI's Distribution System. Customers who consider installing a closed-transition switch shall notify HHHI and shall submit documentation that satisfies HHHI's technical requirements. Customers shall obtain written authorization from HHHI prior to commissioning the switch in closed-transition mode. Closed-transition switches must not operate the generator in parallel with HHHI's Distribution System for longer than one hundred (100) milliseconds under any circumstances. Further requirements may be specified by HHHI. For parallel generation, refer to HHHI's Guidelines for Applicants Connecting Distributed Generation in respect of interconnection and automated disconnection requirements. Customers with a permanently connected Emergency Backup Generation Facility, operating in parallel, shall notify HHHI regarding the presence of such equipment and shall enter into a connection agreement as required in HHHI's Guidelines for Applicants Connecting Distributed Generation.

Where the backup generators interconnecting device is designed to connect onto the meter base, the Customer or their representative shall contact HHHI for a disconnection/ reconnection. At no time shall the customer or their representative tamper with or remove a HHHI owned meter.

Portable or Permanently Connected Emergency Backup Generation Facilities

Customers installing backup generation facilities must notify HHHI prior to installation. Customers with a portable or permanently connected Emergency Backup Generation Facility shall comply with all the applicable criteria of the Ontario Electrical Safety Code and, in particular, shall ensure that the Customer's emergency generation does not back feed onto HHHI's Distribution System. The Customer shall be responsible for proper interface protection between the portable or permanently connected Emergency Backup Generation Facility's electrical circuits and HHHI's Distribution System. Portable or permanently connected Emergency Backup Generation Facilities shall not be installed in a manner that would adversely affect HHHI's Distribution System. Portable or permanently connected Emergency Backup Generation Facilities must be operated in isolation from HHHI's Distribution System.

Customers with permanently connected Emergency Backup Generation Facilities shall notify HHHI regarding the presence of such equipment. All applicable environmental requirements are the responsibility of the Customer. Customers shall consult with HHHI during the planning and prior to the installation of any portable or permanently connected Emergency Backup Generation Facilities.

Customers shall ensure their emergency generation facility does not parallel or connect with HHHI's Distribution System without a proper interface protection and does not adversely affect HHHI's Distribution System. See Section 3.7. – Embedded Generation, of these Conditions of Service for parallel operation.

Customers planning to install back-up generator(s) shall submit two (2) copies of relevant drawings and support documentation to HHHI for review and comment. HHHI reserves the right to witness the commissioning and/or operation of an installation and its' connection to HHHI's Distribution System. Relevant information includes, but is not limited to:

- Single line diagram with generator connection;
- Generator specification;
- Switch specification;
- Statement of whether an open or closed transition switch is used;
- Method of disconnect when utility power is restored (voltage/ frequency sensing);
- Applicable standards the interconnection switch conforms to (CSA, IEEE).

Where the backup generators interconnecting device is designed to connect onto the meter base, the Customer or their representative shall contact HHHI for a disconnection/ reconnection. At no time shall the customer or their representative tamper with or remove a HHHI owned meter.

2.3.7. Load Displacement Generation Facilities

Customers intending to install generators for Load Displacement purposes shall consult with HHHI during the planning of and prior to the installation of any Generation Facility for Load Displacement. Customers with a Load Displacement Generation Facility shall comply with all the applicable criteria of the Ontario Electrical Safety Code and, in particular, shall ensure that the Load Displacement generation does not back feed onto HHHI's Distribution System. The Customer shall be responsible for proper interface protection between the Customer's electrical circuits and HHHI's Distribution System. Any Load Displacement generation shall be installed in a manner that would not adversely affect HHHI's Distribution System. All Customers with Load Displacement generation must notify HHHI regarding the presence of their Load Displacement generation. Load Displacement generation must satisfy the general technical requirements and the Connection Impact Assessment (CIA) criteria set out in Section 3.7. of these Conditions of Service.

2.3.8. Meter Installation

HHHI will supply, install, own, and maintain all meters, instrument transformers, ancillary devices, and secondary wiring that are required for revenue metering, including instrument transformers installed in a switchgear cubicle. The installation and cost of instrument transformers in switchgear cubicles and multi-unit metering closets will be the responsibility of the Customer.

2.3.8.1. General

HHHI is the majority revenue meter provider within the service area of The Town of Halton Hills' geographical boundaries as described in HHHI's Distribution Licence. Metering equipment includes, but is not limited to:

- Meters and associated equipment; and
- Data acquisition technologies; and
- Communication technologies.

Exceptions would only be permissible at the discretion of HHHI. All equipment shall comply with the Electricity and Gas Inspection Act as stated by Industry Canada, Legal Metrology. All equipment used shall be rated and marked CSA approved to the latest standards of the Canadian Standards Association.

The latest edition of rules in the Ontario Electrical Safety Code shall govern all installations. All installations shall be further governed by the policies and engineering standards of HHHI. Customers must submit metering plans, including all metering equipment and corresponding product numbers, to HHHI for approval prior to the commencement of construction. All 3-Phase socket bases must have an isolated neutral termination block.

2.3.8.2. Replacement

Replacement of all meters and associated equipment shall be carried out by HHHI's staff. Replacements required for normal HHHI maintenance and re-verification will be at the expense of HHHI. In cases of damage caused by a Customer or third party, the Customer or third party at fault for the damage will be liable for all costs incurred to repair and/or replace the meter, including, but not limited to, labour, equipment, materials, and vehicles. Examples of causes of damage include, but are not limited to:

- smashed meter; or
- overloading; or
- ground fault; or
- flash-over.

2.3.8.3. Responsibility of the Customer

The Customer shall provide HHHI permanent access to meters and communication panels in areas that are not normally available to the general public by providing any necessary keys or key pad pass codes, prior to energizing service. These areas include, but are not limited to,

electrical rooms, meter rooms, meter closets and vaults. HHHI will retain any keys or codes until such time as the meter is removed. The Customer is required to provide HHHI with any new keys or codes, prior to making changes.

The Customer shall not perform any work within 3.0 meters of HHHI's primary line.

The Customer is not to install the meter base or any supporting equipment, including but not limited to, secondary cables and ducts, within 1.0 meters of other utilities including, natural gas, telephone, cable, water and wastewater. This requirement applies to all services whether single or three phase, residential, commercial, or industrial. If HHHI personnel determine the clearance of 1.0 meters has not been met, HHHI may demand that remedial measures be taken to correct the installation of the service to achieve the required clearance. These remedial measures will be at the Customer's expense. HHHI will not energize a service until such time as the remedial measures have been completed to the satisfaction of HHHI.

The Customer is responsible for the following, prior to the energization of service and installation of a meter:

(i) A certificate of approval for connection by the ESA; and
(ii) A minimum of forty-eight (48) hour notice prior to energization; and
(iii) Provide a safe working distance of 1.22 meters around all residential and industrial metering equipment; and
(iv) Notification of any change that would alter the existing location, ampacity or load on the service; and
(v) A completed and returned Application for Service contract, as requested, and an Offer to Connect returned, and
(vi) Pay all expense fees associated with the new service or service upgrade in advance of any construction, the details of which may be obtained by contacting the HHHI's Engineering Clerk at (519) 853-3700 extension 213; and
(vii) Check Metering at the service entrance of all new and upgrading multi-unit building services, in conjunction with individually metered sub-services the primary purpose being to provide a check and balance of overall building consumption; and
(viii) Lockable meter rooms and/ or closets where individual unit meters are grouped together; and
(ix) Supply and install all metering equipment and infrastructure, communication for individually metering each separate store, shop, and apartment or industrial unit located in a shopping

plaza, condominium, or industrial unit. HHHI will supply and own the meter, and instrument transformers; and

(x) A dedicated voice quality or better telephone line and jack located inside the metering cabinet for all general services with a demand load of 50kW or greater or where HHHI determines telephone connection for meter interrogation is required.

2.3.8.4. Responsibility of HHHI

HHHI shall energize the primary and/or connect the secondary terminations at the transformer and install a revenue meter. Under normal circumstances, HHHI will energize the service to the line side of the Main Disconnect or Breaker within forty-eight (48) hours upon receipt of the written service connection approval from ESA, provided all other requirements have been met to the satisfaction of HHHI.

2.3.8.5. Metering Requirements for Multi-Unit Residential Rental Buildings and Condominiums

Developers of new multi-unit residential buildings and new and existing condominiums (collectively, "MURBs"), or Boards of Directors of condominiums, or authorized persons in charge of any other applicable class of unit under Ontario Regulation 389/10, may choose to have HHHI install suite metering or a bulk interval meter for the purpose of enabling unit sub-metering by a licensed unit sub-meter provider.

Upon the request of a MURB developer or a condominium Board of Directors, HHHI will install suite metering that meets the functional specification of Ontario Regulation 425/06 – Criteria and Requirements for Meters and Metering Equipment, Systems and Technology (smart metering). In such case, each separate residential and commercial unit, as well as common areas, will become direct, individual customers of HHHI, with the common area accounts held by the developer, Condominium Corporation or the property owner as the case may be. The MURB developer or condominium board of directors may choose an Alternative Bid for the installation of suite metering. In such a case, the MURB developer, property owner or condominium Board of Directors is required to:

(i) select and hire a qualified contractor; and

(ii) ensure all work that is eligible for alternative bid is done in accordance with HHHI's technical standards and specifications; and

(iii) will assume full responsibility for the installation and

warranty aspects for a period of two (2) years from the date of commissioning.

Where the MURB developer or condominium Board of Directors transfers the metering facilities installed under the alternative bid option to HHHI and provided HHHI has inspected and approved the facilities installed, HHHI shall pay the Condominium Corporation, property owner or developer a transfer price. The transfer price shall be the lower of the cost to the MURB developer or condominium Board of Directors to install the metering facilities or HHHI's fully allocated estimated cost to install the metering facilities.

Common Area Metering

Where units in a MURB are to be suite metered, the responsible party (MURB developer, condominium Board of Directors, or property owner) shall enter into a contract with HHHI for the supply of energy for all common or shared areas. Common or shared areas typically include, but are not limited to, lighting, heating, air conditioning, water heating, elevators, and common laundry facilities. In such cases, consumption for all common areas will be separately metered and classified as a General Service less than 50 kW or General Service 50kW to 999kW as the case may be for billing purposes.

Installation of Bulk Interval Metering by HHHI

Where bulk interval metering is supplied by HHHI for the purpose of enabling unit sub-metering, the responsible party (MURB developer, condominium Corporation, or property owner, but not the unit sub-meter provider) shall enter into a contract with HHHI for the supply of energy to the building.

HHHI Installation of Suite Metering

Customers interested in having HHHI supply and install suite metering can contact the Engineering Department to inquire about services and the process. A consultation will be provided at no cost to the Customer. At the time of a consultation the Customer should be prepared to discuss:

- The proposal overview being made by the Customer;
- Existing metering set-up (Customers looking to change from bulk to suite metering);
- Review design drawings, locations of electrical closets, and electrical loads for the building (suites, common areas, commercial/ retail uses);
- Locations for metering within the building;

- Services that HHHI can provide to the Customer;
- Customer timing for the work.

HHHI will supply the Customer with a proposal for suite metering at no cost.

2.3.8.6. Main Switch and Meter Mounting Devices

The Customer's main switch immediately preceding the meter shall be installed so that the top of the switch is 1.83 meters or less from the finished floor and shall permit the sealing and padlocking of:

(i) the handle in the open position; and
(ii) the cover or door in the closed position.

Meter mounting devices for use on Commercial and/or Industrial accounts shall be installed on the load side of the Customer's main switch and be located indoors.

The Customer is required to supply and install a HHHI approved meter base (listed in Table B-1 of Appendix B – Metering Requirements) and specified in a HHHI Technical Service Layout. For services other than those in Table B-1, the Customer must submit an application to HHHI's Engineering Department, for approval prior to the commencement of construction. In all situations, early contact with the HHHI's Engineering Department is essential.

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

Interval metering for services less than 50kW is optional, however, all expenditures relating to the installation, including, but not limited to, equipment, labour and materials, will be paid for by the Customer. Interval metering is mandatory for services 50 kW and above and expenses will be paid by HHHI. A dedicated telephone line and duct is required for interval metering. The telephone line will connect to the interval meter and will be paid for by the Customer.

A switch gear will not be built until such time as HHHI has approved the instrument transformers. HHHI will not be held liable for any equipment built prior to all designs being approved by HHHI's Engineering Department. The Customer must contact the Metering Department to co-

ordinate the delivering of the Instrument transformers to the switch gear manufacturer.

Instrument transformers located in a 1.22 x 1.22 x 0.3 meter (4' x 4' x 1') cabinet will be installed by HHHI.

Any metering requiring Current Transformers (CT) shall have a 0.03175 meter (1.25") conduit no longer than 9.0 meters and complete with fish rope.

2.3.8.7. Single Phase Metering

All new single phase services will be supplied underground at 120/240 volts using single phase, 3-wire and designed to a minimum of 200 amps. All meter bases shall be CSA approved four jaw socket type meters and of the manufacturer's designation for "over-sized model" as opposed to their "standard size model".

The Customer shall supply the appropriate meter base as per Table B-1 for an individual service. The meter base shall be supplied by the Customer and installed externally, before the main disconnect, at 1.67 +/- 0.15 meters from finished grade to the center of the meter, within 1.22 meters (4') from a front corner of the building and on a pathway which is cleared of obstacles at all times, including snow. For all new services and where applicable for upgraded services, meters will not be located within an enclosed structure and/or within a fenced perimeter without HHHI's written approval.

2.3.8.8. Three Phase Metering

Authorization to install a service other than those stated below must be obtained from HHHI's Engineering Department. All new and upgraded services will be supplied with a utilization voltage of 120/208 or 347/600, 3-phase and 4-wire.

Specialty metering items or conditions, other than the HHHI's standard, will be supplied by the Customer. These specialty items or conditions may include, but are not limited to Electronic Pulse Metering and Primary Metering. Any use of specialty metering items or conditions must first be approved by HHHI Engineering Department.

All cabinets shall be 1.22 x 1.22 x 0.30 meters (4' x 4' x 1') unless stated otherwise and be installed per HHHI Standard 25U-206.3 where main

switch is located on the line side of the meter and customers main load center is directly following the meter cabinet unless otherwise specified. Where services utilize instrument transformers mounted in the switchgear, a 0.92 x 0.92 x 0.30 meter (3' x 3' x 1') cabinet shall be installed within 9.0 meters (30') of the instrument transformers per HHHI Standard 25U-166 Figure 2. There shall be a 0.03175 meter conduit between the instrument transformer cabinet and the meter cabinet.

The meter cabinet shall have a 120-volt outlet fed from a dedicated, 15 amp, Ground Fault Interrupt, circuit breaker within the cabinet and a dedicated "voice" quality or better telephone line. The telephone line shall be activated at HHHI's discretion and at the Customer's expense. HHHI will advise the customer if a cellular or other non-hardwired communication medium is available for backhaul of metered data. Factors such as poor signal may result in a hardwired communication requirement.

The Customer shall supply the back plate to HHHI, a minimum of two (2) weeks prior to the required installation date. The following information shall be marked in indelible ink on the back plate:

- Top of the back plate marked **'TOP'**; and
- Location where **'LINE'** and **'LOAD'** wires will enter and exit at opposite ends of the cabinet; and
- Contact person/telephone numbers for the Company, Customer, and electrical contractor; and
- Service voltage and amperage size; and
- Number and size of service conductors.
- Phone number for cabinet.

The cabinet must contain 1.83 meters of service conductor looped in the cabinet for meter connections.

Where more than one (1) conductor per phase is used, the connectors shall be provided by the Customer at the Customer's expense.

The Customer shall supply equipment and labour, except for the meters, instrument transformers and labour for the meter connections in a meter cabinet. The customer is responsible for pulling their secondary cable into/ through the meter cabinet.

The customer shall contact and coordinate all metering related issues with HHHI's System Planning Department.

Three phase services up to 200 amps shall use a 7-jaw, socket type meter base for a self-contained meter and be of the manufacturer's "over-sized model" as opposed to their "standard size model".

All three phase metering installations are to be installed inside a building. Three phase services above 200 amps require a meter cabinet inside the building. The main switch is to be installed ahead of the meter on all three phase services.

2.3.8.9. Centrally Metered Services (CMS)

CMS Metering will be required for customers with more than one service supplied by one Distribution Transformer and with either a minimum 200 amps secondary *or* a single phase service greater than 200 amps. There are three types of installations that require 5 jaw bases, supplied by customer:

(i) Overhead primary: The Current Transformer is located under the Distribution Transformer with the meter on same pole;

(ii) Underground secondary: The meter & Current Transformer combination is located externally on a building;

(iii) Underground Pad mount: The Current Transformer is located inside a Pad mount Transformer with the meter located on a 6" x 6" meter pressure treated post anchored 0.3 meters from the pad. The meter is located to the right, rear side of Pad mount Transformer opening, thus not obstructing access to secondary terminals.

2.3.8.10. Service Main Limitations

The metering designs for service mains in excess of 600 amps or 600 volts shall be submitted to HHHI for approval prior to the commencement of construction. Additional standards and requirements for services metered above 600 volts must be approved by HHHI's Engineering Department prior to the commencement of construction. HHHI will not be held liable for the cost of any builds prior to all designs being approved by HHHI's Engineering Department.

2.3.8.11. Special Enclosures

Designs for specially constructed meter entrance enclosures and/or kiosks, for outdoor use, must be approved by HHHI's Engineering Department prior to the commencement of construction. HHHI will not be held liable for the cost of any builds prior to all designs being approved by HHHI's

Engineering Department.

2.3.8.12. Meter Cables

The Customer shall provide 1.00 meter conductor loops in the cabinet between line and load entry points once the back plate has been installed by HHHI Metering Department. Line and load entry points shall be approved by HHHI's Engineering Department prior to installation. Where more than two conductors per phase are used, the connectors shall be provided by the Customer. Mineral insulated, solid or hard drawn wire conductors are not acceptable for meter loops. Any variation from the above must be approved by HHHI's Engineering Department prior to the commencement of construction. HHHI will not be held liable for the cost of any builds prior to all designs being approved by HHHI's Engineering Department.

2.3.8.13. Barriers

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

2.3.8.14. Doors

Side-hinged doors shall be installed over all live electrical equipment where HHHI personnel may be required to work including, but not limited to, line splitters, un-metered sections of switchgear, breakers, switches, metering compartments, meter cabinets and enclosures. These hinged doors shall have a provision for sealing and padlocking. Where bolts are used, the hinged doors shall be of the captive knurled type. All outer-hinged doors shall open no less than 135°. All inner-hinged doors shall open to a full 90°.

2.3.8.15. Auxiliary Connections

All connections to circuits such as fire alarms, exit lights and customer instrumentation shall be made to the load side of HHHI's metering. No Customer equipment shall be connected to any part of the HHHI metering circuit.

2.3.8.16. Working Space

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

2.3.8.17. Current Transformer Boxes

Where instrument transformers are incorporated in low voltage switchgear, the size of the chamber and number of instrument transformers shall be as shown in Table B-1 in Appendix B – Metering Requirements of these Conditions of Service. A separate meter cabinet must be supplied and installed by the Customer, as close as possible to the instrument transformer compartment. The design for the meter cabinet must be approved by HHHI's Engineering Department prior to the commencement of construction. HHHI will not be held liable for the cost of any builds prior to all designs being approved by HHHI's Engineering Department

The cabinet and the metering cubicle will be connected by a 0.038 meter metallic conduit with fish rope, the length of which shall not exceed 8.00 meters and shall have no more than three 90° bends. The conduit will be provided for the exclusive use of HHHI. No junctions or pull boxes with removable covers are permitted.

The meter cabinet shall be grounded by a minimum #6 copper grounding conductor, not installed in the above conduit. The final layout and arrangements of components must be approved by HHHI's Engineering Department prior to the commencement of construction. HHHI will not be held liable for the cost of any builds prior to all designs being approved by HHHI's Engineering Department.

HHHI will issue specific metering requirements where:

(i) Two or more circuits are totalized; or
(ii) Where remote totalizing is involved; or
(iii) Where instrument transformers are incorporated in high voltage switchgear (greater than 750 V).

2.3.8.18. Interval Metering

2.3.8.18.1. Conditions for Supplying Interval Metering

Interval meters will be installed for all new or upgraded services where the peak demand is forecasted to be 50 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 0.013 meter conduit from their communication room to the meter cabinet. HHHI will, as a first option, assess the location for metering and install a wireless communicating meter where signal strength is sufficient. If signal strength is insufficient HHHI will advise the Customer and the customer will be responsible for arranging the installation of hardwired telephone communication infrastructure, terminated in the meter cabinet and for the exclusive use of HHHI to retrieve interval meter data, 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 HHHI 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 re-verification 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.

2.3.8.18.2. Interval Metering Data

HHHI will aggregate Customer internal data for the purpose of billing all charges approved by the OEB. HHHI will maintain the usage profile of all Customers with Interval Meters and shall make this information available to Customers.

The Customer can personally obtain Interval Meter data through secure, password protected, web access provided by HHHI.

Third party entities requiring access to Interval-Metering data for the purposes of analysis, energy programs and aggregation, must provide a signed agreement between the Customer and the third party entity, allowing for the sharing of data.

2.3.8.19. Smart Meters

HHHI has installed smart meters in accordance with regulations and policies set out by Government authorities for all Residential and General Service less than 50 kW classes.

2.3.9. Meter Reading

Where “meter read or meter reading” is used in this document, it means the collection of consumption data either manually, automatically, or remotely, from the meter.

HHHI reads meters on an hourly, monthly or bi-monthly frequency, depending on Rate Classification and service size. Meter readings are obtained either manually or remotely using electronic means. Where HHHI is unable, for any reason, to obtain a meter reading the Customer may be required to provide a meter reading.

Where a phone line is used as the method for meter reading data retrieval the customer is obligated to ensure the phone line remains active. If the phone line signal is interrupted for any reason (poor signal, disconnection, cut, etc…) the customer is responsible for repairing and reinstating the phone service to the point of metering at their own expense. If repair work is not completed in a timely manner as prescribed by HHHI, HHHI may elect to perform manual reads until the issue is resolved. The Customer is responsible for the costs, as defined in HHHI’s most current Tariffs of Rates and Charges, for manual meter reads.

The Customer must provide free, safe and unobstructed access during regular business hours, to any authorized representative of HHHI for the purpose of meter reading, meter maintenance and meter inspection. Where premises are closed during HHHI’s normal business hours, the Customer must provide HHHI with any necessary keys and/or key pad pass codes, to access the meter. HHHI will retain any keys and/or codes until such time as the meter is removed. The Customer is required to provide HHHI with any new keys and/or codes prior to making changes.

HHHI reserves the right to use an estimated meter read for both energy and demand quantities when actual readings are not available.

If unable to access the premises, HHHI shall attempt to arrange access to the premises at a time convenient for both HHHI and the Customer. Notice may be given verbally (phone call) or written (letter delivered to the meter location). At its discretion, HHHI may require the Customer to read the meter and provide the results to HHHI.

To ensure accurate billing and proper operation, it is necessary for HHHI to annually read and visually inspect the meter. If HHHI cannot access the meter for this purpose after the Customer has been contacted directly, HHHI reserves the right to require a relocation of the meter at the Customer’s expense. If the situation is not rectified, HHHI may ultimately disconnect the Customer in accordance with Section 2.2. of these Conditions of Service

2.3.9.1. Final Meter Reading

When a service is no longer required, the Customer shall provide two (2) business days' notice of the date the service is to be discontinued so that HHHI can obtain a final meter reading as close as possible to the final reading date. The Customer shall provide HHHI, or its agents, access to the meter for this purpose. If a final meter reading is not obtained, the Customer shall pay a sum based on an estimate of demand and/or energy for electricity used since the last meter reading, as determined by HHHI.

2.3.9.2. Faulty Registration of Meters

The security and accuracy of metering is governed by the federal *Electricity and Gas Inspection Act* and associated regulations, under the jurisdiction of Measurement Canada. HHHI's revenue meters comply with the accuracy specifications established by those regulations.

The entity billing a Customer, whether HHHI or a Retailer, is responsible for advising the Customer of any meter error of which it becomes aware and its magnitude and of the Customer's rights and obligations under the *Electricity and Gas Inspection Act* and the *Electricity Act* and all codes and regulations associated with both Acts. The billing entity is also responsible for subsequently settling actual payment differences with the Customer or Retailer.

In the event of incorrect electricity usage registration, HHHI will determine the correction factors based on the specific cause of the metering error and the Consumer's electricity usage history. The Consumer shall pay for all the electricity supplied a reasonable sum based on the reading of any meter formerly or subsequently installed on the premises by HHHI, due regard being given to any change in the characteristics of the installation and/or the demand. If Measurement Canada, determines that the Consumer was overcharged, HHHI will reimburse the Consumer for the amount incorrectly billed based on Measurement Canada findings.

If the incorrect measurement is due to reasons other than the accuracy of the meter, including but not limited to, incorrect meter connection, incorrect connection of auxiliary metering equipment, or incorrect meter multiplier used in the bill calculation, a corrected bill will be issued in accordance with Section 2.4.4.10. in these Conditions of Service.

2.3.9.3. Meter Dispute Testing

Where a Customer questions the validity of a bill, the Customer is to contact the HHHI Customer Care Department at (519) 853-3701 during office hours. A Customer Care Representative will review the bill and calculations with the Customer to determine the accuracy. Further to the initial Customer call, further steps may include one or more, but are not limited to, the following:

(i) collection of problem details from the Customer; and/or
(ii) analysis of billing details including calculation of charges and appropriateness of meter readings; and/or
(iii) comparison of estimated readings with past usage; and/or
(iv) obtaining a check meter reading; and/or
(v) providing information to assist the Customer understanding of and confidence in the bills; and/or
(vi) field visit to the Customer premises to verify meter reading, meter data and test meter operation.

At any point in this process, if HHHI staff determine suspect meter operation, a meter dispute test will be initiated. However, if HHHI is satisfied with meter operation and accuracy of billing, however the Customer is not satisfied with the billing register and where all other processes have exhausted, the Customer may request that the meter be replaced and the removed meter be tested by Measurement Canada.

Measurement Canada has jurisdiction, under the *Electricity and Gas Inspection Act*, in a dispute between HHHI and its Customer where the condition or registration of a meter or meters is in question. HHHI will inform Customers of the assistance provided by Measurement Canada in dispute investigations.

If the services of Measurement Canada are requested by the Customer or Retailer to resolve the issue, HHHI may charge the Customer for the costs of processing the application to Measurement Canada and removing and transporting the meter to a testing location. If the dispute is substantiated by Measurement Canada and the resolution is in the favour of the Customer, HHHI shall bear such costs. If the dispute is unsubstantiated by Measurement Canada and the resolution is in the favour of HHHI, the customer shall bear such costs.

Measurement Canada will follow its dispute investigation process and issue a decision. A Measurement Canada decision can be appealed by either HHHI or the Customer who initiated the dispute investigation. Any appeal will follow Measurement Canada's appeal process.

2.4. Tariffs and Charges

2.4.1. Service Connection

Charges for distribution services and pass-through charges are approved by the Ontario Energy Board in the Tariff of Rates and Charges available from HHHI and any additional decisions. Information about rate changes will be included with the first billing issued at the revised rates.

2.4.1.1. Rate Classifications

Rate Classifications are defined on the Ontario Energy Board approved Tariff of Rates and Charges. When assigning a Customer to the appropriate Rate Classification, HHHI reviews the purpose of the service (i.e. Residential, General Service, Un-metered Scattered Load, etc.) and the estimated average load in kWhs and kWs. The Distribution Service Rates for each classification are based on the cost of delivering electricity to only that class of Customers.

2.4.1.2. Components of Distribution Rates

HHHI Distribution Rates include a monthly service charge component and a volumetric-based component. For demand billed Customers, the volumetric rate is a per kW charge. The billing demand shall be taken as 90% of the kVA or 100% of the measured demand in kW, whichever is greater. For energy only customers, the volumetric rate is a per kWh charge. The monthly service charge component is designed to recover common costs of Distribution Services that are independent of electricity use. All other Distribution Service costs are recovered through the volumetric rate. Effective May 1, 2019, Residential customers will be billed a monthly service charge only for Distribution Rates.

2.4.1.3. Rates Outside HHHI Control (excluding Energy)

HHHI is required to collect rates that are outside the control of HHHI (pass-through rates), as approved by the Ontario Energy Board in the Tariff of Rates and Charges available from HHHI and any additional decisions. These pass through rates may include, but are not limited to, rural and remote rate protection in accordance with the Regulations made pursuant to Section 79 of the *Electricity Act,* Debt Retirement Charges set in accordance with Section 85 of the *Electricity Act*, Transmission Charges and Wholesale Market Service Charges Other charges may be applied as per Ontario Acts, Regulations and OEB Codes.

2.4.2. Energy (Electricity) Supply

2.4.2.1. Standard Supply Service

HHHI shall provide Customers connected to the Distribution System with access to electricity through Standard Supply Service.

All Customers are Standard Supply Service Customers until HHHI is informed of and completes the Customer transfer to a competitive Retailer, all in accordance with Section 10 - Service Transaction Requests of the Retail Settlement Code.

HHHI may, at its discretion, refuse to process a Service Transfer Request for a Customer switch to a Retailer if that Customer is in arrears to HHHI for Distribution Services and/or Standard Supply Service.

Where a Service Transfer Request is accepted, a final Standard Supply bill will be issued to the Customer. This bill will be based on an actual meter read unless the Customer, HHHI and the Retailer agree in writing to an alternative. The effective date of the service transfer shall be the next scheduled meter reading date unless a request is made for a special meter reading and HHHI can accommodate the request. The Ontario Energy Board approved special meter read charge will apply.

All service transfers, except a return to Standard Supply Service, must be supported by the Customer's written authorization, a copy of which must be retained by the applicable competitive Retailer.

2.4.2.1.1. Pricing of Standard Supply Service including Regulated Price Plan (RPP)

Pricing of Standard Supply Service is in accordance with applicable regulations made under the *Ontario Energy Board Act* and the Standard Supply Code, specifically section 3, Rates. Pricing of Standard Supply Service is dependent on Customer electricity usage and meter type. Customers who are eligible for RPP shall be charged for Standard Supply Service at rates determined, approved or fixed by the Ontario Energy Board in accordance with the following:

(i) RPP eligible Customers with a conventional meter, an un-metered service or bulk metered multi-unit service, will be charged Ontario Energy Board approved tiered prices;

(ii) RPP eligible Customers with a Smart Meter will be charged Ontario Energy Board approved time- of-use

prices;

(iii) Customers not eligible for RPP and with a conventional meter shall be billed for hourly electrical energy consumed based on the weighted average hourly spot market (WAHSP) for electricity for the period over which the customer is being billed. The WAHSP will be calculated according to the methodology prescribed in the Retail Settlement Code;

(iv) Customers not eligible for RPP and with an Interval Meter or other eligible time-of-use metering infrastructure capable of providing data on at least an hourly basis shall be billed for hourly electrical energy consumed based on the respective Hourly Ontario Electricity Price (HOEP);

(v) RPP eligible Customers electing for spot market pricing and requiring an Interval Meter capable of providing data on at least an hourly basis shall be billed for hourly electrical energy consumed based on the respective Hourly Ontario Electricity Price (HOEP).

Customer eligibility for RPP is in accordance with applicable regulations made under the *Ontario Energy Board Act* and the Standard Supply Code. HHHI will categorize an RPP eligible Customer as a Spot Market Price Customer only upon written notification from Customer and after the installation of an Interval Meter capable of providing data on at least an hourly basis. All costs associated with the installation and maintenance of an Interval Meter for an RPP eligible Customer electing for Spot Market Pricing will be paid by the Customer.

Effective July 1, 2017, as per the *Ontario Fair Hydro Plan Act*, HHHI will no longer credit/charge an RPP variance settlement amount when any of the following apply:

- the Customer is moving outside of Ontario
- the Customer signs a Retailer contract
- the Customer elects, in writing, to Spot Market Pricing
- the Customer ceases to be eligible for RPP.

All pricing of Standard Supply Service, including RPP pricing, is subject to change upon notification from the Ministry of Energy and/or the OEB. Customers may be notified of changes by, but not limited to, bill message, bill insert, electronic mail, and notices on HHHI's website.

2.4.2.2. Competitive Retailer Supplied Electricity

Where a Customer has signed a Retailer contract, HHHI will continue to provide Distribution Services to the Customer in accordance with these Conditions of Service. The Retailer contracted Customer will be billed either by HHHI under Distributor Consolidated Billing or by the Customer's designated Retailer under Retailer Consolidated Billing and as prescribed in the Retail Settlement Code. A Customer that has signed a Retailer contract will be required to pay the Global Adjustment and any associated costs.

With the exception of the energy (commodity) and Global Adjustment charges, including any Global Adjustment Rate Riders as approved by the Ontario Energy Board in HHHI's Tariff of Rates and Charges, all other charges remain the same as those for Standard Supply Customers.

2.4.3. Deposits

Whenever required by HHHI and the in accordance with the DSC, Customers will be required to provide and maintain a security deposit.

Customers who meet the security deposit conditions described below will be required to provide an account security deposit to HHHI in the form of:

(i) Cash; or
(ii) Cheque; or
(iii) Money order; or
(iv) Credit card (a third party processing fee will apply); or
(v) An automatically renewing irrevocable commercial letter of credit from a bank defined in the *Bank Act, 1991,* c.46 (General Service Customers only)

HHHI will not accept third party guarantees.

The amount of the account security deposit will be based on the billing factor times the estimated average bill during the most recent 12 months. The billing factor is 2.5 for monthly billed Customers.

Where there is no established historical electricity consumption information for the service premises, the deposit will be based on a reasonable estimate using information from a like property used for similar purposes.

Where the Customer, other than a Residential Customer, has more than one disconnection notice in a relevant twelve (12) month period, the highest bill in the period will be used for the calculation of the deposit.

If requested by the Customer, security deposit payment may be made in equal installments over a maximum of four (4) months for General Service Customers or over a period of six (6) months for Residential Customers.

2.4.3.1. Waiving a Security Deposit

A Security Deposit may be waived by HHHI where the Customer has met one of the following conditions:

(i) a good payment history based on the most recent customer history, some portion of which must be in the most recent twenty-four (24) months, during which time the Customer:

(a) had less than two (2) notices of disconnection; and

(b) had less than two (2) payments returned for insufficient funds ("NSF"); and

(c) had no disconnect/collection trips; and

(d) had no security deposit applied for amounts owing.

The minimum time period for good payment history is as follows:

- Residential rate class – one (1) year
- General Service <50 kW rate class – five (5) years
- All other classes – seven (7) years

(ii) The Customer provides a letter from another electricity or gas distributor in Canada confirming good payment history. The letter must contain information consistent with the good payment criteria described in Section 2.4.3.1. (i) of these Conditions of Service.

(iii) The Customer provides a satisfactory credit check at the Customer's expense. The acceptable Equifax Credit scores are as follows:

- Residential rate class - Consumer Score of 700 or greater
- General Service - Business Score of 20 or lower

(iv) The Customer is a Residential rate class and the Customer enrolls in, and continues to be enrolled in, HHHI's pre-authorized payment.

(v) The Customer is a bulk-metered Residential Condominium as defined in the *Condominium Act, 1998* and has provided HHHI with a signed declaration attesting to their legal status as a Residential Condominium Corporation.

(vi) The Residential Customer has been qualified as an eligible low-income customer and requests the waiving of the security deposit.

2.4.3.2. Reduction of Security Deposits

The security deposit may be reduced for non-Residential Customers with 50 kW or greater demand. Where the Customer has a credit rating from a recognized credit rating agency, (Dominion Bond Rating Service, Standard & Poor's or Moody's) the maximum amount of deposit required will be reduced as follows:

Table 2 – Credit Rating

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 AA or equivalent	**85%**
BBB-,From BBB, BBB+ to below A or equivalent	**75%**
Below BBB- or equivalent	**0%**

Equivalent ratings from other bond rating agencies would apply for the same reductions.

2.4.3.3. Interest on Security Deposits

Interest on security deposits will accrue monthly commencing when the total deposit has been received. The rate shall be at the average Chartered Bank Prime Rate as published on the Bank of Canada Web site, less 2%. The interest rate shall be updated by HHHI, at a minimum, on a quarterly basis. The interest will be calculated and applied to the existing deposit prior to each update and at a minimum on a yearly basis

2.4.3.4. Annual Review of Security Deposits

HHHI will undertake an annual review of all security deposit requirements for each Customer.

Where it is determined that all or part of the deposit is no longer required, the account will be credited with the amount of the deposit plus accumulated interest.

Where it is determined that a deposit is now required or needs to be adjusted upward, the amount of the deposit will be added to the next regular bill and is payable by the due date of that bill, except for Residential Customers which shall be permitted to pay the adjusted amount in equal installments paid over a period of at least six (6) months. As with all outstanding balances, payment arrangements that are satisfactory to HHHI may be made.

For Customers in a >5000 kW demand rate class, where the Customer is in a position to have some or all of the deposit refunded, only a maximum of 50% of the deposit will be returned. A higher refund requires a credit rating from a recognized credit rating agency based on the criteria previously stated.

2.4.3.5. Refunding of Security Deposits

Upon closure of a Customer's account with HHHI, including a Customer move from standard supply service ("SSS") to a competitive retailer where the retailer is performing the billing function (retailer consolidated billing), for all accounts types, the balance of the security deposit plus accumulated interest, after all amounts owing are paid, will be returned to the Customer within six (6) weeks of the closure of the account.

No earlier than twelve (12) months after the payment of a security deposit or the making of a prior demand for a review, a Customer may request, in writing, that the deposit amount be reviewed to determine whether the entire amount of the security deposit, or some portion of it, should be returned to the Customer as it is no longer required.

2.4.4. Billing

HHHI will determine the billing cycle and frequency of meter readings for each Customer on the basis of Customer classification. Bills for the use of electrical energy may be based on either a metered rate or, for certain specific types of

customer or loads, on a flat rate basis as determined by HHHI and approved by the Ontario Energy Board.

HHHI will bill Standard Supply Service Customers. Standard Supply Customers may discuss the charges shown on their bill by contacting HHHI using the contact methods shown on their bill.

Retailer Customers may be billed by HHHI depending on the billing options selected by the retailer in accordance with the Retail Settlement Code. Retailer Customers may discuss the charges shown on their bill by contacting their Retailer.

2.4.4.1. Use of Estimates

In months where a bill is issued but no reading is obtained, HHHI will estimate energy and demand in order to determine billing quantities. The estimate is based on historical usage for the premise, or a predetermined quantity if there is no historical usage information available.

Customers who do not have an interval meter, or are not yet transitioned to time- of-use pricing, may avoid receiving bills based on estimated meter readings if they provide Customer-obtained meter reads that pass validation checks and are provided according to processes and timing established by HHHI for billing purposes.

2.4.4.2. Customers with Smart Meters on Time-of-Use Pricing

In a billing period, where meter reading data is not available, HHHI or the Smart Metering Entity will estimate consumption in order to determine billing quantities. The estimate is based on historical usage for the premise, or a predetermined quantity if there is no historical usage information available.

2.4.4.3. Closing of Account

If a Customer wishes to close their electricity account, HHHI requires two (2) business days to arrange for a final read.

2.4.4.4. Pro-ration of Accounts

Accounts will be pro-rated where the bill to a Customer is for a period shorter or longer than the standard billing period or where rates have been revised effective on a date not coincident with the Customer's billing or meter reading date.

2.4.4.5. Budget Payment Plan

A budget payment plan is available to all Standard Supply Service Customers and retailer-enrolled Customers on Distributor Consolidated billing. To help smooth electricity costs over the year, the plan bills an equal portion of the previous year's charges per bill period and then reconciles the balance owing in the anniversary month. Customers on a budget plan are reviewed semi-annually and amounts are adjusted to reflect historic usage.

2.4.4.6. Primary Metering Allowance

A Primary Metering Allowance is applicable to all Customers, excluding Sub-Transmission rate class Customers, requiring a billing adjustment for transformer losses as a result of being metered on the primary side of a transformer. The OEB approved transformer loss allowance is as set out in the OEB approved Tariff of Rates and Charges available on HHHI's website www.haltonhillshydro.com.

2.4.4.7. Transformer Allowance for Ownership

Customer-supplied Transformation Allowance is applicable to all Customers, excluding Sub-Transmission rate class customers, who are demand or energy-billed and providing their own transformers. The OEB approved transformer loss allowance is as set out in the Tariff of Rates and Charges available on HHHI's website www.haltonhillshydro.com.

2.4.4.8. Annual Monitoring of Electricity Usage

For energy only metered General Service less than 50 kW Customers, annual consumption will be monitored to identify services that have an annual load greater than 250,000 kWhs. Customers that meet or exceed the threshold will have a demand meter installed to monitor peak demand.

Billed demand is monitored during the calendar year to determine whether the account should be reclassified for billing purposes. The review occurs in the first quarter of the year, with the measurement period being January 1 through December 31 of the previous year and average monthly billing demand is calculated based on the measurements taken for bills issued within that time period.

If the average monthly billing demand over the calendar year exceeds the 50 kW threshold for demand billing, or the 1,000 kW threshold between General Service 50-999 kW and General Service 1,000-4,999 kW, the reclassification of the account, with no retroactive adjustment, will occur effective the next scheduled bill after the annual review. Customers will be notified before the reclassification and be advised if a new meter and telephone line will be needed for meter reading data retrieval.

Alternatively, where a demand Customer requests HHHI to do a review, the calculation will be based on the average monthly billing demand over the most recent twelve (12) month period and the account will be reclassified, as appropriate, effective the next scheduled bill following the review. Such reviews will not take place more than once (1) per year. In some cases, HHHI may consider reclassification if billing demand for a period of five (5) consecutive months falls outside limits applicable to the Customer's current rate classification, if so required by the Customer.

2.4.4.9. Billing Determinants for Demand Customers

Demand charges will be billed at the greater of 100 per cent of kW or 90 per cent of kVA where kVA metering is installed, where applicable and approved by the Ontario Energy Board on the Tariff of Rates and Charges. When a Customer's power factor is known to be less than 90 per cent, a kVA meter or other equivalent electronic meter shall be used for measuring and billing.

2.4.4.10. Billing Errors

In the event of any billing errors, HHHI will notify a Customer by way of, but not limited to, bill insert, bill message, letter or outgoing telephone message.

2.4.4.10.1. Over Billed Accounts

Where HHHI has over billed a Customer by an amount that is equal or exceeds the Customer's average monthly billing amount, HHHI

will, within ten (10) days of determination of the error, notify the Customer of the over billing and advise the Customer they may elect to have the full amount credited to their account or repaid in full by cheque, within eleven (11) days of requesting payment by cheque. Where the Customer has not requested payment by cheque within ten (10) days of notification of the error by HHHI, HHHI may credit the full amount to the account.

Where HHHI has over billed a Customer by an amount that is less than the Customer's average monthly billing amount, HHHI will credit the Customer's account in the next regularly scheduled bill issued to the Customer.

If there are outstanding arrears on a Customer's account, HHHI will apply any over billed amounts to the arrears on the Customer's account and credit or repay the remaining balance to the Customer.

2.4.4.10.2. Under Billed Accounts

Where HHHI has under billed a Customer who is not responsible for the error, HHHI shall allow the Customer to pay the under billed amount in equal instalments over a period at least equal to the duration of the billing error, up to a maximum of two (2) years.

Where HHHI issues a bill to a Customer for an under billed amount, HHHI will notify the Customer that, if the Customer is an eligible low-income Customer, he or she has the option of paying the under billed amount as follows:

(i) in accordance with Section 2.4.5.1. of these Conditions of Service; or

(ii) over a period of ten (10) months where the under billed amount is less than twice the Customer's average monthly billing and over a period of twenty (20) months where the under billed amount equals or exceeds twice the Customer's average monthly billing.

2.4.5. Payments and Overdue Account Interest Charges

2.4.5.1. Payment Options

Customers may pay their electricity bills using any of the following methods:

(i) Cheque mailed with the remittance stub portion of the bill to HHHI at the address on the stub; or

(ii) Cheque with the remittance stub portion of the bill paid at HHHI's office at 43 Alice St., Halton Hills (Acton) during regular business hours; or

(iii) Cheque with the remittance stub portion of the bill paid at HHHI's office at 43 Alice St., Halton Hills (Acton) in the drop box after regular business hours; or

(iv) Money Order mailed with the remittance stub portion of the bill to HHHI at the address on the stub; or

(v) Money Order with the remittance stub portion of the bill paid at HHHI's office at 43 Alice St., Halton Hills (Acton) during regular business hours; or

(vi) Money Order with the remittance stub portion of the bill paid at HHHI's office at 43 Alice St., Halton Hills (Acton) in the drop box after regular business hours; or

(vii) Credit Card with the remittance stub portion of the bill paid at HHHI's office at 43 Alice St., Halton Hills (Acton) during regular business hours (a third party processing fee will be charged); or

(viii) Credit Card over the phone with HHHI's Customer Care Department during regular business hours (a third party processing fee will be charged); or

(ix) In person at most Canadian financial institutions; or

(x) Automated banking machines; or

(xi) Telephone banking; or

(xii) Internet bill payment services offered through the Customer's financial institution.

All payments must be in Canadian dollars.

Payment plans are available to Customers as per Section 2.6.2 of the Standard Supply Service Code.

With the exception of Customers in arrears for electricity charges who have not entered into an arrears payment agreement with HHHI, an equal monthly payment plan option is available for qualifying Residential Customers. The payment plan is comprised of an equalized payment amount being automatically withdrawn from a Customer's account with a financial institution on a monthly basis. An equal monthly payment plan option is available on a monthly basis for eligible low-income customers.

2.4.5.2. Late Payment Charges

Bills are payable in full by the due date. Should the bill not be paid by the due date, overdue interest charges will apply at a rate of 1.5% monthly (compounded) or 19.56% annually. 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.

2.4.5.3. Additional Charges

Customers are required to pay additional charges. Additional charges may include, but are not limited to, processing non-sufficient funds ("NSF"s), disconnection notices, re-connection of service and reference letters. A complete list of additional charges is found in the OEB approved Specific Service Charges set out in the Tariff of Rates and Charges available on HHHI's website www.haltonhillshydro.com.

Outstanding bills that have been subject to the collection process, may ultimately lead to the service being disconnected or disrupted. Service will be restored once satisfactory payment and/or payment arrangements have been made (refer to Section 2.2. of these Conditions of Service).

2.5. Customer Information

2.5.1. Retail Settlement Code Requirements

HHHI shall provide current and historical usage information to Customers and Retailers in accordance with Chapter 11 of the Retail Settlement Code.

Customers with remotely read Interval Meters shall have access to meter usage data in accordance with Section 2.3.8.18.2. of these Conditions of Service or over the Internet after having obtained a password from HHHI for secure access.

2.5.1.1. Current Usage Data

Customers with cumulative volume, demand and non-remotely read Interval Meters shall receive their current usage data on their HHHI electricity bill.

Customers with remotely read or non-remotely read Interval Meters shall have access to read-only meter usage data under the following conditions:

(i) HHHI will select the access windows it requires to read the meter; and

(ii) HHHI's access to the meter is not hindered or a Customer's access to the meter does not corrupt usage information. HHHI will suspend a Customer's right to access until any outstanding problems are resolved; and

(iii) The Customer pays the reasonable cost of any software, hardware and other services required for a Customer to obtain direct access to meter information. This may include installation of a secondary meter access system; and

(iv) The Customer shall bear any cost incurred by HHHI to correct problems caused by a Customer's direct access to the meter; and

(v) Where the Customer assigns his or her right to direct meter access to a Retailer or third party, the Customer shall be responsible for the actions of the assigned party.

Customers with Smart Meters have access to their hourly electricity usage information over the internet. Access to this information is subject to acceptance of the End User Agreement on the HHHI website.

2.5.1.2. Historical Information

Provision of Customer-specific information to retailers through the Electronic Business Transaction ("EBT") system shall be provided at no charge. Customers and Retailers may request data directly twice a year, at no charge to the Customer or Retailer. Additional requests shall also be honoured, but HHHI may, at its discretion, charge a reasonable fee for such additional requests. A request is considered to be data delivered to a single civic address or electronic mail account.

HHHI will provide a Customer with at least twelve (12) months, where available, of historical usage information, information about the Customer's meter configuration, and payment information ("Historical Information"). The Historical Information can be released to the Customer or any third party designated by the Customer, subject to the following:

(i) The third party is a Retailer and the Customer has provided the Retailer with written authorization for the release of the information; or

(ii) The third party is someone other than a Retailer and the Customer has provided HHHI with written authorization for the release of the information.

Notwithstanding the above, HHHI will not provide Retailers with data related to time-of-use consumption.

2.5.2. Protection of Individual Privacy and Customer Information

2.5.2.1. Privacy Legislation

HHHI is subject to municipal privacy legislation that contains specific restrictions concerning the collection, use and disclosure of Personal Information.

In addition, the HHHI's Licence prohibits HHHI from disclosing information regarding a Customer to any other party without the written consent of the Customer, except where such information is required to be disclosed:

(i) to comply with any legislative or regulatory requirements, including the conditions of Licence; or
(ii) for billing, settlement or market operation purposes; or
(iii) for law enforcement purposes; or
(iv) to a debt collection agency for the processing of past due accounts of the Customer.

The Licence permits HHHI to disclose information regarding a Customer where the information has been sufficiently aggregated such that the Customer's particular information cannot reasonably be identified.

2.5.2.2. HHHI's Collection, Use and Disclosure of Customer Information

HHHI collects and records information about its Customers, including personal information (collectively, "Customer Information"), primarily from its Customers, whether verbally, in writing or via HHHI's website. However, HHHI may also collect from other sources, including credit bureaus or personal references. The information collected is primarily:

- information establishing identity (for example: name, address, phone number, date of birth, etc.); and
- information related to the provision of electricity and/or distribution services by HHHI and other electricity distributors; and
- information about financial behaviour, such as payment history and creditworthiness.

HHHI collects Customer Information for the following purposes:

(i) to establish and maintain responsible commercial relations and operations, including for purposes of billing and debt collection and for assessing Customer credit history from time to time to determine if HHHI requires a security deposit; and

(ii) to understand Customer needs and eligibility for products and services; and

(iii) to recommend particular products and services to meet a Customer's needs; and

(iv) to develop, enhance, promote and provide electricity products and services; and

(v) to manage and develop HHHI's business and operations; and

(vi) to meet legal and regulatory requirements; and

(vii) to provide Customers with information about the electricity market and rates.

HHHI does not trade or sell Customer Information to any third parties. HHHI shall not use or disclose Customer Information for purposes other than those for which it was collected, except with the Customer's consent or as required by law.

The information will be used and disclosed internally within HHHI by and among staff members (for example, its customer care staff and its internal auditors) that need the information in the performance of their duties and where the use and disclosure is necessary and proper in the discharge of HHHI's business.

In some instances, Customer Information will be shared with third party service providers who perform services on HHHI's behalf, such as customer service, outage management, data storage, data cleansing and the like. These third party service providers are given only the information necessary to perform those services that HHHI has contracted them to provide. Additionally, they are prohibited from storing, analyzing or using that information for purposes other than the services they have been contracted to provide. HHHI uses contractual means to require such service providers to protect Customer Information from loss, theft and unauthorized access, use, disclosure and otherwise in a manner consistent with the privacy policy and practices established by HHHI.

2.5.2.3. Access to Personal Information

HHHI retains personal information only as long as necessary for the fulfillment of the purposes described in this Section.

Customers may obtain access to their personal information held by HHHI at any time and review its content and accuracy, and have it amended as appropriate. However, access may be restricted as permitted or required by law. Customers can request access by appointment only with the Customer Care Supervisor.

3. Customer Class Specific

Where connections are referred to in this Section, it is understood that all conditions outlined in Section 2.1. of these Conditions of Service have been met.

3.1. Residential Service

This section refers to the supply of electrical energy to Residential Customers residing in detached, semi-detached, duplex, triplex, or townhouse dwelling units. Residential services will be offered at 120/240V, 1-phase, 3-wire, 60-Hz only, up to a maximum of 200A where available and only as underground servicing. For Residential services requiring a larger supply, contact HHHI's Engineering Department for further information.

3.1.1. Point of Demarcation

3.1.1.1. Overhead

Refer to Appendix C – Point of Demarcation for details. Any deviations must be authorized by HHHI's Engineering Department.

3.1.1.2. Underground

Refer to Appendix C – Point of Demarcation for details. Any deviations must be authorized by HHHI's Engineering Department.

3.1.2. Residential Underground Subdivisions

Where the supply of electrical energy to a residential underground subdivision secondary servicing may not be nearby, or where present, would be insufficient in capacity, an expansion of HHHI's Distribution System may be needed. Contact HHHI's Engineering Department for a copy of HHHI's Residential Subdivision Agreement for full details including metering and inspection. To accommodate the developer's subdivision construction phasing, HHHI will determine if a temporary distribution system configuration is feasible during which the normal electrical backup may not be available for up to one (1) year. Development phasing requirements beyond one (1) year will require the installation of a temporary distribution system backup at a cost to the developer.

3.1.2.1. Service Requirements

Servicing of new residential subdivisions will be underground, however, main trunk supply to the boundary of the subdivision will be overhead, unless feasible and the developer requests underground supply at their own expense. Refer to HHHI's Residential Subdivision Agreement.

3.1.2.2. Site Information

Refer to Appendix D – Site Information for details. All required information must be received prior to establishing service details. All electronic drawings should be provided in a HHHI approved file format.

3.1.2.3. Servicing Cost

Residential underground subdivisions require an expansion or enhancement to the distribution network and thus the servicing cost for the subdivision shall be based on the results from the Economic Evaluation Model. The basic credit per property is considered in the model. HHHI's Offer to Connect will stipulate the servicing cost and options. The expansion and enhancement cost to HHHI's standard will be reduced in whole or in part by a credit based on the future net revenue to HHHI. The net revenue horizon of HHHI will be based on twenty-five (25) years, subject to change, depending on the type of development.

3.1.3. Residential Single Family Homes

A single family home is a permanent structure or structures located on a single parcel of land and approved by the municipality`s building department as a dwelling and occupied for domestic or household purposes by a single Customer. Single family homes include, but are not limited to, detached and semi-detached.

The Customer will be required to obtain an approved technical service layout from HHHI's Engineering Department before proceeding with the relocation or installation of any service. Failure to obtain the service layout may result in the service being relocated at the Customer's expense.

Approved service locations on layouts are final. Any deviation, without prior consultation with the Engineering Department, will be subject to correction at the expense of the Customer.

No layout approvals will be done on Secondary services that are not directly attached to HHHI's street circuits. **Electrical Safety Authority inspection is required for all work.**

The Customer will be supplied at one service entrance only. Where single-phase power is required, a 3-wire service having a nominal voltage of 120/240V will be supplied.

All new services from HHHI's main line will be installed underground according to HHHI specifications, at the expense of the Customer. Any exceptions will be at the discretion of HHHI. The Customer shall provide a minimum two (2) business days' notice for trench inspection. HHHI shall inspect the Customer's underground service trench between the main line and the service entrance point, prior to the back filling of the trench.

It is the responsibility of the Customer and/or their Contractor to ensure that cable terminations are installed as per the manufacturer's recommendations. Only personnel qualified and experienced shall make cable connections and terminations. Upon request, proof of the qualifications of personnel making terminations shall be submitted to HHHI for review.

No work will proceed or materials ordered until appropriate construction charges, deposits, documentations or contracts have been received. The Electrical Safety Authority (ESA) will govern any electrical service requirement not mentioned in this section on Residential Services.

3.1.3.1. Services Over Swimming Pools

HHHI will **not** allow electrical conductors to be located above swimming pools.

Where a new swimming pool is to be installed, any electrical conductors located directly over the proposed pool location will be relocated at the Customer's expense.

3.1.3.2. Service Requirements

The location of the service entrance point and the meter base will be established through consultation with HHHI's Engineering Department for both new and upgraded electrical services. Failure to comply may result in the relocation of the service at the Customer's expense.

One (1) service will be provided for each property. In circumstances where more than one service is already installed at a single property and where any of the services is to be upgraded, the upgraded service will replace all of the existing services.

The maximum service size is limited to 200A, 120/240V. Due to technical constraints, single-phase secondary services greater than 200A may not be available in all areas. All deviations from the maximum service size must be approved by HHHI's Engineering Department.

Where revenue metering is located inside a residence, the Customer will be required to relocate the meter to the exterior of the building when upgrading the electrical service, working on service conductors within or relocating the service entrance.

3.1.3.2.1. Overhead Services

3.1.3.2.1.1. Overhead Secondary Service

New overhead services are not permitted for new residential dwellings including, but not limited to:

- Dwellings built on vacant lots;
- A new dwelling on a lot where a dwelling had previously existed and was demolished;
- Dwellings where HHHI's customer signed for a disconnect and removal of their overhead service;
- Where service voltage is converted from single to three phase or vise-versa.

Exceptions will be assessed on a case-by-case basis at the discretion of HHHI.

3.1.3.2.1.2. Overhead Primary Service

Where HHHI deems an overhead primary pole line to be practical, the Customer shall install and maintain such a pole line in accordance with the Ontario Electrical Safety Code. This primary pole line shall be guyed at opposite ends in such a manner to be considered self-supporting.

The first service pole or first point of support shall be double dead-end construction, according to HHHI specifications and shall not be more than 30.0 meters from the main supply street circuit. To avoid conflict with guying, the neutral shall be continuous and tied in on a spool bolt or clevis.

The Customer shall leave sufficient wire coiled at the first point of support to reach the main supply street circuit with excess to

accommodate proper dead-ending. Any wire too short will be replaced at the Customer's expense.

All primary lines shall be insulated for 16/27.6Y kV (in a Level II environment, i.e. a minimum leakage distance of 20 mm/kV for insulators) unless 44 kV (also in a Level II environment) is required. Customers (and their consultants or contractors) are also referred to Electrical Safety Authority publication entitled: Distributor Safety Bulletin DSB-02/12, Insulator Class Recommendation (issued April 4, 2012).

All three phase primary services are to be 4-wire.

Minimum pole class and sizes are as follows:

Single phase transformer pole - 12.2 meters Class 4
Single or three phase pole line - 12.2 meters Class 4
Three phase transformer pole - 13.7 meters Class 4

3.1.3.2.2. Underground Services

All new services from HHHI's main line will be installed underground according to HHHI specifications, paid for by the Customer, less the Basic Connection Allowance (see Section 2.1.1. of these Conditions of Service). Any exceptions will be at the discretion of HHHI.

The Customer shall construct and own all civil infrastructure including, but not limited to, poles, underground conduits, cables, transformer pad, and ground loop on private property that is deemed required by HHHI. All civil infrastructures are to be in accordance with HHHI standards, practices, specifications in these Conditions of Service and are subject to HHHI inspection and acceptance. The Customer is responsible to maintain all structural and mechanical facilities on private property in a safe condition satisfactory to HHHI.

The trench route must agree with the Engineering design provided by HHHI's Engineering Department. Any deviation from the original design must be approved by HHHI's Engineering Department prior to any construction. The Customer will be responsible for all costs associated with the design and inspection, and all additional re-design and subsequent re-inspection costs due to changes or deviations initiated by the Customer or its agents.

Where HHHI's main line is on the opposite side of the road allowance, the Customer shall be responsible for the cost of the road crossing. The Customer will also be responsible for ensuring that the service entrance and meter meets HHHI's specifications.

It is the responsibility of the Customer, or their contractor, to obtain clearances from all utility companies, including HHHI, before digging. It is also the responsibility of the Customer to arrange an appointment with HHHI to inspect each trench, **prior** to the installation of service cables.

The Customer will ensure that any intended tree planting has 3.0 meter clearance from the underground electrical plant.

The customer will ensure that no objects, structures, roads, or driveways (including turn-a-bouts) are located within 3.0 meters of HHHI owned pad mounted equipment. HHHI will not be held liable for the removal of objects including plants, shrubs, bushes, trees and other forms of vegetation, placed around HHHI owned pad mounted equipment, nor will HHHI be responsible for replacing any objects that were removed. The Customer will not block access to HHHI owned equipment.

3.1.3.2.2.1. Underground Secondary Service

All underground secondary services will have a minimum rating of 200 Amps, up to and including the meter base.

The Customer will install secondary conductors in a 0.100 meter (4") PVC Type 2 duct, from the main line to the delivery point, according to HHHI specifications.

The Customer will supply all required adapters, scepter pipe, weather heads and clips to take the secondary wires up the pole to the connection point at the main line.

The duct(s) shall be concrete encased, complete with rebar, where they pass under a vehicular travelled surface. The concrete shall be of a thickness as specified in the latest CSA C22.3 No. 7 Underground Systems.

If the specified depth of trench cannot be achieved, the Customer will contact HHHI's Engineering Department to request a deviation from the standard depth. Where deviations

are approved by HHHI's Engineering Department, the ducts shall be concrete encased, complete with rebar and 0.15 meter (6") red caution tape.

Meter base terminations will be supplied by the Customer and installed by HHHI at the Customer's expense.

HHHI will maintain the service, up to the demarcation point, after energization has occurred.

3.1.3.2.2.2. Underground Primary Service

The Customer will supply, install and maintain the following, according to HHHI specifications:

(i) The transformer base complete with grounding; and

(ii) Suitable access to the metering equipment and transformer by HHHI vehicles. Where necessary, a suitable, unobstructed paved or graveled surface may be required; and

(iii) Concrete encased ducts where the duct passes under a vehicular travelled surface; and

(iv) At a termination pole, the first 1.5 meters of cable shall be direct buried in sand cover and the first 3.0 meters of duct following the 1.5 meters of sand cover shall be concrete encased. Underground 44kV trenches must be concrete encased complete with rebar. The concrete shall be of a thickness as specified in the latest CSA C22.3 No. 7 Underground Systems. If the specified depth of trench cannot be achieved, the Customer will contact HHHI's Engineering Department to request a deviation from the standard depth. Where deviations are approved by HHHI's Engineering Department, the ducts shall be concrete encased, complete with rebar and 0.15 meter (6") red caution tape.

(v) Where road crossing(s) (open cut or directional bore) are required, the Customer will contact the Town of Halton Hills to obtain the necessary permit.

(vi) Primary cable per HHHI's approved cable specifications which are available on HHHI's website or from the Engineering Department..

Underground services which are installed or inherited by HHHI shall be maintained by HHHI. Site restoration by HHHI will be confined to the immediate area of the repair work and will include only the replacement of similar natural surface materials within the immediate area.

Sheds, patios and any type of building in the immediate area where repair work is required will be disassembled or moved by the Customer at their expense.

The Customer will be responsible for all repair costs in the event the Customer damages secondary conductors owned by HHHI.

Where an existing service requires what is considered more than one normal repair, HHHI may require the Customer to replace the service at the Customer's expense.

The trench for all underground services must meet Electrical Safety Authority and HHHI's standards as applicable.

Due to secondary line loses, the maximum allowable length of secondary service (including pole riser distance) will be 75.0 meters for 4/0 aluminum and 90.0 meters for 250 kcmil. Lengths over 90.0 meters will require a primary service.

Where secondary cables are supplied from a private pole line, the termination shall be done by the Customer at their own expense. If the secondary cables are supplied from HHHI's main line, the termination at the supply point shall be done by HHHI at the expense of the Customer.

The Customer will supply, install and maintain a rigidly mounted 0.05 meter minimum diameter I.P.S., C.S.A approved service entrance conduit, termination 0.60 meters below grade, complete with conduit bushing. The Customer is also responsible for all meter base connections.

3.1.3.3. Site Information

Refer to Appendix D – Site Information for details. All required information must be received prior to establishing service details. All electronic drawings should be provided in a HHHI approved file format.

3.1.3.4. Metering

The Customer will supply and install a meter socket in accordance with HHHI Metering Specifications found in Table B-1, Appendix B – Metering Requirements of these Conditions of Service.

3.1.3.5. Inspection

The electrical installation inside the home and out to the demarcation point must be inspected and approved by ESA. HHHI requires notification in the form of a Connection Authorization from the ESA indicating that an inspection has been conducted prior to HHHI energizing the service.

The service entry components up to, and including, the meter base shall be inspected and approved by HHHI and the ESA prior to energization.

3.1.3.6. Servicing Cost

New services are to be built to HHHI specifications, paid for by the Customer, less the Basic Connection Allowance (see Section 2.1.1. of these Conditions of Service). For residential infill and upgrades, the Customer shall be responsible for the cost of civil and electrical works from the meter base to the supply point.

3.1.4. Residential Townhouses

Residential Townhouses pertains to the supply of electrical energy to row housing. For stacked townhouses, contact HHHI's Engineering Department.

3.1.4.1. Service Requirements

Each townhouse block will be provided with one service up to 400A, single-phase, three-wire service to the building end-wall that will supply a maximum of six (6) – 100A gang metered services. Greater than six (6) meters will require a metering centre with the aggregate load limited to a maximum of 200A. Service size shall be supported by a load summary that meets the requirements of the Ontario Electrical Safety Code.

Where a revenue meter is located inside a townhouse, the Customer will be required to relocate the meter to the exterior of the building at the time of upgrading the electrical service or relocating the service entrance.

The Customer will enter into a Service Agreement with HHHI, governed by the terms and conditions under which the electrical distribution system and services will be designed and installed.

The Customer will provide all civil works, as needed, to accommodate the HHHI plant.

Under certain conditions, up to 600A service (at 120/240V) may be available. Contact HHHI's Engineering Department to determine availability.

3.1.4.2. Site Information

Refer to Appendix D – Site Information for details. All required information must be received prior to establishing service details. All electronic drawings should be provided in a HHHI approved file format.

3.1.4.3. Metering

The Customer will supply and install meter sockets in accordance with HHHI Metering Specifications found in Table B-1, Appendix B – Metering Requirements of these Conditions of Service.

3.1.4.4. Inspection

The electrical installation inside the townhouses and out to the demarcation point(s) must be inspected and approved by ESA. HHHI requires notification in the form of a Connection Authorization from the ESA indicating that an inspection has been conducted prior to HHHI energizing the service.

The service entry components up to, and including, the meter base shall be inspected and approved by HHHI and the ESA prior to energization.

3.1.4.5. Servicing Cost

Service costs will be handled in a similar manner to the single-family residential connections as per Section 3.1.2.3. "Servicing Cost".

3.2. General Service less than 50 kW

General Service less than 50kW services shall include, but are not limited to, small apartment buildings, dense condominium arrangements, in-home businesses, small commercial, agricultural, billboard, industrial and institutional developments supplied from the road right-of-way or HHHI easement.

3.2.1. Point of Demarcation

Refer to Appendix C – Point of Demarcation for details on Demarcation Points. Any deviations must be authorized by HHHI's Engineering Department.

3.2.2. Service Requirements

New services from HHHI's main line will be installed underground according to HHHI specifications at the cost to the Customer, less the Basic Connection Allowance. Any deviation from HHHI specifications must be approved by HHHI's Engineering Department prior to commencement of construction. Failure to comply may result in the relocation of the service at the Customer's expense. This applies to, but is not limited to:

- Structures built on vacant lots;
- A new structure on a lot where a structure had previously existed and was demolished;
- Structures where HHHI's customer signed for a disconnect and removal of their overhead service;
- Where service voltage is converted from single to three phase or vise-versa.
- Structures where the service entrance changes significantly to warrant a new point of connection either to the utilities distribution system or the customer service entrance (ex. Rear lot service converted to front lot service).

All new three (3) phase services shall be supplied underground from a pad mounted transformer. HHHI will only replace or upgrade three phase transformer banks on utility poles where the existing electrical service is currently supplied from a pole mounted transformer bank. Any deviations must be approved by HHHI's Engineering Department prior to construction.

The customer shall obtain a technical service layout from HHHI's Engineering Department prior to any construction. Failure to comply may result in the relocation of the service at the Customer's expense.

HHHI will perform the construction and electrical work required to maintain existing supply by providing standard overhead or underground supply services to Customers affected by HHHI construction activities. If a Customer requests special construction beyond the standard installation specifications, the Customer shall pay the additional cost, including Engineering Department and Administration fees.

Where metering is located inside a building (Electrical Room), the Customer shall ensure the Electrical Room conforms to the requirements of Section 3.2.7. of these Conditions of Service and the Ontario Electrical Safety Code (latest edition).

The Customer will be supplied via one service entrance and one service voltage only. The allowable utilization voltages are:

(i) 120/240 volt, 1 phase, 3-wire
(ii) 120/208 volt, 3 phase, 4-wire
(iii) 347/600 volt, 3 phase, 4-wire

The customer will ensure that no objects, structures, roads, or driveways (including turn-a-bouts) are located within 3.0 meters of HHHI owned pad mounted equipment. HHHI will not be held liable for the removal of objects including plants, shrubs, bushes, trees and other forms of vegetation, placed around HHHI owned pad mounted equipment, nor will HHHI be responsible for replacing any objects that were removed. The Customer will not block access to HHHI owned equipment.

Customers who are upgrading their service requiring a new transformer/ transformer bank and currently have a 3-phase, 3-wire 600V delta service supplied from HHHI will be responsible for upgrading their service entrance to 3-phase, 4-wire. This often requires a 4th wire (neutral) to be installed by the Customer from their service entrance to the utility transformer. In these cases HHHI will require the Customer to install the 4th wire into the metering cabinet for metering purposes. The Customer shall be responsible for evaluating ground fault current and overcurrent protection and making any necessary modifications. All delta service conversion activities downstream of the utility demarcation point is the responsibility of the Customer and shall be done in compliance with the OESC, ESA Distributor Safety Bulletin DSB-04/11 Rev.3 dated August 15, 2013 and OESC bulletin 10-22-1 “Requirements for converting a delta service to a grounded wye service”.

3.2.2.1. Underground Service Requirements

The Customer shall construct and own all civil infrastructure including, but not limited to, poles, underground conduits, cables, transformer pad, and ground loop on private property that is deemed required by HHHI. All civil

infrastructures are to be in accordance with HHHI standards, practices, specifications in these Conditions of Service and are subject to HHHI inspection and acceptance. The Customer is responsible to maintain all structural and mechanical facilities on private property in a safe condition satisfactory to HHHI.

The trench route must agree with the Engineering design provided by HHHI's Engineering Department. Any deviation from the original design must be approved by HHHI's Engineering Department prior to any construction. The Customer will be responsible for all costs associated with the design and inspection, and all additional re-design and subsequent re-inspection costs due to changes or deviations initiated by the Customer or its agents.

It is the responsibility of the Customer, or their contractor, to obtain clearances from all utility companies, including HHHI, before digging. It is also the responsibility of the Customer to arrange an appointment with HHHI to inspect each trench, **prior** to the installation of service cables.

It is the responsibility of the Customer and/or their Contractor to ensure that cable terminations are installed as per the manufacturer's recommendations. Only personnel qualified and experienced shall make cable connections and terminations. Upon request, proof of the qualifications of personnel making terminations shall be submitted to HHH for review.

Due to secondary line loses, the maximum allowable length of secondary service (including pole riser distance) will be 75.0 meters for 4/0 aluminum and 90.0 meters for 250 kcmil. Lengths over 90.0 meters will require a primary service.

If the Customer requests an established underground or overhead service be relocated due to construction of a building or other reason, the Customer will bear the full cost of relocating the service.

3.2.2.1.1. Underground Secondary Service

All underground secondary services will have a minimum rating of 200 Amps, up to and including the meter base.

The Customer will install secondary conductors in a 0.100 meter (4") PVC Type 2 duct, from the main line to the delivery point, according to HHHI specifications.

The Customer will supply all required adapters, scepter pipe, weather heads and clips to take the secondary wires up the pole to the connection point at the main line.

The duct(s) shall be concrete encased, complete with rebar, where they pass under a vehicular travelled surface. The concrete shall be of a thickness as specified in HHHI's Underground Distribution Specification UD-02 (latest revision). This specification can be found on HHHI's website or a copy can be requested from HHHI's Engineering Clerk.

If the specified depth of trench cannot be achieved, the Customer will contact HHHI's Engineering Department to request a deviation from the standard depth. Where deviations are approved by HHHI's Engineering Department, the ducts shall be concrete encased, complete with rebar and 0.15 meter (6") red caution tape.

Meter base terminations will be supplied by the Customer and installed by HHHI at the Customer's expense.

HHHI will maintain the service, up to the demarcation point, after energization has occurred.

3.2.2.1.2. Underground Primary Service

The Customer will supply, install and maintain the following, according to HHHI specifications:

(i) The transformer base complete with grounding; and

(ii) Suitable access to the metering equipment and transformer by HHHI vehicles. Where necessary, a suitable, unobstructed paved or graveled surface may be required; and

(iii) Concrete encased ducts where the duct passes under a vehicular travelled surface; and

(iv) At a termination pole, the first 1.5 meters of cable shall be direct buried in sand cover and the first 3.0 meters of duct following the 1.5 meters of sand cover shall be concrete encased. Underground 44kV trenches must be concrete encased complete with rebar. The concrete shall be of a thickness as specified in the latest CSA C22.3 No. 7 Underground Systems. If the specified depth of trench cannot be achieved, the Customer will contact HHHI's Engineering Department to request a deviation from

the standard depth. Where deviations are approved by HHHI's Engineering Department, the ducts shall be concrete encased, complete with rebar and 0.15 meter (6") red caution tape.

(v) Where road crossing(s) (open cut or directional bore) are required, the Customer will contact the Town of Halton Hills to obtain the necessary permit.

(vi) Primary cable per HHHI's approved cable specifications which are available on HHHI's website or from the Engineering Department.

Underground services which are installed or inherited by HHHI shall be maintained by HHHI. Site restoration by HHHI will be confined to the immediate area of the repair work and will include only the replacement of similar surface materials within the immediate area.

Sheds, patios and any type of building in the immediate area where repair work is required will be disassembled or moved by the Customer at their expense.

The Customer will be responsible for all repair costs in the event the Customer damages secondary conductors owned by HHHI.

Where an existing service requires what is considered more than one normal repair, HHHI may require the Customer to replace the service at the Customer's expense.

The trench for all underground services must meet Electrical Safety Authority and HHHI's standards as applicable.

Due to secondary line loses, the maximum allowable length of secondary service (including pole riser distance) will be 75.0 meters for 4/0 aluminum and 90.0 meters for 250 kcmil. Lengths over 90.0 meters will require a primary service.

Where secondary cables are supplied from a private pole line, the termination shall be done by the Customer at their own expense. If the secondary cables are supplied from HHHI's main line, the termination at the supply point shall be done by HHHI at the expense of the Customer.

The Customer will supply, install and maintain a rigidly mounted 0.05 meter minimum dia. I.P.S., C.S.A approved service entrance conduit,

termination 0.60 meters below grade, complete with conduit bushing. The Customer is also responsible for all meter base connections**.**

3.2.2.2. Overhead Service Requirements

3.2.2.2.1. Overhead Primary Service

Where HHHI deems an overhead primary pole line to be practical, the Customer shall install and maintain such a pole line in accordance with the Electrical Safety Code. This primary pole line shall be guyed at opposite ends in such a manner to be considered self-supporting.

The first service pole or first point of support shall be double dead-end construction, according to HHHI specifications and shall not be more than 30.0 meters from the main supply street circuit. To avoid conflict with guying, the neutral shall be continuous and tied in on a spool bolt or clevis.

The Customer shall leave sufficient wire coiled at the first point of support to reach the main supply street circuit with excess to accommodate proper dead-ending. Any wire too short will be replaced at the Customer's expense.

All primary lines shall be insulated for 16/27.6Y kV (in a Level II environment, i.e. a minimum leakage distance of 20 mm/kV for insulators) unless 44 kV (also in a Level II environment) is required. Customers (and their consultants or contractors) are also referred to Electrical Safety Authority publication entitled: Distributor Safety Bulletin DSB-02/12, Insulator Class Recommendation (issued April 4, 2012).

All three (3) phase primary services are to be 4-wire.

Minimum pole class and sizes are as follows:

Single phase transformer pole - 12.2 meters Class 4
Single or three phase pole line - 12.2 meters Class 4
Three phase transformer pole - 13.7 meters Class 4

3.2.2.2.2. Temporary Service (other than Residential)

A temporary service is a normally metered service provided for construction purposes or special events. Temporary services can be supplied overhead or underground. Prior to any temporary service being installed, the Customer will be required to obtain an approved technical service layout from the Engineering Department before proceeding with the relocation or installation of any service. Failure to obtain the service layout may result in the service being relocated at the Customer's expense. The Customer will be responsible for all associated costs for the installation and removal of the temporary service to HHHI's point of supply.

Temporary services may be provided for a period of no more than twelve (12) months. Temporary services must be renewed if an extension is required and the equipment for such temporary service must be re-inspected by HHHI at the end of the 12-month period at the cost to the Customer.

No work will proceed or materials ordered until appropriate construction charges, deposits, documentations or contracts have been received. HHHI requires notification in the form of a Connection Authorization from the ESA indicating that an inspection has been conducted prior to HHHI energizing the service.

3.2.3. Site Information

Refer to Appendix D – Site Information for details. All required information must be received prior to establishing service details. All electronic drawings should be provided in a HHHI approved file format.

3.2.4. Metering

The Customer will supply and install meter sockets in accordance with HHHI Metering Specifications found in Table B-1, Appendix B – Metering Requirements of these Conditions of Service.

3.2.5. Inspection

The electrical installation inside the building and out to the demarcation point must be inspected and approved by ESA. HHHI requires notification in the form of a Connection Authorization from the ESA indicating that an inspection has been conducted prior to HHHI energizing the service.

The service entry components up to, and including, the meter base shall be inspected and approved by HHHI and the ESA prior to energization.

3.2.6. Servicing Cost

The Customer shall provide and install all electrical works and civil infrastructure for the service up to the supply point in addition to all connection costs. The customer will be required to pay a Capital Contribution, based on an economic evaluation, for HHHI infrastructure enhancements and/or expansions. HHHI performs the economic evaluation using a Discounted Cash Flow Model, consistent with Appendix B of the DSC, for determining amounts to be contributed by the Customer for system enhancements and/or expansions. This Model uses rate class information to determine future operating costs.

3.2.6.1. New Residential Subdivisions or Multi-Unit Developments

All Residential Subdivisions and Multi-unit complexes will follow the general terms and conditions for system expansions and/or enhancements, including Alternative Bids, as detailed in Section 2.1.2. of these Conditions of Service. The builder of the Residential and/or Multi-unit complexes will be required to pay a Capital Contribution, based on an economic evaluation, for HHHI infrastructure enhancements and/or expansions. HHHI performs the economic evaluation using a Discounted Cash Flow Model, consistent with Appendix B of the DSC, for determining amounts to be contributed by the builder for system enhancements and/or expansions. This Model uses rate class information to determine future operating costs.

In all cases, the electrical service must be constructed to HHHI's standards and in compliance with the Ontario Electrical Safety Code, applicable laws, regulations and codes.

All design work including service locations and trench routes will be designed by HHHI's Engineering Department and must be approved by HHHI.

3.2.7. Electrical Room Requirements

The owner of a General Service less than 50 kW is required to supply and maintain an electrical room of sufficient size to accommodate the service entrance and meter requirements of the tenant(s) and provide clear working space in accordance with the Ontario Electrical Safety Code.

The location of the electrical room must provide safe access from inside or outside but not from an adjoining room, so that it is readily accessible to HHHI employees and its agents. The room must be locked, access must be available at all hours and the Owner must provide all required keys and passcodes for access. The electrical room shall not be used for storage or contain equipment foreign to the electrical installation within the area designated as safe working space The electrical room must be free of hazardous items and/or materials including, but not limited those that are, combustible, biohazards and corrosives. All stairways leading to electrical rooms above or below grade shall be located indoors and shall have a handrail on at least one side as per the Ontario Building Code.

The electrical room shall have a minimum ceiling height of 2.2 meters, adequate lighting at the working area in accordance with Illuminating Engineering Society (I.E.S.) standards, and a 120 V convenience outlet. The lights and convenience outlet noted above and any required vault circuit shall be supplied from a panel located and clearly identified in the electrical room. Emergency lighting should be installed and maintained in the electrical room.

The electrical room shall not contain any wash tubs or floor set tubs and shall be graded is such a way so that any liquid on the floor does not accumulate but rather flows to a drain point in the room.

The electrical room must have adequate ventilation for personnel safety and safe operation of equipment.

The electrical room shall be visibly identified from the outside. Outside access doors to electrical rooms must have at least 0.15 meter clearance between the grade of the electrical room and the bottom of the door. Electrical rooms 'on' or 'below' grade must have a drain, including a "P" trap complete with a non-mechanical priming device, and a backwater valve connected to the sanitary sewer. The electrical room floor must slope 0.006 / 0.300 meters or 2%, towards the drain.

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

In order to allow for an increase in load, it is recommended that the owner provide spare wall space so that at least thirty percent (30%) of the Customers supplied through meter sockets can accommodate meter cabinets at a later date.

3.2.8. Technical Information

Project drawings must be submitted and approved by HHHI's Engineering Department. All drawings must be in full compliance with HHHI's standards. Approval of project drawings by HHHI shall not relieve the Customer of its responsibility in respect to full compliance with HHHI's standards and all applicable laws, regulations and codes. Any construction, without prior approval of HHHI's Engineering Department, will be subject to correction at the expense of the Customer.

One copy of all relevant drawings must be submitted to HHHI's Engineering Department. Where the Customer requires an approved copy of the drawings to be returned, two copies of all drawings must be submitted.

Prior to the preparation of a design for a service, the Customer will provide the following information to HHHI:

(i) The approximate date the Customer requires the electrical service; and

(ii) The due date HHHI's civil construction drawings are required in order to co-ordinate with site construction; and

(iii) Site & Grading Plans – Plans must indicating the lot, plan and street numbers in addition to showing the location of the Building on the property relative to the property lines, any driveways and parking areas and the distance to the nearest intersection. All elevations shall be shown for all structures and proposed installations; and

(iv) Mechanical Servicing Plan - The mechanical Servicing Plan will show the location of all services proposed and/or existing including, but not limited to, water, gas, storm and sanitary sewers, telephone, and cable on the property; and

(v) Floor Plan -The floor plan will show the service location, all other services locations, driveway and parking and indicate the total gross floor area of the building; and

(vi) Duct Bank Location – the drawings will show the preferred routing of the underground duct bank on the property, subject to approval by HHHI. All duct banks will be constructed to HHHI standards and/ or that of the Electrical Safety Authority. Trench routes and point of connection to HHHI's Distribution System will ultimately be determined and approved by HHHI's Engineering Department.

Customers' plans and preferred routing do not relieve the Customer, or their Contractors, from HHHI's requirements. Any construction, without prior approval with HHHI's Engineering Department, will be subject to correction at the expense of the Customer; and

(vii) Transformer Location - the drawings will show the preferred location for the high voltage transformation on the property, subject to approval by HHHI. New services will have transformation that is pad mounted. Only by approval of HHHI's Engineering Department, shall other forms of transformation be installed, including, but not limited to vault, submersible, and new pole mounted; and

(viii) Single Line Diagram – The Customer's Single Line Diagram will clearly show the main service entrance switch capacity, the required supply voltage, and the number and capacity of all sub-services showing provision for metering facilities, as well as the connected load breakdown for, but not limited to, lighting, heating, ventilation, and air conditioning. Additionally, the Single Line Diagram will indicate the estimated initial kW demand and ultimate maximum demands; and

(ix) Switchgear & Instrument Transformer Compartment – The Customer will submit two (2) copies of all drawings relating to service entrance switchgear, showing the location and size of the Instrument Transformer (IT) compartment. The drawings shall include:

a. Height of the compartment; and
b. Location of bus bars inside compartment; and
c. Physical dimensions of bus bars; and
d. Depth of compartment; and
e. Location for IT wiring to exit compartment and be brought to meter cabinet; and
f. Point for locking cabinet, including interlocking arrangement if required.

3.3. General Service between 50 kW and 999 kW

General Service between 50 kW and 999 kW services shall include medium sized apartment buildings, dense condominium arrangements, small commercial, agricultural, billboards, industrial and institutional developments supplied from the road right-of-way or HHHI easement. General Service between 50 kW and 999 kW does not apply to residential services. For Commercial Industrial Subdivision Developments, contact HHHI's Engineering Department. These cases will be assessed on an individual basis. All non-residential Customers with an average peak demand between 50 kW and 999 kW, over the past twelve (12) months, are to be classified as General Service between

50 kW and 999 kW. For new Customers without prior billing history, the peak demand will be based on 90% of the proposed capacity or installed transformer.

3.3.1. Point of Demarcation

Refer to Appendix C – Point of Demarcation for details. Any deviations must be authorized by HHHI's Engineering Department.

The Customer will own and maintain the electrical service equipment up to the point of demarcation and is responsible for the support structures of all electrical equipment on their property. Service costing (see Section 3.3.6.), easements and any specific maintenance agreements between HHHI and the Customer shall determine the financial responsibilities.

3.3.2. Service Requirements

New services from HHHI's main line will be installed below ground according to HHHI specifications at the cost to the Customer, less the Basic Connection Allowance. Any deviation from HHHI specifications must be approved by HHHI's Engineering Department prior to commencement of construction. Failure to comply may result in the relocation of the service at the Customer's expense. This applies to, but is not limited to:

- Structures built on vacant lots;
- A new structure on a lot where a structure had previously existed and was demolished;
- Structures where HHHI's customer signed for a disconnect and removal of their overhead service;
- Where service voltage is converted from single to three phase or vise-versa.
- Structures where the service entrance changes significantly to warrant a new point of connection either to the utilities distribution system or the customer service entrance (ex. Rear lot service converted to front lot service).

All new three (3) phase services shall be supplied underground from a pad mounted transformer. HHHI will only replace or upgrade three phase transformer banks on utility poles where the existing electrical service is currently supplied from a pole mounted transformer bank.

The customer shall obtain a technical service layout from HHHI's Engineering Department prior to any construction. Failure to comply may result in the relocation of the service at the Customer's expense.

HHHI will undertake construction or maintenance programs to maintain and enhance its distribution plant, at HHHI's expense. In the event that services or facilities to a Customer need to be restored as a result of construction or maintenance activities by HHHI, they will be restored to an equivalent condition. HHHI will perform the construction and electrical work required to maintain existing supply by providing standard overhead or underground supply services to Customers affected by HHHI construction activities. If a Customer requests special construction beyond the standard installation specifications, the Customer shall pay the additional cost, including Engineering Department and Administration fees.

Where metering is located inside a building (Electrical Room), the Customer shall ensure the Electrical Room conforms to the requirements of Section 3.3.7. of these Conditions of Service and the Ontario Electrical Safety Code (latest edition).

The Customer will be supplied via one service entrance and one service voltage only. The allowable utilization voltages are:

(i) 120/240 volt, 1 phase, 3-wire
(ii) 120/208 volt, 3 phase, 4-wire
(iii) 347/600 volt, 3 phase, 4-wire

The Customer will ensure that no objects, structures, roads, or driveways (including turn-a-bouts) are located within 3.0 meters of HHHI owned pad mounted equipment. HHHI will not be held liable for the removal of objects including plants, shrubs, bushes, trees and other forms of vegetation, placed around HHHI owned pad mounted equipment, nor will HHHI be responsible for replacing any objects that were removed. The Customer will not block access to HHHI owned equipment.

Customers who are upgrading their service requiring a new transformer/ transformer bank and currently have a 3-phase, 3-wire 600V delta service supplied from HHHI will be responsible for upgrading their service entrance to 3-phase, 4-wire. This often requires a 4^{th} wire (neutral) to be installed by the Customer from their service entrance to the utility transformer. In these cases HHHI will require the Customer to install the 4^{th} wire into the metering cabinet for metering purposes. The Customer shall be responsible for evaluating ground fault current and overcurrent protection and making any necessary modifications. All delta service conversion activities downstream of the utility demarcation point is the responsibility of the Customer and shall be done in compliance with the OESC, ESA Distributor Safety Bulletin DSB-04/11 Rev.3 dated August 15, 2013

and OESC bulletin 10-22-1 “Requirements for converting a delta service to a grounded wye service”.

In the event that the customer requires greater than 300kVA of transformation in areas where 4,160V or 8,320V exist, the customer shall be required to build a private substation supplied from HHHI’s 44kV system voltage unless otherwise advised by HHHI’s Engineering Department.

In the event that the customer requires greater than 1500kVA of transformation in areas where 27,600V exist, the customer shall be required to build a private substation supplied from HHHI’s 27,600V system voltage unless otherwise advised by HHHI’s Engineering Department.

In the event that the customer requires greater than 100kVA of single phase transformation in areas where 4,160/ 2400V, 8,320/ 4800V or 27,600/ 16,000V exist, the customer shall be required to install a three phase service that will be supplied from a system voltage that HHHI deems appropriate. Transformation limitations applicable to three phase services as described in this Conditions of Service shall continue to apply in these instances.

HHHI will supply the transformer for new and upgraded services. HHHI will only place an order for a transformer once the customer has paid their connection fees and returned their Offer to Connect signed. Where HHHI places an order for a transformer and the customer cancels their service layout, HHHI may retain a portion or all of the connection fees paid by the customer if the transformer order cannot be cancelled.

3.3.2.1. Underground Service Requirements

The Customer shall construct and own all civil infrastructure including, but not limited to, poles, underground conduits, cables, transformer pad, and ground loop on private property that is deemed required by HHHI. All civil infrastructures are to be in accordance with HHHI standards, practices, specifications in these Conditions of Service and are subject to HHHI inspection and acceptance. The Customer is responsible to maintain all structural and mechanical facilities on private property in a safe condition satisfactory to HHHI.

The trench route must agree with the Engineering design provided by HHHI’s Engineering Department. Any deviation from the original design must be approved by HHHI’s Engineering Department prior to any construction. The Customer will be responsible for all costs associated with the design and inspection, and all additional re-design and

subsequent re-inspection costs due to changes or deviations initiated by the Customer or its agents.

It is the responsibility of the Customer, or their contractor, to obtain clearances from all utility companies, including HHHI, before digging. It is also the responsibility of the Customer to arrange an appointment with HHHI to inspect each trench, **prior** to the installation of service cables.

It is the responsibility of the Customer and/or their Contractor to ensure that cable terminations are installed as per the manufacturer's recommendations. Only personnel qualified and experienced shall make cable connections and terminations. Upon request, proof of the qualifications of personnel making terminations shall be submitted to HHH for review.

If the distance from HHHI's main line to the service entrance is more than 55.0 meters, HHHI may require that the service be designed and installed for distribution voltage.

If the Customer requests an established underground or overhead service be relocated due to construction of a building or other reason, the Customer will bear the full cost of relocating the service.

3.3.2.1.1. Underground Secondary Service

All underground secondary services will have a minimum rating of 200 Amps, up to and including the meter base.

The Customer will install secondary conductors in a 0.100 meter (4") PVC Type 2 duct, from the main line to the delivery point, according to HHHI specifications.

The Customer will supply all required adapters, scepter pipe, weather heads and clips to take the secondary wires up the pole to the connection point at the main line.

The duct(s) shall be concrete encased, complete with rebar, where they pass under a vehicular travelled surface. The concrete shall be of a thickness as specified in the latest CSA C22.3 No. 7 Underground Systems. Secondary cable and lug requirements for new underground services are located in Appendix F – Secondary Cable & Lug Requirements for New Underground Services.

If the specified depth of trench cannot be achieved, the Customer will contact HHHI's Engineering Department to request a deviation from the standard depth. Where deviations are approved by HHHI's Engineering Department, the ducts shall be concrete encased, complete with rebar and 0.15 meter (6") red caution tape.

Meter base terminations will be supplied by the Customer and installed by HHHI at the Customer's expense.

HHHI will maintain the service, up to the demarcation point, after energization has occurred.

3.3.2.1.2. Underground Primary Service

The Customer will supply, install and maintain the following, according to HHHI specifications:

(i) The transformer pad and vault complete with grounding; and

(ii) Suitable access to the metering equipment and transformer by HHHI vehicles. Where necessary, a suitable, unobstructed paved or graveled surface may be required; and

(iii) Concrete encased ducts where the duct passes under a vehicular travelled surface; and

(iv) At a termination pole, the first 1.5 meters of cable shall be direct buried in sand cover and the first 3.0 meters of duct following the 1.5 meters of sand cover shall be concrete encased. Underground 44kV trenches must be concrete encased complete with rebar. The concrete shall be of a thickness as specified in the latest CSA C22.3 No. 7 Underground Systems. If the specified depth of trench cannot be achieved, the Customer will contact HHHI's Engineering Department to request a deviation from the standard depth. Where deviations are approved by HHHI's Engineering Department, the ducts shall be concrete encased, complete with rebar and 0.15 meter (6") red caution tape.

(v) Where road crossing(s) (open cut or directional bore) are required, the Customer will contact the Town of Halton Hills to obtain the necessary permit.

(vi) Primary cable per HHHI's approved cable specifications which are available on our website or from the Engineering Department.

Underground services which are installed or inherited by HHHI shall be maintained by HHHI. Site restoration by HHHI will be confined to the immediate area of the repair work and will include only the replacement of similar surface materials within the immediate area.

Sheds, patios and any type of building in the immediate area where repair work is required will be disassembled or moved by the Customer at their expense.

The Customer will be responsible for all repair costs in the event the Customer damages secondary conductors owned by HHHI.

Where an existing service requires what is considered more than one normal repair, HHHI may require the Customer to replace the service at the Customer's expense.

The trench for all underground services must meet Electrical Safety Authority and HHHI's standards as applicable.

Due to secondary line loses, the maximum allowable length of secondary service (including pole riser distance) will be 75.0 meters for 4/0 aluminum and 90.0 meters for 250 kcmil. Lengths over 90.0 meters will require a primary service.

Where secondary cables are supplied from a private pole line, the termination shall be done by the Customer at their own expense. If the secondary cables are supplied from HHHI's main line, the termination at the supply point shall be done by HHHI at the expense of the Customer.

The Customer will supply, install and maintain a rigidly mounted 0.05 meter minimum diameter I.P.S., C.S.A approved service entrance conduit, termination 0.60 meters below grade, complete with conduit bushing. The Customer is also responsible for all meter base connections**.**

3.3.2.2. Overhead Service Requirements

3.3.2.2.1. Overhead Primary Service

Where HHHI deems an overhead primary pole line to be practical, the Customer shall install and maintain such a pole line in accordance with the Ontario Electrical Safety Code. This primary

pole line shall be guyed at opposite ends in such a manner to be considered self-supporting.

The first service pole or first point of support shall be double dead-end construction, according to HHHI specifications and shall not be more than 30.0 meters from the main supply street circuit. To avoid conflict with guying, the neutral shall be continuous and tied in on a spool bolt,clevis, or other approved fitting.

The Customer shall leave sufficient wire coiled at the first point of support to reach the main supply street circuit with excess to accommodate proper dead-ending. Any wire too short will be replaced at the Customer's expense.

All primary lines shall be insulated for 16/27.6Y kV (in a Level II environment, i.e. a minimum leakage distance of 20 mm/kV for insulators) unless 44 kV (also in a Level II environment) is required. Customers (and their consultants or contractors) are also referred to Electrical Safety Authority publication entitled: Distributor Safety Bulletin DSB-02/12, Insulator Class Recommendation (issued April 4, 2012).

All three (3) phase primary services are to be 4-wire.

Minimum pole class and sizes are as follows:

Single phase transformer pole - 12.2 meters Class 4
Single or three phase pole line - 12.2 meters Class 4
Three phase transformer pole - 13.7 meters Class 4

3.3.2.2.2. Temporary Service (other than Residential)

A temporary service is a normally metered service provided for construction purposes or special events. Temporary services can be supplied overhead or underground. Prior to any temporary service being installed, the Customer will be required to obtain an approved technical service layout from the Engineering Department before proceeding with the relocation or installation of any service. Failure to obtain the service layout may result in the service being relocated at the Customer's expense. The Customer will be responsible for all associated costs for the installation and removal of the temporary service to HHHI's point of supply.

Temporary services may be provided for a period of no more than 12 months. Temporary services must be renewed if an extension is required and the equipment for such temporary service must be re-inspected by HHHI at the end of the 12-month period at the cost to the Customer.

No work will proceed or materials ordered until appropriate construction charges, deposits, documentations or contracts have been received. HHHI requires notification in the form of a Connection Authorization from the ESA indicating that an inspection has been conducted prior to HHHI energizing the service.

3.3.3. Site Information

Refer to Appendix D – Site Information for details. All required information must be received prior to establishing service details. All electronic drawings should be provided in a HHHI approved file format.

3.3.4. Metering

The Customer will supply and install meter sockets in accordance with HHHI Metering Specifications found in Table B-1, Appendix B – Metering Requirements of these Conditions of Service.

3.3.5. Inspection

The electrical installation inside the building and out to the demarcation point must be inspected and approved by ESA. HHHI requires notification in the form of a Connection Authorization from the ESA indicating that an inspection has been conducted prior to HHHI energizing the service.

The service entry components up to, and including, the meter base shall be inspected and approved by HHHI and the ESA prior to energization.

3.3.6. Servicing Cost

The Customer shall provide and install all electrical works and civil infrastructure for the service up to the supply point in addition to all connection costs. The customer will be required to pay a Capital Contribution, based on an economic evaluation, for HHHI infrastructure enhancements and/or expansions. HHHI performs the economic evaluation using a Discounted Cash Flow Model, consistent with Appendix B of the DSC, for determining amounts to be contributed by the Customer for system enhancements and/or expansions. This Model uses rate class information to determine future operating costs.

3.3.6.1. New Residential Subdivisions or Multi-Unit Developments

All Residential Subdivisions and Multi-unit complexes will follow the general terms and conditions for system expansions and/or enhancements, including Alternative Bids, as detailed in Section 2.1.2. of these Conditions of Service. The builder of the Residential and/or Multi-unit complexes will be required to pay a Capital Contribution, based on an economic evaluation, for HHHI infrastructure enhancements and/or expansions. HHHI performs the economic evaluation using a Discounted Cash Flow Model, consistent with Appendix B of the DSC, for determining amounts to be contributed by the builder for system enhancements and/or expansions. This Model uses rate class information to determine future operating costs.

In all cases, the electrical service must be constructed to HHHI's standards and in compliance with the Ontario Electrical Safety Code, applicable laws, regulations and codes.

All design, work including service locations and trench routes, will be designed by HHHI's Engineering Department.

3.3.7. Electrical Room Requirements

The owner of a General Service 50 to 999 kW is required to supply and maintain an electrical room of sufficient size to accommodate the service entrance and meter requirements of the tenant(s) and provide clear working space in accordance with the Ontario Electrical Safety Code.

The location of the electrical room must provide safe access from inside or outside but not from an adjoining room, so that it is readily accessible to HHHI employees and its agents. The room must be locked, access must be available at all hours and the Owner must provide all required keys and passcodes for access. The electrical room shall not be used for storage or contain equipment foreign to the electrical installation within the area designated as safe working space The electrical room must be free of hazardous items and/or materials including, but not limited those that are, combustible, biohazards and corrosives. All stairways leading to electrical rooms above or below grade shall be located indoors and shall have a handrail on at least one side as per the Ontario Building Code.

The electrical room shall have a minimum ceiling height of 2.2 meters, adequate lighting at the working area in accordance with Illuminating Engineering Society (I.E.S.) standards, and a 120 V convenience outlet located within 1.0 meter from the remote hydro meter cabinet. The lights and convenience outlet noted above

and any required vault circuit shall be supplied from a panel located and clearly identified in the electrical room. Emergency lighting should be installed and maintained in the electrical room.

The electrical room shall not contain any wash tubs or floor set tubs and shall be graded is such a way so that any liquid on the floor does not accumulate but rather flows to a drain point in the room.

The electrical room must have adequate ventilation for personnel safety and safe operation of equipment.

The electrical room shall be visibly identified from the outside. Outside access doors to electrical rooms must have at least 0.15 meter clearance between the grade of the electrical room and the bottom of the door. Electrical rooms 'on' or 'below' grade must have a drain, including a "P" trap complete with a non-mechanical priming device, and a backwater valve connected to the sanitary sewer. The electrical room floor must slope 0.006 / 0.300 meters or 2%, towards the drain.

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

In order to allow for an increase in load, it is recommended that the owner provide spare wall space so that at least thirty percent (30%) of the Customers supplied through meter sockets can accommodate meter cabinets at a later date.

3.3.8. Technical Information

Project drawings must be submitted and approved by HHHI's Engineering Department. All drawings must be in full compliance with HHHI's standards. Approval of project drawings by HHHI shall not relieve the Customer of its responsibility in respect to full compliance with HHHI's standards and all applicable laws, regulations and codes. Any construction, without prior approval of HHHI's Engineering Department, will be subject to correction at the expense of the Customer.

One copy of all relevant drawings must be submitted to HHHI's Engineering Department. Where the Customer requires an approved copy of the drawings to be returned, two copies of all drawings must be submitted.

Prior to the preparation of a design for a service, the Customer will provide the following information to HHHI:

(i) The approximate date the Customer requires the electrical service; and

(ii) The due date HHHI's civil construction drawings are required in order to co-ordinate with site construction; and

(iii) Site & Grading Plans – Plans must indicating the lot, plan and street numbers in addition to showing the location of the Building on the property relative to the property lines, any driveways and parking areas and the distance to the nearest intersection. All elevations shall be shown for all structures and proposed installations; and

(iv) Mechanical Servicing Plan - The mechanical Servicing Plan will show the location of all services proposed and/or existing including, but not limited to, water, gas, storm and sanitary sewers, telephone, and cable on the property; and

(v) Floor Plan -The floor plan will show the service location, all other services locations, driveway and parking and indicate the total gross floor area of the building; and

(vi) Duct Bank Location – the drawings will show the preferred routing of the underground duct bank on the property, subject to approval by HHHI. All duct banks will be constructed to HHHI standards and/ or that of the Electrical Safety Authority. Trench routes and point of connection to HHHI's Distribution System will ultimately be determined and approved by HHHI's Engineering Department. Customers' plans and preferred routing do not relieve the Customer, or their Contractors, from HHHI's requirements. Any construction, without prior approval with HHHI's Engineering Department, will be subject to correction at the expense of the Customer; and

(vii) Transformer Location - the drawings will show the preferred location for the high voltage transformation on the property, subject to approval by HHHI. New services will have transformation that is pad mounted. Only by approval of HHHI's Engineering Department, shall other forms of transformation be installed, including, but not limited to vault, submersible, and new pole mounted; and

(viii) Single Line Diagram – The Customer's Single Line Diagram will clearly show the main service entrance switch capacity, the required supply voltage, and the number and capacity of all sub-services showing provision for metering facilities, as well as the connected load breakdown for, but not limited to, lighting, heating, ventilation, and air conditioning. Additionally, the Single Line Diagram will indicate the estimated initial kW demand and ultimate maximum demands; and

(ix) Switchgear & Instrument Transformer Compartment – The Customer will submit two (2) copies of all drawings relating to service entrance switchgear, showing the location and size of the Instrument Transformer (IT) compartment. The drawings shall include:

a. Height of the compartment; and
b. Location of bus bars inside compartment; and
c. Physical dimensions of bus bars; and
d. Depth of compartment; and
e. Location for IT wiring to exit compartment and be brought to meter cabinet; and
f. Point for locking cabinet, including interlocking arrangement if required.

3.4. General Service greater than 1,000 kW

General Service greater than 1,000 kW does not apply to residential services. All non-residential Customers with an average peak demand greater than 1,000 kW, over the past twelve (12) months, are to be classified as General Service greater than 1,000 kW. For new Customers without prior billing history, the peak demand will be based on 90% of the installed transformer. For Commercial Industrial Subdivision Developments, contact HHHI's Engineering Department. These cases will be assessed on an individual basis.

3.4.1. Point of Demarcation

Refer to Appendix C – Point of Demarcation for site information details. All required information must be received prior to establishing service details. All electronic drawings should be provided in a HHHI approved file format. The Customer will own and maintain the electrical service equipment up to the point of demarcation and is responsible for the support structures of all electrical equipment on their property. Service costing (see Section 3.4.6.), easements and any specific maintenance agreements between HHHI and the Customer shall determine the financial responsibilities.

3.4.2. Service Requirements

New services from HHHI's main line will be installed below ground according to HHHI specifications at the cost to the Customer, less the Basic Connection Allowance. Any deviation from HHHI specifications must be approved by HHHI's Engineering Department prior to commencement of construction. Failure to comply may result in the relocation of the service at the Customer's expense.

The customer shall obtain a technical service layout from HHHI's Engineering Department prior to any construction. Failure to comply may result in the relocation of the service at the Customer's expense.

Where a primary service is provided to a Customer-owned substation, the Customer shall install and maintain such equipment in accordance with all applicable laws, codes, regulations, and HHHI's standards for high voltage installations. HHHI will provide planning details upon application for service.

It is the responsibility of the Customer and/or their Contractor to ensure that cable terminations are installed as per the manufacturer's recommendations. Only personnel qualified and experienced shall make cable connections and terminations. Upon request, proof of the qualifications of personnel making terminations shall be submitted to HHH for review.

Customer owned substations must be inspected by both the Electrical Safety Authority and HHHI. The Customer will provide a pre-service inspection report to HHHI. A contractor acceptable to HHHI will prepare and present the certified report to HHHI's Engineer Department.

A Customer owned substation is defined as a collection of transformers and switchgear, located in a suitable room or enclosure owned and maintained by the Customer, and supplied at a primary voltage greater than 750 volts.

In the event that the customer requires greater than 300kVA of transformation in areas where 4,160V or 8,320V exist, the customer shall be required to build a private substation supplied from HHHI's 44kV system voltage unless otherwise advised by HHHI's Engineering Department.

In the event that the customer requires greater than 1500kVA of transformation in areas where 27,600V exist, the customer shall be required to build a private substation supplied from HHHI's 27,600V system voltage unless otherwise advised by HHHI's Engineering Department.

HHHI will supply the transformer for new and upgraded services. HHHI will only place an order for a transformer once the customer has paid their connection fees and returned their Offer to Connect signed. Where HHHI places an order for a transformer and the customer cancels their service layout, HHHI may retain a portion or all of the connection fees paid by the customer if the transformer order cannot be cancelled.

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

Customer's station ground system. HHHI will provide interface details and requirements for high voltage supplies to the Customer.

The Customer and HHHI shall inspect their own respective substations in accordance with the Distribution System Code. The minimum inspection cycles for Customer specific substations are one (1) year for open substations and three (3) years for enclosed substations. To facilitate and encourage the maintenance of this equipment, including, without limitation, the installation, maintenance, and testing of vault fire alarm detectors, HHHI will provide one power interruption annually, at no charge. This no-charge service would be scheduled during HHHI's normal business hours, Monday to Friday, and appointment times are not necessarily guaranteed. HHHI will charge Customers for power interruptions arranged at times other than as outlined above.

Customer may be required to install, at their expense, an underground feed as per HHHI specifications.

It is the Customer's responsibility to contact HHHI's Engineering Department prior to the commencement of any work on a private substation to schedule any approvals, costs, specifications and requirements. Any deviation from HHHI specifications must be approved by HHHI's Engineering Department prior to commencement of construction. Failure to comply may result in the relocation of the service at the Customer's expense.

3.4.3. Site Information

Refer to Appendix D – Site Information for details. All required information must be received prior to establishing service details. All electronic drawings should be provided in a HHHI approved file format.

Transformer and substation location are subject to HHHI approval and Electrical Safety Authority inspection.

Customers must ensure compliance with all requirements for Site Plan Approval by the Town of Halton Hills. HHHI will make final connections at the termination pole at the expense of the Customer.

Customer may be required to install, at their expense, an underground feed as per HHHI specifications.

It is the Customer's responsibility to contact HHHI's Engineering Department prior to the commencement of any work on a private substation to schedule any approvals, costs, specifications and requirements. Any deviation from HHHI specifications must be approved by HHHI's Engineering Department prior to

commencement of construction. Failure to comply may result in the relocation of the service at the Customer's expense.

3.4.4. Metering

The Customer will supply and install meter sockets in accordance with HHHI Metering Specifications found in Table B-1, Appendix B – Metering Requirements of these Conditions of Service.

3.4.5. Inspection

The electrical installation inside the building and out to the demarcation point must be inspected and approved by ESA. HHHI requires notification in the form of a Connection Authorization from the ESA indicating that an inspection has been conducted prior to HHHI energizing the service.

The service entry components up to, and including, the meter base shall be inspected and approved by HHHI and the ESA prior to energization.

3.4.6. Servicing Cost

The Customer shall provide and install all electrical works and civil infrastructure for the service up to the supply point in addition to all connection costs. The customer will be required to pay a Capital Contribution, based on an economic evaluation, for HHHI infrastructure enhancements and/or expansions. HHHI performs the economic evaluation using a Discounted Cash Flow Model, consistent with Appendix B of the DSC, for determining amounts to be contributed by the Customer for system enhancements and/or expansions. This Model uses rate class information to determine future operating costs.

3.4.6.1. New Residential Subdivisions or Multi-Unit Developments

All Residential Subdivisions and Multi-unit complexes will follow the general terms and conditions for system expansions and/or enhancements, including Alternative Bids, as detailed in Section 2.1.2. of these Conditions of Service. The builder of the Residential and/or Multi-unit complexes will be required to pay a Capital Contribution, based on an economic evaluation, for HHHI infrastructure enhancements and/or expansions. HHHI performs the economic evaluation using a Discounted Cash Flow Model, consistent with Appendix B of the DSC, for determining amounts to be contributed by the builder for system enhancements and/or expansions. This Model uses rate class information to determine future operating costs. In all cases, the electrical service must be constructed to

HHHI's standards and in compliance with the Ontario Electrical Safety Code, applicable laws, regulations and codes.

All design work including service locations and trench routes will be designed by HHHI's Engineering Department must be approved by HHHI.

3.4.7. Electrical Room Requirements

The owner of a General Service greater than 1,000 kW is required to supply and maintain an electrical room of sufficient size to accommodate the service entrance and meter requirements of the tenant(s) and provide clear working space in accordance with the Ontario Electrical Safety Code.

The location of the electrical room must provide safe access from inside or outside but not from an adjoining room, so that it is readily accessible to HHHI employees and its agents. The room must be locked, access must be available at all hours and the Owner must provide all required keys and passcodes for access. The electrical room shall not be used for storage or contain equipment foreign to the electrical installation within the area designated as safe working space The electrical room must be free of hazardous items and/or materials including, but not limited those that are, combustible, biohazards and corrosives. All stairways leading to electrical rooms above or below grade shall be located indoors and shall have a handrail on at least one side as per the Ontario Building Code.

The electrical room shall have a minimum ceiling height of 2.2 meters, adequate lighting at the working area in accordance with Illuminating Engineering Society (I.E.S.) standards, and a 120 V convenience outlet located within 1.0 meter from the remote hydro meter cabinet. The lights and convenience outlet noted above and any required vault circuit shall be supplied from a panel located and clearly identified in the electrical room. Emergency lighting should be installed and maintained in the electrical room.

The electrical room shall not contain any wash tubs or floor set tubs and shall be graded is such a way so that any liquid on the floor does not accumulate but rather flows to a drain point in the room.

The electrical room must have adequate heat and ventilation for personnel safety and safe operation of equipment.

The electrical room shall be visibly identified from the outside. Outside access doors to electrical rooms must have at least 0.15 meter clearance between the grade of the electrical room and the bottom of the door. All electrical room doors must be equipped with a panic bar inside the room for emergency exit. Electrical rooms 'on' or 'below' grade must have a drain, including a "P" trap complete with a

non- mechanical priming device, and a backwater valve connected to the sanitary sewer. The electrical room floor must slope 0.006 / 0.300 meters or 2%, towards the drain.

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

In order to allow for an increase in load, it is recommended that the owner provide spare wall space so that at least thirty percent (30%) of the Customers supplied through meter sockets can accommodate meter cabinets at a later date.

3.4.8. Technical Information

Project drawings must be submitted and approved by HHHI's Engineering Department. All drawings must be in full compliance with HHHI's standards. Approval of project drawings by HHHI shall not relieve the Customer of its responsibility in respect to full compliance with HHHI's standards and all applicable laws, regulations and codes. Any construction, without prior approval of HHHI's Engineering Department, will be subject to correction at the expense of the Customer.

One copy of all relevant drawings must be submitted to HHHI's Engineering Department. Where the Customer requires an approved copy of the drawings to be returned, two copies of all drawings must be submitted.

Prior to the preparation of a design for a service, the Customer will provide the following information to HHHI:

(i) The approximate date the Customer requires the electrical service; and

(ii) The due date HHHI's civil construction drawings are required in order to co-ordinate with site construction; and

(iii) Site & Grading Plans – Plans must indicating the lot, plan and street numbers in addition to showing the location of the Building on the property relative to the property lines, any driveways and parking areas and the distance to the nearest intersection. All elevations shall be shown for all structures and proposed installations; and

(iv) Mechanical Servicing Plan - The mechanical Servicing Plan will show the location of all services proposed and/or existing including, but not limited to, water, gas, storm and sanitary sewers, telephone, and cable on the property; and

(v) Floor Plan -The floor plan will show the service location, all other services locations, driveway and parking and indicate the total gross floor area of the building; and

(vi) Duct Bank Location – the drawings will show the preferred routing of the underground duct bank on the property, subject to approval by HHHI. All duct banks will be constructed to HHHI standards and/ or that of the Electrical Safety Authority. Trench routes and point of connection to HHHI's Distribution System will ultimately be determined and approved by HHHI's Engineering Department. Customers' plans and preferred routing do not relieve the Customer, or their Contractors, from HHHI's requirements. Any construction, without prior approval with HHHI's Engineering Department, will be subject to correction at the expense of the Customer; and

(vii) Transformer Location - the drawings will show the preferred location for the high voltage transformation on the property, subject to approval by HHHI. New services will have transformation that is pad mounted. Only by approval of HHHI's Engineering Department, shall other forms of transformation be installed, including, but not limited to vault, submersible, and new pole mounted; and

(viii) Single Line Diagram – The Customer's Single Line Diagram will clearly show the main service entrance switch capacity, the required supply voltage, and the number and capacity of all sub-services showing provision for metering facilities, as well as the connected load breakdown for, but not limited to, lighting, heating, ventilation, and air conditioning. Additionally, the Single Line Diagram will indicate the estimated initial kW demand and ultimate maximum demands; and

(ix) Switchgear & Instrument Transformer Compartment – The Customer will submit two (2) copies of all drawings relating to service entrance switchgear, showing the location and size of the Instrument Transformer (IT) compartment. The drawings shall include:

a. Height of the compartment; and
b. Location of bus bars inside compartment; and
c. Physical dimensions of bus bars; and
d. Depth of compartment; and
e. Location for IT wiring to exit compartment and be brought to meter cabinet; and
f. Point for locking cabinet, including interlocking arrangement if required; and

(x) Substation Information - Customers will be required to supply and install their own transformation and associated hardware when the following conditions exist:

a. The Customer requires over 300 kVA of transformation from the 4,160 or 8,320 volt system; or
b. The Customer requires over 1.5 MVA of transformation from the 27,600 volt system.

Refer to Appendix E for details on Customer Owned Substations.

3.5. Unmetered Connections

HHHI, at its sole discretion, may provide for new service connections without a meter being installed. Un-metered loads will be small in size, non-variable, and supply a single device. Un-metered loads may include, but are not limited to, traffic signals, railway crossing signals, pedestrian crosswalk signals, beacons, bus shelters, telephone booths, CATV amplifiers and other miscellaneous small fixed loads. Other loads less than 2 kW may also be considered for un-metered connections.

3.5.1. Point of Demarcation

Refer to Appendix C – Point of Demarcation for details. Any deviations must be authorized by HHHI's Engineering Department. The Customer will own and maintain the electrical service equipment up to the point of demarcation and is responsible for the support structures of all electrical equipment on their property. Easements and any specific maintenance agreements between HHHI and the Customer shall determine the financial responsibilities.

3.5.2. Service Requirements

The Customer shall contact HHHI for service requirements. The Customer shall provide manufacturer information and documentation with regard to electrical demand and expected hours of operation of the proposed un-metered load. HHHI may require, at its sole discretion, the Customer provide at its own cost, a load study acceptable to HHHI in order to determine energy consumption.

The Customer shall notify HHHI prior to making any changes to existing equipment or adding new equipment that is to be supplied from the HHHI distribution system.

Where installations involve HHHI owned poles, the method and location of attachment are subject to the approval of HHHI. HHHI may, in its sole discretion, require the Customer to enter into agreement with HHHI governing such attachments and may be required to pay pole rental fees as provided in HHHI's most current Tariff of Rates and Charges.

The Customer shall construct, at its expense, the civil infrastructure, including but not limited to poles, underground conduits, handwells, tap boxes, junction boxes, and pedestals on public road allowances or private property that is deemed required by HHHI to house or support HHHI's electrical equipment. These civil infrastructures shall be in accordance with HHHI's current standards, practices, specifications and are subject to inspection and acceptance by HHHI.

HHHI will provide, at the Customer's expense, for all breakouts of the HHHI civil infrastructure, including but not limited to, cable chambers and vaults which may be required to make the service connection. The Customer's service connection equipment shall be suitable to accept conductors installed by HHHI. The Customer shall bring its cables to a point determined by HHHI's Engineering Department and HHHI shall make all new connections and final disconnections to and from HHHI's distribution system.

The Customer shall pay the applicable Connection Fees. Where "variable connection fees" apply, HHHI shall provide an estimate of the proposed work to the un-metered Customer. In turn, the un-metered Customer shall provide a response to HHHI within two (2) weeks indicating if they wish to proceed or not with the proposed work.

The Customer shall maintain its civil infrastructure in a safe condition satisfactory to HHHI. HHHI will undertake the necessary programs to maintain and enhance its distribution plant, however, if during the course of HHHI's work, relocation of Customer equipment is necessary, the Customer shall reimburse HHHI for all costs incurred for in relocating Customer's infrastructure. More specifically, HHHI will provide standard overhead or underground supply services to un-metered Customers affected by HHHI's construction activities at its own cost. Should the un-metered Customer request to deviate from the normal HHHI standard installation, and in accordance with its program, the un-metered Customer shall pay the additional costs, including, but not limited to, Engineering Department and Administration fees.

Request for payment shall be subject to HHHI having provided the un-metered Customer with adequate advance notice, prior to effecting the relocation. The un-metered Customer shall respond within two weeks of its intended plan to modify, upgrade, or remove its plant.

3.5.3. Customer Responsibilities

Customers are required to comply with the requirements of HHHI's standards and the Ontario Electrical Safety Code to ensure public safety. In addition, Customers must install, operate, and maintain its secondary conductor or cable from the HHHI's demarcation point to the intended load. Customers are

responsible to provide load data as requested by HHHI including the number of devices, type of device(s), loading, hours of device operation, etc. Energy consumption shall be calculated by HHHI based upon the information provided by the Customer which may include, but is not limited to, device manufacturer's specifications and maximum continuous calculated.

Customer will not allow any external party to connect to its unmetered service or its unmetered secondary bus.

3.5.4. HHHI Responsibilities

Where the connection point is from HHHI owned assets, HHHI will provide a Service Layout for each unmetered service location. The Layout will identify the connection point and include any applicable HHHI standards and conditions.

HHHI will ensure that un-metered service billing information accurately reflects calculated electrical consumption by unit, quantity, load profile and demand as provided by the Customer.

HHHI will validate un-metered service data provided by the Customer in a timely manner (within 60 days), and advise the customer of the acceptance or rejection of the data

In the event of changes to cost allocation, load profile and other rate-related materials that may have a material impact, HHHI will engage and communicate with the un-metered load customer class as appropriate using a method that may include, but is not limited to, posting on HHHI's website for comment, letter, electronic mail, bill message or bill insert, prior to the implementation of material changes to the class or its rate structure. The purpose of this communication is to ensure the utility has the most current and relevant customer information and to contact or make available for comment information regarding the preparation of cost allocation studies, load profile studies or other related materials that may materially impact unmetered load customers.

3.5.5. Un-metered Service Load Revision

HHHI must be advised immediately, in writing, of all changes to the loading of unmetered services. All revisions are subject to acceptance and validation by HHHI.

Written notice of load revisions must include any testing results conducted by the Customer in addition to:

- The device's manufacturer's specifications for the device; and
- The maximum continuous calculated load; and
- The HHHI account number; and
- The HHHI service address as shown on the bill

Should the Customer reduce its unmetered load and not advise HHHI in a timely manner, the electricity charges billed will be revised on a go-forward prospective basis only and not retroactively adjusted.

Adjustments to the number of devices on an unmetered service will take effect as of the next billing period.

3.6. Street Lighting

All services supplied to street lighting equipment owned by or operated for a municipality or the Province of Ontario shall be classified as Street Lighting Service.

In addition to complying with these Conditions of Service, all Street Lighting plant, facilities, or equipment owned by the Customer must comply with all Electrical Safety Authority (ESA) requirements. Any new attachments to HHHI's poles may require a third party attachment permit and design submission in accordance with ESA's Third Party Attachment Guidelines made under Ontario Regulation 22/04 "Electrical Distribution Safety". Further, new attachments shall follow the installation requirements of HHHI described in HHHI's "Guidelines for Street Light Installations on Halton Hills Hydro Inc. Poles" dated October 19, 2015. Copies of HHHI attachment requirements can be obtained from the Engineering Department.

The method and location of underground supply to Street Lighting plant from HHHI's distribution system will be established for each application through consultation with HHHI. Additionally, the connection costs will be provided by HHHI's Engineering Department, subject to method and location of supply.

3.7. Embedded Generation

Customers of HHHI may choose to supply some, or all, of their electrical energy needs through the installation of an on-site, customer-owned generation facility. HHHI owns and operates the local distribution system composed of numerous primary voltages and will provide non-discriminatory access to its distribution system for a Generator, and will make every effort to respond promptly to a Generator's request for connection. For the purposes of these Conditions of Service, a Generator that requests connection to HHHI's distribution system will be referred to as an "embedded generator" or "Generator". This section will provide prospective embedded generators with a brief

outline of technical requirements for connecting embedded generation of 10MVA or less. Generation projects greater than 10MW will be reviewed on a case-by-case basis.

Embedded Generators will be required to adhere to the requirements and processes as outlines in HHHI's "Guidelines for Applicants Connecting Distributed Generation". The Guidelines can be obtained by contacting HHHI's Engineering Clerk or is available at www.haltonhillshydro.com. Failure to meet with HHHI's, ESA's, or other applicable governing bodies' requirements will delay the process of connection and will result in no connection being made until all party's requirements are satisfied and confirmation has been received by HHHI. The following information is taken from HHHI's "Guidelines for Applicants Connecting Distributed Generation". However, this information is not to be interpreted as the sole factors and considerations for connection. The Generator is responsible for reviewing HHHI's "Guidelines for Applicants Connecting Distributed Generation" and the information available on HHHI's website to ensure they are familiar with the process.

3.7.1. Potential Connection Capacities on Feeders

HHHI's distribution system operates at 27.6 kV, 44 kV, 8.32kV, 4.16kV. As a general rule, the voltage levels may have capacity for the **maximum** following amounts of distributed generation:

(i) 4.16/ 2.4 kV - possible between 500 kW and 1 MW
(ii) 8.32/ 4.8 kV - possible between 500 kW and 1 MW
(iii) 27.6/ 16.0 kV - possible between 1 MW and 10 MW
(iv) 44 kV - possible between 5 MW and 10 MW

The above limitations are based on distribution station capacity and feeder conductor capacity. These numbers are meant as a guide for **maximum** cumulative amounts of distributed generation on any one feeder. Generators are required to request an Offer to Connect from HHHI to determine if capacity exists.

3.7.2. Requirements for Connection

3.7.2.1. Process for Connecting micro-generation (up to 10 kW)

The following steps will be followed for Generators requesting to connect a micro-generation facility up to 10 kW.

1. The Generator shall complete and submit HHHI's "Connection Review Application Form" (Appendix 2) and "Generator Connection Assessment Form" (Appendix 3) from HHHI's Guidelines for Applicants Connecting Distributed Generation.

2. For applicants of the microFIT program, HHHI will assess capacity and if capacity exists, provide an “Offer to Connect” to the Generator.

If capacity exists:

3. HHHI will provide a Connection Cost Agreement and Connection Agreement to the Generator.
4. The Generator will sign and return a Connection Cost Agreement.
5. The Generator will sign and return a Connection Agreement and pay the required connection fee.
6. The Generator will contact HHHI to inspect the meter base and isolating switch location.
7. The Generator shall contact the Electrical Safety Authority to inspect the installation prior to connection.

The Generator will contact the IESO if taking part in an IESO directed program (ie: microFIT).

3.7.2.2. Process for Connecting Small and Mid-Sized Generation (>10kW up to 10 MW)

The following steps will be followed for Generators requesting to connect a Small and/or Mid-Sized Generation facility greater than 10 kW but less than 10 MW.

1. The Generator will complete and submit HHHI’s “Connection Review Application Form” (Appendix 2 from HHHI’s Guidelines for Applicants Connecting Distributed Generation) for a pre-consultation.
2. The Generator will complete and submit HHHI’s “Generator Connection Assessment Form” (Appendix 4 from HHHI’s Guidelines for Applicants Connecting Distributed Generation). The Generator Connection Assessment Form, 10kW up to 10MW (Appendix 4) and supporting documentation will be signed and sealed by a Professional Engineer working for the Generator.
3. The Generator will engage HHHI in a Connection Impact Assessment (CIA) and Sign a Study Agreement.
4. The Generator will make payment for the CIA.
5. HHHI will conduct a CIA for the Generator. If results are favorable for the connection, an Offer to Connect will be made to the Generator and will include a Connection Cost Agreement and Connection Agreement. The Connection Cost Agreement will include, but is not limited to, the scope of work, the Generator’s responsibilities, HHHI’s responsibilities,

material aspects, timing, approvals requirements, commissioning, and associated costs.

6. The Generator will sign and return the Connection Cost Agreement, agreeing to the scope of work following the CIA.
7. The Generator will pay the connection fee.
8. The Generator will sign and return a Connection Agreement.
9. The Generator will provide a metering back panel, where required, to HHH's Metering Department at least two (2) weeks prior to the commissioning date and co-ordinate with the Metering Department to schedule the installation of the back panel with meter and instrument transformers.
10. The Generator will contact the Electrical Safety Authority to inspect their installation prior to connection.
11. The Generator will contact HHHI to witness the commissioning and will, at a minimum, commission the installation using HHHI's Commissioning and Equipment Verification Report. Commissioning tests will also be witnessed by a Professional Engineer, hired by the Generator, who will sign and seal HHHI's Commissioning Report on the Generator's behalf.
12. The Generator shall engage a Professional Engineer to produce, sign and seal a letter addressed to HHHI stating that the installed equipment and installation meets CSA, ESA, and all other applicable industry Standards.
13. The Generator will contact the IESO if taking part in an IESO directed program.

In all cases, a detailed final design will be completed by a competent person or organization, and should include consideration of proposed power and protective equipment and local conditions (including existing and future equipment loading and operating). The Generator is solely responsible for the project, including timing, milestones, ensuring accurate information is provided to HHHI in a timely manner, and all other aspects of the project. The Generator may also need to consult the IESO and Hydro One Networks Inc. for requirements, as applicable.

3.7.3. Connection Impact Assessment (CIA)

Where required, HHHI will perform a connection impact assessment and advise the Generator of compliance or of problems that need to be addressed. Once HHHI is satisfied that compliance has been met, permission to proceed will be provided. Prior to the CIA, the Generator will be required to enter into a "Study Agreement" with HHHI (Appendix 9 from HHHI's Guidelines for Applicants Connecting Distributed Generation). The Generator should not order any equipment or make commitments to the project until the CIA has been satisfactorily completed and a

Distribution Connection Agreement has been executed. When a Generators licence is required, HHHI will require a copy of the Generator's Licence.

The CIA will set out the impact of the proposed generation facility on HHHI's distribution system or customers of the distributor including:

(i) any voltage impacts, impacts on current loading settings and impacts on fault currents; and
(ii) the connection feasibility; and
(iii) the need for any line or equipment upgrades; and
(iv) the need for transmission system protection modifications; and
(v) any metering requirements.

The technical submission for projects greater than 10kW, including, but not limited to, single line diagrams, Generation Connection Assessment Form, and site plan, must be signed and sealed by a Professional Engineer licensed by the Professional Engineers of Ontario.

3.7.4. Islanding

Islanding is a situation where a portion of the utility system that contains both loads and a distributed generation source becomes separated from the remainder of the utility system but remains energized.

All distributed generation must have automatic anti-islanding capabilities so as to disconnect the generation source from HHHI's system in the event of a utility outage. The Generators anti-islanding protection scheme will employ an interconnecting device that is configured to delay reconnection of the generation facility to HHHI's distribution system for five (5) minutes following the return of steady-state voltage and frequency. After five (5) minutes of steady-state distribution system operation, the generation facility may interconnect and actively export power.

3.7.5. Commissioning

Prior to a generation facility of size 10kW or larger being allowed to connect to HHHI's distribution system, the Generator, in coordination with HHHI's Engineering Department, must complete a "Commissioning and Equipment Verification Report" found in Appendix 7 of HHHI's Guidelines for Applicants Connecting Distributed Generation. Areas of this Report not shaded must be completed by the Generator and/ or their representatives. The Report must be signed and sealed by a Professional Engineer who is acting on the Generator's behalf and who is registered with the Professional Engineers of Ontario.

The Applicant should submit their Commissioning Plan to HHHI at least five (5) business days prior to the commissioning test date.

Commissioning and Verification tests shall be performed per CSA C22.3 No. 9-08 "Interconnection of Distributed Resources and Electricity Supply Systems", IEEE 1547 "Standard for Interconnecting of Distributed Resources with Electric Supply Systems" and the OEB Distribution System Code Appendix F.2 "Technical Requirements".

The Generator will be required to pay the costs related to production and commissioning tests if these tests are required.

The Generator is required to provide HHHI with ESA Connection Authorization prior to the commissioning tests. If not provided, an interconnection cannot take place and the commissioning tests cannot begin until such time that ESA Connection Authorization is provided.

3.7.6. Safety Requirements

The connection and operation of an embedded generation facility must not endanger workers or jeopardize public safety. Additionally, the generation facility must not adversely affect or compromise equipment owned or operated by HHHI, or the security, reliability, efficiency and the quality of electrical supply to other Customers connected to HHHI's distribution system. If damage or increased operating costs result from a connection with a generator, the Generator responsible shall reimburse HHHI for all costs.

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

(i) Internal faults within the generator; and
(ii) External faults in HHHI's distribution system; and
(iii) Abnormal system conditions including, but limited to, over/under voltage and over/under frequency.

The Generator shall disconnect the facility from HHHI's distribution system when:

a. A remote trip or transfer trip is included in the interface protection, and
b. The Customer effects changes in the normal feeder arrangements other than those agreed upon in the operating agreement between HHHI and the Customer.

The Generator's voltage injected into HHHI's distribution system must match HHHI's Standard Primary or Secondary Service supply offerings at the point of connection or point of common couple, (as applicable. The Generator's inverters must be able to regulate the output A/C voltage within the tolerances of CSA C235-83.

3.7.7. Isolating Device

The Generator's isolating device is a means of electrically disconnecting the generation facility from HHHI's distribution system. Such a device is required at all distributed generation facilities and shall:

(i) Be compliant with the Ontario Electrical Safety Code; and
(ii) Be able to operate the switch under rated load; and
(iii) Must have open and closed positions clearly indicated; and
(iv) Must be accessible to HHHI; and
(v) Must be in a well-lit, non-hazardous location; and
(vi) Must be located upstream of all generation equipment including related switches, and step-up transformers; and
(vii) Must be as close as possible to the generation meter; and
(viii) Must be located on the generation side of the meter; and
(ix) Where the voltage is three phase, an isolating device must be installed on the utility and generation sides of the meter to allow the meter to be completely isolated; and
(x) Must have provisions to be locked (i.e.: pad lockable); and
(xi) Must be gang operated so as to not single phase three-phase loads; and
(xii) Must not endanger the person(s) operating the switch; and
(xiii) May, at HHHI's discretion, be required to be motorized for generation exceeding 250kW. If the switch is motorized, the power source for its operation must be reliable and may require back-up battery power to operate the switch; and
(xiv) Generator/ HHHI operation of the switch should be coordinated with the other party prior to operating the switch. Procedures for tagging and lockout should be reviewed by both parties; and
(xv) Where the isolating device is located inside a building or structure, the Generator shall provide HHHI with access keys and codes prior to connecting the generation.

3.7.8. Termination and/or Disconnection

HHHI reserves the right to terminate any agreement and/ or disconnect a generation facility, at any time, if HHHI becomes aware of any unsafe condition(s) to persons, livestock or property that is not corrected in a timely fashion. HHHI will notify ESA in writing of all unsafe conditions.

The Connection Agreement between HHHI and the Generator shall provide additional details relating to reasons for disconnection.

3.7.9. Net Metered Generation

For those wanting to connect distributed generation to supplement their consumption, HHHI offers net metered connections whereby generation connected downstream of the utility meter supplements the consumption of the residence/ building and any excess generated power is credited on the Customer's bill. Net metering measures the consumption of electricity used against the amount of electricity generated resulting in a "net" total from which the bill is calculated. Net Metering is ideal for Customers looking to reduce electricity costs. Under HHHI's Net Metering Agreement, excess generation credits can be carried forward up to twelve (12) months to offset future electricity costs.

To qualify for the Net metering program, the generation source must be a Renewable Energy Technologies (RET) with a total nameplate rating of 500 kW or less.

All net metered installations must conform to the Ontario Electrical Safety Code, be inspected by the Electrical Safety Authority (ESA), and meet with HHHI's requirements specified in HHHI's Guidelines for Applicants Connecting Distributed Generation. Applicants interested in connecting net metered generation will be required to complete and submit HHHI's "Connection Review Application Form" (Appendix 2) and "Generator Connection Assessment Form" (Appendix 3 or 4) from HHHI's Guidelines for Applicants Connecting Distributed Generation. The process through connection will depend on the nameplate rating in kilowatts of the generation (ie: >=10kW or > 10kW up to 500kW). Customers taking part in net metering will be required to enter into a Connection Cost Agreement and Connection Agreement with HHHI in the forms showing in the appendices of HHHI's Guidelines for Applicants Connecting Distributed Generation.

All net metered installations must have an A/C disconnect switch mounted externally on the building within 1.25m (4ft) of the meter base. The disconnect switch must be electrically connected between the inverter(s) used to convert DC to AC and the service panel to which the generation is connected. This disconnect switch shall conform to the Ontario Electrical Safety Code and HHHI's requirement's.

All net metered installations must have a meter capable of registering power delivered to the site and power received from the site and must meet HHHI's metering requirements as shown in Appendix B. HHHI will install a meter capable of registering delivered and received power at the customer's expense. Net metered accounts do not qualify for Regulated Price Plan Time-of-Use (RPP-TOU) rates. Customers currently billed RPP-TOU who install net metering will have their accounts changed to the Regulated Price Plan Tiered (RPP-Tiered) rates.

APPENDIX A

Company Specifics

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Company Specifics

Service Area

HHHI may only operate distribution facilities within its Licensed Territory as defined in its Distribution License. HHHI operates primarily within the Municipal boundaries of the Town of Halton Hills.

Contact Information

Address
Halton Hills Hydro Inc.
43 Alice Street,
Halton Hills (Acton), ON
L7J 2A9

Office Hours
Monday to Friday
8:30am to 4:30pm

Telephone Numbers

General Phone
(519) 853-3700 (local)
(905) 453-2222 (Toronto)

Customer Care
(519) 853-3701

Outages
(519) 853-3701 during business hours
(855) 437-7408 Toll free after hours

Locates
(800) 400-2255 One Call

Engineering Department
(519) 853-3700 extension 213

Websites and electronic mail

Halton Hills Hydro Inc.
www.haltonhillshydro.com

General Inquiries
inquiries@haltonhillshydro.com

Regulatory Affairs
RegulatoryAffairs@haltonhillshydro.com

Generation Inquiries
generation@haltonhillshydro.com

Locates
www.on1call.com

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APPENDIX B

Metering Requirements

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Metering Requirements

Table B-1

SUPPLY VOLTAGE	MAIN SWITCH AMPERES	DESCRIPTION	MAXIMUM kVA ALLOWED	
120/240	100	1-PHASE 3-WIRE	19	Manufacturer's "Oversized" Socket type meter base with 4-Jaws (**below*)
120/240	200	1-PHASE 3-WIRE	38	Manufacturer's "Oversized" Socket type meter base with 4-Jaws (**below*)
120/240	400	1-PHASE 3-WIRE	77	Manufacturer's 400A meter base (**below*) **Meter bases are specified in HHHI's Approved Materials List*
120/208	200	3-PHASE 4-WIRE	58	Manufacturer's "Oversized" Combination Socket type meter base with 7- Jaws
120/208	400	3-PHASE 4-WIRE	115	Meter Cabinet 1220 x 1220 x 300 mm (48" x 48" x 12")
120/208	600	3-PHASE 4-WIRE	173	Meter Cabinet 1220 x 1220 x 300 mm (48" x 48" x 12")
120/208*	800	3-PHASE 4-WIRE	231	Meter Cabinet 920 x 920 x 300 mm (36" x 36" x 12")
120/208*	1000	3-PHASE 4-WIRE	288	Meter Cabinet 920 x 920 x 300 mm (36" x 36" x 12")
347/600	200	3-PHASE 4-WIRE	166	Manufacturer's "Oversized" Socket type meter base with 7-Jaws
347/600*	400	3-PHASE 4-WIRE	333	Meter Cabinet 1220 x 1220 x 300 mm (48" x 48" x 12")
*INSTRUMENT TRANSFORMERS INSTALLED IN A SWITCH GEAR CUBICLE		3-PHASE 4-WIRE	500 kVA and OVER	Meter Cabinet 920 x 920 x 300 mm (36" x 36" x 12") The instrument transformer cabinet must be connected to the Meter cabinet with a 38mm (1.5") metallic conduit no longer than 6.1m (20') complete with fish rope

For services other than those in Table B-1, the Customer must get authorization from HHHI's Engineering Department. In all situations, early contact with HHHI's Engineering Department is essential to receiving connection when desired.

Interval metering for services less than 50kW is optional and shall be paid for by the Customer. Interval metering is mandatory for services 50kW and above and will be paid for by HHHI. A dedicated telephone line and duct is required in which the telephone line will connect to an interval meter at the Customer's expense. The phone line must be installed and activated prior to energization.

A switchgear manufacturer will not build the switchgear until they have the instrument transformers as specified by HHHI. It is therefore essential the Customer contact HHHI's Metering Department for co-ordination of delivering the Instrument transformers on-site. Instrument transformers located in a 1.220 x 1.220 x 0.300 meter (48" x 48" x 12") meter cabinet will be installed by HHHI personnel.

* Any metering requiring Instrument transformers installed in a switch gear cubicle shall have a 38mm (1.5") metallic conduit no longer than 6.1m (20') from the remote meter cabinet terminated inside the metering cubicle and complete with fish rope. Ninety (90) degree elbows, commonly referred to as LBs are not permitted in the conduit.

High Direct Voltage Field Tests
Table B-2

VOLTAGE RATING OF CABLE (kV rms) Phase to Phase	ACCEPTANCE TEST VOLTAGE (kV dc)
15kV	**56**
28kV	**75**
46kV	**132**

Acceptance test voltage duration is normally 15 minutes per phase. The maintenance test voltage duration shall be not less than 5 or more than 15 minutes.

The above ratings are based on cables having 100% insulation level. If cables have 133% insulation level, then Manufacturer's recommendations should be consulted.

When older cables or other equipment such as transformers, switchgear, motors, etc. are connected to the cable to be tested, lower voltages than those listed in Table B-2 may be necessary.

*Measurements are in accordance with Manufacturer Specifications.

LEAKAGE CURRENT:

The maximum permissible Leakage current shall be calculated using the following formulas:

$$\text{Leakage Current} = \frac{\text{DC Test Voltage (kV)}}{Insulation\ Resitance\ (M\Omega)}\ x\ 10^3 A$$

$$\text{Insulation Resistance} = \frac{\text{k}}{L}\ x\ Log_{10}\left(\frac{D}{d}\right) x\ 10^3 M\Omega$$

Where:
D = diameter over insulation
d = diameter of conductor
L = length of conductor under test in meters
K = 6000 G$\boldsymbol{\Omega}$·m (constant)

APPENDIX C

Point of Demarcation

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Halton Hills Hydro Conditions of Service 2018 - Demarcation Points

Definitions:

Operational Demarcation Point is 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 is the physical location at which a distributor's ownership of distribution equipment including connection assets ends at the customer; (DSC)

Demarcation Points:

Service Class	Service Type	Ownership Demarcation Point	Operational Demarcation Point
Residential	Overhead secondary service supplied from the Utilities main o/h distribution circuit. **	Connection point at top of customer's service mast.	Connection point at top of customer's service mast.
	Overhead secondary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private secondary o/h pole line. **	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Overhead primary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private primary o/h pole line.	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Underground secondary service supplied from the Utilities main o/h distribution circuit.	Line side of the meterbase.	Line side of the meterbase.
	Underground secondary service supplied from the Utilities main u/g distribution circuit.	Line side of the meterbase.	Line side of the meterbase.
	Underground primary service supplied from the Utilities main o/h distribution circuit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
General Service Less than 50kW	Overhead secondary service supplied from the Utilities main o/h distribution circuit. **	Connection point at top of customer's service mast	Connection point at top of customer's service mast
	Overhead secondary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private secondary o/h pole line. **	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Overhead primary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private primary o/h pole line.	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Underground secondary service supplied from the Utilities main o/h distribution circuit.	At Property Line.	Connection point to the Utilities main o/h distribution circuit.
	Underground secondary service supplied from the Utilities main u/g distribution circuit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Underground primary service supplied from the Utilities main o/h distribution circuit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Underground primary service supplied from the Utilities main u/g distribution circuit via Utility owned switchgear unit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Municipal/ Provincial traffic lights and street/ path lights supplied from the Utilities main o/h distribution circuit.	Connection point to Utilities o/h distribution circuit.	Connection point at Utilities o/h distribution circuit.
	Municipal/ Provincial traffic lights and street/ path lights supplied from the Utilities main u/g distribution circuit.	Connections at secondary bus bars/spades of Utility owned transformer .	Connections at secondary bus bars/spades of Utility owned transformer .

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Demarcation Points:

Service Class	Service Type	Ownership Demarcation Point	Operational Demarcation Point
General Service 51kW to 999kW	Overhead secondary service supplied from the Utilities main o/h distribution circuit. **	Connection point at top of customer's service mast.	Connection point at top of customer's service mast
	Overhead secondary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private secondary o/h pole line. **	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Overhead primary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private primary o/h pole line.	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Underground secondary service supplied from the Utilities main o/h distribution circuit.	At Property Line.	Connection point to the Utilities main o/h distribution circuit.
	Underground secondary service supplied from the Utilities main u/g distribution circuit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Underground primary service supplied from the Utilities main o/h distribution circuit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Underground primary service supplied from the Utilities main u/g distribution circuit via Utility owned switchgear unit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Overhead primary service to a private substation transformer supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
	Underground primary service to a private substation transformer supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
General Service 1000kW - 4999kW	Overhead primary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private primary o/h pole line.	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Underground primary service supplied from the Utilities main o/h distribution circuit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Underground primary service supplied from the Utilities main u/g distribution circuit via Utility owned switchgear unit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Overhead primary service to a private substation transformer supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
	Underground primary service to a private substation transformer supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
3rd Party Connections and Miscellaneous unmetered loads (Less than 5kW)	Overhead secondary service supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
	Underground secondary service supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
	Underground secondary service supplied from the Utilities main u/g distribution circuit.	Connection point to the Utilities main u/g distribution circuit.	Connections at secondary bus bars/spades of Utility owned transformer .
Temporary	Overhead secondary service supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
	Underground secondary service supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
	Underground secondary service supplied from the Utilities main u/g distribution circuit.	Connection point to the Utilities main u/g distribution circuit.	Connections at secondary bus bars/spades of Utility owned transformer .

** This method of supply is for existing construction only, and is not available for new service connections.

Halton Hills Hydro Conditions of Service 2018 - Demarcation Points

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Demarcation Points:

Service Class	Service Type	Ownership Demarcation Point	Operational Demarcation Point
Residential	Overhead secondary service supplied from the Utilities main o/h distribution circuit. **	Connection point at top of customer's service mast.	Connection point at top of customer's service mast.
	Overhead secondary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private secondary o/h pole line. **	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Overhead primary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private primary o/h pole line.	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Underground secondary service supplied from the Utilities main o/h distribution circuit.	Line side of the meterbase.	Line side of the meterbase.
	Underground secondary service supplied from the Utilities main u/g distribution circuit.	Line side of the meterbase.	Line side of the meterbase.
	Underground primary service supplied from the Utilities main o/h distribution circuit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
General Service Less than 50kW	Overhead secondary service supplied from the Utilities main o/h distribution circuit. **	Connection point at top of customer's service mast	Connection point at top of customer's service mast
	Overhead secondary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private secondary o/h pole line. **	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Overhead primary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private primary o/h pole line.	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Underground secondary service supplied from the Utilities main o/h distribution circuit.	At Property Line.	Connection point to the Utilities main o/h distribution circuit.
	Underground secondary service supplied from the Utilities main u/g distribution circuit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Underground primary service supplied from the Utilities main o/h distribution circuit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Underground primary service supplied from the Utilities main u/g distribution circuit via Utility owned switchgear unit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Municipal/ Provincial traffic lights and street/ path lights supplied from the Utilities main o/h distribution circuit.	Connection point to Utilities o/h distribution circuit.	Connection point at Utilities o/h distribution circuit.
	Municipal/ Provincial traffic lights and street/ path lights supplied from the Utilities main u/g distribution circuit.	Connections at secondary bus bars/spades of Utility owned transformer .	Connections at secondary bus bars/spades of Utility owned transformer .

Halton Hills Hydro Conditions of Service 2018 - Demarcation Points

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Demarcation Points:

Service Class	Service Type	Ownership Demarcation Point	Operational Demarcation Point
General Service 51kW to 999kW	Overhead secondary service supplied from the Utilities main o/h distribution circuit. **	Connection point at top of customer's service mast.	Connection point at top of customer's service mast
	Overhead secondary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private secondary o/h pole line. **	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Overhead primary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private primary o/h pole line.	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Underground secondary service supplied from the Utilities main o/h distribution circuit.	At Property Line.	Connection point to the Utilities main o/h distribution circuit.
	Underground secondary service supplied from the Utilities main u/g distribution circuit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Underground primary service supplied from the Utilities main o/h distribution circuit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Underground primary service supplied from the Utilities main u/g distribution circuit via Utility owned switchgear unit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Overhead primary service to a private substation transformer supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
	Underground primary service to a private substation transformer supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
General Service 1000kW - 4999kW	Overhead primary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private primary o/h pole line.	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Underground primary service supplied from the Utilities main o/h distribution circuit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Underground primary service supplied from the Utilities main u/g distribution circuit via Utility owned switchgear unit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Overhead primary service to a private substation transformer supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
	Underground primary service to a private substation transformer supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
3rd Party Connections and Miscellaneous unmetered loads (Less than 5kW)	Overhead secondary service supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
	Underground secondary service supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
	Underground secondary service supplied from the Utilities main u/g distribution circuit.	Connection point to the Utilities main u/g distribution circuit.	Connections at secondary bus bars/spades of Utility owned transformer .
Temporary	Overhead secondary service supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
	Underground secondary service supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
	Underground secondary service supplied from the Utilities main u/g distribution circuit.	Connection point to the Utilities main u/g distribution circuit.	Connections at secondary bus bars/spades of Utility owned transformer .

** This method of supply is for existing construction only, and is not available for new service connections.

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APPENDIX D

Site Information

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Halton Hills Hydro Conditions of Service 2018 - Demarcation Points

Definitions:

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Ownership Demarcation Point is the physical location at which a distributor's ownership of distribution equipment including connection assets ends at the customer; (DSC)

Demarcation Points:

Service Class	Service Type	Ownership Demarcation Point	Operational Demarcation Point
Residential	Overhead secondary service supplied from the Utilities main o/h distribution circuit. **	Connection point at top of customer's service mast.	Connection point at top of customer's service mast.
	Overhead secondary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private secondary o/h pole line. **	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Overhead primary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private primary o/h pole line.	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Underground secondary service supplied from the Utilities main o/h distribution circuit.	Line side of the meterbase.	Line side of the meterbase.
	Underground secondary service supplied from the Utilities main u/g distribution circuit.	Line side of the meterbase.	Line side of the meterbase.
	Underground primary service supplied from the Utilities main o/h distribution circuit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
General Service Less than 50kW	Overhead secondary service supplied from the Utilities main o/h distribution circuit. **	Connection point at top of customer's service mast	Connection point at top of customer's service mast
	Overhead secondary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private secondary o/h pole line. **	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Overhead primary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private primary o/h pole line.	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Underground secondary service supplied from the Utilities main o/h distribution circuit.	At Property Line.	Connection point to the Utilities main o/h distribution circuit.
	Underground secondary service supplied from the Utilities main u/g distribution circuit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Underground primary service supplied from the Utilities main o/h distribution circuit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Underground primary service supplied from the Utilities main u/g distribution circuit via Utility owned switchgear unit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Municipal/ Provincial traffic lights and street/ path lights supplied from the Utilities main o/h distribution circuit.	Connection point to Utilities o/h distribution circuit.	Connection point at Utilities o/h distribution circuit.
	Municipal/ Provincial traffic lights and street/ path lights supplied from the Utilities main u/g distribution circuit.	Connections at secondary bus bars/spades of Utility owned transformer .	Connections at secondary bus bars/spades of Utility owned transformer .

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Demarcation Points:

Service Class	Service Type	Ownership Demarcation Point	Operational Demarcation Point
General Service 51kW to 999kW	Overhead secondary service supplied from the Utilities main o/h distribution circuit. **	Connection point at top of customer's service mast.	Connection point at top of customer's service mast
	Overhead secondary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private secondary o/h pole line. **	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Overhead primary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private primary o/h pole line.	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Underground secondary service supplied from the Utilities main o/h distribution circuit.	At Property Line.	Connection point to the Utilities main o/h distribution circuit.
	Underground secondary service supplied from the Utilities main u/g distribution circuit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Underground primary service supplied from the Utilities main o/h distribution circuit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Underground primary service supplied from the Utilities main u/g distribution circuit via Utility owned switchgear unit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Overhead primary service to a private substation transformer supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
	Underground primary service to a private substation transformer supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
General Service 1000kW - 4999kW	Overhead primary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private primary o/h pole line.	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Underground primary service supplied from the Utilities main o/h distribution circuit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Underground primary service supplied from the Utilities main u/g distribution circuit via Utility owned switchgear unit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Overhead primary service to a private substation transformer supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
	Underground primary service to a private substation transformer supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
3rd Party Connections and Miscellaneous unmetered loads (Less than 5kW)	Overhead secondary service supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
	Underground secondary service supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
	Underground secondary service supplied from the Utilities main u/g distribution circuit.	Connection point to the Utilities main u/g distribution circuit.	Connections at secondary bus bars/spades of Utility owned transformer .
Temporary	Overhead secondary service supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
	Underground secondary service supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
	Underground secondary service supplied from the Utilities main u/g distribution circuit.	Connection point to the Utilities main u/g distribution circuit.	Connections at secondary bus bars/spades of Utility owned transformer .

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APPENDIX E

Customer Owned Substation Requirements

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Customer Owned Substations

1. Customer-Own Substation Submission Requirements

Electrical Inspection Bulletin 36-1-22 Plan Submissions for High Voltage installations indicates the minimum content requirement for plans submitted to the provincial Electrical Safety Authority. One additional copy of the plans and specifications shall be submitted to HHHI.

Prior to energizing the substation, HHHI requires the following document submissions:

(i) One (1) set of as-built nameplate and outline drawings for the substation transformer and any medium- voltage switchgear; and

(ii) One (1) co-ordination study which demonstrates co-ordinated protection between HHHI's over-current protection installed at the point of primary supply (where applicable), the substation's high-voltage over-current protection, and the substation's low-voltage over-current protection; and

(iii) One (1) set of certified test results for the substation transformer, showing as a minimum the tested no- load losses, the load losses (corrected to 85°C), and the impedance voltage.

2. Demarcation Point, Responsibilities & Suggested Maintenance

A. Demarcation Point:

The demarcation point for a customer-own substation is defined as "the point of connection to the overhead street circuit." Please keep in mind that all equipment located beyond this point is customer owned and is the responsibility of the customer to operate and maintain.

B. Responsibilities:

It is the responsibility of the Owner to ensure that only qualified personnel have access to the area containing high voltage equipment and that the enclosure is adequately secured. HHHI will supply a lock on the 44kV airbreak switch located within the enclosure used for isolating the substation transformer. This lock is to ensure that HHHI staff is present prior to any switching operations that could directly affect HHHI's 44kV distribution system.

C. Maintenance:

HHHI strongly recommends that annual maintenance be performed on customer owned substations to maintain the equipment in proper working condition and the area within the fenced enclosure. A Disconnect/Reconnect is offered, at no charge, by HHHI, once per year during regular business hours. For after-hours Disconnect/Reconnects, overtime charges will apply less the equivalent amount of one Disconnect/Reconnect during regular hours. HHHI also performs a thermal scan of all customer owned substations every three years at no cost to our customers. If any issues are identified through this scan, a follow up letter will be forwarded with our findings to the address on file for the station.

Any questions relating to the maintenance and operation of customer owned substations should be directed to HHHI's Manager of Operations.

Table E-1 - Impedence

kVA (Min LV 600)	Imp. Range, %	
	Min.	Max.
501 – 750	5	7.5
751 – 1000	5	7.5
1001 – 1500	5	7.5
1501 – 2000	5	7.5
2001 – 2500	5	7.5
2501 – 3000	5	7.5

APPENDIX F

Secondary Cable & Lug Requirements for Underground-New Services

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Halton Hills Hydro Conditions of Service 2018 - Demarcation Points

Definitions:

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Demarcation Points:

Service Class	Service Type	Ownership Demarcation Point	Operational Demarcation Point
Residential	Overhead secondary service supplied from the Utilities main o/h distribution circuit. **	Connection point at top of customer's service mast.	Connection point at top of customer's service mast.
	Overhead secondary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private secondary o/h pole line. **	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Overhead primary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private primary o/h pole line.	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Underground secondary service supplied from the Utilities main o/h distribution circuit.	Line side of the meterbase.	Line side of the meterbase.
	Underground secondary service supplied from the Utilities main u/g distribution circuit.	Line side of the meterbase.	Line side of the meterbase.
	Underground primary service supplied from the Utilities main o/h distribution circuit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
General Service Less than 50kW	Overhead secondary service supplied from the Utilities main o/h distribution circuit. **	Connection point at top of customer's service mast	Connection point at top of customer's service mast
	Overhead secondary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private secondary o/h pole line. **	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Overhead primary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private primary o/h pole line.	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Underground secondary service supplied from the Utilities main o/h distribution circuit.	At Property Line.	Connection point to the Utilities main o/h distribution circuit.
	Underground secondary service supplied from the Utilities main u/g distribution circuit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Underground primary service supplied from the Utilities main o/h distribution circuit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Underground primary service supplied from the Utilities main u/g distribution circuit via Utility owned switchgear unit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Municipal/ Provincial traffic lights and street/ path lights supplied from the Utilities main o/h distribution circuit.	Connection point to Utilities o/h distribution circuit.	Connection point at Utilities o/h distribution circuit.
	Municipal/ Provincial traffic lights and street/ path lights supplied from the Utilities main u/g distribution circuit.	Connections at secondary bus bars/spades of Utility owned transformer .	Connections at secondary bus bars/spades of Utility owned transformer .

Halton Hills Hydro Conditions of Service 2018 - Demarcation Points

Definitions:

Operational Demarcation Point is 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 is the physical location at which a distributor's ownership of distribution equipment including connection assets ends at the customer; (DSC)

Demarcation Points:

Service Class	Service Type	Ownership Demarcation Point	Operational Demarcation Point
General Service 51kW to 999kW	Overhead secondary service supplied from the Utilities main o/h distribution circuit. **	Connection point at top of customer's service mast.	Connection point at top of customer's service mast
	Overhead secondary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private secondary o/h pole line. **	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Overhead primary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private primary o/h pole line.	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Underground secondary service supplied from the Utilities main o/h distribution circuit.	At Property Line.	Connection point to the Utilities main o/h distribution circuit.
	Underground secondary service supplied from the Utilities main u/g distribution circuit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Underground primary service supplied from the Utilities main o/h distribution circuit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Underground primary service supplied from the Utilities main u/g distribution circuit via Utility owned switchgear unit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Overhead primary service to a private substation transformer supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
	Underground primary service to a private substation transformer supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
General Service 1000kW - 4999kW	Overhead primary service supplied from the Utilities main o/h distribution circuit, where the customer requires a private primary o/h pole line.	Connection point at first customer owned and maintained piece of equipment.	Connection point at first customer owned and maintained piece of equipment.
	Underground primary service supplied from the Utilities main o/h distribution circuit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Underground primary service supplied from the Utilities main u/g distribution circuit via Utility owned switchgear unit.	At Property Line.	Connections at secondary bus bars/spades of Utility owned transformer .
	Overhead primary service to a private substation transformer supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
	Underground primary service to a private substation transformer supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
3rd Party Connections and Miscellaneous unmetered loads (Less than 5kW)	Overhead secondary service supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
	Underground secondary service supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
	Underground secondary service supplied from the Utilities main u/g distribution circuit.	Connection point to the Utilities main u/g distribution circuit.	Connections at secondary bus bars/spades of Utility owned transformer .
Temporary	Overhead secondary service supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
	Underground secondary service supplied from the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.	Connection point to the Utilities main o/h distribution circuit.
	Underground secondary service supplied from the Utilities main u/g distribution circuit.	Connection point to the Utilities main u/g distribution circuit.	Connections at secondary bus bars/spades of Utility owned transformer .

** This method of supply is for existing construction only, and is not available for new service connections.

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APPENDIX G

Change History

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Change History

Date	Change	Reference
May 8, 2013	Revised	
January 2018	Revised	General formatting, contacts, update of Table of Contents, update of hyperlinks, general specification updates
	1.4 / 2.3.2.10	Methods of notification
	1.6.17 Customer's Obligation to Notify	Added section
	1.6.18 Electric Vehicles	Added section
	1.8 Disputes – Step 5	Updated referral contacts
	2.1.7.9 Closing of Accounts	Added provision where a customer notifies after the closing date
	2.3.6 Emergency Backup Generation	Added information to provide to HHHI
	1.1 / 2.3.8.1	Update to Licence and service territory
	2.3.8.3 Responsibility of the Customer	Added further clarity for metering requirements.
	2.3.8.5 Multi-Unit Residential Building (MURBs)	Added HHHI installation of suite metering requirements.
	2.3.8.8 Three Phase Metering	Added clarity for installation requirements.
	2.3.8.18.1 Conditions for Supplying Interval Metering	Added wireless metering consideration.
	2.3.9 Meter Reading	Added clarity with respect to responsibilities when phone line is required.
	2.4.1.3 Pass Through Rates	Retitled section, added information
	2.4.2.1.1 Pricing of Standard Supply Service Including Regulated Price Plan	Added information about Ontario Fair Hydro Plan and RPP pricing.
	3.1.3.2.1.1 Overhead Secondary Services	Added clarity for what is considered an existing or new service.
	3.2.2 Service Requirements	Added clarity for what is considered an existing or new service. Added information about Delta service upgrades.
	3.2.2 Service Requirements	Added clarity for what is considered an existing or new service. Added information about Delta service upgrades. Added information about LDC supply of transformation.
	3.4.2 Service Requirements	Added information about LDC supply of transformation.
	3.5/ 3.5.3/ 3.5.4/ 3.5.5 Un-Metered Services	Added information/ sections about un-metered load service, roles and responsibilities.
	3.6 Street Lighting	Added information about 3rd party attachment requirements.
	3.7.9 Net Metered Generation	Added section
	Appendix B, Table B-1	Modified meter cabinet size requirements for services greater than 600A.
	Appendix C, Demarcation Points	Added clarity for municipally/ provincially traffic lights,