

CONDITIONS OF SERVICE

EFFECTIVE DATE: JANUARY 1, 2027

TORONTO HYDRO®

*A registered trademark of Toronto Hydro Corporation used under licence. "Toronto Hydro" means Toronto Hydro-Electric System Limited.

Customers without email access can submit inquiries through regular mail to:

Standards Department
Toronto Hydro-Electric System Limited
500 Commissioners Street
Toronto, Ontario
M4M 3N7

To contact Toronto Hydro, call **416-542-8000** or email **ConditionsofService@torontohydro.com**

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Toronto Hydro-Electric System Limited

PREFACE
CONDITIONS OF SERVICE

The Distribution System Code (DSC) requires that every distributor produce its own "Conditions of Service" document. The purpose of this document is to provide a means for communicating the types and level of service available to the Customers and Consumers within Toronto Hydro's service area. The Distribution System Code requires that the Conditions of Service be readily available for review by the general public. In addition, the most recent version of the document must be provided to the Ontario Energy Board (OEB), which in turn will retain it on file for the purpose of facilitating dispute resolutions in the event that a dispute cannot be resolved between the Customer and its distributor.

The acceptance of supply of electricity or related services from Toronto Hydro constitutes the acceptance of a binding contract with Toronto Hydro which includes these Conditions of Service and all terms thereunder. The person so accepting the supply of electricity or related services shall be liable for payment for same, and such contract shall be binding upon the person's heirs, administrators, executors, successors or assigns.

This document follows the form and general content of the Condition of Service template appended to the DSC. The template was prepared to assist distributors in developing their own "Conditions of Service" document based on current practice and the DSC. The text of the template is shown *in italics* throughout these Conditions of Service, right after each of the subheadings. The template outlines the minimum requirements. However, as suggested by the DSC, Toronto Hydro has expanded on the contents to encompass local characteristics and other specific requirements.

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 the respective Customer class. This section covers items such as Service Entrance Requirements, Delineation of Ownership, Special Contracts, etc.

Other sections include the Glossary of Terms, Tables and References.

Subsequent changes will be incorporated with each submission to the OEB.

A Revision Summary of the latest revisions to the Conditions of Service is posted on Toronto Hydro's website (torontohydro.com). Comments to these revisions can be emailed to ConditionsofService@torontohydro.com. Toronto Hydro will file to the Ontario Energy Board a summary of public comments received from customers about the changes.

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Section 1 – INTRODUCTION

1 INTRODUCTION

1.1 Identification of Distributor and Service Area

In this section the distributor should identify its service area as defined in the Distributor's License.

Toronto Hydro-Electric System Limited, referred to herein as "Toronto Hydro", is a corporation incorporated under the laws of the Province of Ontario and a distributor of electricity.

Toronto Hydro is licensed by the Ontario Energy Board ("OEB") to supply electricity to Customers as described in the Electricity Distribution License issued to Toronto Hydro on June 27, 2023 by the OEB and expiring June 26, 2043 ("Distribution License"). Additionally, there are requirements imposed on Toronto Hydro by the various codes referred to in the Distribution License and by the *Electricity Act, 1998* and the *Ontario Energy Board Act*, 1998.

Toronto Hydro may only operate distribution facilities within its Licensed Territory as defined in its Distribution License. This service area is subject to change with the OEB's approval.

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

1.1.1 Distribution Overview

Toronto Hydro distributes electrical power through 13.8 kV and 27.6 kV primary distribution systems. On the 27.6 kV system all feeders are arranged to run in an open-loop fashion with open points between adjacent feeders. These feeders supply distribution transformers either directly or through 13.8 kV or 4 kV sub-distribution systems. There are presently four types of distribution design systems at the 13.8 kV primary voltage level:

- 13.8 kV underground radial
- 13.8 kV overhead open loop
- 13.8 kV underground open-loop
- 13.8 kV underground network

The underground network system is distinct from the other systems. This low-voltage secondary network system may be available to some Customers in the downtown core of the City of Toronto as a source of supply at 120/208 V or 347/600 V, depending on the local capacity of the system and the energy requirements of the Customer.

The supply of electricity by Toronto Hydro to any Customer will be at one of the following primary voltage levels: 27.6 kV or 13.8 kV depending on the proximity of the Customer's premises to the nearest distribution facility. For connection of a Customer at 4 kV level, Toronto Hydro will carry out a special study

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to justify the investment. The cost of this study may be charged to the Customer.

Each type of supply is distinct and is suitable for different Customer classes and geographic areas. Toronto Hydro will determine, at its sole discretion, the Customer's type of supply based on factors that include, but are not limited to, reliability, capacity, operational and system design considerations.

1.2 Related Codes and Governing Laws

This section should reference any legislation that is applicable to the distributor – Customer relationship.

The supply of electricity or related services by Toronto Hydro 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:

1. *Electricity Act, 1998*
2. *Ontario Energy Board Act*, 1998
3. Distribution License
4. Affiliate Relationships Code
5. Distribution System Code
6. Retail Settlement Code
7. Standard Supply Service Code

If there is a conflict between these Conditions of Service and the acts, Distribution License and codes listed above, the conflict shall be resolved by applying the prevailing provision in accordance with the order of priority set out above.

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); O. Reg. 213/91: Construction Projects under the OHSA; and the Electrical Utility Safety Rules published by the Infrastructure Health and Safety Association (IHSA).

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1.3 Interpretation

This section should describe the rules for interpretation of the Conditions of Service document.

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

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

1.4 Amendments and Changes

This section should outline the process for making changes to this document. Include any public notice provisions.

The provisions of these Conditions of Service in effect at the time Toronto Hydro signs the contract shall form part of any contract made between Toronto Hydro and any connected Customer, Consumer or Retailer. These Conditions of Service supersede all previous conditions of service, oral or written, of Toronto Hydro including any of its predecessor municipal electric utilities as of its effective date.

In the event of changes to these Conditions of Service, Toronto Hydro will publish the proposed changes on its website and issue a notice with the Consumer's bill. Toronto Hydro may also issue a public notice via social media.

The current version of this document is posted on Toronto Hydro's website (torontohydro.com) and can be downloaded from torontohydro.com. If a Customer requests a physical copy of the Conditions of Service by mail, the Customer may be responsible for reasonable mailing and printing costs.

1.5 Contact Information

This section should provide information on how a Customer can contact the distributor.

Include such items as:

- ***Address of the distributor***
- ***Telephone numbers***
- ***Normal business hours***
- ***Emergency contact numbers***

Toronto Hydro can be contacted 24 hours a day at 416-542-8000 or such other numbers as Toronto Hydro may advise through its website, invoices or otherwise. Except where otherwise noted, normal working hours are Monday to Friday between 8:30 a.m. and 4:30 p.m. Customer Care representatives may be contacted at 416-542-8000 between 8 a.m. and 8 p.m. Monday to Friday. The mailing address is Toronto Hydro-Electric System Limited, 14 Carlton Street, Toronto Ontario M5B 1K5.

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1.6 Customer Rights and Obligations

This section should outline the rights and obligations a Customer or embedded generator has with respect to the distributor that are not covered elsewhere in this document.

In the context of this section, the term "Customer" shall be interpreted to encompass the property owner or its property management representative or agent, as applicable.

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

- of Toronto Hydro in providing distribution services to the Customer;
- of the Customer in being connected to Toronto Hydro's distribution system; or
- of Toronto Hydro or Customer in meeting their respective obligations under these Conditions of Service, Toronto Hydro's licences, the Distribution System Code and any other applicable law.

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

The Customer shall indemnify and hold harmless Toronto Hydro, its directors, officers, employees and agents from any claims made by any third parties in relation to Customer-owned Equipment, and in connection with the construction and installation of an embedded Distributed Energy Resource (DER) facility or other electrical apparatus by or on behalf of the Customer.

1.6.1 Accuracy of Information

To provide customer service, deliver and/or supply energy, manage Customer accounts, assess credit history and determine the need for a security deposit, Toronto Hydro may require certain information from the Customer, including, but not limited to, the Customer's credit report, driver's licence, property tax bill, purchase or lease agreements, articles of incorporation and/or business registration. Customers must provide Toronto Hydro with information that is true, complete and correct. Toronto Hydro will only request information necessary for the stated purpose, and may verify the accuracy of all information provided and, if required, may obtain additional credit information from a consumer reporting agency.

1.6.2 Space and Access

Customers will provide Toronto Hydro, free of charge or rent, with a convenient and safe place for Toronto Hydro's Facilities and Equipment on Customer Property to receive power where required. For example, for a transformer or meter to be installed on Customer Property. Toronto Hydro is not liable for any damage resulting from, arising out of, or related to the presence of Toronto Hydro Facilities and Equipment on Customer Property.

Customers shall only allow Toronto Hydro employees, authorized agents, or persons lawfully permitted to do so, to repair, remove, replace, alter or inspect Toronto Hydro Facilities and Equipment on the Customer Property and/or Customer Equipment.

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In addition to Toronto Hydro's rights under Section 40 of the *Electricity Act*, 1998, Toronto Hydro employees and its authorized agents may enter Customer Property, in order to:

1. install, inspect, read, calibrate, maintain, repair, alter, remove or replace all or any part of a meter installation,
2. inspect, maintain, repair, alter, remove, replace or disconnect wires or other facilities used to transmit or distribute electricity,
3. inspect, maintain, repair, alter, remove and replace Toronto Hydro Facilities and Equipment, such as sentinel lights, and/or
4. perform switching operations, or interrupt the Customer's supply, in order to maintain or improve the supply system or to provide new or upgraded services to other Customers.

Toronto Hydro's employees and their authorized agents will make reasonable efforts to enter Customer Property during normal business hours. Upon request, they will identify themselves with proper identification. Toronto Hydro will provide reasonable notice of the entry, restore the property to its original condition as far as practicable, and compensate for any damages caused by the entry, in accordance with Section 40 of the *Electricity Act*, 1998.

If Toronto Hydro Facilities and Equipment are located inside a Customer-owned vault, building or enclosed structure, Customer will provide Toronto Hydro with key access upon request. Toronto Hydro's written approval is needed for any exceptions to this requirement.

If Toronto Hydro Facilities and Equipment are inaccessible, Toronto Hydro may require Customer to relocate Toronto Hydro Facilities and Equipment to an accessible location.

Refer to Section 1.7.1 Access to Customer Property for additional information related to this subject.

1.6.3 Responsibility to Toronto Hydro Facilities and Equipment on Private Property

Toronto Hydro Facilities and Equipment located on Customer Property are in the care of the Customer. In the event that Toronto Hydro Facilities and Equipment are damaged or destroyed by fire or by any cause, other than ordinary wear and tear, tempest or lightning, an investigation will be completed and the Customer may be liable for the value or a portion thereof of the Toronto Hydro Facilities and Equipment or the cost of repairing or replacing the same.

Refer to Section 1.7.2 Safety of Equipment for additional information related to this subject.

Where Toronto Hydro undertakes work on Toronto Hydro's Facilities and Equipment located on Customer Property, Customers shall cooperate fully with Toronto Hydro to facilitate the safe and timely completion of Toronto Hydro's work, in accordance with Section 1.7.1 of these Conditions of Service. This includes, but is not limited to, reasonable access, coordinating any necessary site preparations, and refraining from obstructing or delaying the upgrade process.

1.6.4 Green Button™

For Customers making use of Toronto Hydro's Green Button functionality, including, but not limited to the sharing of Customer data with third parties through the Connect my Data (CMD) and Download my Data (DMD) applications (the "Green Button Functionality"), the Customer acknowledges and agrees that use of

the Green Button Functionality is at the Customer's sole discretion, and shall be in accordance with Toronto Hydro's terms and conditions relating to the Green Button Functionality available on Toronto Hydro's website (torontohydro.com).

Green Button™, Green Button *Download My Data*® and Green Button *Connect My Data*® are trademarks, registered trademarks, official marks, or service marks of Departments of the United States of America, the Ontario Ministry of Energy, and/or the Green Button Alliance, Inc.

1.6.5 Notification Obligations for Modifications, Changes or a Sale of Customer Property

Customer shall notify Toronto Hydro in writing and in advance of:

1. changes to existing structures on Customer Property effecting any substantial increase in the Customer's peak demand, regardless of the Estimated Incremental Peak Demand which may be set out in an Offer to Connect;

2. any changes involving building extensions or modifications or any installations of sub-services or meters; and

3. any sale, severance or subdivision of Customer Property or the registration of a condominium plan and declaration in respect of Customer Property or the creation of a cooperative, co-ownership or other similar arrangement affecting all or any portion of the Customer Property.

Depending on the nature of the proposed changes to Customer Property, new or additional agreements, such as an easement in a form and on terms acceptable to Toronto Hydro (as described in section 2.1.6 of these Conditions of Service) may be required by Toronto Hydro, at the cost of the Customer.

Customer shall provide written notice to any potential purchaser of Customer Property of: (i) the existence of Customer-owned Equipment on Customer Property, and (ii) the obligations described in these Conditions of Service, including, but not limited to, this section and section 1.7.5.

Customer shall indemnify Toronto Hydro for any damages arising directly from the Customer's failure to comply with this section.

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1.7 Distributor Rights

This section should outline the rights a distributor has with respect to a Customer or embedded generator that are not covered elsewhere in this document.

1.7.1 Access to Customer Property

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

The Customer and Consumer must provide unimpeded, unobstructed, safe, secure access for Toronto Hydro employees, or its contractors, at all times for the purpose of installing, inspecting, testing, reading, operating, replacing, removing, or maintaining, Toronto Hydro distribution equipment or revenue metering, including reading the revenue meter and switching operations. For further clarity, this right to access applies to Toronto Hydro distribution equipment on, under, over or inside Customer-owned Property, twenty-four (24) hours a day seven (7) days a week. Toronto Hydro will provide reasonable notice of entry, but certain situations may result in no notice being provided, including:

1. during an emergency situation; or

2. when access without notification has been previously agreed upon by and arranged between Toronto Hydro and the Customer.

Neither the Customer or Consumer can change or alter, without prior approval from Toronto Hydro, property which is in proximity to Toronto Hydro's Facilities and Equipment including landscaping, planting trees or shrubs, buildings fences, pools, decks, sheds, or other structures which may impede access to Toronto Hydro's Facilities and Equipment.

Should access be obstructed or impeded, Toronto Hydro will strive to notify and give the Customer or Consumer reasonable time to correct the obstruction, as determined by Toronto Hydro. However, where notifying the Customer is not practicable, such as during emergencies or under a mutually agreed upon arrangement, Toronto Hydro may at its sole discretion remove the obstruction or the impediment (e.g., removal of unauthorized locks) in order to gain access to its Facilities and Equipment, and Toronto Hydro shall not be liable to the Customer for any damages arising as a result of the removal of the obstruction or the impediment other than physical damage to facilities arising directly from entry on the Customer-owned Property.

1.7.2 Safety of Equipment

The Customer shall comply with all aspects of the Ontario Electrical Safety Code (OESC) with respect to ensuring that equipment is properly identified and connected for metering and operation purposes and will take whatever steps necessary to correct any deficiencies, in particular cross wiring situations, in a timely fashion. If the Customer does not take such action within a reasonable time, Toronto Hydro may disconnect the supply of electricity to the Customer.

The Customer shall not use or interfere with the facilities of Toronto Hydro except in accordance with a written agreement with Toronto Hydro. Toronto Hydro has the right to seal any point where a connection may be made on the line side of the metering equipment.

The Customer shall not build, plant or maintain or cause to be built, planted or maintained any structure or

object (including but not limited to trees, shrubs, landscaping, fencing, parked vehicles, and patios) that, in the sole opinion of Toronto Hydro or other municipal or regulatory authority, would or could obstruct the running of distribution lines; endanger or impair access to Toronto Hydro's equipment; interfere with the proper and safe operation of Toronto Hydro's facilities, including the timely maintenance or response to system or equipment issues; or adversely affect compliance with any applicable legislative, regulatory or municipal requirement.

Where an obstruction to Toronto Hydro Facilities and Equipment is discovered, Toronto Hydro will notify the Customer and provide a reasonable time for the Customer to correct any obstructions. If the Customer does not remove such obstruction within the reasonable time designated by Toronto Hydro, Toronto Hydro may disconnect the supply of electricity to the Customer and/or remove, relocate or, in the case of shrubs or other vegetation, trim such obstructions at the Customer's expense, and Toronto Hydro shall not be liable to the Customer for any damages arising as a result thereof, other than physical damage to facilities arising directly from entry on the Customer's property. Toronto Hydro's policies and procedures with respect to the disconnection process are further described in these Conditions of Service.

1.7.3 Tree and Vegetation Management

To ensure public safety and the continued reliable operation of its distribution system, Toronto Hydro will maintain clearance around its distribution lines on a cyclical or as-needed basis in close cooperation with the City of Toronto's forestry department. The tree trimming cycle may vary depending on extent of storm damage, health of trees, and vegetation type.

When new overhead lines are required on private property to supply the Customer, the Customer is responsible for initial tree trimming to allow Toronto Hydro to perform its work. Customers are also responsible for continuing tree trimming, tree and brush removal around overhead lines that are less than 750 Volts and located on private property. Customers shall hire only certified personnel (i.e. a utility arborist) to perform the tree trimming in proximity to overhead distribution lines on private property.

Where Toronto Hydro owns overhead lines over 750 Volts on private property, Toronto Hydro will maintain the tree clearance at no cost to the Customer. Where overhead lines located on private property over 750 Volts are owned by the Customer, the Customer is responsible for continuing tree trimming, tree and brush removal.

Please refer to the table below for a summary of the tree trimming responsibilities between the Customer and Toronto Hydro.

<table>
<tr><th>Location of Distribution System</th><th colspan="2">Nominal Voltage</th><th>Tree Trimming Responsibility</th></tr>
<tr><td rowspan="2">Public Road Allowance</td><td colspan="2">< 750 V</td><td>Toronto Hydro</td></tr>
<tr><td colspan="2">> 750 V</td><td>Toronto Hydro</td></tr>
<tr><td rowspan="4">Private Property</td><td rowspan="2">Toronto Hydro - Owned Lines</td><td>< 750 V</td><td>Customer</td></tr>
<tr><td>> 750 V</td><td>Toronto Hydro</td></tr>
<tr><td rowspan="2">Customer – Owned Lines</td><td>< 750 V</td><td>Customer</td></tr>
<tr><td>> 750 V</td><td>Customer</td></tr>
</table>

Toronto Hydro will endeavour to contact the Customer regarding the planned tree trimming prior to work

being performed. However, in the event of emergencies, Toronto Hydro may be unable to contact the Customer prior to performing the work.

The Customer is also responsible for any vegetation clearing and removal in proximity to Toronto Hydro pad-mounted assets located on private property.

Toronto Hydro may be required to temporarily disconnect and reconnect the electricity supply to facilitate tree trimming.

To permit the safe clearance of trees and vegetation from Customer-Owned overhead lines over 750 Volts, Customers are required to contact Toronto Hydro to request and pay for the disconnection and reconnection of the electricity supply prior to performing work.

The Customer and/or the Customer's contractors must maintain clearances conforming to the Ontario Electrical Safety Code at all times, and any Toronto Hydro requirements that may apply.

In situations where the Customer has failed to adequately maintain their tree and vegetation, such that it will prevent Toronto Hydro from performing its operations and maintenance activities in a safe manner, could endanger public safety or impact the continued reliable operation of Toronto Hydro's distribution system, Toronto Hydro will notify the Customer to remove the identified obstruction or hazard. *Refer to section 1.7.2 Safety of Equipment* of these Conditions of Service for more information on the Customer's safety-related obligations.

If emergency work performed by Toronto Hydro requires trimming of a tree or brush, responsibility for the removal of the trimmed vegetation shall rest with the owner of the tree. Information regarding tree ownership and available removal services may be obtained by contacting the City of Toronto through 311.

1.7.4 Operating Control

The Customer shall provide a convenient and safe place, satisfactory to Toronto Hydro, for installing, maintaining and operating its equipment in, on, or about the Customer Property or in, on, or about the public road allowance for metered and non-metered connections. Toronto Hydro assumes no risk and will not be liable for damages resulting from the presence of Toronto Hydro's Facilities and Equipment on the Customer Property or in, on, or about the public road allowance for metered and non-metered connections, or approaches thereto, or any acts, omissions or events beyond its control, or the negligence or willful misconduct of any Persons over whom Toronto Hydro has no control.

Unless an employee or an agent of Toronto Hydro, or another Person lawfully entitled to do so, no Person shall remove, replace, alter, repair, inspect or tamper with Toronto Hydro's Facilities and Equipment.

Customers will be required to pay the cost of repairs or replacement of Toronto Hydro's Facilities and Equipment that has been damaged or lost by the direct or indirect act or omission of the Customer or its agents.

The physical location on Customer Property or the public road allowance for metered and non-metered connections at which a distributor's responsibility for operational control of distribution equipment ends is defined by the Distribution System Code as the "operational demarcation point".

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The operational demarcation point(s) typically refers to the initial disconnecting or distribution-isolating device(s) owned by the Customer, located at Customer Property. These devices serve to separate the customer's facility or building from Toronto Hydro's distribution system. For larger Customers with more complex connections, the operational demarcation point(s) may be located further downstream from the ownership demarcation point(s). Where necessary, the operation and control of high-voltage equipment at the Customer Property shall be detailed in an Operating Agreement with the Customer. In all instances, Toronto Hydro reserves the right to determine the operational demarcation point(s).

1.7.5 Customer-owned Equipment, Infrastructure and Property

In the context of this section, the term “Customer” shall be interpreted to encompass the property owner, or its property management representative or agent, as applicable.

The Customer is responsible for providing, inspecting, maintaining, repairing and replacing, in a safe condition satisfactory to Toronto Hydro, all Customer-owned Equipment on private property or in the public road allowance for non-metered and metered connections. This equipment and infrastructure may be situated in the vicinity or in the same space as Toronto Hydro’s Facilities and Equipment. Equipment and infrastructure include but is not limited to transformers, cable, switches, poles, fences, gates, duct banks, conduits, cable chambers, cable pull rooms, transformer rooms, transformer vaults, transformer pads, tap boxes, handwells, meter bases, clevises, service masts and junction boxes.

The Customer is also responsible for maintaining Customer Property in a condition that is safe and that does not inhibit the operation or threaten the integrity or reliability of Customer-owned Equipment or Toronto Hydro’s Facilities and Equipment. The Customer’s responsibility to maintain Customer Property includes, but is not limited to, clearing vegetation, keeping storm drains clear and drainage systems fully functional, removing debris, maintaining operational and electrical clearances, and maintaining proper grading and surfaces. It is the Customer’s responsibility to ensure that all Customer-owned Equipment constructed to house Customer-owned Equipment and/or Toronto Hydro’s Facilities and Equipment is impermeable to water, hazardous materials and gas. Toronto Hydro shall not be responsible for any damage caused by the leakage of water, hazardous materials or gases entering or exiting any Customer-owned Equipment.

The Customer shall inspect and maintain Customer-owned Equipment at regular intervals. When access to Customer-owned Equipment is under the control of Toronto Hydro (e.g., a transformer vault, a fenced off transformer), the Customer shall contact Toronto Hydro as per the instructions posted on Toronto Hydro’s website to make appropriate arrangements (e.g., access, temporary disconnection) prior to undertaking any inspections, maintenance, repairs, or replacements.

Where Toronto Hydro undertakes work on Toronto Hydro Facilities and Equipment that requires the Customer complete corresponding work on Customer-owned Equipment, the Customer shall cooperate fully with Toronto Hydro to facilitate the safe and timely completion of its work. The Customer is solely responsible for undertaking any work required to ensure the Customer-owned Equipment is in compliance with all applicable laws, standards and codes (including, but not limited to, the Electrical Safety Code) and that the Customer-owned Equipment is compatible with the Toronto Hydro Facilities and Equipment. Customer obligations may include, but are not limited to, upgrading meter bases, modifying pilot wire configurations, upgrading switchgear, enhancing civil structures, and updating protection and coordination systems, as required to ensure a safe and reliable service connection.

If a Customer request for non-standard service is granted by Toronto Hydro, the Customer shall accept all

responsibility and liability relating to the non-standard service. To provide greater clarity, it is the Customer's sole responsibility to ensure the non-standard service and/or installation has no impact on Customer-owned Equipment or Toronto Hydro's Facilities and Equipment or any other consequence or impact of any kind.

For Customer-owned vaults that contain Toronto Hydro's Facilities and Equipment, Toronto Hydro will provide a Customer with one vault access of up to four (4) hours on a rolling 12-month schedule at no charge. This no charge service would be scheduled during Toronto Hydro's normal working hours, and appointment times are not necessarily guaranteed. Additional vault access, or vault access at times other than during Toronto Hydro's normal working hours will be charged at cost. If Toronto Hydro staff attend the property to provide no charge vault access and the Customer is not present, the free access hours will be forfeited and Toronto Hydro may charge the Customer for costs associated with attending the site.

In order to enter a vault, all third parties are required to follow and apply all applicable Occupational Health and Safety Act (OHSA) requirements and Electrical Utility Safety Rules (EUSR) prior to, while, and after entering a vault containing Toronto Hydro Facilities and Equipment.

Further, individuals must wear proper personal protective equipment to enter into the vault. As per OHSA O.Reg. 213/91, s. 21(1) and EUSR Rule 113.1 fire retardant clothing (HRC 2), safety glasses, safety gloves, hard hat, safety boots (Canadian Standards Association Green Triangle, etc.) must be worn at all times. Individuals must maintain safe limits of approach as outlined in EUSR Rule 129.

In a situation where observing the safety requirements as outlined above is not possible, or becomes impossible, Toronto Hydro or its agent may immediately stop work and require the appointment be rescheduled to a time when all safety precautions can be followed. Any remaining free access hours may be forfeited and in the instance of paid access a minimum of one hour for the appointment may be charged. If the Customer does not inspect, maintain, repair, or replace Customer-owned Equipment and Customer Property as required, Toronto Hydro may disconnect the supply of electricity to the Customer.

Notwithstanding the above, unless otherwise agreed to by the parties, subject to the Customer providing an easement to Toronto Hydro, Toronto Hydro will provide, maintain, repair and replace those civil infrastructure (such as poles, duct banks, conduits, cable chambers, cable pull rooms, transformer vaults, transformer pads, and switching vaults) that are required to house the primary distribution systems built along private streets that supply Customers of Multi-unit Residential developments (part of Class 3B). Effective November 15, 2004, Toronto Hydro will treat such infrastructure in the same way as those located in the public road allowance.

Where Toronto Hydro identifies, through an inspection or other activity, deficiencies relating to Customer-owned Equipment, or Customer Property, such as deficiencies to walls, ceilings, floors, doors, vents, drains, electrical devices or other elements, Toronto Hydro may:

- notify the Customer of the deficiencies through a Customer Action Form or other form of notice;
- provide a reasonable time for the Customer to correct the deficiencies; and
- if circumstances merit, request the Customer to correct the deficiency in a manner that brings the Customer-owned Equipment, or Customer Property up to current standards even if the Customer-owned Equipment, or Customer Property was designed, installed, or constructed to an older standard. (Examples of circumstances that may merit the application of a current standard include, but are not limited to, the existence of health or safety hazards, legal or regulatory requirements,

and conditions that may impact the integrity, reliability, or operability of the distribution system or any equipment that supplies the Customer.)

When notified of deficiencies, or requested to correct deficiencies in a particular manner through a Customer Action Form or other form of notice, the Customer shall correct the deficiencies and comply with any requests. It is the responsibility of the Customer and/or its agents to determine the steps needed to adequately correct all listed deficiencies. If the Customer does not correct the deficiencies within the reasonable time, or if the corrections are not considered adequate by Toronto Hydro or an inspection authority, Toronto Hydro may disconnect the supply of electricity to the Customer-owned Property or may correct the deficiencies at the Customer's expense. In the event Toronto Hydro performs remedial work on Customer-owned Equipment, Toronto Hydro is entitled to charge the cost of the work to the Customer. The Customer remains responsible for ongoing inspection, maintenance, repairs and replacement of assets as outlined in this document Toronto Hydro shall not be liable to the Customer for any damages arising as a result of or in the course of disconnecting supply or correcting the deficiencies other than physical damage to facilities arising directly from entry on the Customer Property. Toronto Hydro's policies and procedures with respect to the disconnection process are further described in these Conditions of Service.

Notwithstanding the above, the Customer shall be liable for any damages or losses sustained by Toronto Hydro, including damages to Toronto Hydro Facilities and Equipment that is installed either within the public road allowance or private property, resulting from:

- the operation or failure of Customer-owned Equipment,
- the Customer not adequately maintaining, repairing, or replacing Customer-owned Equipment,
- the Customer not adequately maintaining or repairing their property.

Refer to Section 6, Reference #5a “Requirements for the Design and Construction of Customer-Owned Structures” for additional details.

1.8 Disputes

Any dispute between Customers or Retailers and the Distributor shall be settled according to the dispute resolution process specified in the Distributor Licence.

In this section, the Distributor should outline the Customer Complaint and Dispute Resolution process that has been established as a condition of licence.

If a Customer, Consumer or other market participant has a complaint about Toronto Hydro regarding services provided by Toronto Hydro under its Electricity Distribution License, the Consumer may contact Toronto Hydro's Customer Care Department by telephone at 416-542-8000, Monday to Friday from 8 a.m. to 8 p.m., or by email through the Contact section of Toronto Hydro’s website (torontohydro.com) in writing at:

Toronto Hydro
Attn: Customer Care
500 Commissioners Street
Toronto, ON
M4M 3N7

Upon receipt of a complaint, a Toronto Hydro Customer Care representative will contact the Customer, Consumer or other market participant to acknowledge receipt of the complaint and, if possible, to resolve the complaint. If a Customer, Consumer or other market participant is not satisfied with the resolution, they may follow the Dispute Resolution process described on Toronto Hydro's website (torontohydro.com).

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Section 2 – DISTRIBUTION ACTIVITIES (GENERAL)

2 DISTRIBUTION ACTIVITIES (GENERAL)

This section should include information that is applicable to all Customer classes of the distributor. Items that are applicable to only a specific Customer class are covered in Section 3.

2.1 Connections - Process and Timing

Under the terms of the Distribution System Code, Toronto Hydro has the obligation to either connect or to make an offer to connect any Customers that lie in its service area. The form of the offer and its terms and conditions may vary in accordance with Toronto Hydro's requirements for connecting a Customer to Toronto Hydro's distribution system.

The Customer or its representative shall consult with Toronto Hydro concerning the availability of supply, the supply voltage, service location, metering, and any other details. These requirements are separate from and in addition to those of the Electrical Safety Authority (ESA). Toronto Hydro will confirm, in writing, the characteristics of the electricity supply.

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

- the timely provision of electricity supply to new and upgraded premises or
- the availability of adequate capacity for additional loads to be connected in existing premises.

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

Toronto Hydro may collect a Design Pre-payment in order to initiate and perform a design review in the preparation of an offer to connect. Upon acceptance of the offer to connect, the Design Pre-payment will be credited towards the Customer's financial obligations for the project. If the Customer does not accept Toronto Hydro's offer to connect, or if the applicant withdraws its application, or if Toronto Hydro is unable to provide an offer to connect, then Toronto Hydro may refund the Design Pre-payment less any costs incurred by Toronto Hydro.

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

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

In addition to any other requirements in these Conditions of Service, the supply of electricity is conditional

upon Toronto Hydro being permitted and able to provide such a supply, obtaining the necessary apparatus, material, and easements, and constructing works to provide the service. Should Toronto Hydro not be permitted or able to do so, it is under no responsibility to the Customer whatsoever and the Customer releases Toronto Hydro from any liability in respect thereto.

Requirements regarding Connection Agreements are set forth in *Sections 2.1.7.4, 3.7*, and in *Section 6, Reference #3 – "Toronto Hydro Distributed Energy Resource Requirements"* for load Customer, a generator, wholesale market participant and embedded distributor.

2.1.1 Building that Lies Along

In this section, the Distributor should describe the standard connection allowance or charge used by the Distributor in its service territory, and describe any variable connection fees that would be charged beyond the standard allowance.

The Distributor also may stipulate in this section other terms and conditions by which a Customer requesting a Connection must abide, as long as it is within the terms of the Distribution System Code.

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

Under the terms of the Distribution System Code, Toronto Hydro has the obligation to connect (under Section 28 of the *Electricity Act, 1998*) a building or facility that "lies along" its distribution line, provided:

a. the building can be connected to Toronto Hydro's distribution system without an expansion or enhancement, and

b. the service installation meets the conditions listed in the Conditions of Service of the distributor that owns and operates the distribution line.

The location of the Customer's service entrance equipment is subject to the approval of Toronto Hydro and the Electrical Safety Authority.

2.1.1.1 Connection Charges

Toronto Hydro shall recover costs associated with the installation of connection assets by Customer Class via Basic Connection Costs through the economic evaluation for Expansions and Variable Connection Costs, collected directly from the Customer, as applicable.

The Variable Connection Costs shall be calculated as the costs associated with the installation of Connection assets **above and beyond** the Standard Allowance for Basic Connection as described in Table 1. Toronto Hydro will recover these Variable Connection Costs, which shall be based on actual cost, directly from the Customer.

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2.1.2 Expansions / Offer to Connect

Under the terms of the DSC, a Distributor has the Obligation to make an Offer to Connect any Building that is in the distributor's service territory that cannot be connected without an expansion, or "lies along" its distribution system, but may be denied connection for the reasons described in subsection 2.1.3 of the distributor's Conditions of Service.

The Offer to Connect must be fair and reasonable and be based on the distributor's design standard. The Offer to Connect also must be made within a reasonable time from the request for connection.

In this section, the Distributor should outline, in detail, the process followed to determine any required capital contributions. This section also should describe any fixed connection fees as well as variable connection fees, by Customer class.

If a Customer requests to connect a new Customer load, either through a new connection or by increasing the load at an existing connection, to Toronto Hydro's distribution system, and the new load necessitates an expansion of Toronto Hydro's distribution system, then Toronto Hydro will provide Customers requesting connections that necessitate an expansion with an offer to connect for expansions ("Offer to Connect"). Toronto Hydro will perform an economic evaluation of the expansion project in accordance with the Capital Contribution policy set out in *Section 2.1.2.2*. The economic evaluation will determine if the forecasted future revenue ("Estimated Incremental Revenues") from the new load ("Estimated Incremental Demand") and from the Customer(s) will pay for the costs associated with the expansion. The costs associated with the expansion include but are not limited to:

1. the distribution system expansion capital cost *"*Expansion Costs*"*;
2. on-going operating, maintenance and administration costs including those actually incurred and those apportioned in the manner set forth below *"*OM&A Costs*"*; and
3. the basic cost of connection outlined in Table 1.

The Expansion Costs that Toronto Hydro will include in the economic evaluation are capital costs that are associated with the installation of expansion facilities and equipment on Toronto Hydro's main distribution system. The expansion facilities and equipment will typically meet the following criteria:

- Are required to accommodate the new Customer load;
- Are not necessary to serve the needs of existing Customers and their existing loads; and
- Are designed and installed in accordance with Toronto Hydro's planning, design, and construction standards.

For the purpose of determining OM&A Costs*,* Toronto Hydro will use system average operating, maintenance and administrative costs as a proxy for incremental OM&A Costs associated with the expansion facilities and apportion them as fixed costs (for Rate Class 1 and 2) or as a function of $/kW of demand (for Rate Class 3, 4, and 5).

The Expansion Costs are in addition to any Variable Connection Costs. Refer to Table 1 in Section 5 for additional information on service connection charges.

For the purpose of establishing the Estimated Incremental Demand to be used in the economic evaluation, the Customer shall provide a valid estimate of the proposed new load (incremental demand)

for evaluation and acceptance by Toronto Hydro. If the Customer and Toronto Hydro are unable to agree on a valid incremental demand for new Class 3, 4, and 5 Customers or in the absence of adequate billing history for existing Customers, Toronto Hydro will set the Estimated Incremental Demand to 90% of the incremental installed transformer capacity.

Using the Estimated Incremental Demand, Toronto Hydro shall then calculate the Estimated Incremental Revenues that would be received from the Customer(s) based on the new load. Toronto Hydro will use the “fixed charge” and the “variable charge” that have been approved by the Ontario Energy Board by Rate Class to determine the Estimated Incremental Revenues. For existing Customers Toronto Hydro shall apportion the “fixed charge” based on the ratio between the new (incremental) load and the combined load.

In performing the economic evaluation, should the Net Present Value (NPV) of the costs and revenues associated with the Expansion be less than zero, the Customer shall pay a capital contribution in the amount of the shortfall (i.e. the amount below zero) to Toronto Hydro. Toronto Hydro has elected to collect this shortfall from the Customer in accordance with its Capital Contribution policy as outlined in *Section 2.1.2.2*.

For the purposes of connecting a generator, the amount charged by Toronto Hydro to the generator to construct an expansion to connect a DER facility to the Toronto Hydro distribution system shall be equal to the generator’s share of the present value of the projected capital costs and on-going maintenance costs for the equipment. Projected revenue and avoided costs from the DER facility shall be assumed to be zero, unless otherwise determined by rates approved by the Ontario Energy Board. In the case of a renewable DER facility, Toronto Hydro shall not charge the generator for any costs of the expansion that are at or below the renewable energy expansion costs cap for renewable DER facilities as set by the Ontario Energy Board.

The methodology and inputs that Toronto Hydro will use for all new load and new connection economic evaluations are presented in Appendix B of the Distribution System Code.

2.1.2.1 Offer to Connect and Alternative Bid Work

Toronto Hydro will provide one firm Offer to Connect to the Customer, at no expense to the Customer, for plans submitted to Toronto Hydro that necessitate an expansion to Toronto Hydro’s main distribution system. If the Customer submits revised plans, Toronto Hydro may provide a new firm Offer to Connect for the revised plans at the Customer’s expense.

In the Offer to Connect, Toronto Hydro will advise the Customer of any eligible work for which the Customer has the choice to obtain alternative bids from a qualified contractor. The Customer may obtain an alternative bid to construct the eligible work portions of the expansion and connection facilities:

- that do not make physical contact with Toronto Hydro’s distribution system; and
- that only require work to be completed within Toronto Hydro’s safe limits of approach to energized facilities or equipment,

unless otherwise directed by Toronto Hydro.

If the Customer chooses to utilize an alternative bid, the Customer shall only use qualified contractors. To qualify to undertake work that is eligible for alternative bid, contractors shall submit a “Contractor Pre-Qualification Application” posted on Toronto Hydro’s website (torontohydro.com) and meet the requirements no later than 30 business days prior to their selection by the Customer to undertake work

that is eligible for alternative bid. To avoid delay in the start of the work that is eligible for alternative bid, the Customer should engage a contractor that is currently qualified by Toronto Hydro.

Toronto Hydro does not make any representation or warranty regarding any contractor selected by the Customer to do any work regardless of whether the contractor has completed the requirements set by Toronto Hydro or not and shall have no liability to the Customer in respect of such work.

Toronto Hydro will also include in the Offer to Connect or by separate document an estimate of any additional costs ("Additional Alternative Bid Costs") that will be incurred by Toronto Hydro in the event that the Customer decides to pursue an alternative bid for the work that is eligible for alternative bid. Additional Alternative Bid Costs may include, but are not limited to, the following:

- costs for additional design, engineering, or installation of facilities required to complete the project;
- costs associated with any temporary de-energization of any portion of the existing distribution system that is required in relation to an expansion that is constructed under the alternative bid option;
- costs associated to review and approve the plans for the design, engineering, layout, and work execution for the work that is eligible for alternative bid to ensure conformance to Toronto Hydro's distribution system planning standards and specifications prior to commencing that work;
- costs for administering the contract between the Customer and the contractor hired by the Customer if Toronto Hydro is asked to administer the contract by the Customer and Toronto Hydro agrees to administer the contract; and
- costs for inspection or approval by Toronto Hydro of the work performed by the contractor hired by the Customer.

Within sixty (60) days of receiving the Offer to Connect, the Customer shall return a signed copy of the Offer to Connect indicating the Customer has accepted the offer, and whether the Customer is electing to pursue an alternative bid. After sixty (60) days, if the Customer has not accepted the Offer to Connect in writing, Toronto Hydro may revoke the Offer to Connect without providing any notification to the Customer.

If the Customer decides to pursue an alternative bid, the Customer and his qualified contractor shall only use materials that meet the same specifications as Toronto Hydro approved materials (i.e. same manufacturers and same part numbers). Once the Customer has hired a qualified contractor, the Customer may request, and if requested, Toronto Hydro shall provide the listing of approved materials that may be required for the alternative bid work.

Upon accepting an Offer to Connect, regardless of whether the Customer will be pursuing an alternative bid or not, the Customer shall provide Toronto Hydro the payables (e.g. costs) and security amounts (e.g. deposits) as required and stipulated in the Offer to Connect.

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2.1.2.2 Capital Contribution Policy

The capital contribution policy elected by Toronto Hydro shall be consistent with the policy outlined below for each Customer Class:

Class 1 – Residential Single Service

- Overhead or Underground: Capital contribution typically not collected from Customer.
- Residential Customers that require transformation on private property due to their required demand load and/or supply voltage exceeding the Supply Offering (*section 2.3.4.3*) requirement, may be subject to a capital contribution for the work required to enable the connection.

Class 2 - General Service (Below 50 kW)

- Overhead or Underground: Capital contribution typically not collected from Customer.
- General Service Customers that require transformation on private property due to their required demand load and/or supply voltage exceeding the Supply Offering (*section 2.3.4.3*) requirements, may be subject to a capital contribution for the work required to enable the connection.

Class 3 - General Service (50 kW – 999 kW)

- Capital contribution collected from Customer

Class 4 - General Service (1000 kW – 4999 kW)

- Capital contribution collected from Customer

Class 5 – Large User (5000 kW and above)

- Capital contribution collected from Customer

For the purpose of determining the amount of Capital Contribution payable by a Customer the following clarification and exception shall apply:

- Condominium apartments and apartment buildings that have a demand less than 1,000 kW are part of Class 3A General Services
- Condominium townhouse units intended to remain in private property are part of Class 3B General Service
- Townhouse units built (or intended to be) fronting public road allowances are part of Class 3C “Residential Subdivision”
- Townhouse units built as “freehold” (i.e. on property owned by the individual townhouse owner) are part of Class 3C “Residential Subdivision”
- Low-rise residential developments involving more than five lots regardless of demand are classified as Class 3C “Residential Subdivision”

However, notwithstanding the treatment of capital contribution, Toronto Hydro shall in all cases calculate the “Estimated Incremental Revenues” of new Customers using the “fixed charge” and the “variable

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charge" that have been approved by the Ontario Energy Board for the Rate Class applicable to each individual new meter installed in connection with the expansion project.

To determine the amount of Capital Contribution required from a Class 3, 4, or 5 Customer for an expansion project, Toronto Hydro will perform an economic evaluation by inputting the project specific information together with a set of standardized assumptions and specific annual parameters into a proprietary "Business Economic Model" developed for Toronto Hydro in accordance with the methodology and inputs outlined in Appendix B of the Distribution System Code ("Economic Evaluation").

Where Toronto Hydro is required to provide a capital contribution to a transmitter for a new or modified transmitter-owned connection facility, and the new or modified transmitter-owned connection facility meets the needs of an embedded distributor and/or a load Customer with a non-coincident peak demand that is equal to or greater than 5 MW, Toronto Hydro shall require a capital contribution from all beneficiaries that contributed to the need for the new or modified transmitter-owned connection facility. A transmitter shall calculate the amount of capital contribution for each of those beneficiaries using the methodology set out in the Transmission System Code.

Where an expansion involves an upstream transmission asset that has been deemed by the Board to be a Toronto Hydro asset, a capital contribution associated with this portion of an expansion is not required from a load Customer with a non-coincident peak demand of less than 5 MW.

2.1.2.2.1 Offer to Connect – Content and Process

Based on the output of its Economic Evaluation, Toronto Hydro will set out in the Offer to Connect the following, as applicable:

a. Whether the offer is a firm offer or an estimate of costs that would be revised in the final payment to reflect actual costs incurred;

b. the amount of the capital contribution;

c. the calculation used to determine the amount of the capital contribution including all of the assumptions and inputs used to produce the economic evaluation;

d. 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;

e. a description of, and costs for, the work that is eligible for alternative bid and the work that is not eligible for alternative bid associated with the expansion broken down into the following categories:

    I. labour (including design, engineering and construction);

    II. materials;

    III. equipment; and

    IV. overhead costs (including administration);

f. the amount for any Additional Alternative Bid Costs;

g. the amount for the basic cost of connection; and

h. the expansion deposit amount.

If there is a conflict between an Offer to Connect and these Conditions of Service, the Offer to Connect shall govern.

2.1.2.2.2 Transfer Price for Work that is Eligible for Alternative Bid

The transfer price for the expansion work that is eligible for alternative bid shall be the lower of the cost to the Customer ("Customer's Cost") to construct the expansion facilities or the amount set out in the initial Offer to Connect to do the expansion work that is eligible for alternative bid. The Customer's Cost shall mean:

a. The costs the Customer paid to have the eligible alternative bid expansion work performed, as supported by evidence satisfactory to Toronto Hydro; and

b. Any costs incurred by Toronto Hydro and charged to the Customer as a result of the Customer selecting to perform expansion work using an alternative bid.

For greater clarity, the cost referred to in (a) does not include any costs associated with completing connection work as identified in the Offer to Connect.

If the Customer does not provide the cost to construct the expansion facilities as referred to in (a), to Toronto Hydro within 30 days of the expansion facilities being energized, then the amount of the transfer price shall be the amount set out in the initial Offer to Connect to do expansion the work that is eligible for alternative bid.

Toronto Hydro will assume ownership of the facilities as of the date that the facilities were energized unless otherwise specified in the Offer to Connect.

2.1.2.2.3 Alternative Bid Final Economic Evaluation and Capital Contribution Settlement

If the Offer to Connect is a firm offer and the Customer has exercised the alternative bid option, Toronto Hydro will carry out a final Economic Evaluation once the expansion facilities are energized. The final Economic Evaluation will be based on the amounts used in the firm offer for costs and forecasted revenues, plus any transfer price to be paid to the Customer. If the required capital contribution amount from the final Economic Evaluation ("Final Capital Contribution") differs from the required capital contribution amount from the initial Economic Evaluation ("Initial Capital Contribution"), the Customer will be responsible for the Final Capital Contribution and not the Initial Capital Contribution. Toronto Hydro and the Customer shall arrange to settle any amounts owing as necessary, including by way of set off.

Toronto Hydro will provide the Customer with the calculation used to determine the final capital contribution amount including all of the assumptions and inputs used to produce the final Economic Evaluation at no cost to the Customer.

2.1.2.3 Expansion Deposit

As noted above, an expansion to Toronto Hydro's distribution system results in Expansion Costs and OM&A Costs. Given that the capital contribution that the Customer shall pay to Toronto Hydro may not fully offset these costs for Toronto Hydro, Toronto Hydro may require the Customer to provide an expansion deposit in addition to the capital contribution. The expansion deposit is intended to hold Toronto Hydro harmless with respect to the expansion.

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For Class 3, 4, and 5 Customers an Offer to Connect may require the Customers to provide an expansion deposit to cover the difference between the costs associated with the expansion as outlined in *Section 2.1.2* and the amount of the capital contribution paid by the Customer, in accordance with Toronto Hydro's Economic Evaluation of the expansion.

Toronto Hydro will require the Customer to provide the expansion deposit, as contained in the Offer to Connect, prior to the commencement of any expansion work or the installation of any connection assets.

Where a Customer intends to exercise the alternative bid option, Toronto Hydro may require the Customer to post an expansion deposit in an amount equal to the costs for the expansion work that is ineligible for alternative bid (collectively the "Initial Expansion Deposit"), prior to the commencement of any expansion work or the installation of any connection assets. Once the expansion facilities are energized, and Toronto Hydro has conducted a final Economic Evaluation and determined a final capital contribution amount, Toronto Hydro may require the Customer to post an additional deposit to be added to the Initial Expansion Deposit such that the total expansion deposit, made up of the initial expansion deposit and the additional deposit (collectively the "Total Expansion Deposit"), is equal to the difference between the costs associated with the expansion as outlined in *Section 2.1.2*, including the transfer price, and the amount of the final capital contribution.

Toronto Hydro may retain or realize on any expansion deposit from the Customer for the purposes of covering any amounts that the Customer owes to Toronto Hydro pursuant to the Offer to Connect. These amounts may include an outstanding capital contribution, and the costs associated with completing, repairing, or bringing up to standard the expansion facilities (e.g. bringing expansion facilities up to proper design and technical specifications; ensuring that facilities operate properly when energized).

In addition, for Customers that exercise the alternative bid option, Toronto Hydro shall retain 10% of the Total Expansion Deposit, for a warranty period of up to two years and may apply such deposit to any work required to repair the expansion facilities within the two-year warranty period. At the end of the warranty period, Toronto Hydro shall return to the Customer the unused portion of the Total Expansion Deposit that was retained for the warranty period.

The two-year warranty period begins at the end of the Realization Period. The Realization Period for a project ends:

- For residential developments, upon the first to occur of the materialization of the last forecasted connection in the expansion project, or at the end of the connection horizon of the expansion facilities, determined in accordance with Appendix B of the DSC,

- For commercial and industrial developments, the first to occur of the materialization of the last forecasted demand, or at the end of the connection horizon of the expansion facilities, determined in accordance with Appendix B of the DSC, or

- For residential developments combined with commercial or industrial developments, upon the first to occur of the materialization of both the last forecasted connection and the last forecasted demand, or at the end of the connection horizon of the expansion facilities, determined in accordance with Appendix B of the DSC.

For further information on Connection Horizon and Revenue Horizon, please refer to Section 2.1.11 of the Conditions of Service.

Any expansion deposit must be either in the form of (i) cash or (ii) an irrevocable commercial letter of credit issued by a Schedule I bank as defined in the *Bank Act*, or (iii) surety bond, but the form of deposit

must expressly provide for its use to cover the events for which it is held as a deposit.

Except for the warranty portion of the Total Expansion Deposit which shall be retained for the duration of the warranty period, once the facilities are energized, Toronto Hydro shall reduce any expansion deposit amount at the end of each 365-day period as specified in the Offer to Connect.

The amount of the reduction at the end of each 365-day period is calculated by multiplying any expansion deposit by a percentage, less any portion that Toronto Hydro has retained or realized. The percentage is derived by dividing the actual connections (for residential developments) or actual demand (for commercial and industrial developments) completed or materialized in that 365-day period, incremental to any connections completed or demand that materialized in any previous 365-day period, by the total number of connections (for residential developments) or actual demand (for commercial and industrial developments) contemplated in the Offer to Connect. (For example, if twenty percent of the forecasted connections or demand materialized in a year, and Toronto Hydro has not retained or realized any portion of any expansion deposit in accordance with the Offer to Connect, then Toronto Hydro will return to the Customer twenty percent of the expansion deposit.)

However, if at the end of the connection horizon of the expansion facilities, determined in accordance with Appendix B of the DSC, the total number of connections (for residential developments) or the actual demand (for commercial and industrial developments) contemplated by the Offer to Connect have not materialized, Toronto Hydro shall retain any cash held as an expansion deposit, or be entitled to realize on any letter of credit or bond held as an expansion deposit and retain any cash resulting therefrom, with no obligation to return any portion of such monies to the Customer at any time.

If the Customer has provided any expansion deposit in the form of cash, any portion of any expansion deposit held as cash returned to the Customer shall include interest on the returned amount from the date of receipt of the full amount of the expansion deposit at the Prime Business Rate set by the Bank of Canada less 2 percent.

2.1.2.4 Rebates of Capital Contribution

As noted above, when a new Customer connection or the addition of new load necessitates an expansion to Toronto Hydro's distribution system, Toronto Hydro conducts an economic evaluation. The economic evaluation considers costs associated with the expansion and forecasts revenues that the expansion will enable. If, within the connection horizon determined in accordance with Appendix B of the DSC of the expansion facilities, a subsequent Customer:

- connects new load to Toronto Hydro's distribution system;
- derives a benefit from the expansion facilities;
- the new load had not been forecasted and not included in the economic evaluation; and
- the subsequent Customer is a Class 3, 4, or 5 Customer,

then the subsequent Customer ("Unforecasted Customer") shall contribute a fair share of the cost that was incurred to construct the expansion. In such a case, Toronto Hydro shall collect the fair share from the Unforecasted Customer and shall provide that share as a rebate to the initial contributor (i.e. the Customer that initially paid the required capital contribution) to the expansion.

For further information on Connection Horizon and Revenue Horizon, please refer to Section 2.1.11 of the Conditions of Service.

The amount of the fair share of the Unforecasted Customer, and therefore the amount of the rebate to the capital contribution of the initial contributor(s), will be determined by Toronto Hydro by apportioning the overall benefits associated with the expansion between the Unforecasted Customer and the initial (or previous) contributor(s). If applicable, Toronto Hydro may consider any or all of the following factors when apportioning the overall benefits:

a. the relative name-plate rated capacity of the connections;

b. the relative non-coincident peak demand;

c. the line length that the Unforecasted Customer requires in comparison to the line length that the initial contributor(s) requires in the context of the expansion;

d. the proportion of the five (5) year period of time after the energization date of the expansion that the Unforecasted Customer will be connected to the Toronto Hydro distribution system; and

e. any other factor that Toronto Hydro, in its sole discretion, considers to be relevant to the determination.

2.1.3 Connection Denial

The DSC sets outs the conditions for a Distributor to deny connections. The DSC lists reasons for which a Building that "lies along" a distribution line may be refused connection to that line. This section should describe reasons why a distributor may not be obligated to connect the Customer and provide additional details, where relevant, about specific conditions that may result in a refused connection in accordance with the DSC. For example, the criteria for establishing an unsafe connection or a connection, which adversely affects the system, should be further documented within the Conditions of Service.

The Distribution System Code provides for the ability of a Distributor to deny connections. Toronto Hydro is not obligated to connect a Customer within its service area if the connection would result in any of the following:

- Contravention of existing laws of Canada or the Province of Ontario, including the Ontario Electrical Safety Code
- Violations of conditions in Toronto Hydro's Licence
- Use of a Toronto Hydro distribution system line for a purpose that it does not serve and that Toronto Hydro does not intend to serve
- Adverse effect on the reliability or safety of Toronto Hydro's distribution system
- Public safety reasons or imposition of an unsafe work situation beyond normal risks inherent in the operation of Toronto Hydro's distribution system
- A material decrease in the efficiency of the Toronto Hydro's distribution system
- A materially adverse effect on the quality of distribution services received by an existing connection
- If the person requesting the connection owes Toronto Hydro money for distribution services

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- Potential increases in monetary amounts that already are in arrears with Toronto Hydro
- If an electrical connection to Toronto Hydro's distribution system does not meet Toronto Hydro's design requirements
- Any other conditions documented in Toronto Hydro's Conditions of Service

If Toronto Hydro refuses to connect a Customer in its service area that lies along one of its distribution lines, Toronto Hydro shall inform the person requesting the connection of the reasons for the denial, and where Toronto Hydro is able to provide a remedy, make an Offer to Connect in accordance with *Section 2.1.2* of these Conditions of Service. If Toronto Hydro is not capable of resolving the issue, it is the responsibility of the Customer to do so before a connection can be made.

2.1.4 Inspections Before Connections

In this section, the Distributor should state the requirement for inspection by the Electrical Safety Authority prior to the commencement of electricity supply.

All Customer electrical installations shall be inspected and approved by the Electrical Safety Authority (ESA) and must also meet Toronto Hydro's requirements. Toronto Hydro requires notification from the ESA of this approval prior to the energization of a Customer's supply of electricity. Where a "Connection Authorization" from the ESA has been issued to Toronto Hydro, it is valid for the connection of a service for a period of up to six (6) months from the date of issue. If the connection of service has not been completed after six (6) months, a new "Connection Authorization" is required. Services that have been disconnected for a period of six (6) months or longer must also be re-inspected and approved by the ESA, prior to reconnection.

Temporary services, typically used for construction purposes and for a period of twelve months or less, must be inspected and approved by the ESA. The temporary service may be re-inspected by the ESA should the period of use exceed six (6) months.

Customer-Owned substations must be inspected by both the ESA and Toronto Hydro.

Transformer rooms shall be inspected and approved by Toronto Hydro prior to the installation of Toronto Hydro's equipment.

Duct banks shall be inspected and approved by Toronto Hydro prior to the pouring of concrete and again before backfilling. A mandrel shall be used to clear all extraneous material from completed ducts and a site contractor shall perform this work in the presence of a Toronto Hydro inspector. A mandrel, approved by Toronto Hydro for a nominal diameter of duct, will be passed through each duct. In the event of ducts blocked by ice, the owner's representative will be responsible for clearing the ducts prior to the cable installation. Connection to existing concrete duct banks or cable chamber shall be done only by a contractor approved by Toronto Hydro. All work done on existing Toronto Hydro's plant must be authorized by Toronto Hydro and carried out in accordance with all applicable safety acts and regulations.

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

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2.1.5 Relocation of Toronto Hydro-Owned Assets

This section should specify the distributor's policy with respect to requests for relocation of plant and the conditions under which the requestor is or may be required to pay for the relocation of plant. Sharing arrangements also should be noted.

When Toronto Hydro approves a request for the relocation of a Toronto Hydro-owned asset, Toronto Hydro shall recover from the requesting party the costs of relocating and re-instating the asset (if applicable), except to the extent recovery is limited under law.

Toronto Hydro will review and assess each relocation request for its effect on Toronto Hydro's customers and the distribution system as a whole. Toronto Hydro will make an effort to accommodate the relocation request by evaluating whether the requested relocation could pose a risk to the safety of the public, workers, or the system. This assessment will also determine whether the requested relocation could negatively affect system quality, integrity, reliability, or efficiency; and whether any alternatives to a relocation are available. Following these assessments, Toronto Hydro may conclude that a particular relocation is not feasible, and/or that a particular relocation must be executed in a particular manner.

The requesting party must contact and obtain written approval from Toronto Hydro prior to undertaking any work that may result in an encroachment on electrical or non-electrical (i.e. structures) Toronto Hydro-owned assets. This includes, but is not limited to:

a. The alteration of any existing buildings, structures, or apparatus; or

b. The construction of any new buildings, structures, or apparatus.

Toronto Hydro will inform the requesting party of any requirements for the removal of the encroachment. This includes where the relocation work itself would result in an encroachment on either electrical or non-electrical (i.e. structures) working clearances set by Toronto Hydro. Any costs relating to this will be at the requesting party's expense.

Where the relocation request is for Toronto Hydro's assets to be relocated to privately-owned property or where the relocation will require Toronto Hydro to access privately owned property, Toronto Hydro will advise the requesting party of all related relocation requirements ("Relocation Requirements"). Relocation Requirements must be arranged by the requesting party at the requesting party's expense in advance of the relocation. Where the privately-owned property is not owned by the requesting party, the requesting party remains responsible for the Relocation Requirements, including but not limited to those Relocation Requirements that require the cooperation of the land owner (e.g. easements). Relocation Requirements may be in a form prescribed by Toronto Hydro and may include, but are not limited to, easement registrations, title opinions, reference plans and/or written authorizations. Where the requesting party is unable to satisfy the Relocation Requirements, Toronto Hydro is under no obligation to relocate Toronto Hydro-owned assets. Relocation Requirements are at the sole discretion of Toronto Hydro.

Toronto Hydro may require a Design Pre-payment from the requesting party in order to initiate design activities in the preparation of a job-quotation for asset relocation requests. Upon acceptance of the job quotation by the requesting party, the Design Pre-payment will be credited towards the requesting party's financial obligations for the relocation work. If the requesting party does not accept Toronto Hydro's job quotation, or if the requesting party later withdraws its application, then Toronto Hydro may refund the Design Pre-payment less any costs incurred by Toronto Hydro.

If, at Toronto Hydro's sole discretion a coordination agreement is required to allow for the requesting party to perform the relocation work on Toronto Hydro's behalf using a Toronto Hydro qualified contractor, the requesting party shall enter into a coordination agreement with Toronto Hydro to execute the

relocation. The coordination agreement shall be in the form prescribed by Toronto Hydro.

Relocation work undertaken by Toronto Hydro will take place during Toronto Hydro's normal working hours. If a requesting party requests that such work be done outside of Toronto Hydro's normal working hours, the requesting party may be required to pay for any incremental costs incurred by Toronto Hydro as a result thereof.

2.1.6 Easements

In this section, any requirements for easements should be described.

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

The Customer will prepare at its own cost any required reference plan to the satisfaction of Toronto Hydro. Easement documents are prepared by the Toronto Hydro Legal Services Department. Four copies of the deposited reference plan must be supplied to Toronto Hydro prior to the preparation of the easement documents. Details will be provided upon application for service.

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2.1.7 Contracts

This section should outline the types of contracts that are available for each type of Customer, including standard, implied and special contracts. Connection agreements and operating agreements should be listed and referenced as appendices to the Conditions of Service, if applicable.

2.1.7.1 Contract for New or Modified Electricity Service

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

- a completed and signed contract for service in a form acceptable to Toronto Hydro;
- payment to Toronto Hydro of any applicable connection fee;
- an inspection and approval by the Electrical Safety Authority of the electrical equipment for the new service; and
- a Connection Agreement as requested or required pursuant to *Section 2.1.7.4*.

2.1.7.2 Implied Contract

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

The acceptance of supply of electricity or related services from Toronto Hydro constitutes a binding contract with Toronto Hydro, which includes these Conditions of Service and all terms thereunder. The person so accepting the supply of electricity or related services shall be liable for payment for same, and such contract shall be binding upon such person's heirs, administrators, executors, successors or assigns.

2.1.7.3 Special Contracts

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

- Construction sites
- Mobile facilities
- Non-permanent structures
- Special occasions, etc.
- Embedded DER facilities

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2.1.7.4 Connection Agreements

Toronto Hydro may require a Customer to enter into a Connection Agreement in a form acceptable to Toronto Hydro. Until such time as the Customer executes such a Connection Agreement with Toronto Hydro, the Customer shall be deemed to have accepted and agreed to be bound by all of the terms in the Connection Agreement attached to this as Schedule A in Section 6.

A Generator, and a Wholesale Market Participant shall enter into a Connection Agreement as per *Section 6, Reference #3 – "Toronto Hydro Distributed Energy Resource Requirements"*.

An embedded distributor shall enter into a Connection Agreement in a form acceptable to Toronto Hydro. Until such time as the embedded distributor executes such a Connection Agreement with Toronto Hydro, 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.

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

If there is a conflict between a Connection Agreement with a Customer, generator, wholesale market participant or embedded distributor and this Conditions of Service, the Connection Agreement shall govern.

2.1.7.5 Operating Agreements

Class 3, 4 and 5 Customers may be required to enter into a Toronto Hydro Operating Agreement, to clarify the responsibilities of each party pertaining to the work co-ordination, work protection and operating control of the electrical system(s) connected.

2.1.7.6 Payment by Building Owner

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

A Building owner wishing to terminate the supply of electricity to its Building must notify Toronto Hydro in writing. Until Toronto Hydro 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 Toronto Hydro for the supply of electricity to such Building. Toronto Hydro may refuse to terminate the supply of electricity to an owner's Building when there are occupant(s) in the Building (i.e. during certain periods of the winter).

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, Toronto Hydro 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 Toronto Hydro 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, Toronto Hydro may disconnect the service without notice. Toronto Hydro will not be responsible for any liabilities or damages, which may occur as a result of the service being disconnected.

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Where a non-residential property has been vacated by an occupant of the property, and Toronto Hydro 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, Toronto Hydro will bill the owner for the electricity supply to the property until such time as Toronto Hydro is notified by the owner or a new occupant that the occupant should be billed for the electricity supply.

2.1.7.7 Opening and Closing of Accounts

A Customer who wishes to open or close an account shall notify Toronto Hydro's Contact Centre (i) Toronto Hydro's website, (ii) by phone, (iii) by written request via email, or (iv) by such other means acceptable to Toronto Hydro.

Following the closure of an account, the Customer remains responsible for payment to Toronto Hydro for the supply of electricity to the property up to the date the account is closed with Toronto Hydro.

Closure of an account and disconnection of electrical service are separate requests. Closure of an account does not automatically create a request for a disconnection of electrical service, which is subject to the separate procedure set out in Section 2.2. In the same, a request to disconnect electrical service does not automatically result in a closure of an account.

When opening an account, to avoid supply disruptions and ensure accurate billing, Customer should contact Toronto Hydro as soon as possible to establish the account setup process.

2.1.8 Feeder Capacity Optimization

Toronto Hydro will provide service to the Customer based upon the Estimated Incremental Peak Demand indicated in the Offer to Connect that has been signed by the Customer.

Toronto Hydro reserves the right to examine the Customer's peak demand with a view to optimizing its feeder capacity. If the actual peak demand is lower than the Estimated Incremental Peak Demand indicated in the Offer to Connect, then Toronto Hydro will adjust downwards its internal peak demand forecast and may re-assign any unused capacity if it determines this is appropriate to meet other demand needs.

The Customer shall obtain in writing the consent of Toronto Hydro prior to effecting any substantial increase in its peak demand, regardless of the Estimated Incremental Peak Demand set forth in the Offer to Connect, or through past demand history.

2.1.9 Bypass Compensation

Toronto Hydro shall require bypass compensation from a Customer, with a non-coincident peak demand that meets or exceeds 5 MW, if:

a. the Customer disconnects its load facility from Toronto Hydro's distribution system and connects that facility to a DER facility (excluding embedded renewable DER) or to another load facility that is not owned by Toronto Hydro such that Toronto Hydro will no longer receive rate revenues in relation to that disconnected facility; or

b. the Customer, while retaining its connection to Toronto Hydro's distribution system, also connects its load facility to a DER facility (excluding embedded renewable DER) or to another load facility that is not owned by Toronto Hydro such that the Customer reduces its load served directly by Toronto Hydro's distribution system, and Toronto Hydro's rate revenues in relation to that facility

will be reduced.

Toronto Hydro shall calculate bypass compensation using the methodology set out in the Distribution System Code.

2.1.10 Capacity Allocation Model

Customers interested in the Capacity Allocation Model shall notify Toronto Hydro of their interest at their earliest convenience. Toronto Hydro will review each individual request in accordance with the methodology and requirements set out in Appendix I of the Distribution System Code and may require additional information as reasonably necessary. Customers are encouraged to engage and coordinate with other prospective Customers within the relevant geographic area where a Capacity Allocation Model is being contemplated.

2.1.11 Connection and Revenue Horizons

Toronto Hydro will work with the Customer to determine the appropriate Customer Connection Horizon and Customer Revenue Horizon in accordance with Appendix B of the Distribution System Code. Customers are responsible for providing all information and documentation required for Toronto Hydro to determine the appropriate horizon. Customers should refer to Appendix B of the Distribution System Code for specific requirements and eligibility criteria.

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2.2 Disconnection

In this section, the Distributor should specify under what circumstances it has the right or obligation to disconnect a Customer. This section also should outline the business processes used by the distributor, including notification and timing provisions.

Toronto Hydro reserves the right to disconnect service for reasons not limited to:

- Contravention of the laws of Canada or the Province of Ontario, including Ontario's Electrical Safety Code;
- A material adverse effect on the reliability and safety of Toronto Hydro's distribution system;
- Imposition of an unsafe worker situation beyond normal risks inherent in the operation of Toronto Hydro's distribution system;
- A material decrease in the efficiency of Toronto Hydro's distribution system;
- A materially adverse effect on the quality of distribution services received by an existing connection;
- Inability of Toronto Hydro to perform planned inspections and maintenance;
- Failure of the Consumer or Customer to comply with a directive of Toronto Hydro that Toronto Hydro makes for purposes of meeting its licence obligations;
- Overdue amounts payable to Toronto Hydro including the non-payment of a security deposit;
- Electrical disturbance propagation caused by Customer equipment that is not corrected in a timely fashion;
- Failure to open a new account when moving in and/or using electricity without establishment of a new account; or
- Any other conditions identified in these Conditions of Service.

Toronto Hydro may disconnect the supply of electricity without notice in accordance with the following conditions, and as stated in *Sections 2.1.7.6* and *2.2.2* in these Conditions of Service:

- pursuant to a court order;
- for emergency or safety reasons, including where the failure to open a new account is related to an unsafe connection or configuration;
- for system reliability reasons;
- a Customer intentionally avoids bill payments by applying or re-applying for a new account under a different account-holder name, or otherwise acts fraudulently;
- a Customer who has been disconnected has self-reconnected; or
- pursuant to an order of the Electrical Safety Authority.

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A Customer intending to demolish any buildings that house Toronto Hydro's distribution equipment shall notify Toronto Hydro at least four (4) months in advance of demolition. The Customer shall pay Toronto Hydro for the costs of removing all electrical equipment owned by Toronto Hydro that is located on private property. Provided the Customer has made all necessary arrangements, including payment of any outstanding arrears, Toronto Hydro shall remove all its equipment by the date agreed to with the Customer.

2.2.1 Disconnection and Reconnection – Process and Charges

Bills are payable in full by the due date. If the bill is still unpaid after the due date, an account overdue notice will be issued. If the bill remains unpaid following a minimum of seven calendar days after the issuance of the account overdue notice, a disconnection notice will be issued. Disconnection notices will provide the earliest and latest dates of disconnection in writing and if issued by mail shall be deemed to be received on the fifth calendar day after the date on which the notice was printed. At least 48 hours prior to disconnection, Toronto Hydro will make reasonable efforts to contact a residential Customer, by telephone to provide relevant information about the disconnection, payment options and any available assistance programs in accordance with the Distribution System Code. Fourteen calendar days after a disconnection notice has been received by the Customer, the service may be disconnected and not restored, or a Timed Load Interrupter Device may be installed, until payment arrangements satisfactory to Toronto Hydro have been made. Toronto Hydro may also recover from the Customer applicable reconnection costs and reasonable costs for repairs of Toronto Hydro's physical assets in reconnecting the property. Such discontinuance or restriction of service does not relieve the Customer of the liability for arrears or other applicable charges for the balance of the term of contract, nor shall Toronto Hydro be liable for any damage to the Customer's premises resulting from such discontinuance or restriction of service, other than physical damage to facilities arising directly from entry on the Customer's property.

Notwithstanding the foregoing, Toronto Hydro shall not shut off the supply of electricity to a property for non-payment during such periods as may be prescribed by regulations under the *Electricity Act*, 1998, or to an occupied residential property for non-payment during the Disconnection Ban Period in accordance with the Distribution System Code. Upon discovery that a hazardous condition or disturbance propagation (feedback) exists, Toronto Hydro will notify the Customer to rectify the condition at once. If the Customer fails to make satisfactory arrangements to remedy the condition within a reasonable period after a disconnect notice has been given to the Customer, the service may be disconnected and not restored until satisfactory arrangements to remedy the condition have been made. Toronto Hydro shall not be liable for any damage to the Customer's premises resulting from such discontinuance of service, except for physical damage to facilities arising directly from Toronto Hydro's entry on the Customer's property.

Notwithstanding the above, in the case of a residential Customer that has provided Toronto Hydro with documentation from a physician confirming that disconnection poses a risk of significant adverse effects on the physical health of the Customer or on the physical health of the Customer's spouse, or dependent family member or other person that regularly resides with the Customer, shall not be disconnected for non-payment until 60 days from the date on which the disconnection notice is delivered.

At the request of a residential Customer, Toronto Hydro shall send a copy of any disconnection notice issued to the Customer for non-payment to a third party designated by the Customer for that purpose provided that the request is made no later than the last day of the applicable minimum notice period. As well, residential Customers may at any time prior to disconnection, designate a third party to also receive any future notice of disconnection.

Upon receipt of a connection termination request by the Customer, Toronto Hydro will disconnect and/or remove Toronto Hydro's connection assets at the Customer's cost as outlined in Table 1 in Section 5 of these Conditions of Service.

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When a Customer requests a disconnection and a reconnection of its supply of electricity then the Customer shall pay a fair and reasonable charge based on cost recovery principles or pay the applicable fees in accordance with the charges presented in the Standard Service Charges listing, as available on Toronto Hydro's website (torontohydro.com). Eligible low-income customers (ELIC) are eligible for one (1) free disconnection and reconnection on a rolling 12-month basis.

Prior to working near Toronto Hydro's overhead conductors, Customers shall contact Toronto Hydro to determine if a disconnection of electricity is required. Toronto Hydro will provide a disconnection and reconnection for a fee as outlined above.

Where Toronto Hydro installs a Timed Load Interrupter Device or disconnects a Customer for non-payment, Toronto Hydro will provide to the Customer (i) the Fire Safety Notice of the Office of the Fire Marshal; (ii) any other public safety notices or information bulletins issued by public safety authorities and provided to Toronto Hydro, which provide information to consumers respecting dangers associated with the disconnection of electricity service, and when applicable, (iii) written notice to the Customer explaining the effect of a Timed Load Interrupter Device on service, along with a telephone number for the Customer to obtain further information.

Where a Timed Load Interrupter Device is installed or a service is disconnected by Toronto Hydro for non-payment, Toronto Hydro will remove the Timed Load Interrupter Device or reconnect the service within 2 business days of the outstanding account balance being paid in full or the Customer entering into an arrears payment agreement. A Customer may request the continued use of the Timed Load Interrupter Device during the course of the arrears payment agreement.

2.2.2 Unauthorized Energy Use

Notwithstanding the provisions of *Section 2.1.7.2 (Implied Contract)* and *Section 2.1.7.6 (Payment by Building Owner)*, Toronto Hydro reserves the right to disconnect the supply of electricity to a building or property where the building or property has, or appears to have, been used for unlawful purposes, including energy diversion or theft of power. The supply of electricity to the building or property may not be reconnected for the existing Customer until Toronto Hydro receives full payment from the existing customer of all reasonable costs and losses incurred by Toronto Hydro arising from the unauthorized energy use, including costs of inspections, repair costs, commodity costs, disconnection costs, and reconnection costs. If someone other than the existing customer requests reconnection, Toronto Hydro may recover any reconnection charges approved by the Ontario Energy Board.

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2.3 Conveyance of Electricity

2.3.1 Limitations on the Guaranty of Supply

In this section, the Distributor should specify its limitations on the guaranty of supply. The Distributor also should reference the provisions for "Powers of Entry" described in section 40 of the Electricity Act, 1998.

Toronto Hydro 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 to the Consumer or Customer by reason of any failure in respect thereof.

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

During an emergency, Toronto Hydro may interrupt supply to a Consumer in response to a shortage of supply of electricity, or to effect repairs on its distribution system, or while repairs are being made to Consumer or Customer-owned Equipment. Toronto Hydro shall have rights to access property in accordance with Section 40 of the *Electricity Act, 1998* and any successor acts thereto.

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

2.3.2 Power Quality

This section should outline the guidelines and policies to which the Distributor will endeavor to adhere to in conveying electricity supply, such as service voltage guidelines and outage notification processes. This section also should indicate the process the distributor uses for handling voltage disturbances and power quality testing and remedial action.

This section also should include conditions under which supply of electricity to Customers may be interrupted. Additionally, conditions under which the supply may become unreliable or intermittent should be described.

2.3.2.1 Power Quality Testing

Where a Customer provides evidence or data indicating that a power quality disturbance problem may be originating from Toronto Hydro's distribution system, Toronto Hydro will investigate the issue within a reasonable timeframe in an attempt to identify the underlying cause. Depending on the circumstances, this may include a review of relevant power interruption data, trend analysis, and power quality monitoring. The power quality monitoring will be conducted at the main revenue meter at the Customer's point of connection.

Toronto Hydro will recommend and/or take appropriate mitigation measures upon determination that the cause resulting in the power quality concern:

1. originates from the Toronto Hydro distribution system;

2. is deemed a system delivery issue; and

3. industry standards are not met.

If Toronto Hydro is unable to correct the problem without adversely affecting other Toronto Hydro Consumers, Customers, or the distribution system, then it is not obligated to make the corrections. Toronto Hydro will apply appropriate industry standards and good utility practice as a guideline. If the problem lies on the Customer side of the demarcation point, Toronto Hydro may seek reimbursement from the Customer for the costs incurred in the investigation.

2.3.2.2 Prevention of Distortion on the Distribution System

Customers are responsible for protecting Customer Equipment against voltage fluctuations, voltage drops, frequency variations, and accidental grounding. Specifically, Customers must ensure that the design and installation of their electrical appliances and equipment provide adequate protection against these occurrences.

Customers having a non-linear load shall implement the necessary corrective measures such as installing proper filters and/or improving their grounding connections. The Customer's configuration of their electrical equipment must comply with the latest edition of IEEE Standard 519.

The Customer should be aware that some distribution system events such as, but not limited to capacitor switching may cause problems with highly sensitive equipment, and the Consumer or Customer shall be responsible for mitigating these effects.

2.3.2.2.1 Voltage Distortion

The Customer shall install equipment that is designed such that the voltage harmonic distortion contribution complies with Table 1 – Voltage distortion limits, of the latest edition of IEEE Standard 519. Specifically, the limit on individual harmonic distortion and total harmonic distortion should be maintained as specified in Table 1 of the latest edition of IEEE Standard 519.

2.3.2.2.2 Current Distortion

The Customer shall install equipment that is designed such that the current harmonic distortion limits are not exceeded, and shall remain in compliance with Table 2 – Current distortion limits for systems rated 120 V through 69 kV, of the latest edition of IEEE Standard 519.

2.3.2.3 Obligation to Help in the Investigation

If Toronto Hydro has reason to believe the Customer's equipment is the source causing unacceptable harmonics or voltage level on Toronto Hydro's distribution system, the Customer shall help Toronto Hydro by providing required equipment information, relevant data and necessary access for monitoring the equipment.

The Customer shall assist in the investigation and resolution of power quality problems by:

a. maintaining and providing Toronto Hydro with a detailed log of exact times and dates of poor power quality;

b. ensuring corrective measures such as filters and/or grounding are installed for non-linear loads

connected to the distribution system;

c. assisting Toronto Hydro in determining whether the Customer's equipment may be a source of undesirable system disturbances; and

d. ceasing operation of the equipment deemed to be the cause of system disturbances until satisfactory remedial action has been taken.

If requested, Toronto Hydro can provide a list of vendors that are qualified to perform an independent investigation, and to supply and install corrective equipment at the Customer's facility. All independent investigations or any requirements for corrective equipment shall be at the Customer's sole responsibility and expense.

2.3.2.4 Timely Correction of Deficiencies

If an undesirable system disturbance is being caused by the Customer's equipment, the Customer will be required to cease operation of the equipment until remedial action has been taken by the Customer, at the Customer's expense. If the Customer does not take such action within a reasonable time, Toronto Hydro shall disconnect the supply of electricity to the property, in order to mitigate any adverse effects on other Customers or Consumers.

2.3.2.5 Notification for Interruptions

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

During an emergency, Toronto Hydro may interrupt supply of electricity to a property without notice in response to a shortage of supply of electricity or to effect repairs on Toronto Hydro'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.

2.3.2.6 Notification to Consumers on Life Support

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

With planned interruptions, the same procedure as prescribed in *Section 2.3.2.5* will be observed. For those unplanned power interruptions, Toronto Hydro will endeavor to notify these Consumers who enrolled in the Outage Notification Program but will not be liable in any manner to the Consumers for failure to do so.

2.3.2.7 Emergency Interruptions for Safety

Toronto Hydro will endeavour to notify Consumers 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 Toronto Hydro or the public, the supply of electricity may be interrupted without notice.

2.3.2.8 Emergency Service (Trouble Calls)

Toronto Hydro will exercise reasonable diligence and care to deliver a continuous supply of electricity to the Consumer. However, Toronto Hydro cannot guarantee a supply that is free from interruption.

When power is interrupted, the Consumer should first ensure that failure is not due to blowing of fuses within the installation. If there is a partial power failure, the Consumer should obtain the services of an electrical contractor to carry out necessary repairs. If, on examination, it appears that Toronto Hydro's main source of supply has failed, the Consumer should report these conditions at once to Toronto Hydro's Call Centre by calling 416-542-8000.

Toronto Hydro operates a Call Centre 24 hours a day to provide emergency service to Consumers. Toronto Hydro will initiate restoration efforts as rapidly as practicable.

2.3.2.9 Outage Reporting

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

2.3.3 Electrical Disturbances

This section should outline the guidelines to which the Distributor and the Customer will be expected to adhere to regarding electrical disturbances.

Toronto Hydro shall not be held liable for the failure to maintain supply voltages within standard levels due to Force Majeure as defined in *Section 2.3.5* of these Conditions of Service.

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

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. Toronto Hydro will assist in attempting to resolve any such difficulties at the Customer's expense.

Consumers 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.

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2.3.4 Standard Voltage Offerings

This section should specify the voltages that the distributor may provide to each type of Customer, based on their supply requirements. This section should include both the primary and secondary voltages that are available. Additionally, any physical or geographic constraints on a particular voltage, or conditions under which voltages may not be provided should be detailed in this section.

2.3.4.1 Primary Voltage

The primary voltage to be used will be determined by Toronto Hydro for both Toronto Hydro-Owned and Customer-Owned transformation. Depending on the voltage of the plant that "lies along", the preferred primary voltage will be at 27.6/16 kV grounded wye, three phase, four-wire system. However, in the downtown core of the City of Toronto the primary voltage will be 13.8/8 kV grounded wye, three phase, four wire; or 13.8 kV three phase, three wire, depending on the area.

2.3.4.2 Supply Voltage

Toronto Hydro's standard nominal secondary voltages are as follows:

- 120/240 V, single phase, 3 wire
- 120/208 V, three phase, 4 wire
- 347/600 V, three phase, 4 wire

Standard nominal supply voltage may not be available in all areas. The Customer must contact Toronto Hydro to confirm available supply voltage and capacity. Depending on the system availability in the area, 120/208 V two phase, three wire may be supplied in place of 120/240 V.

Existing Toronto Hydro Customers may be supplied with legacy 240/416 V, three phase, 4 wire. This voltage class is no longer offered to new Customers but is maintained for existing Customers.

The supply voltage governs the supply capacity and offerings for any Customer.

Existing Customers with multiple supply voltages at a property may continue to operate under their existing configuration. However, where a Customer requests a service upgrade, the Customer shall consolidate the property to a single supply voltage (i.e. 120/240 V, 120/208 V, or 347/600 V).

2.3.4.3 Supply Offerings

This section outlines Toronto Hydro's supply offerings to permanent services from the public road allowance and transformer offerings on private property. Refer to Section 2.6 for temporary service requirements.

2.3.4.3.1 General

Toronto Hydro's supply offerings from the public road allowance are based on predefined service sizes. Customers must provide space for a transformer on their private property if the requested service size or demand load exceeds the specified limits detailed later in this section and as described in Tables 2 and 3 of this Conditions of Service. In cases of higher electrical demand, customers are required to install a Customer-owned substation on private property. Each supply option is customized to different customer

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classes and geographic areas, with feasibility and design considerations assessed through site evaluations.

In all cases, the Customer shall provide documentation acceptable to Toronto Hydro to support the estimated demand load and/or electrical use data for the connection. Customers are responsible for ensuring that the Customer-owned service entrance equipment involved in the work can adequately accommodate Toronto Hydro's service termination and applicable metering requirements, and complies with relevant Ontario Electrical Safety Code (OESC) requirements. Toronto Hydro may require, at its sole discretion, that the Customer provide, at its own expense, a detailed load study by a Professional Engineer, or a licensed electrical contractor, licensed or certified within the province of Ontario, in order to determine and/or justify the expected power and energy consumption. Toronto Hydro may request supporting City of Toronto documentation (e.g., building permit) related to the development project, or any supporting documentation (e.g., site plan, single-line diagram, equipment specifications) to review and assess the requested connection. Toronto Hydro will evaluate any request for non-standard connections or the preservation of existing legacy arrangements, but reserves the right to decline. Should the request be approved, additional requirements or agreements may be necessary to facilitate the connection.

Toronto Hydro no longer offers 600V, three-phase, three-wire delta connected secondary to new services or services seeking upgrades. If a customer performs any work on their existing 600V delta connected service entrance equipment requiring an Electrical Safety Authority (ESA) permit, or if repairs necessitate an ESA permit for an existing 600V delta service, unless explicitly communicated otherwise by Toronto Hydro, a 347/600V, three-phase, four-wire, grounded wye connected service will be provided by Toronto Hydro and sized according to the Customer's specified service size or demand load. Such work is generally considered a service upgrade by Toronto Hydro and the Customer is responsible for any modification of their equipment as a result.

Customers are always encouraged to contact Toronto Hydro at the early stages of project planning via a service request available at torontohydro.com/make-a-service-request.

2.3.4.3.2 Residential Customers

This section refers to the supply of electrical energy to Residential Customers within residentially zoned properties of up to six dwelling units as approved by the City of Toronto. Examples include, but are not limited to:

- Detached
- Semi-detached
- Townhouse
- Duplex
- Triplex
- Fourplex

Garden or Laneway Suites are considered as one of the dwelling units approved by the City of Toronto.

Residential Customers are supplied with a 120/240V, single-phase, three-wire service, up to a maximum of 400A, where available and may be subject to additional restrictions. Services up to 200A are supplied overhead or underground based on area availability, whereas services at 400A are supplied underground only. For residential services requiring larger supply than mentioned above and/or for three-phase services, Toronto Hydro will work with the Customer to determine the most suitable method of supply appropriate for the site. Toronto Hydro transformation on private property is typically required to supply these services. Refer to Table 2 for a summary of the above-mentioned offerings. Toronto Hydro will

collaborate with the customer to determine the optimal route for the incoming supply on the private property, ensuring adequate access and workspace for future maintenance of on-site transformation, where applicable.

Refer to *Section 3.1 Residential* for more conditions and requirements related to residential connections.

2.3.4.3.3 General Services (Non-Residential, Mixed-Use and Multi-Residential (> 6 dwelling units) Customers)

This section refers to the supply of electrical energy to General Services which consists of Non-Residential Customers (Commercial/Industrial/Institutional), Mixed-Use, and Multi-Residential Customers with more than six dwelling units. Examples include, but are not limited to:

- Commercial Establishments
- Restaurants
- Schools
- Plazas
- Mixed-Use Buildings
- Office Buildings
- Condominiums
- Apartments
- Industrial Complexes
- Electric Vehicle Charging Stations

General services can be provided with either single-phase or three-phase standard secondary voltages, as detailed in *Section 2.3.4.2 Supply Voltage* of the Conditions of Service document. These voltages are supplied through transformers available on the public road allowance, up to service sizes specified below:

- For 120/240V single-phase, three-wire, services up to 200A are supplied overhead or underground based on area availability, where services at 400A are typically supplied underground subject to system conditions in the vicinity.

- For 120/208V three-phase, four-wire, services up to 200A are supplied overhead or underground based on area availability, where services at 400A are typically supplied underground subject to system conditions in the vicinity.

- For 347/600V three-phase, four-wire services up to 200A are supplied overhead or underground based on area availability.

Where the Customer requested service size or equivalent electric loads exceed the service sizes above, they are required to arrange for Toronto Hydro transformation on their private property to receive the electric supply. The customer assumes responsibility and ownership for the necessary civil and electrical work on their private property to accommodate this transformer and incoming supply. For additional information, refer to *Section 1.7.5 Customer-Owned Equipment, Infrastructure and Property*. Toronto Hydro will collaborate with the customer to determine the optimal route for the incoming supply on the private property, ensuring adequate access and workspace for future maintenance of on-site transformation, where applicable.

Toronto Hydro transformer options available on private property include:

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- Pad-mounted transformation (transformation at ground level)
- Vault transformation (transformation within a building vault or property vault)

Additionally, network transformation at 120/208V or 347/600V may be accessible to select customers in the downtown core (former City of Toronto), depending on factors such as local system capacity and the customer's electrical requirements. Availability of these supply options may vary by location and is subject to review and approval by Toronto Hydro.

It is important to note that transformer sizes vary based on the primary voltage(s) available in the area. Therefore, customers are always encouraged to contact Toronto Hydro at the early stages of project planning via a service request on the Toronto Hydro website (torontohydro.com). During the connection process, Toronto Hydro will confirm the primary voltage available. Information about the maximum available transformer sizes can be found in Table 3 of this Conditions of Service document.

Refer to *Sections 3.2, 3.3, and 3.4* for more detailed information on conditions and requirements that specifically apply to General Service customers by demand rate class.

Additional information related to the supply offerings can be found in Customer Connection Guides, which are available at torontohydro.com/contractors-and-developers/customer-connection-guides.

If the requested demand load from a customer exceeds the capacities of the Toronto Hydro supplied transformers on private property, the customer must provide their own Customer-owned high voltage substation. Toronto Hydro will only supply a primary voltage feed to the customer. For specific requirements, please refer to *Section 6, Reference #4 – "Toronto Hydro Requirements for the Design and Construction of Customer-Owned High Voltage Substations*" for detailed information.

In cases where customers require voltages other than those available at the standard supply voltage, or if demands from a single occupant exceed the indicated capacities, the customer should consult with Toronto Hydro. Toronto Hydro may provide guidance on any special conditions and requirements for obtaining such non-standard services, but it is not obligated to do so.

When a Customer is required to provide Toronto Hydro-owned transformation on private property in accordance with this section, and the Customer is unable to do so or is severely constrained from doing so, the Customer may request Toronto Hydro to provide the transformation facilities from Toronto Hydro's existing distribution system. If requested by the Customer, and if Toronto Hydro determines at its sole discretion that it is able to do so, then Toronto Hydro may provide these transformation facilities. By requesting this option, the Customer agrees to pay Toronto Hydro for providing the transformation facilities as part of the Customer's connection costs, in addition to any associated expansion costs.

For any civil structures housing Toronto Hydro-owned assets on private property, please refer to Section 6, Reference #5a – "Toronto Hydro Requirements for the Design and Construction of Customer-Owned Structures" for details.

2.3.4.4 Number of Connections to Toronto Hydro's Distribution System

Normally Toronto Hydro permits only one supply point per property, subject to the limitations as outlined in *Section 2.3.4 – Standard Voltage Offerings* of these Conditions of Service. However, where having only one supply point is not technically feasible, and where sufficient capacity is readily available to supply the additional supply point(s), Toronto Hydro may, in its sole discretion, connect additional supply point(s) on the same property. Prior to Toronto Hydro's approval, the Customer shall provide evidence, in writing, of ESA's approval and acceptance for the additional supply.

At Toronto Hydro's sole discretion, a second point or multiple points of connection to the main Toronto Hydro distribution system may be offered when:

a. the Customer is fed by the 13.8 kV underground radial system as defined in *Section 1.1.1*;

b. the Customer's peak demand load exceeds the cable limitations Toronto Hydro can offer; or

c. a loop feed or loop arrangement is required.

Where multiple primary connections exist, and unless otherwise agreed by Toronto Hydro, load should be distributed evenly across all active connections. Load must not be transferred from one active connection to another without the permission of Toronto Hydro.

Toronto Hydro will determine the location of any connection points to its main distribution system, and the route through which the primary feeder circuits enter and exit on the land parcel or property. Toronto Hydro will consider the Customer's request for diversity of supply. However, in accordance with good utility practice, Toronto Hydro retains the right to decide in its sole discretion not to allow a second point of connection to the main distribution system.

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2.3.5 Voltage Guidelines

This section should specify what voltages the distributor's Customers can reasonably expect, with reference to latest version of CSA Standard C235.

Toronto Hydro maintains service voltage at the Customer's service connection point within the steady-state voltage range limits shown in the following table:

Nominal Voltage	Steady-state voltage range limits for system <=1000 V at point of connection			
		Extreme Operating Conditions		
		Normal Operating Conditions		
Single Phase				
120/240	106/212	110/220	125/250	127/254
Two Phase 3 Wire				
120/208	110/190	112/194	125/216	127/220
Three Phase 4 Wire				
120/208Y	110/190	112/194	125/216	127/220
240/416Y (*)	220/380	224/388	250/432	254/440
347/600Y	306/530	318/550	360/625	367/635

(*) 240/416Y is no longer a standard voltage offered by Toronto Hydro.

For system voltages greater than 1,000 V and up to 50,000 V, the maximum voltage variation is ± 6% of the nominal voltage. In Emergency conditions, voltages may exceed these thresholds. These voltage guidelines relate to long-term steady-state levels and do not include short-term or transient disturbances. The steady-state voltage range limits, with the exception of the limits for Two Phase 3 Wire 120/208, are based on C.S.A. Standard CSA C235:19.

Where voltages lie outside the indicated limits for Normal Operating Conditions but within the indicated limits for Extreme Operating Conditions as noted above, improvement or corrective action will be taken by Toronto Hydro on a planned or programmed basis, but not necessarily on an emergency basis. Where voltages lie outside the indicated limits for Extreme Operating Conditions, improvement or corrective action may be taken on an emergency basis depending on a number of factors, which include, but are not limited to, the location and nature of load or circuit, the extent to which voltage limits are exceeded, and the duration of time for which the limits have been exceeded.

Toronto Hydro shall practice reasonable diligence in maintaining voltage levels, but is not responsible for variations in voltage related to external factors. External factors include, but are not limited to, those factors that necessitate operating contingencies, and exceptionally high loads and low voltage supply from the transmitter or host distributor. Toronto Hydro 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 events or causes beyond the reasonable control of Toronto Hydro, including, without limitation, severe weather, flood, fire, lightning, other forces of nature, acts of animals, epidemic, quarantine restriction, war, sabotage, act of a public enemy, earthquake, insurrection, riot, civil disturbance, strike, restraint by court order or public authority, or action or non-action by or inability to obtain authorization or approval from any governmental authority, or any combination of these causes ("Force Majeure").

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2.3.6 Emergency Backup Distributed Energy Resource Facilities

Distributors should include the following statements in this section:

- ***Customers with portable or permanently connected emergency generation capability shall comply with all applicable criteria of the Ontario Electrical Safety Code and in particular, shall ensure that Customer emergency generation does not back feed into the Distributor's system.***

- ***Customers with permanently connected emergency generation equipment shall notify their Distributor regarding the presence of such equipment.***

Any other requirements the Distributor imposes on Customers with emergency backup generation facilities should be described in this section.

Emergency backup Distributed Energy Resource (DER) is a DER facility installed by Customers for backup of load when utility power supply is not available. A Customer with portable or permanently connected emergency backup DER shall comply with all applicable criteria of the Ontario Electrical Safety Code and in particular, shall ensure that its Emergency Backup DER Facility does not back feed into the Distributor's system or back feed through the revenue meter.

A Customer with an Emergency Backup DER Facility in Open-Transition mode shall further ensure that its facility does not parallel with, nor adversely affect Toronto Hydro's distribution system.

Customers who consider installing a Closed-Transition switch shall make a connection request by submitting an application through Toronto Hydro's grid connection process and shall submit documentation that satisfies Toronto Hydro's technical requirements. Customers shall obtain written authorization from Toronto Hydro prior to commissioning the switch in Closed-Transition mode. Closed-Transition switches must not operate the generator in parallel with Toronto Hydro's distribution system for longer than 100 milliseconds under any circumstances. Further requirements are specified in *Section 6, Reference #3 – "Toronto Hydro Distributed Energy Resource Requirements"*.

For parallel DER connections, refer to Section 6, Reference #3 – "Toronto Hydro Distributed Energy Resource Requirements".

Customers with a permanently connected Emergency Backup DER Facility operating in parallel shall notify Toronto Hydro regarding the presence of such equipment and shall enter into a connection agreement as required in *Section 6, Reference #3 – "Toronto Hydro Distributed Energy Resource Requirements"*.

For a portable emergency backup DER, residential Customers can install a Canadian Standards Association (CSA) approved meter base plug-in transfer device onto a Toronto Hydro approved 200 A, 4-jaw meter socket that is installed outdoors. All installations must meet Toronto Hydro approval requirements and will only be considered for residential Customers with 120/240 V, single-phase and up to a 200 A service. Customers must initially contact Toronto Hydro to begin the installation process for the meter base plug-in transfer device. Following a Toronto Hydro field visit at the Customer's residence and a system review to determine the feasibility of the installation, the Customer will be advised whether to proceed to make arrangements to have the meter base plug-in transfer device installed by an electrical contractor that is licensed by the Electrical Safety Authority. In addition, during the time of installation or removal of the meter base plug-in transfer device, a service disconnection/reconnection and breaking/resealing of the revenue meter will be required and shall be performed by Toronto Hydro. The Customer will be responsible for the associated costs incurred by Toronto Hydro and the customer may be required to enter into a connection agreement by Toronto Hydro.

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The installation of a meter base plug-in transfer device is not permitted where a Customer location has a DER installation (i.e. Micro Feed-in Tariff, Feed-in Tariff, Net Metering, Load Displacement, and Renewable Energy Standard Offer Program).

2.3.7 Metering

This section should specify the options available to a Customer for metering equipment. The Distributor also should outline the technical requirements for meter installations including location and associated main switch.

Toronto Hydro will supply, install, own, and maintain all meters, instrument transformers, ancillary devices, and secondary wiring that are required for revenue metering.

For further metering conditions and requirements refer to the three reference documents as specified in Section 6:

- Reference #6 “Toronto Hydro Metering Requirements 750 Volts or Less”,
- Reference #7 “Toronto Hydro Metering Requirements for 13.8 kV & 27.6 kV Customer-Owned Substations”, and
- Reference #8 “Toronto Hydro Metering Services and Charges”.

A DER facility on the Toronto Hydro distribution system shall follow the metering requirements and conditions as specified in *Section 6, Reference #3 – “Toronto Hydro Distributed Energy Resource Requirements”*.

2.3.7.1 General

Describe the Distributor’s access to meter installation requirements here.

Toronto Hydro will typically install metering equipment at the Customer supply voltage. The Customer must provide a convenient and safe location, satisfactory to Toronto Hydro, for the installation of meters, wires and ancillary equipment. Customer installations must comply with Toronto Hydro’s instructions and specifications, the Ontario Building Code and the Ontario Electrical Safety Code (OESC), and are subject to Toronto Hydro’s inspection and acceptance.

Meters for new or upgraded residential services will be mounted outdoors on an approved meter socket as specified in *Section 6, Reference #6 – “Toronto Hydro Metering Requirements 750 Volts or Less”* Table I.

No person, except those authorized by Toronto Hydro, may remove, connect or otherwise interfere with meters, wires or ancillary equipment owned by Toronto Hydro.

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

Toronto Hydro may operate Customer-owned switches when inspecting, installing and/or removing Toronto Hydro’s Facilities and Equipment or for the purpose of any other distribution activities. Moreover, Toronto Hydro shall not be liable to the Customer for any damages or losses sustained including

damages or losses resulting from the Customer not adequately maintaining, repairing, or replacing Customer-owned Equipment.

The location designated by the Customer for Toronto Hydro metering, whether indoors or outdoors, must ensure direct access for Toronto Hydro staff and provide a safe and efficient working environment. This includes, but is not limited to:

- **Minimum working space:** A clear space of at least 1.0 metre with secure footing must be maintained around the meter and associated equipment, as specified by the OESC.
    - Note: In cases where maintaining the minimum working space is not feasible due to existing conditions, a reduced space may be acceptable. However, such cases will undergo review by Toronto Hydro as part of the service request process and decisions will be at Toronto Hydro's sole discretion.
- **Indoor installations:** Indoor meter installations require a minimum ceiling height of 2.2 metres and adequate lighting to facilitate safe and effective operation.
- **Unobstructed working space:** All working spaces must be kept free from or protected against vegetation, moving machinery, vibration, dust, moisture, or fumes to ensure uninterrupted access and operation.
- **Outdoor installation guidelines:** Outdoor meter sockets and any associated equipment as required shall be positioned at least 1.0 metre away from the discharge of any combustible gas relief device or vent. In cases where this clearance cannot be achieved, the Customer must retain a gas company to install a certified overpressure cut-off type regulator, which requires only 0.3 metres of clearance from the meter socket.

The location of the service entrance point and meter base shall be established through consultation with Toronto Hydro for new, upgraded, changed, modified, or relocated electrical services. The Customer must keep the route to the meter clear. Toronto Hydro is not responsible for damage to vegetation on the access path to the metering equipment. If meters are deemed to be in a hazardous or inaccessible location by Toronto Hydro, the Customer may be required to relocate the meter or provide a meter cabinet or protective housing.

Any compartments, cabinets, boxes, sockets, or other workspace provided for the installation of Toronto Hydro's metering equipment shall be for the exclusive use of Toronto Hydro. No equipment, other than that provided and installed by Toronto Hydro, may be installed in any part of the Toronto Hydro metering workspace.

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2.3.7.1.1 Metering Requirements for Multi-Unit Complexes and Condominiums

Developers of new and existing multi-unit complexes i.e. residential complexes, condominiums, commercial and non-profit housing co-operative buildings (collectively, “Multi-unit Complexes” or “MUCs”), boards of directors of condominiums, residential or commercial landlords, or other authorized persons in charge of any other applicable class of unit under Ontario Regulation 389/10, may choose to have Toronto Hydro install unit smart metering, or to have Toronto Hydro install a bulk interval meter for the purpose of enabling unit sub-metering by a licensed unit sub-meter provider.

Installation of Unit Smart Metering by Toronto Hydro

Upon the request of a MUC developer, a condominium board of directors, residential or commercial landlords or other authorized persons in charge of the building, Toronto Hydro will install unit smart 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 that case, each separate residential and commercial unit, as well as common areas, will become direct individual customers of Toronto Hydro, with the common area accounts held by the developer, condominium corporation, landlord or other authorized person as the case may be.

The MUC developer, condominium board of directors, landlord or authorized person may choose an Alternative Bid for the installation of unit smart metering. In that case, the MUC developer, landlord, condominium board of directors or authorized person is required to:

i. select and hire a qualified contractor;

ii. ensure all work that is eligible for alternative bid is done in accordance with Toronto Hydro’s technical standards and specifications: and

iii. assume full responsibility for the installation and warranty all aspects for a period of 2 years from date of commissioning.

Where the MUC developer, condominium board of directors, landlord or authorized person transfers the metering facilities installed under the alternative bid option to Toronto Hydro, and provided Toronto Hydro has inspected and approved the facilities installed, Toronto Hydro shall pay the condominium corporation, landlord or developer a transfer price. The transfer price shall be the lower of the cost to the MUC developer, condominium board of directors, landlord or other authorized person to install the metering facilities or Toronto Hydro’s fully allocated cost to install the metering facilities.

Common Area Metering

Where units in a MUC are to be unit smart metered, the responsible party (MUC developer, condominium board of directors, landlord or other authorized persons) shall enter into a contract with Toronto Hydro for the supply of electricity for all common or shared services. Common or shared services typically include lighting of all common areas shared by the tenants, or unit owners, and common services such as heating, air conditioning, water heating, elevators, and common laundry facilities. In such cases, consumption for all common areas will be separately metered.

Installation of Bulk Interval Metering by Toronto Hydro

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Where bulk interval metering is supplied by Toronto Hydro to an exempt distributor for the purpose of enabling unit sub-metering, the responsible party (i.e., the developer, condominium corporation, landlord, or other authorized persons, but not the unit sub-meter provider) shall enter into a contract with Toronto Hydro for the supply of electricity to the building.

Electric Vehicle Metering Program in Multi-Unit Residential Buildings

An authorized person may request the installation of a new meter for Electric Vehicle Supply Equipment in a multi-unit residential building. Authorized persons may include the building developer, a condominium board of directors, or other person in charge of the building. The new meter can be consolidated with an existing account, or the authorized person may choose to open a separate account for the electric vehicle charger.

2.3.7.1.2 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 no higher than 1.83 m and that the bottom of the switch is no lower than 1.0 m from the finished floor and shall permit the sealing and padlocking of:

a. the handle in the "open" position; and

b. the cover or door in the closed position.

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

The Customer is required to supply and install a Canadian Standards Association (CSA) approved meter socket for the use of Toronto Hydro’s self-contained socket meters for the main switch ratings and supply voltages listed in Table 7 in Section 5 of these Conditions of Service.

The Customer is required to supply and install a meter cabinet to contain Toronto Hydro’s metering equipment for the main switch ratings and supply voltages listed in Table 8 in Section 5 of these Conditions of Service.

Meter centres installed for individual metering applications must meet the requirements specified in Table 10 in Section 5 of these Conditions of Service.

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

2.3.7.1.3 Service Mains Limitations

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

2.3.7.1.4 Special Enclosures

Specially constructed meter entrance enclosures will be permitted for outdoor use upon Toronto Hydro’s approval of a written application for use.

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2.3.7.1.5 Meter Cables

The Customer shall provide meter loops having a length of 610 mm in addition to the length between line and load entry points.

Line and load entry points shall be approved by Toronto Hydro prior to installation. Where more than two conductors per phase are used, the connectors shall be provided by the Customer (see Table 8 in Section 5 of these Conditions of Service for required cabinets). Mineral insulated, solid or hard drawn wire conductors are not acceptable for meter loops.

Any variation from the above must first be checked and approved by Toronto Hydro prior to installation.

2.3.7.1.6 Barriers

Barriers are required in each section of switchgear or service entrance equipment between metered and unmetered conductors and/or between sections reserved for Toronto Hydro use and sections for Customer use.

2.3.7.1.7 Doors

Side-hinged doors shall be installed over all live electrical equipment where Toronto Hydro personnel may be required to work (i.e. line splitters, unmetered sections of switchgear, breakers, switches, metering compartments, meter cabinets and enclosures). These hinged doors shall have provision for sealing and padlocking. Where bolts are used, they 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°.

2.3.7.1.8 Auxiliary Connections

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

2.3.7.1.9 Working Space

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

2.3.7.2 Current Transformer Boxes

Where current transformers are required, the Distributor should outline the technical requirements to be followed for such installations.

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 9 in Section 5 of to these Conditions of Service. A separate meter cabinet must be supplied and installed by the Customer, located to the satisfaction of Toronto Hydro and as close as possible to the instrument transformer compartment.

The cabinet and the compartment will be connected by an empty 1½ inch conduit, the length of which shall not exceed 30 m, and which shall include a maximum of three 90° bends. The conduit will be provided for the exclusive use of Toronto Hydro. No fittings 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 Customer shall install a strong nylon or polyrope pull line in the conduit, with an

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excess of 1500 mm loop left at each end.

The final layout and arrangements of components must be approved by Toronto Hydro prior to fabrication of equipment.

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

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2.3.7.3 Interval Metering

Where interval metering is required or requested, the Distributor should outline the technical requirements to be followed for such installations. Included with the technical specifications should be the conditions under which interval metering will be supplied.

Interval meters will be installed for all new or upgraded services where the peak demand is forecast 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 and install a 32 mm (1 ¼ in) conduit from the meter cabinet to an outdoor location for the installation of an antenna to be mounted 1.8 m (6 ft) above ground. The conduit installation shall not be more than 30.5 m (100 ft) in length.

If Toronto Hydro determines in its sole discretion that a cellular installation is not feasible, Toronto Hydro may require the Customer to install a 13 mm (1/2 in) conduit from the meter cabinet to the telephone room. Toronto Hydro will arrange for the installation of a telephone line, terminated in the meter cabinet for the exclusive use of Toronto Hydro to retrieve interval meter data. The Customer will be responsible for the installation of the telephone infrastructure (conduit, cable, and jack). The phone line will be Toronto Hydro-Owned, direct dial, voice quality, active 24 hours per day, and energized prior to meter installation.

2.3.7.4 Meter Reading

This section should outline the requirements for access to meters for the purposes of obtaining readings and the process to be used if a reading is not obtained.

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

2.3.7.5 Final Meter Reading

This section should outline any requirements associated with obtaining a final meter reading on termination of a contract for service.

When a service is no longer required, the Customer or Consumer shall provide sufficient notice of the date the service is to be discontinued so that Toronto Hydro can obtain a final meter reading as close as possible to the final reading date. The Customer or Consumer shall provide access to Toronto Hydro or its agents for this purpose. If a final meter reading is not obtained, the Consumer shall pay a sum based on an estimated demand and/or energy for electricity used since the last meter reading, as determined by Toronto Hydro.

2.3.7.6 Faulty Registration of Meters

In this section, the Distributor should outline the process for dealing with metering errors

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

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

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

2.3.7.7 Meter Dispute Testing

This section should outline the process by which a Customer can dispute a meter measurement or read and seek redress.

Metering inaccuracy is an extremely rare occurrence. Most billing inquiries can be resolved between the Customer or Consumer and Toronto Hydro without resorting to the meter dispute test.

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

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2.4 Tariffs and Charges

2.4.1 Service Connection

The Distributor should outline the rates that have been established for providing the Customer with a connection to the electrical distribution system and all services provided by the Distributor as per the rules and regulations laid out by all applicable codes.

Charges for distribution services are made as set out in the Schedule of Rates available from Toronto Hydro. Notice of Rate revisions will be published on Toronto Hydro's website (torontohydro.com). Toronto Hydro may also issue a public notice via social media. Information about changes will also be issued to all Consumers with the first billing issued at revised rates.

2.4.1.1 Customers Switching to Retailer

There are no physical service connection differences between Standard Service Supply (SSS) customers and third-party retailers' customers. The supply of electricity to both types of customers is delivered through Toronto Hydro's distribution system with the same distribution requirements. Therefore, all service connection requirements applicable to the SSS customers are applicable to third party retailers' customers.

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2.4.2 Energy Supply

This section should outline the process the Distributor has established for the following:

- ***Provision of Standard Service Supply to the Customer, per the rules and regulations laid out in the Retail Settlement Code and the Standard Service Supply Code***
- ***Provision of Supply to the Customer through a Retailer, per the rules and regulations laid out in the Retail Settlement Code***
- ***Wheeling of energy and all associated tariffs***

2.4.2.1 Standard Service Supply (SSS)

All Toronto Hydro Consumers are Standard Service Supply (SSS) Consumers until Toronto Hydro is informed by the Consumer or the Consumer's authorized retailers of their switch to a competitive electricity supplier. The Service Transfer Request (STR) must be made by the Consumer or the Consumer's authorized retailer.

2.4.2.2 Retailer Supply

Consumers transferring from Standard Service Supply (SSS) to a retailer shall comply with the Service Transfer Request (STR) requirements as outlined in Sections 10.5 through 10.5.6 of the Retail Settlement Code. All requests shall be submitted as electronic file and transmitted through EBT Express. Service Transfer Request (STR) shall contain information as set out in Section 10.3 of the Retail Settlement Code.

If the information is incomplete, Toronto Hydro shall notify the retailer or Consumer about the specific deficiencies and await a reply before proceeding to process the transfer.

2.4.2.3 Wheeling of Energy

All Customers or Consumers considering delivery of electricity through the Toronto Hydro distribution system are required to contact Toronto Hydro for technical requirements and applicable tariffs.

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2.4.3 Deposits

This section should outline any deposit and prudential requirements the Distributor has established for providing a Customer with Distribution Services, supply through Standard Service Supply or through a Retailer, per the rules and regulations laid out in the Distribution System Code.

Whenever required by Toronto Hydro, including, but not limited to, as a condition of supplying or continuing to supply distribution services, Customers shall provide and maintain a security deposit ("deposit") in an amount that Toronto Hydro deems necessary and reasonable. Toronto Hydro will not discriminate among Customers with similar risk profiles or risk-related factors except where expressly permitted under the Distribution System Code.

Except for Customers who meet the security deposit waiver conditions described below, all Customers are required to provide an account security deposit to Toronto Hydro, which, at the Customer's election, must be in the form of:

(i) cash, cheque or Money Order, or, if approved by Toronto Hydro, Visa or Mastercard or

(ii) for non-residential Customers an automatically renewing irrevocable commercial letter of credit from a bank defined in the *Bank Act*.

Toronto Hydro will not accept third party guarantees.

The amount of the account security deposit will be based on the billing cycle factor times the estimated average bill, which shall be based on the Customer's average monthly load during the most recent 12 consecutive months within the past two years. The billing factor is 2.5 for monthly billed Customers.

Where the Customer does not have relevant usage information, or there is no established historical electricity consumption information for the service premises, the deposit will be based on the average consumption of that Customer's rate class or a reasonable estimate, as determined by Toronto Hydro.

Where the Customer, other than a residential electricity Customer, has more than one disconnection notice in a relevant 12-month period, the highest bill in the period will be used for the calculation of the deposit.

If requested by the Customer, they will be permitted to pay the security deposit in equal installments over a maximum of 4 months, or over a period of 6 months for residential Customers (including where a new security deposit is required due to Toronto Hydro having to apply the existing security deposit against amounts owing).

The security deposit may be waived based on the following criteria:

a. The Customer has a good payment history based on the most recent customer history with some portion in the most recent 24 months, during which time the Customer:

- had no more than one (1) notice of disconnection; and
- had no more than one (1) payment returned for insufficient funds ("NSF"); and
- had no disconnect/collection trip; and
- had no security deposit applied for amounts owing.

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

- Residential - 1 year
- Non-residential <50 kW demand rate class – 3 years
- All other classes - 7 years

or

b. 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 this document.

or

c. The Customer (other than those in a > 5,000 kW demand rate class) provides a satisfactory credit check at its expense. The acceptable Equifax Credit scores are as follows:

- Residential - Consumer Score of 700 or greater
- Business - Commercial Score of 9 or lower

or

d. Residential account deposits may be waived where the Customer enrolls in the Toronto Hydro's pre-authorized payment plan or in an equal monthly payment plan, and supplies at least two pieces of identification information, provided that a deposit may otherwise be required as per section 2.4.9B of the Distribution System Code.

or

e. The Customer is a bulk-metered residential condominium as defined in the *Condominium Act*, 1998 and has provided Toronto Hydro with a signed declaration attesting to their legal status as a residential condominium corporation.

or

f. The residential Customer has been qualified as an "eligible low-income customer" and requests a waiver.

The credit history of a separate legal entity or a company that carries on business under a different business name cannot be used to provide a non-residential Customer with a security deposit waiver irrespective of common ownership or affiliation. Toronto Hydro reserves the right to deny a security deposit waiver request at its sole discretion.

The security deposit may be reduced for non-residential Customers with 50 kW or greater demand, based on the following criteria:

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:

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

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

In the above case, the commodity price used to calculate the deposit shall be the same as the price used by the IESO for the purpose of determining maximum net exposures and prudential support obligations for market participants other than distributors, low-volume Consumers and designated Consumers.

Interest will accrue monthly on security deposits 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 Toronto Hydro 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.

Toronto Hydro will undertake an annual review of all security deposit requirements for each Customer based on the above ***Security Deposit*** requirements and whether the Customer meets the ***Good Payment History*** criteria described in this document.

- Where it is determined that all or part of the deposit is no longer required, that amount, plus accumulated interest, will be credited to the account or reflected in reduction of the deposit amount

- 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 they shall be permitted to pay the adjusted amount in equal installments paid over a period of at least six months. As with all outstanding balances payment arrangements that are satisfactory to Toronto Hydro may be made. In the case that a Customer that does not meet the minimum time period, but has a good payment history over the most recent 24 months period, Toronto Hydro may waive the requirement to impose a new or increased deposit amount

- For Customers in the > 5,000 kW demand rate class, where the Customer is in a position to have some or all of the deposit refunded, only 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

Except where a Customer changes the billing option as described below, within six weeks of the closure of a Customer's account with Toronto Hydro, the balance of the security deposit plus accumulated interest will be returned to the Customer, subject to Toronto Hydro's right to use the security deposit to

set off other amounts owing by the Customer to Toronto Hydro.

Where a Customer changes from Standard Supply Service to a competitive retailer that uses retailer-consolidated billing, or a Customer enrolled with a retailer changes billing options from distributor-consolidated billing to retailer-consolidated billing or split billing, Toronto Hydro will apply any security deposit on the Customer's account to the final bill prior to the change in service. Toronto Hydro will promptly return any remaining amount of the security deposit to the customer and will not pay any portion of a customer's security deposit to a competitive retailer. If there is a change made from distributor-consolidated billing to split billing, Toronto Hydro may retain a portion of the security deposit to reflect the non-payment risk associated with the new billing option.

No earlier than 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

This section should outline the billing methods and billing cycles the Distributor has established to provide a Customer with Distribution Services, supply through Standard Service Supply or through a Retailer, per the rules and regulations laid out in the Retail Settlement Code.

Toronto Hydro renders bills to its Customers on a monthly basis. Bills for the use of electrical energy may be based on either a metered or an unmetered connection.

Customers that are metered will be billed based on an actual meter reading. During periods when an actual meter reading is unavailable, Customers will be billed in accordance with the validating, estimating, and editing (VEE) process as described in Section 5.3 of the DSC.

Totalization of individually metered accounts is not allowed. However, a building that is Toronto Hydro unit smart metered may have an option of totalized billing for the common element meters in that building only.

The Customer may dispute charges shown on the Customer's bill or other matters by contacting and advising Toronto Hydro of the reason for the dispute. Toronto Hydro will promptly investigate all disputes and advise the Customer of the results.

2.4.4.1 Rate Reclassification

At least once every calendar year, Toronto Hydro will conduct a review of a non-residential customer's rate classification to determine whether the account should be assigned to a different rate class. Where a change is required, Toronto Hydro will notify the affected customer in writing no less than one billing cycle in advance of the reclassification taking effect. Subject to the customer requested review process outlined below, a customer's rate class will not be changed more than once in any given calendar year.

Toronto Hydro will review a non-residential customer's rate classification upon request. If the customer's average monthly peak demand falls outside the upper or lower limits applicable to the customer's current rate class for a period of five consecutive months, Toronto Hydro will update the customer's rate class accordingly. Subject to this process, customer requests for a rate classification review will not be processed more than once per calendar year.

All reclassifications will take effect going forward from the time the new rate class is determine and will be conducted in accordance with section 2.5 of the Distribution System Code.

2.4.5 Payments and Overdue Account Interest Charges

This section should outline payment methods that the Distributor has established to provide the Customer with Distribution Services, supply through Standard Service Supply or through a Retailer as per the rules and regulations laid out in the Retail Settlements Code.

Toronto Hydro accepts payments in the form of a cheque (either mailed or delivered to a Toronto Hydro drop box), and through most financial institutions (either directly or through Pre-Authorized Debits).

Equal monthly payment plans are available to residential Customers or to general service < 50 kW Customers receiving standard supply as per Section 2.6.2 of the Standard Supply Service Code. Toronto Hydro may refuse to provide an equal monthly payment plan option to a general service < 50 kW Customer where:

a. the Customer has fewer than 12 months' billing history;

b. the Customer is in arrears on payment to Toronto Hydro;

c. the Customer's participation in the equal monthly payment plan in the past 12 months was cancelled due to non-payment; or

d. the Customer has a consumption pattern that is not sufficiently predictable to be estimated on an annual basis with any reasonable degree of accuracy.

Bills are payable in full by the due date, 24 days after the statement date. If the resulting due date falls on a weekend or statutory holiday recognized by Toronto Hydro, the due date is the next business day. After the due date, interest is charged on any amount past due at a daily rate of 0.04896% compounded at time of billing from the due date until receipt of such amount and all accrued interest (effective interest rate of 19.56% per annum).

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

Outstanding bills are subject to the collection process and may ultimately lead to the service being discontinued. Service will be restored once satisfactory payment and/or payment arrangements have been made (refer to *Section 2.2.1*).

2.4.6 Credit Refunds to Customer

When the Customer closes an account for any reason, it is the Customer's responsibility to immediately notify Toronto Hydro of the termination of the account and to provide updated contact information including mailing address.

If a credit amount is left on the Customer's account after Toronto Hydro issues a final bill, Toronto Hydro will mail a refund cheque to the Customer at the last known address on file.

2.5 Customer Information

The Conditions of Service shall describe the provision of information with respect to chapter 11 of the Retail Settlement Code. This specifies the rights of Consumers and retailers to access current and historical usage information and related data and the obligations of distributors in providing

access to such information. The Conditions of Service should include reference to include information subject to privacy regulations and load profile information.

Any processes for handling requests for information outside of the requirements of the Retail Settlement Code should be described in this section.

Toronto Hydro's Privacy Policy Statement describes how and why Toronto Hydro collects, uses, discloses, handles, and protects the personal information of its Customers, Consumers or members of the public. It also addresses the reasons why personal information is collected, used, or disclosed, how the information is safeguarded, and outlines individuals' rights with respect to this information. Toronto Hydro's Privacy Policy Statement can be found on its website.

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

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

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

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

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

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2.6 Temporary Services

A temporary service is a planned service connection requiring the supply of electricity typically for a period of less than 12 months, after which the temporary service will be disconnected and removed. A temporary service is normally a metered service and is generally provided for construction purposes or special events.

Temporary services can be supplied overhead or underground. The Customer shall contact and provide specified information to Toronto Hydro in the early planning stages, so that Toronto Hydro can determine at its sole discretion the type of temporary service installation and the point of supply. The Customer is responsible for supplying, installing, and removing the required Customer's temporary facilities on their property in accordance with Toronto Hydro requirements, and the Ontario Electrical Safety Code and Bulletins. There may be situations where the Customer is required to provide temporary transformation facilities on Customer's private property.

The Customer is responsible for Toronto Hydro's costs associated with the installation and removal of equipment required for the temporary service. The Customer shall pay in accordance with the Standard Service Charges specified on Toronto Hydro's website (torontohydro.com). Where Standard Service Charges do not apply, the Customer shall pay a fair and reasonable charge based on cost recovery principles. In all cases, Toronto Hydro shall determine, at its sole discretion, the amount that the Customer shall pay.

Subject to the requirements of Toronto Hydro, supply will be connected after receipt of a "Connection Authorization" from the Electrical Safety Authority (ESA), an account opened and payment for connection costs is received from the Customer.

A temporary service is generally provided for a period of no more than twelve (12) months, and the equipment for such temporary service may be re-inspected by the ESA at the end of a six (6) month period. The Customer shall inform Toronto Hydro if the temporary service extends beyond twelve (12) months.

Where a temporary service is to be provided, the Customer shall provide and maintain a designated area for posting Toronto Hydro information. The Customer is responsible for ensuring that the posted information is not tampered with or obstructed in any way. The entire site relating to where the temporary service is to be installed, which includes the route to and from all work areas, must be maintained at all times in accordance with all laws and regulations and in a safe condition which allows Toronto Hydro employees and representatives to carry out all work in a safe environment. The Customer shall be responsible for all damages and related costs sustained by any Toronto Hydro employee or representative in carrying out such work.

In addition to ESA requirements, where Toronto Hydro's point of supply terminates at a pole or post the Customer shall leave 760 mm of cable at the masthead for connection purposes, and for:

a. a temporary secondary service connection up to 200 A at 120/240 V, 120/208 V or 347/600V, the supply connection shall terminate at a temporary pole that is installed by the Customer on Customer's private property. The supply connection can be fed either from the overhead or underground distribution system. The Customer is responsible for installing all the necessary apparatus (e.g. conduit, meter socket, service equipment in weatherproof enclosure) on the pole.

b. overhead transformation feeding a temporary secondary service connection requiring electricity for a 400 A or 600 A service at 347/600 V, Toronto Hydro shall install temporary service conductors directly from the transformer secondary terminals and terminate at a temporary pole

that is installed by the Customer on Customer's private property. The Customer is responsible for installing all the necessary components (e.g. clevis, masthead, conduit) on the pole. The Customer shall extend the temporary service conductors from the pole to a housing where the main service entrance equipment and meter socket are to be installed.

In the case of temporary underground primary services, Toronto Hydro will install and connect temporary primary service cables to a temporary point of supply indicated by Toronto Hydro. The Customer shall be responsible for the installation of any civil infrastructure on Customer's private property or public road allowance (subject to City of Toronto approval), and may be responsible for the installation and removal of the temporary electrical equipment as applicable.

The Customer shall provide a structural analysis report, stamped and signed by a Professional Engineer, licensed within the Province of Ontario, for any structure that may be housing or supporting a Toronto Hydro-owned asset.

The standard allowances, respective ownership and operating demarcation points between Toronto Hydro and Customer, along with the supply offerings of various supply alternatives are defined in Tables 1 and 4 in Section 5 of these Conditions of Service.

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Section 3 – CUSTOMER CLASS SPECIFIC

3 CUSTOMER CLASS SPECIFIC

The Customer Class Specific section shall contain references to services and requirements, which are specific to individual Customer classes. This section should cover such items as:

- ***Demarcation Point***
- ***Metering***
- ***Service Entrance Requirements***
- ***Delineation of Ownership and Operational Points of Demarcation.***
- ***Special Contracts***
- ***Other conditions specific to Customer class***

The following are examples of Customer specific subsections. It is recognized that Customer Classifications are unique to each Distributor. The Distributor is not limited by these examples to the range and scope of their Customer Classifications. Each Distributor therefore should review their current Classifications and ensure that all of their existing Customer Classifications are adequately covered by the Distributor' s Conditions of Service document.

3.1 Residential

Include all items that apply specifically to Residential Customers not covered under the General section.

This section refers to service requirements for the supply of electrical energy to Residential Customers within residentially zoned properties of up to six dwelling units as approved by the City of Toronto. Examples include but are not limited to:

- Detached
- Semi-detached
- Townhouse
- Duplex
- Triplex
- Fourplex

Garden or Laneway Suites are considered as one of the dwelling units approved by the City of Toronto.

3.1.1 Voltage Supply

Residential Customers are supplied 120/240V, single phase, three-wire, up to a maximum of 400A, where available. Services up to 200A are supplied overhead or underground based on area availability. Services at 400A are supplied underground only. Depending on the availability of supply, all services may be subject to additional restrictions. For information on Toronto Hydro's residential supply offerings, refer to *Section 2.3.4.3 Supply Offerings*.

3.1.2 Metering

The Customer must provide a convenient and safe location, satisfactory to Toronto Hydro, for the installation of meters, wires and ancillary equipment. All residential installations shall meet the following

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requirements and conditions:

a. A 120/240 V, 1-ph, three-wire, four-jaw approved meter socket.

   Note: Certain areas may require a five-jaw socket as determined by Toronto Hydro. The Customer should contact Toronto Hydro to confirm details.

b. The approved meter socket shall be mounted directly below the service mast such that the midpoint of the meter is 1.7 m (± 100 mm) above finished grade within 1.0 m of the face of the building (in front of any existing or proposed fence) that is closest to the Toronto Hydro source of supply, unless otherwise approved by Toronto Hydro.

c. Further requirements are specified in *Section 2.3.7*, and *Section 6, Reference #6 – "Toronto Hydro Metering Requirements 750 Volts or Less"*.

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

For ganged (grouped) meter arrangements, Toronto Hydro must approve ganged meter bases, their number, location and service route prior to installation. The Customer shall identify the metering equipment and unit electrical panel with the unit number. The labelling shall comply with unit identification requirements in accordance with Toronto Hydro's standards prior to energization. Any cost incurred by Toronto Hydro due to incorrect or incomplete marking, or reassigned unit numbers, will be borne by the Customer.

For additional details on meter requirements and specifications, refer to *Section 6, Reference #6 "Toronto Hydro Metering Requirements 750 Volts or Less"* for details.

3.1.3 Electrical Work and Inspection

All work completed inside a home must be in accordance with the Ontario Electrical Safety Code (OESC). Any electrical work such as modifications or upgrades, particularly those associated with or in proximity to Toronto Hydro Facilities and Equipment (e.g., meter, cables) should be completed by a licensed electrical contractor. The electrical installation from inside the home out to the demarcation point must be inspected and approved by the Electrical Safety Authority (ESA). For more information, refer to esasafe.com.

Prior to energization, Toronto Hydro requires notice from the ESA confirming that (i) an inspection has been conducted, from the demarcation point to the first Customer owned device, and (ii) ESA approval has been granted in the form of a Connection Authorization Certificate.

The service entry components, up to and including the meter base, must also be inspected and approved by Toronto Hydro prior to energization.

3.1.4 Overhead Services

For a new service or service upgrade, Toronto Hydro will provide an overhead service to Residential Customers within the existing overhead distribution areas.

The maximum capacity of a secondary overhead service is 200A. Larger capacity services will be supplied underground.

To receive overhead service from Toronto Hydro, the following conditions apply:

a. All installations must comply with the latest version of the OESC.

b. Customers are required to supply and install a clevis type insulator.

c. The point of attachment of the supply conductor shall be:

- Between 150 mm and 300 mm below the service head,
- Within 1.0 m of the face of the building, and
- Between 4.5 m and 9.0 m above sidewalk or grade (to facilitate proper clearances above grade and ladder handling techniques).

  Note: The exact attachment height will be communicated by Toronto Hydro during the connection process and is dependent on site conditions as well as availability and conditions of nearby infrastructure.

d. The following clearance (under maximum sag conditions of the conductors) must be provided between utility service conductors and finished grade:

- At least 5.0 m over lands accessible to vehicles.
- At least 4.0 m over or alongside walkways or areas unlikely to be traveled by vehicles.

e. A minimum horizontal clearance (under maximum swing conditions of the conductors) of 1.0 m from utility service conductors must be provided to prevent accessibility from readily accessible surfaces. For example, a 1.0 m horizontal clearance is required from:

- a balcony, stairway, or fire escape, or
- a window or door.

f. A minimum vertical clearance (under maximum sag conditions of the conductors) of 2.5 m must be provided from utility conductors passing over a readily accessible surface such as a balcony, stairway, or fire escape.

g. Customers must prepare a clear path from vegetation for a new or upgraded overhead electrical service on their property. Refer to *Section 1.7.3 Tree and Vegetation Management* for additional information.

At Toronto Hydro's discretion, an underground service may be required if the criteria described above are not satisfied or if site conditions or proposed arrangements are deemed unsafe or inaccessible. Where applicable, Customers are also responsible for ensuring that all private poles are capable of providing adequate support for the attached lines. Toronto Hydro reserves the right to disconnect a service if Customer-owned poles are in poor condition. In all cases, conditions for connection will be communicated during the connection assessment and/or relevant service visit(s).

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3.1.5 Underground Services

For a new service or service upgrade, Toronto Hydro will provide an underground service to Residential Customers within the existing underground distribution areas. Customers requesting a new underground service in an overhead area will be required to cover all associated civil and electrical work necessary to bring the service to their property.

The same service conditions identified in *Section 3.1.4 Overhead Services* apply to underground services as well. In addition, the Customer is responsible for installing, owning, maintaining, and replacing the conduit that guides the service cable from Toronto Hydro distribution system past the property line to the meter base on the Customer's property. Any trench route on the Customer's property shall be approved by Toronto Hydro, and follow the route indicated on a Service Design/Layout drawing or the route supplied by Toronto Hydro. Any deviation from this route must be approved by Toronto Hydro. The Customer will be responsible for Toronto Hydro's costs associated with re-design and inspection services due to changes or deviations initiated by the Customer or its agents.

The Customer (i.e., property owner) and its agents are responsible for:

- Ensuring that the service entrance and meter adhere to Toronto Hydro requirements.
- Covering expenses related to any necessary road crossings.
- Coordinating the installation of other services, such as gas, telephone, and telecommunication to prevent conflicts with Toronto Hydro's underground cables. Toronto Hydro's installation will not normally commence until all other servicing and grading have been completed.
- Obtaining clearances from all utility companies, including Toronto Hydro, before excavation.
- Contacting Toronto Hydro to inspect each trench before the installation of Toronto Hydro's service cables.
- Providing unimpeded access for Toronto Hydro to perform the service installation.
- Ensuring that any intended tree planting has appropriate clearance from underground electrical plant.
- Sealing of ducts to protect Customer-owned Equipment from any foreign elements such as water or gas.

Toronto Hydro reserves the right to install temporary jumper cables from either the Customer's or a neighboring Customer's service in the event of a fault on the Customer's underground electricity service. Toronto Hydro will connect on the line side of the meter in order to not affect the Customer's consumption charges. This connection will be maintained until the fault is repaired on the Customer's property.

Where the Customer requires a high voltage service exceeding the supply offering specified in *Section 2.3.4.3*, a Toronto Hydro transformer will be required on the private property. The Customer shall install, own, maintain, and repair all Customer-owned Equipment on private property. These Customer-owned Equipment typically include but not limited to poles, direct buried ducts, concrete encased duct banks, and transformer foundations. Refer to *Section 1.7.5 Customer-Owned Equipment, Infrastructure and Property* for additional information.

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3.1.6 Services Over / Under / Beside Swimming Pools

Any overhead or underground electrical conductors located in the vicinity of a swimming pool shall meet the minimum clearances as identified in Toronto Hydro's Standards.

Toronto Hydro prohibits any electrical conductors from being positioned over swimming pools. If a swimming pool or its accessories are installed, any existing electrical conductors located above or near the pool not meeting Toronto Hydro's Standards must be relocated, at the property owner's expense.

Additional information related to pool clearances can be found on Toronto Hydro's website, available at torontohydro.com/contractors-and-developers/clearance-guides.

When underground electrical circuits are located near a proposed swimming pool, the Customer must provide Toronto Hydro with a site plan that clearly indicates the swimming pool location. The Customer must also obtain "locates" for all electric services (both high voltage and low voltage) and provide this information to Toronto Hydro. If the proposed swimming pool location does not meet Toronto Hydro's required clearances, the proposed location must be amended to comply with the minimum clearance requirements. Alternatively, the Customer may choose to relocate the underground electric services. In such cases, the Customer will be responsible for all costs incurred by Toronto Hydro for the work.

3.1.7 Clearances

The Customer (e.g., property owner) and its agents are responsible for ensuring that all necessary work whether temporary or permanent, adhere to the required clearances set out by both Toronto Hydro and the OESC.

In order to identify any potential conflicts with nearby distribution infrastructure, such as overhead powerlines, Customer should notify Toronto Hydro before or during the design stage. Where applicable, site plans and designs, including the architectural drawings, should be submitted before or during the municipally (e.g., City of Toronto) permit review and issuance.

Before initiating any work that may encroach upon Toronto Hydro Facilities and Equipment, the Customer must contact Toronto Hydro and secure written approval. Where the required clearances cannot be met, temporary or permanent relocation may be required. For more information, refer to *Section 2.1.5 Relocation of Toronto Hydro-Owned Assets*.

For work and building clearances to Toronto Hydro infrastructure, refer to guide available on Toronto Hydro's website, available at torontohydro.com/contractors-and-developers/clearance-guides.

3.1.8 Property Access

The Customer shall provide Toronto Hydro with unimpeded access to install the electricity service. In addition, the Customer will be responsible for removing and reinstating any privately-owned obstructions (landscaping, sprinklers and sprinkler piping, sheds, buildings, etc.) to provide Toronto Hydro with unimpeded access to its assets.

Customers are obligated to protect Toronto Hydro equipment from damage and maintain the required clearances on private property. This requirement applies at all times, including during maintenance and/or repairs to private property, vegetation and structures on private property.

Service locations requiring access to adjacent properties (mutual drives, narrow side set-backs, etc.) will

require the registration of an easement and/or written consent from the property owner(s) involved as determined by Toronto Hydro.

Proposed new or service changes in areas with mutual access (such as driveways, walkways) require:

- at least 50% ownership of the walkway or driveway by the Customer requesting the service when the width of the mutual property is less than 2.0 metres (right of way access is not considered ownership);
- a minimum of 1.0 metre width (for meter only installation) and a minimum 1.5 metres width (for overhead connection access);
- absence of fences or other property separation;
- unobstructed access to service; and
- Customer responsibility for disclosure of all property encumbrances.

Toronto Hydro assumes no liability for any private property or meter location disputes between owner(s).

The service should not be located where an accumulation of ice may form across the service wires and/or meter base. Toronto Hydro shall not be responsible for removing such ice formation or damages resulting from ice. If revenue metering equipment is installed inside areas that are prone to ice formation, the Customer shall install appropriate protection (typically in the form of an ice rack) to guard against falling ice. The Customer owns and is responsible for the support structures within their building and the physical security of overhead and underground service entrances into the Customer's premises. This includes ensuring a tight seal at the service entrance to avoid water leakage or animal ingress.

Refer to *Section 1.6.2 Space and Access* for additional information.

3.1.9 Site Information

Prior to establishing service details, Toronto Hydro shall require the following information from the Customer:

- a site plan, to scale, showing the building in relation to existing and proposed property lines, other buildings, streets and driveways the location of other services, gas, telephone, water and cablevision. In certain situations, a grading plan may be required;
- civic address;
- city permit;
- single line diagram;
- Customer billing information;
- requested energized date;
- service size amperage; and
- a supporting demand load summary in accordance with the OESC may be required.

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Additional information related to the site may be requested by Toronto Hydro to review and assess the connection.

Refer to Section 1.6.1 Accuracy of Information for more information.

3.1.10 Premise Identification

At all times (including during construction), the civic address must be clearly visible from the public roadway.

On each ESA Connection Authorization Certificate, Toronto Hydro service agreement and Offer to Connect, the civic address must be clearly indicated before the Service will be energized.

3.1.11 Demarcation Points

For secondary services that Toronto Hydro wholly owns and maintains, the ownership demarcation point is typically located at:

- the top of the Customer's service mast, for overhead connections; or
- the line side of the Customer's meter base, for underground connections;

Additional information related to the supply offerings can be found in Customer Connection Guides, and are available at torontohydro.com/contractors-and-developers/customer-connection-guides.

Toronto Hydro has operating control at the first disconnecting device on the Customer's premises (e.g., panel), or an equivalent device. For Customers who own a disconnecting device on the line side of the connection (upstream of the meter), this device is also under the operating control of Toronto Hydro.

Different demarcation points may exist if the connection differs from the typical arrangements, especially for legacy connections. The Customer should check and confirm the demarcation point with Toronto Hydro prior to carrying out any work on private property.

Toronto Hydro maintains the portion of the secondary service that it owns (including repair and like-for-like replacement of a wire or cable that has failed irreparably). Customers are responsible for all civil work, supports, vegetation and landscaping associated with any repair or replacement to the Toronto Hydro portion of secondary services located on private property.

Where the distance between the ownership demarcation point(s) and the point of supply exceeds the voltage drop distance limits of Toronto Hydro's standard service conductors, a high-voltage primary line may be required.

For additional information, refer to Table 1 under Section 5 of these Conditions of Service for the point of ownership demarcation for Residential Services.

3.1.12 Connection and Disconnection of Services

Toronto Hydro shall make all connections to and final disconnections from the distribution system in

accordance with *Sections 2.1 and 2.2* of these Conditions of Service. No unauthorized electrical contractor or person shall tamper with Toronto Hydro owned assets, unless the electrical contractor is approved and explicitly authorized by Toronto Hydro.

A Customer who requires a temporary disconnect and reconnect, commonly referred to as “isolation”, for repairs or panel changes, must submit a service request to book an appointment with Toronto Hydro prior to conducting the work. During this appointment or relevant service visit(s), Toronto Hydro will assess the condition of the existing service. If deemed unsafe according to the conditions outlined in *Section 2.1.3 Connection Denial*, Toronto Hydro will disconnect the service until the concern has been addressed, and reconnection is authorized by the ESA. However, if the existing service is deemed safe but requires upgrading or modification, Toronto Hydro will collaborate with the Customer to facilitate the necessary changes without disconnecting the service. Any upgrades will follow Toronto Hydro's service connection process. In all instances, prior to energizing or re-energizing the electrical installation, a Connection Authorization Certificate issued by ESA is mandatory.

Where the Customer or its agents (e.g., licensed electrical contractor) do not comply with the criteria above, the Customer will be responsible for any related damage or loss to Toronto Hydro.

Refer to *Sections 2.1 and 2.2* of these Conditions of Service for additional information.

3.1.13 Service Connection Charges

Toronto Hydro will provide new Customer connections with a standard allowance that covers up to 30 metres of overhead conductor, and an equivalent credit for distribution and transformation equipment needed from the secondary distribution system to the demarcation point. Underground services will also receive a credit equivalent to this allowance as part of the service connection. However, for any services that require extra work beyond this initial allowance, or for services not included in the standard offerings outlined in *Section 2.3.4.3 Supply Offerings*, Customers will be charged a variable connection fee based on the actual costs incurred. New Customers who opt for underground services in areas where overhead installations are the norm will be required to cover 100% of the connection costs, minus the standard allowance provided. Moreover, any non-standard installations approved by Toronto Hydro will be subject to additional variable connection fees based on actual costs.

Customers seeking upgrades to an existing service will be subject to a variable connection fee based on actual costs. Similarly, existing Customers with non-standard installations requiring updates to meet current standards will also be subject to this variable connection fee based on actual costs.

For more information related to service connection charges, refer to Table 1 of this Conditions of Service.

3.1.14 Electric Vehicle Chargers & Heat Pumps

Before purchasing or installing an electric vehicle charger and/or heat pump, Customers are encouraged to consult Toronto Hydro’s website (torontohydro.com) to better understand connection requirements and learn other helpful tips.

3.1.15 Distributed Energy Resource (DER) Connections

For Customers seeking emergency backup DER connections (e.g., backup generator), please refer to *Section 2.3.6 Emergency Backup Distributed Energy Resource Facilities* for details.

For Customers seeking permanent DER connections (e.g., solar, energy storage), please refer to *Section 6, Reference #3 "Distributed Energy Resource Requirements"* for details. More information is also available on Toronto Hydro's webpage at torontohydro.com/grid-connections/connection-process.

3.1.16 Historical and Legacy Connections

In certain historical or legacy situations, ownership demarcation points and connection arrangements may vary from those described above. Examples include but are not limited to:

- Historical connections that are now obsolete and no longer adhere to current standards.
- Non-standard connections that were accepted by Toronto Hydro at the time of installation based on site-specific conditions.
- Connections established prior to the amalgamation of the six local hydro utilities on January 1, 1998.
- Instances where a written agreement exists between Toronto Hydro and the Customer specifying a different ownership demarcation point.

Toronto Hydro will collaborate with Customers in such cases to ensure clarity and resolution.

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3.2 General Service (Below 50 kW)

Include all items that apply specifically to general service Customers not covered under the other sections, and broken down (by load demand).

a. The Customer shall supply the following to Toronto Hydro well in advance of installation commencement:

- Required in-service date
- Proposed Service Entrance equipment's Rated Capacity (Amperes) and Voltage rating and metering requirements
- Propose Total Load details in kVA and/or kW (Winter and Summer)
- Locations of other services, gas, telephone, water and cable TV
- Details respecting heating equipment, air-conditioners, motor starting current limitation and any appliances which demand a high consumption of electricity
- Survey plan and site plan indicating the proposed location of the service entrance equipment with respect to public rights-of-way and lot lines
- For General Service (50 – 999 kW and 1,000 kW and above) Class Customers, electrical, architectural and/or mechanical drawings as required by Toronto Hydro

b. The Customer shall construct and install all civil infrastructure (including but not limited to poles, UG conduits, cable chambers, cable pull rooms, transformer room/vault/pad) on private property, that is deemed required by Toronto Hydro as part of its connection assets. All such civil infrastructures are to be in accordance with Toronto Hydro's current standards, practices, specifications and these Conditions of Service and are subject to Toronto Hydro's inspection and acceptance.

Should the Customer construct and install the civil infrastructure related to connection assets, Toronto Hydro shall not include the associated civil component in its calculation of Basic and Variable Connection Fees.

c. Toronto Hydro is responsible for the maintenance and repairs of its connection assets but not the transformer room(s) or any other civil structure that is part of the Customer's building.

d. When effecting changes the Customer shall maintain sufficient clearances between electrical equipment and buildings and other permanent structures to meet the requirements of the Ontario Electrical Safety Code and the *Occupational Health & Safety Act* and Regulations.

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

f. Provided the existing civil infrastructure has been maintained in satisfactory conditions by the Customer, Toronto Hydro will undertake the necessary programs to enhance its distribution plant at its expense, as part of its planned activities during normal business hours, Monday to Friday.

When a Customer requests that such planned or maintenance activities which may include an

electricity disconnection be done outside Toronto Hydro's normal business hours, then the Customer may be required to pay the incremental costs incurred by Toronto Hydro as a result thereof.

In the event that services or facilities to a Customer need to be restored as a result of these construction or maintenance activities by Toronto Hydro, they will be restored to an equivalent condition.

In addition, Toronto Hydro will carry out the necessary construction and electrical work to maintain existing supplies by providing standard overhead or underground supply services to Customers affected by Toronto Hydro's construction activities. If a Customer requests special construction beyond the normal Toronto Hydro standard installation in accordance with the program, the Customer shall pay the additional cost associated therewith, including engineering and administration fees.

g. Toronto Hydro shall install, maintain, and replace, at its own cost, all those civil infrastructures that are part of its main distribution system (i.e. not including connection assets) that may be located on private property and which serve Customers that are located outside of that private property. These Toronto Hydro civil infrastructures will require an easement.

h. The Customer shall install, maintain, and replace, at its own cost, all those civil infrastructures located on private property that are required to house the connection assets (i.e. the electrical equipment owned by Toronto Hydro) that serve Customers that are located on that private property.

   Where changes to Customer's civil infrastructure are part of a Toronto Hydro initiated enhancement project, Toronto Hydro may absorb the costs of modifications to the Customer's civil infrastructure, provided the existing civil infrastructure has been maintained in satisfactory condition by the Customer.

i. The Customer shall maintain in proper working condition all Customer-Owned service disconnecting devices (such as main switch and secondary breakers) that Toronto Hydro may need to operate to ensure the safe operation and maintenance of the distribution system. Toronto Hydro shall not be liable for any loss or damage arising from Toronto Hydro's operation of Customer-Owned service disconnecting devices and specifically will not be liable if a switch/breaker or other Customer equipment were to become inoperative or get damaged during or after its operation. Toronto Hydro may request that a waiver form be signed by the Customer acknowledging Toronto Hydro's limited liability in such circumstances.

Refer to Table 1 of Section 5 of these Conditions of Service for Point of Demarcation, Standard Allowance and Connection Fees for General Service.

3.2.1 Electrical Requirements (As Applicable)

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

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

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

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

The electrical room must be located to provide safe access from the outside or main hallway, and not from an adjoining room, so that it is readily accessible to Toronto Hydro's employees and agents at all hours to permit meter reading and to maintain electric supply. This room must be locked. The owner shall install a pad bolt with mortise strike (Ackland Hardware, Cat. No. 199-10 or equivalent). Toronto Hydro shall provide a secure arrangement so that Toronto Hydro's padlock can be installed as well as the Customer's lock.

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

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

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

3.2.2 Underground Service Requirements

The Customer shall construct or install all civil infrastructure (including but not limited to poles, UG conduits, cable chambers, cable pull rooms, transformer room/vault/pad) on private property, that is deemed required by Toronto Hydro as part of its Connection Assets. All civil infrastructures are to be in accordance with Toronto Hydro's current standards, practices, specifications and these Conditions of Service and are subject to Toronto Hydro's inspection/acceptance.

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

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

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

It is the responsibility of the owner to contact Toronto Hydro to inspect each trench prior to the installation of Toronto Hydro's cables.

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3.3 General Service (Above 50 kW)

Include all items that apply specifically to General Service Customers (above 50 kW) not covered under the General section. Describe the criteria to determine how a Customer is classified as being above 50 kW.

All non-residential Customers with an average peak demand between 50 kW and 999 kW over the past twelve months are to be classified as General Services above 50 kW.

3.3.1 New Residential Subdivisions or Multi-Unit Developments

Customers of new Residential Subdivisions involving the construction of new city streets and roadways, or of Multi-unit Developments that are supplied from primary distribution systems built along private streets, are treated as Non-Residential Class Customers and will be subject to capital contribution for "expansion" work, in addition to any applicable Connection Fees in accordance with *Section 2.1*.

All other Residential Subdivisions or Multi-unit complexes will follow the general terms and conditions for Connection Fees and capital contribution for the appropriate General Class Customers.

In all cases, all of the electrical service must be constructed to Toronto Hydro'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 must be approved by Toronto Hydro.

3.3.2 Electrical Requirements

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

Toronto Hydro will supply, install and maintain the electrical transformation equipment within the transformer vault or pad supplied by the Customer, at its expense, on the property. Toronto Hydro has the right to have this equipment connected to its distribution system.

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

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

The electrical room must be separate from, but adjacent to, the transformer vault. It must be located to provide safe access from the outside or main hallway, and not from an adjoining room, so that it is readily accessible to Toronto Hydro's employees and agents at all hours to permit meter reading and to maintain electric supply. This room must be locked. The owner shall install a pad bolt with mortise strike (Ackland Hardware, Cat. No. 199-10 or equivalent). Toronto Hydro shall provide a secure arrangement so that Toronto Hydro's padlock can be installed as well as the Customer's lock.

The electrical room shall not be used for storage or contain equipment not related to the electrical installation within the area designated by Toronto Hydro as safe working space. All stairways leading to electrical rooms above or below grade shall have a handrail on at least one side as per the Ontario

Building Code, and shall be located indoors.

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

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

The 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. The electrical room shall be visibly identified from the outside.

3.3.3 Technical Information

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

Prior to the preparation of a design for a service, the Customer will provide the following information to Toronto Hydro as well as the approximate date that the Customer requires the electrical service and the due date that Toronto Hydro's civil construction drawings are required in order to co-ordinate with site construction.

3.3.3.1 Site and Grading Plans

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

3.3.3.2 Mechanical Servicing Plan

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

3.3.3.3 Floor Plan

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

3.3.3.4 Duct Bank Location

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

Toronto Hydro.

3.3.3.5 Transformer Location

Indicate the preferred location on the property for the high voltage transformation. This is subject to approval by Toronto Hydro. Transformation will be vault, pad, submersible type or pole mounted depending on the project load requirements.

3.3.3.6 Electrical Meter Room

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

3.3.3.7 Single Line Diagram

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

3.3.3.8 Switchgear

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

3.3.3.9 Substation Information

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

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

3.3.4 Technical Considerations

3.3.4.1 Short Circuit Ratings

16,000/27,600 V Supply: The Customer's protective equipment shall have a three phase, short circuit rating of 800 MVA symmetrical. The asymmetrical current is 27,000 A (1.6 factor used).

8,000/13,800 V Supply: The Customer's protective equipment shall have a three phase, short circuit rating of 500 MVA symmetrical. The asymmetrical current is 34,000 A (1.6 factor used.)

2,400/4,160 V Supply: The Customer's protective equipment shall have a three phase, short circuit rating of 250 MVA symmetrical or 56,000 A asymmetrical (1.6 factor used).

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347/600 V Supply: The Customer's protective equipment shall have a minimum short circuit rating of 50,000 A.

347/600 V Supply from network system: Available short circuit current may be obtained upon request to Toronto Hydro.

120/208 V Supply: Available short circuit current may be obtained upon request to Toronto Hydro.

3.3.4.2 Primary Fusing

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

3.3.4.3 Ground Fault Interrupting

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

3.3.4.4 Lightning Arresters

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

3.3.4.5 Basic Impulse Level (B.I.L.)

The Customer's apparatus shall have a minimum Basic Impulse Level in accordance with the following:

2,400/4,160 supply voltage - 60 kV B.I.L.

8,000/13,800 supply voltage - 95 kV B.I.L

16,000/27,600 supply voltage - Delta primary 150 kV B.I.L.

16,000/27,000 supply voltage - Grounded Wye primary 125 kV B.I.L.

3.3.4.6 Unbalanced Loads

On three-phase service, the unbalance due to single-phase loads shall not exceed 20% of the Customer's

balanced phase loading expressed in kilowatts.

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3.4 General Service (Above 1,000 kW)

Include all items that apply specifically to General Service Customers (above 1000 kW) not covered under the General section. Describe the criteria to determine how a Customer is classified as being above 1,000 kW.

All non-residential Customers with an average monthly demand of 1,000 kW or higher, averaged over twelve consecutive months, as determined by Toronto Hydro, are to be classified as Customers over 1,000 kW.

3.4.1 Electrical Requirements

Where a primary service is provided to a Customer-Owned substation, the Customer shall install and maintain such equipment in accordance with all applicable laws, codes, regulations, and Toronto Hydro's Customer Owned Substation requirements for high voltage installations. Toronto Hydro will provide planning details upon application for service.

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

High voltage distribution services are three-phase, three-wire or four-wire depending on the supply feeder. The Customer is required to bring out a neutral conductor for connection to the system neutral. If not required for Customer's use, this neutral shall be terminated to the Customer's station ground system. Toronto Hydro will provide Customer interface details and requirements for high voltage supplies.

Customer must provide transformers having voltage taps in their primary windings and configurations as shown in Table 6 in Section 5 of these Conditions of Service for all new, upgraded and refurbished installations. Transformers other than listed in Table 6 may be considered in like-for-like repair but shall not be connected without the specific written approval of Toronto Hydro.

Customer-Owned substations must be inspected by both the Electrical Safety Authority and Toronto Hydro. The owner will provide a pre-service inspection report to Toronto Hydro. A contractor acceptable to Toronto Hydro will prepare the certified report to Toronto Hydro.

The Customer shall inspect their own substations at minimum intervals of one year for outdoor substations and three years for indoor substations. Where an electricity disconnection may be required at Customer-Owned substations to perform inspections, maintenance, and installations, the Customer shall arrange a time for a disconnection by Toronto Hydro. For Toronto Hydro to perform the disconnection, Customers are required to pay a fair and reasonable charge based on cost recovery principles.

3.4.2 Technical Information and Considerations

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

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3.5 Embedded Distributed Energy Resource Facilities

This section should include all terms and conditions applicable to the connection of embedded generation facility to the distributor (e.g., application process, engineering standards and operating agreements).

For the terms and conditions applicable to the connection of a DER facility on the Toronto Hydro distribution system refer to the requirements outlined in *Section 6, Reference #3 – "Toronto Hydro Distributed Energy Resource Requirements"*.

3.6 Wholesale Market Participant

Criteria for a Customer that is classified as being a Market Participant needs to be established. This section should describe any specific requirements for Customers that also are Market Participants.

Refer to the requirements outlined in Section 6, Reference #3 – "Toronto Hydro Distributed Energy Resource Requirements".

3.7 Embedded Distributor

This section should include all terms and conditions applicable to the connection of an embedded distributor.

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

An embedded distributor shall enter into a Connection Agreement in a form acceptable to Toronto Hydro. Until such time as the embedded distributor executes such a Connection Agreement with Toronto Hydro, 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.

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3.8 Unmetered Connections

This section will include all terms and conditions applicable to unmetered connection.

Unmetered connections are available under conditions specified by Toronto Hydro. Unmetered connections are intended for electrical loads that are small in size, non-variable, and supply a single device. Examples of services that are considered for unmetered supply include but are not limited to:

- street and expressway lighting,
- decorative lighting,
- traffic and railway crossing signals,
- pedestrian x-walk signals/beacons,
- bus shelters,
- telephone booths,
- CATV amplifiers,
- TTC switching devices, and
- other miscellaneous small fixed loads less than 2 kW.

Toronto Hydro will work with the Customer and apply its discretion in determining if a service should be metered, subject to Toronto Hydro's legal and regulatory obligations. Toronto Hydro will not provide a service connection to Customers requesting an unmetered supply connection for an electrical outlet (e.g. receptacle, ground fault interrupter (GFI), and ground fault circuit interrupter (GFCI)) installation.

Where unmetered Customers wish to affix any attachment to or within a Toronto Hydro asset or structure, the method of attachment and their location is subject to Toronto Hydro's review and approval. Toronto Hydro may require Customers to enter into a Licensed Occupancy Agreement with Toronto Hydro prior to the attachment of any assets.

In all cases, the Customer shall make a service connection request to Toronto Hydro for any unmetered connection(s). The Customer shall provide load and/or electrical use data for the unmetered connection(s) acceptable to Toronto Hydro. Information may include but is not limited to:

a. manufacturer information of the electrical device(s),

b. documentation with regard to electrical demand, and

c. expected hours of operation of the proposed unmetered device load.

Toronto Hydro may require, at its sole discretion, that the Customer provide at its own expense, a load study acceptable to Toronto Hydro in order to determine the expected energy consumption.

The Customer shall refer to Tables 11.1 to 11.4 in Section 5 of these Conditions of Service which describes the processes (including billing, data updating and validation), rights and obligations between Toronto Hydro and an unmetered load Customer.

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Each unmetered location shall be reviewed individually by Toronto Hydro, and shall be connected to Toronto Hydro's low voltage distribution system (from either overhead or underground supply). The nominal service voltage will be 120 Volts, single phase. The method and location of supply will be established for each application through consultation with Toronto Hydro. Supply connections to the street and expressway lighting system will not be permitted.

Toronto Hydro shall make all connections to and final disconnections from Toronto Hydro's low voltage distribution system in accordance with *Sections 2.1 and 2.2* of these Conditions of Service. The Customer shall provide an ESA connection authorization prior to and as a pre-condition of Toronto Hydro connecting the service. The Customer shall notify Toronto Hydro in writing prior to making any changes to the existing unmetered connections or adding new equipment that is attached to or is to be supplied from the Toronto Hydro low voltage distribution system.

When unmetered service connections are requested and system expansions are needed, the expansion process outlined in *Section 2.1.2* of these Conditions of Service will apply. Refer to Tables 1 for the standard allowance and applicable fees or methodology in determining the cost of connection.

The standard allowances, along with respective ownership and operating demarcation points between Toronto Hydro and the Customer are defined in *Sections 3.8.1, 3.8.2, 3.8.3* and Table 1 in Section 5 of these Conditions of Service. For Toronto Hydro's operating control rights for unmetered services, please refer to *Section 1.7.4 Operating Control* of these Conditions of Service.

Where installations involve:

a. attachments on Toronto Hydro owned poles, the method and location of attachment are subject to the approval of Toronto Hydro. Toronto Hydro may, in its sole discretion, require the Customer to enter into an agreement with Toronto Hydro governing such attachments.

b. either a modification to Toronto Hydro's distribution infrastructure or the installation of new distribution equipment within the public road allowance in order to supply the Customer, such modification or installation will be carried out by Toronto Hydro at the Customer's expense (including but not limited to poles, underground conduits and tap boxes).

Where the civil infrastructure is required on private property, the Customer is required to construct at its own expense the necessary civil infrastructure as specified by Toronto Hydro, which shall be in accordance with Toronto Hydro's current standards, practices, specifications and these Conditions of Service and shall be subject to inspection and acceptance by Toronto Hydro.

Toronto Hydro will provide, at the Customer's expense, for all breakouts of the Toronto Hydro civil infrastructure (i.e. cable chambers, vaults), which may be required to make the service connection. The Customer's service connection equipment shall be able to accept conductors installed by Toronto Hydro. The Customer shall bring its cables to a point determined by Toronto Hydro.

Toronto Hydro will undertake the necessary programs to maintain and enhance its distribution plant. More specifically, Toronto Hydro will provide standard overhead or underground supply services to unmetered Customers affected by Toronto Hydro's construction activities at its own cost. However, where the unmetered Customer requests special construction beyond the normal Toronto Hydro standard installation, the unmetered Customer shall pay the additional cost, including engineering and administration fees.

Toronto Hydro collects information related to the number of Customers and loads, including unmetered

loads. This information provides inputs for the models used to allocate the costs of operating the distribution system to each of Toronto Hydro's rate classes and in part determines the rates to be applied to collect these costs from each Customer class. To the extent that this information results in significant changes in allocated costs to the unmetered load classes, Toronto Hydro will endeavour to communicate these potential changes to its unmetered load Customers either through direct communication (e.g., phone, email or in-person contact between Toronto Hydro personnel and Customer representatives), through informational mailings (e.g., bill inserts), or through information provided on Toronto Hydro's website (torontohydro.com).

3.8.1 Streetlighting

All services supplied to street and expressway lighting equipment owned by or operated for a municipality or the Province of Ontario shall be classified as Streetlighting 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.

The method and location of underground supply to street lighting plant from the Toronto Hydro distribution system will be established for each application through consultation with Toronto Hydro.

For streetlighting, Toronto Hydro will recover the actual costs for connection assets directly from the customer consistent with the ownership demarcation point defined in Table 5 in Section 5 of these Conditions of Service for various streetlighting systems.

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3.8.2 Traffic and Railway Crossing Signals, Pedestrian X-Walk Signals/Beacons, Bus Shelters, Telephone Booths, CATV Amplifiers, TTC Switching Devices and Miscellaneous Small Fixed Loads (< 2 kW)

Toronto Hydro may connect new Unmetered Scattered Load Service Customers (specified in the title above) using either an overhead or an underground supply. The same terms and conditions as outlined in *Section 3.8* apply to these unmetered loads.

Overhead Supply Connections

Overhead supply connections fall into two categories:

1. The source connection is made at an existing Toronto Hydro supply pole and the service standpipe/mast is located on the same supply pole; or

2. The source connection is made at an existing Toronto Hydro supply pole or line, without any extension of the secondary bus, and the service standpipe/mast is located within 30 m of the existing pole or lines.

In all situations, the ownership demarcation point for any overhead supply connection is at the service standpipe/mast owned, supplied and maintained by the Customer. The service standpipe/mast may require a transition (e.g. riser/dip) to bring the supply to a Customer via underground arrangement.

Operating demarcation point for Toronto Hydro is at the Customer's circuit breaker downstream of the ownership demarcation point, and is intended to provide Toronto Hydro access to Customer-owned equipment in emergency situations.

For overhead supply connections, Toronto Hydro will recover the actual costs of the connection directly from the Customer as described in Table 1 of Section 5 of these Conditions of Service.

Underground Supply Connections

Underground supply connections fall into two categories:

1. The source connection is made at an existing Toronto Hydro underground structure (tap box, cable chamber), and the Customer-owned equipment is attached on a Toronto Hydro pole, or

2. The source connection is made at an existing Toronto Hydro underground structure (tap box, cable chamber), and the Customer-owned equipment is not attached or cannot be attached on a Toronto Hydro pole.

Where the Customer-owned unmetered equipment is attached on a Toronto Hydro pole, the ownership demarcation point is at the line side of the Customer's circuit breaker panel on the pole (effective as of January 9, 2012).

Where the Customer-owned unmetered equipment is not or cannot be attached on a Toronto Hydro pole, the ownership demarcation point is at the line side of the Customer's disconnect enclosure at Customer's structure.

Operating demarcation point for Toronto Hydro is at the Customer's circuit breaker, and is intended to provide Toronto Hydro access to attached Customer-owned equipment in emergency situations.

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For underground supply connections, Toronto Hydro will recover the actual costs of the connection directly from the Customer as described in Table 1 of Section 5 of these Conditions of Service.

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

3.8.3 Decorative Lighting and Tree Lighting Services

This section applies to the distribution and supply of electrical energy for decorative lighting. These installations are typically owned and maintained by a local business improvement association (BIA) as a way of improving streetscape or for specific festive occasions. In addition to complying with these Conditions of Service, all such installations must comply with the Ontario Electrical Safety Code and are subject to the approval of the ESA.

This section does not apply to decorative lighting that is owned by, or operated for, a municipality or the Province of Ontario.

Decorative lighting and tree lighting connected to Toronto Hydro's distribution system shall be subject to the same terms and conditions as outlined in *Section 3.8.2* of these Conditions of Service.

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3.9 Metered Connections in Public Road Allowance

This section outlines the applicable terms and conditions for all metered connections located entirely in the public road allowance.

A revenue meter is required for Customer connections that do not meet the unmetered connection requirements outlined in *Section 3.8* of these Conditions of Service and where the location of the connection is within the public road allowance. Examples of such services include but are not limited to:

- Electric vehicle charging stations
- Heated bus shelters
- Telecommunications equipment
- Other miscellaneous loads greater than 2 kW

The Customer shall make a service connection request to Toronto Hydro for the connection(s) and provide load and/or electrical use data acceptable to Toronto Hydro. Information may include but is not limited to:

a. manufacturer information of the electrical device(s),

b. documentation with regard to the estimated electrical demand, and

c. expected hours of operation of the proposed device.

Toronto Hydro may require, at its sole discretion, that the Customer provide an acceptable load study at the Customer's expense in order to determine the expected energy consumption.

Each service shall be reviewed individually by Toronto Hydro, and shall be connected to Toronto Hydro's low-voltage distribution system. The nominal service voltage will be 120/240 Volts, single phase, 3 wire. The method and location of supply will be established for each application through consultation with Toronto Hydro.

All metered connections situated entirely in the public road allowance are to be supplied underground via metered pedestals. The source of connection may originate from either overhead or underground distribution systems, depending on the area. For ownership demarcation points between Toronto Hydro and the Customer, refer to section 5, Tables 1.

The Customer is required to construct, own and maintain at its own expense the necessary civil infrastructure in the public road allowance as specified by Toronto Hydro. The Customer is responsible for obtaining the applicable permit(s) and meeting all applicable City of Toronto requirements. Toronto Hydro will make provision, at the Customer's expense, for all breakouts of the Toronto Hydro civil infrastructure (e.g. cable chambers, vaults), which may be required to make the service connection.

Where system expansions are needed, the expansion process outlined in *section 2.1.2* of these Conditions of Service will apply. The standard allowances, and applicable fees and methodology in determining the connection costs are outlined in Table 1 in section 5 of these Conditions of Service.

The Customer must provide an above-grade meter pedestal to house the Toronto Hydro revenue meter. The meter pedestal must be in accordance with Toronto Hydro requirements, and the Ontario Electrical

Safety Code. The meter pedestal shall be located at a reasonable distance from the electrical device. The Customer is responsible for providing Toronto Hydro's employees and agents unimpeded and safe access to the meter to obtain readings and to maintain the electric supply at all hours, in accordance with *section 1.7.5* of these Conditions of Service.

Toronto Hydro shall make all connections to and final disconnections from Toronto Hydro's low voltage distribution system in accordance with *sections 2.1 and 2.2* of these Conditions of Service. The Customer shall provide an ESA connection authorization prior to and as a pre-condition of Toronto Hydro connecting the service. The Customer shall notify Toronto Hydro in writing prior to making any changes to the existing metered connections or adding new equipment that is attached to or is to be supplied from Toronto Hydro's low voltage distribution system.

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3.10 Attachment to Toronto Hydro Assets and Structures

This section includes the general terms and conditions applicable to third-party attachments on Toronto Hydro owned assets and structures. The specific terms and conditions are outlined in the Licensed Occupancy Agreement with Toronto Hydro (if applicable).

Where a Customer, Consumer or contractor wishes to affix or attach equipment, such as telecommunication, signage, decorative lighting, security cameras, etc. to Toronto Hydro owned assets or structures (e.g. poles, cable chambers), either temporarily or permanently, a formal request must be submitted, reviewed and approved by Toronto Hydro prior to the attachment of any equipment. Toronto Hydro may require Customers to enter into a Licensed Occupancy Agreement with Toronto Hydro prior to the attachment of any assets. Toronto Hydro may recover the cost of accommodating such attachments through applicable fees or charges.

Toronto Hydro reserves the right to request information with respect to the attachment, its use, and/or method of attachment from the requesting party, including but not limited to:

- pole load analysis report(s), and/or
- cable pulling analysis report(s).

These reports shall be stamped and signed by a Professional Engineer, licensed within the Province of Ontario.

Requesting parties are required to:

- comply with Electrical Utility Safety Rules, and
- submit as-built drawings within 30 days of completion of construction.

All attachments are subject to review and approval by Toronto Hydro. Toronto Hydro reserves the right to remove any attachment that does not comply with the above rules or those specified in the Licensed Occupancy Agreement.

Toronto Hydro may ask the Customer to relocate existing attachments with reasonable notice. Toronto Hydro is not responsible for affixing, operating, or maintaining the attached assets. The written content placed on any attachment must not include any political message or offensive material.

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Section 4 – GLOSSARY OF TERMS

4 GLOSSARY OF TERMS

The Conditions of Service document may contain a variety of terms that should be defined in the context of this document. Where possible, glossary terms should reflect definitions in existing documents that apply to the distributor, such as the Distribution System Code, the Distributor's licence and Standard Supply Service Code. The text of the Conditions of Service document should be used to expand on these definitions as applicable to the Distributor.

Sources for definitions:

Electricity Act, 1998, Schedule A, Section 2

DSC Distribution System Code Definitions

EDL Electricity Distribution Licence

MR Market Rules for the Ontario Electricity Market, Chapter 11, Definitions

RSC Retail Settlement Code Definitions

OEB Ontario Energy Board

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

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

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

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

"apparent power" means the total power measured in kiloVolt Amperes (kVA);

"application for service" means the agreement or contract with Toronto Hydro under which electrical service is requested;

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

“basic connection” means a portion of a Customer load connection, the cost of which Toronto Hydro will

not charge the Customer, but rather, will recover through its revenue requirement, as specified in the Distribution System Code section 3.1.4.

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

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

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

“competitive sector multi-unit residential service” means a service where electricity is used exclusively for residential purposes in a multi-unit residential building, where unit metering is provided using technology that is substantially similar to that employed by competitive sector sub-metering providers;

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

“Conditions of Service” means the document developed by a distributor in accordance with subsection 2.4 of the Code that describes the operating practices and connection rules for the distributor; (DSC)

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

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

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

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

“Customer” means a generator or Consumer whose facilities are connected to or are intended to be connected to a distributor’s distribution system. This includes developers of residential or commercial sub-divisions; (DSC) In certain contexts, particularly those involving responsibility for a building, equipment, infrastructure, or property, “Customer” may refer to the property owner or its property management representative or agent, as applicable.

“Customer Equipment” or “Customer-owned Equipment” means all equipment and infrastructure that is owned by the Customer on private property or in the public road allowance for non-metered and metered connections. This equipment and infrastructure may be situated in the vicinity or in the same space as Toronto Hydro’s Facilities and Equipment. Equipment and infrastructure includes but is not limited to transformers, cable, switches, poles, fences, gates, duct banks, conduits, conduit seals, cable chambers, cable pull rooms, transformer rooms, transformer vaults, transformer pads, tap boxes, handwells, meter bases, clevises, service masts and junction boxes.

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“Customer Property” or “Customer-owned Property” or “Customer Premises” means any premises, including, but not limited to, buildings, land, equipment and other infrastructure, which is owned or occupied by the Customer.

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

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

"developer" means a person or persons owning property for which new or modified electrical services are to be installed;

“disconnection” means a deactivation of connection assets that results in cessation of distribution services to a Consumer; (DSC)

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

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

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

“distribution services” means services related to the distribution of electricity and the services the Board has required distributors to carry out; (RSC, DSC)

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

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

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

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

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

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

"electric service" means the Customer’s conductors and equipment for energy from Toronto Hydro;

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“Electric Vehicle Charging Connection Procedures” means the document issued from time to time by the Board that sets out a procedure for the connection of EVSE and that is referred to in sections 6.1.6 and 6.1.6.1 of the DSC; (DSC)

“Electric Vehicle Supply Equipment" or “EVSE” means electrical supply equipment that is dedicated to supplying a source of electricity for the sole purpose of charging electric vehicles; (DSC)

“eligible low-income customer” means: (a) a residential electricity consumer who has been approved by the CSP for the Ontario Electricity Support Program, or (b) a residential electricity consumer who has been approved by a Low-Income Energy Assistance Program Intake Agency for Emergency Financial Assistance; (DSC)

“embedded distributor” means a distributor that is provided electricity by a host distributor; (RSC, DSC)

“embedded generation facility” or “embedded distributed energy resource facility” means a generation facility which is not directly connected to the IESO-controlled grid but instead is connected to a distribution system, and has the extended meaning given to it in section 1.9 of the DSC; (DSC)

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

“emergency backup generation facility” or “emergency backup distributed energy resource facility” means a standby power system that is installed on a customer site for the sole purpose of providing electrical power if primary or system power has been interrupted or is unavailable; (DSC)

"energy" means the product of power multiplied by time, usually expressed in kilowatt-hours (kW);

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

“energy data” means any energy usage and account holder information identified in REQ.21.2.5t or REQ.21.2.6t in the NAESB ESPI standard that is collected by the energy provider and made available to account holders in the normal course of the energy provider’s operations, excluding any data collected in respect of projects that are being undertaken on a trial basis; (O.Reg. 633/21)

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

“enhancement” means a modification to the main distribution system that is made to improve system operating characteristics such as reliability or power quality or to relieve system capacity constraints resulting, for example, from general load growth, but does not include a renewable enabling improvement; (DSC)

“expansion” means a modification or addition to the main distribution system in response to one or more requests for one or more additional customer connections that otherwise could not be made, for example, by increasing the length of the main distribution system, and includes the modifications or additions to the main distribution system identified in section 3.2.30 but in respect of a renewable energy generation facility excludes a renewable enabling improvement; (DSC)

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

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

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

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

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

“generator” means a person who owns or operates a generation facility; (A, MR, DSC)

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

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

“green button” is a standardized data format that gives residential and business energy consumers an option to easily access and securely transfer their energy usage data; (OEB)

“host distributor” means a distributor who provides electricity to an embedded distributor; (DSC)

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

“IEC” means International Electrotechnical Commission;

“IEEE” means Institute of Electrical and Electronics Engineers;

“IESO” means the Independent Electricity System Operator continued under the *Electricity Act*; (DSC)

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

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

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

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

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

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

“main distribution system” means a distribution system less the connection assets;

"main service" refers to Toronto Hydro’s incoming cables, bus duct, disconnecting and protective equipment for a Building or from which all other metered sub-services are taken;

“market participant” has the meaning prescribed in the Market Rules;

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

“Measurement Canada” means the Special Operating Agency established in August 1996 by the *Electricity and Gas Inspection Act, 1980-81-82-83*, c. 87., and Electricity and Gas Inspection Regulations (SOR/86-131; (DSC)

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

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

"meter socket" means the mounting device for accommodating a socket type revenue meter;

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

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

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

"multiple dwelling" means a Building which contains more than one self-contained dwelling unit;

"municipal street lighting" means all services supplied to street lighting equipment owned and operated

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for a municipal corporation;

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

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

“Ontario Electrical Safety Code” means the code adopted by O. Reg. 164/99 as the Electrical Safety Code; (DSC)

“*Ontario Energy Board Act*” means the *Ontario Energy Board Act*, 1998, S.O. 1998, c.15, Schedule B; (MR, DSC)

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

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

“performance standards” means the performance targets for the distribution and connection activities of the distributor as established by the Board pursuant to the *Ontario Energy Board Act* and in the Rate Handbook;

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

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

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

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

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

"primary service" means any service which is supplied with a nominal voltage greater than 750 volts

"private property" means the property beyond the existing public street allowances;

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

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

"reactive power" means the power component which does not produce work but is necessary to allow

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some equipment to operate, and is measured in kiloVolt Amperes Reactive (kVAR);

"real power" means the power component required to do real work, which is measured in kiloWatts (kW);

“Regulations” means the regulations made under the *Ontario Energy Board Act* or *the Electricity Act*;

“Relocation” refers to activities including but not limited to temporary and/or permanent (re)installation, (de)commissioning, support, protection, removal, relocation, reconstruction, and diverting for the purpose of moving and/or altering of existing Toronto Hydro infrastructure (“Toronto Hydro Plant”) located in, along, over, or under a City of Toronto (“City”) street or road allowance, Ministry of Transportation for the Province of Ontario (“MTO”) highway or right-of-way, also private property, or rail corridor. Toronto Hydro Plant includes Toronto Hydro Main Distribution, and Connection Assets, all of which may include unmetered (i.e. Street lighting) loads, metered loads, and may involve third party attachments to Toronto Hydro Plant.

“reinforcement” means an investment that a distributor makes to increase the distribution system capacity to accommodate new load on the distributor’s distribution system, consistent with the distributor’s planning, design, and construction standard.

“residential customer” means a Customer that receives either a “residential service” or a “competitive sector multi-unit residential service”;

"residential service" means a service where electricity is used exclusively for residential purposes in a separately metered living accommodation, where the “competitive sector multi-unit residential service” is not applicable. Eligibility is restricted to a dwelling unit that consists of a detached house or one unit of a semi-detached, duplex, triplex or quadruplex building, with a residential zoning; a separately metered dwelling within a town house complex or apartment building; and bulk metered residential buildings with six or fewer units;

“retail”, with respect to electricity means,

a. to sell or offer to sell electricity to a Consumer

b. to act as agent or broker for a retailer with respect to the sale or offering for sale of electricity, or

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

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

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

"secondary service" means any service which is supplied with a nominal voltage less than 750 Volts;

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

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“service area,” with respect to a distributor, means the area in which the distributor is authorized by its license to distribute electricity; (A, EDL, DSC)

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

“Standard Allowance” means the amount credited to cover the “basic connection” portion of what the customer pays for their load connection.

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

“Statutory Holiday” means the days designated by Toronto Hydro from time to time. Until otherwise designated, including: New Year’s Day, Family Day, Labour Day, Good Friday, Thanksgiving Day, Easter Monday, Christmas Day, Victoria Day, Boxing Day, Canada (Dominion) Day, and the Civic Holiday (as celebrated in Toronto and various other places in Ontario);"sub-service" means a separately metered service that is taken from the main Building service;

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

"temporary service" means an electrical service granted temporarily for such purposes as construction, real estate sales, trailers, et cetera;

"terminal pole" refers to the Toronto Hydro’s distribution pole on which the service supply cables are terminated;

“Timed Load Interrupter Device” means a device that will completely interrupt the customer’s electricity intermittently for periods of time and allows full load capacity outside of the time periods that the electricity is interrupted; (DSC)

“Toronto Hydro’s Facilities and Equipment” means Toronto Hydro’s meter installation(s), wires, poles, cables, transformers, any other structures, equipment, all other appliances and equipment or other things used for distributing electricity.

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

“totalization” is the process of aggregating, within Toronto Hydro’s meter data management system, interval data from two or more interval meters that serve separate delivery points for the purpose of creating a virtual meter point whose peak load is less than the sum of the individual interval meters.

"transformer room" means an isolated enclosure built to applicable codes to house transformers and associated electrical equipment;

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

“Transmission System Code” means the code, approved by the Board, that is in force at the relevant

time, which regulates the financial and information obligations of the Transmitter with respect to its relationship with Customers, as well as establishing the standards for connection of Customers to, and expansion of a transmission system; (DSC)

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

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

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

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

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

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

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Table 1 – Ownership Demarcation Points and Charges for Connections/Disconnections

IMPORTANT: The range of services listed in the following table may not be applicable in all districts due to the restrictions imposed by the distribution system in certain areas.

Rate/Customer Class	Electrical Ownership Demarcation Point	Civil Ownership Demarcation Point	Service Connection Charges (subject to annual review)	Service Disconnection Charges (initiated by Customer)
CLASS 1 **Residential – Single Service**				
Overhead	Top of Customer's service mast	The Customer owns all civil infrastructure on private property and is responsible for all construction, installation and maintenance.	• Standard Allowance recovered through hydro rates ($3,059.00). • Customer charged the actual costs of the connection above and beyond what is covered by the standard allowance. • Customers requesting an underground service in an overhead area will be required to pay 100% of the connection costs, less the standard allowance. • Any additional work (e.g., design, construction) required due to changes in Customer's initial proposal are to be paid by the customer as a variable connection cost, including additional electrical and/or civil inspections.	No charge – recovered through rates.
Underground (Does not require Transformation Facilities on private property)	• Line side of Customer's meter base, or • Line side of Customer's main disconnect switch.		• Standard Allowance recovered through hydro rates ($3,059.00). • Customer charged the actual costs of the connection above and beyond what is covered by the standard allowance, including street crossing. • Any additional work (e.g., design, construction) required due to changes in Customer's initial proposal are to be paid by the customer as a variable connection cost, including additional electrical and/or civil inspections. Note: If Customer's load requires transformation facilities on Customer's property, refer to "General Service" Rate Class category for Underground service with transformation.	
CLASS 2 **General Service 0 < 50 kW – Single Service**				
Overhead	Top of Customer's service mast	The Customer owns all civil infrastructure on private property and is responsible for all construction, installation and maintenance.	• Standard Allowance recovered through hydro rates ($3,059.00). • Customer charged the actual costs of the connection above and beyond what is covered by the standard allowance. • Any additional work (e.g., design, construction) required due to changes in Customer's initial proposal are to be paid by the customer as a variable connection cost, including additional electrical and/or civil inspections.	No charge – Recovered through rates.
Underground (Does not require Transformation Facilities on private property)	Line side of Customer's main disconnect switch			

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Table 1 – Ownership Demarcation Points and Charges for Connections/Disconnections (continued)

IMPORTANT: The range of services listed in the following table may not be applicable in all districts due to the restrictions imposed by the distribution system in certain areas.

Rate/Customer Class	Electrical Ownership Demarcation Point	Civil Ownership Demarcation Point	Service Connection Charges (subject to annual review)	Service Disconnection Charges (initiated by Customer)
CLASS 3-A **General Service 50 kW – 999 kW – Single Service**				
Overhead (Does not require Transformation Facilities on private property)	Top of Customer's service mast	The Customer owns all civil infrastructure on private property and is responsible for all construction, installation and maintenance.	• Standard Allowance recovered through hydro rates ($3,059.00). • Customer charged the actual costs of the connection assets above and beyond what is covered by the standard allowance, including but not limited to cable chamber(s), underground conduits, excess cabling, and street crossings. • Any additional work (e.g., design, construction) required due to changes in Customer's initial proposal are to be paid by the customer as a variable connection cost, including additional electrical and/or civil inspections.	Customer charged the actual costs associated with disconnection and/or removal of connection assets up to the demarcation point.
Underground (Does not require Transformation Facilities on private property)	Line side of Customer's main disconnect switch			
Overhead (Requires Transformation Facilities on private property)	• Line side of Customer's main disconnect switch (secondary UG), or • Top of Customer's service mast (secondary OH)		• Standard Allowance recovered through hydro rates ($3,059.00). • Customer charged the actual costs of the connection assets above and beyond what is covered by the standard allowance, including transformer(s), transformer connections, associated switching equipment, transformer pole(s), transformer pad foundations, transformer vaults, cable chamber(s), cable pull room(s), underground conduits, excess cabling, and road crossings, as required. • Any additional work (e.g., design, construction, feeder switching/scheduling) required due to changes in Customer's initial proposal are to be paid by the customer as a variable connection cost, including additional electrical and/or civil inspections.	Customer charged the actual costs associated with disconnection and/or removal of connection assets including cables, transformers and related vault equipment up to the demarcation point, and related feeder switching and scheduling.
Underground (Requires Transformation Facilities on private property)	First point of connection past transformers on private property as applicable: a) For pad-mounted transformer supplied services: • Transformer Secondary Spade. b) For non-pad-mounted transformer supplied services: • Line side of Customer's meter base/centre;, • Line side of Customer's main disconnect switch; or • Line side of Customer's collector bus.			

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Table 1 – Ownership Demarcation Points and Charges for Connections/Disconnections (continued)

IMPORTANT: The range of services listed in the following table may not be applicable in all districts due to the restrictions imposed by the distribution system in certain areas.

Rate/Customer Class	Electrical Ownership Demarcation Point	Civil Ownership Demarcation Point	Service Connection Charges (subject to annual review)	Service Disconnection Charges (initiated by Customer)
CLASS 3-B **General Service 50 kW – 999 kW**				
Underground (Multi-units or Townhouse Complex with Transformation Facilities on private property other than supplied from primary distribution systems built along private streets)	<u>For bulk metered service</u> - First point of connection past transformers on private property as applicable: a) For pad-mounted transformer supplied services: • Transformer Secondary Spade. b) For non-pad-mounted transformer supplied services: • Customer's Cable chamber; • Customer's Tap box; • Line side of Customer's meter base/centre; • Line side of Customer's main disconnect switch; or • Line side of Customer's collector bus.	The Customer owns all civil infrastructure on private property and is responsible for all construction, installation and maintenance.	• Standard Allowance recovered through hydro rates ($3,059.00). • Customer charged the actual costs of the connection assets above and beyond what is covered by the standard allowance, including transformer(s), transformer connections, associated switching equipment, transformer pole(s), transformer pad foundations, transformer vaults, cable chamber(s), cable pull room(s), underground conduits, excess cabling, and road crossings, as required. • Any additional work (e.g., design, construction, feeder switching/scheduling) required due to changes in Customer's initial proposal are to be paid by the customer as a variable connection cost, including additional electrical and/or civil inspections.	Customer charged the actual costs associated with disconnection and/or removal of connection assets including cables, transformers and related vault equipment up to the demarcation point, and related feeder switching and scheduling.
	<u>For individually supplied Townhouse units</u> - First point of connection past transformers on private property as applicable: a) For pad-mounted transformer supplied services: • Transformer Secondary Spade. b) For non-pad-mounted transformer supplied services: • Line side of Customer's individual meter base; or • Line side of Customer's main disconnect switch.		• Standard Allowance recovered through hydro rates ($3,059.00). • Customer charged the actual costs of the connection assets above and beyond what is covered by the standard allowance, including transformer(s), transformer connections, associated switching equipment, transformer pole(s), transformer pad foundations, transformer vaults, cable chamber(s), cable pull room(s), underground conduits, excess cabling, and road crossings, as required. • Any additional work (e.g., design, construction, feeder switching/scheduling) required due to changes in Customer's initial proposal are to be paid by the customer as a variable connection cost, including additional electrical and/or civil inspections.	No charge – recovered through rates.

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Table 1 – Ownership Demarcation Points and Charges for Connections/Disconnections (continued)

IMPORTANT: The range of services listed in the following table may not be applicable in all districts due to the restrictions imposed by the distribution system in certain areas.

Rate/Customer Class	Electrical Ownership Demarcation Point	Civil Ownership Demarcation Point	Service Connection Charges (subject to annual review)	Service Disconnection Charges (initiated by Customer)
CLASS 3-B (continued) **General Service 50 kW – 999 kW**				
Underground (Multi-units or Townhouse Complex with NO Transformation Facilities on private property or supplied from primary distribution system built along private streets)	<u>For a bulk metered service -</u> First point of connection past Distributor's system onto private property as applicable: • Customer's Cable chamber; • Customer's Tap box; • Line side of Customer's meter base/centre; • Line side of Customer's main disconnect switch; or • Line side of Customer's collector bus.	The Customer owns all civil infrastructure on private property and is responsible for all construction, installation and maintenance.	• Standard Allowance recovered through hydro rates ($3,059.00). • Customer charged the actual costs of the connection assets above and beyond what is covered by the standard allowance, including transformer(s), transformer connections, associated switching equipment, transformer pole(s), transformer pad foundations, transformer vaults, cable chamber(s), cable pull room(s), underground conduits, excess cabling, and road crossings, as required. • Any additional work (e.g., design, construction, feeder switching/scheduling) required due to changes in Customer's initial proposal are to be paid by the customer as a variable connection cost, including additional electrical and/or civil inspections.	Customer charged the actual costs associated with disconnection and/or removal of connection assets including cables, transformers and related vault equipment up to the demarcation point, and related feeder switching and scheduling.
	<u>For individually supplied Townhouse units -</u> First point of connection past Distributor's system onto private property as applicable: • Line side of Customer's individual meter base, or • Line side of Customer's main disconnect switch.		• Standard Allowance recovered through hydro rates ($3,059.00). • Customer charged the actual costs of the connection assets above and beyond what is covered by the standard allowance, including street crossing. • Any additional work (e.g., design, construction, feeder switching/scheduling) required due to changes in Customer's initial proposal are to be paid by the customer as a variable connection cost, including additional electrical and/or civil inspections.	No charge – Recovered through rates.
CLASS 3-C **Residential Subdivision**				
Underground (development with more than 5 lots)	• Line side of Customer's meter base; or • Line side of Customer's main disconnect switch.	The Customer owns all civil infrastructure on private property and is responsible for all construction, installation and maintenance.	• Standard Allowance recovered through hydro rates ($3,059.00). • Customer charged the actual costs of the connection assets above and beyond what is covered by the standard allowance, including street crossing. • Any additional work (e.g., design, construction, feeder switching/scheduling) required due to changes in Customer's initial proposal are to be paid by the customer as a variable connection cost, including additional electrical and/or civil inspections. • Each new legally sub-divided property and its associated load facility will receive one basic connection allowance. The total number of new legally sub-divided residential properties will determine the full amount of the allowances.	No charge – Recovered through rates.

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Table 1 – Ownership Demarcation Points and Charges for Connections/Disconnections (continued)

IMPORTANT: The range of services listed in the following table may not be applicable in all districts due to the restrictions imposed by the distribution system in certain areas.

Rate/Customer Class	Electrical Ownership Demarcation Point	Civil Ownership Demarcation Point	Service Connection Charges (subject to annual review)	Service Disconnection Charges (initiated by Customer)
CLASS 4 & 5 **General Service 1000 kW and up**				
Underground Single/Multiple Building Bulk Metered or Suite Metering (Requires Transformation Facilities on private property)	First point of connection past transformers on private property as applicable: a) For pad-mounted transformer supplied services: • Transformer Secondary Spade. b) For non-pad-mounted transformer supplied services: • Line side of Customer's main bus; • Line side of Customer's main disconnect switch; or • Line side of Customer's collector bus.	The Customer owns all civil infrastructure on private property and is responsible for all construction, installation and maintenance.	• Standard Allowance recovered through hydro rates ($3,059.00). • Customer charged the actual costs of the connection assets above and beyond what is covered by the standard allowance, including transformer(s), transformer connections, associated switching equipment, transformer pole(s), transformer pad foundations, transformer vaults, cable chamber(s), cable pull room(s), underground conduits, excess cabling, and road crossings, as required. • Any additional work (e.g., design, construction, feeder switching/scheduling) required due to changes in Customer's initial proposal are to be paid by the customer as a variable connection cost, including additional electrical and/or civil inspections.	Customer charged the actual costs associated with disconnection and/or removal of connection assets including cables, transformers and related vault equipment up to the demarcation point, and related feeder switching and scheduling.
Underground Single/Multiple Building Bulk Metered or Suite Metering (Customer-Owned Sub-station) (Requires Transformation Facilities on private property)	Primary Terminations at line side of Customer's high voltage switchgear		• Standard Allowance recovered through hydro rates ($3,059.00). • Customer charged the actual costs of the connection assets above and beyond what is covered by the standard allowance, including transformer(s), transformer connections, associated switching equipment, transformer pole(s), transformer pad foundations, transformer vaults, cable chamber(s), cable pull room(s), underground conduits, excess cabling, and road crossings, as required. • Any additional work (e.g., design, construction, feeder switching/scheduling, additional hi-pot, protection & control relays, wiring and relay settings associated with pilot-wire protection or other extra reliability systems) required due to changes in Customer's initial proposal are to be paid by the customer as a variable connection cost, including additional electrical and/or civil inspections.	Customer charged the actual costs associated with disconnection and/or removal of connection assets including cables, transformers and related vault equipment up to the demarcation point, and related feeder switching and scheduling.

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Table 1 – Ownership Demarcation Points and Charges for Connections/Disconnections (continued)

IMPORTANT: The range of services listed in the following table may not be applicable in all districts due to the restrictions imposed by the distribution system in certain areas.

Rate/Customer Class	Electrical Ownership Demarcation Point	Civil Ownership Demarcation Point	Service Connection Charges (subject to annual review)	Service Disconnection Charges (initiated by Customer)
Unmetered Connections (excluding street lighting – See Table 5)				
Overhead-Supply (1) Source connection is made at Distributor's supply pole and the service mast is located on the same supply pole	Top of Customer's service mast	Top of Customer's service mast	• No standard allowance. Actual connection costs collected directly from the Customer. • Any additional work (e.g., design, construction) required due to changes in Customer's initial proposal are to be paid by the customer as a variable connection cost, including additional electrical and/or civil inspections.	Customer charged the actual costs associated with disconnection and/or removal of connection assets up to the demarcation point.
(2) Source connection is made at Distributor's supply pole (or lines), and the service mast is not located on the same supply pole	Top of Customer's service mast	Top of Customer's service mast		
Underground-Supply (1) Customer attachments on Distributor's poles	Line side of Customer's circuit breaker panel on pole	Line side of Customer's circuit breaker panel on pole		
(2) Customer attachments not on Distributor's poles	Customer's disconnect enclosure at Customer's structure	Outside border of the Customer pad or equipment		

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Table 1 – Ownership Demarcation Points and Charges for Connections/Disconnections (continued)

IMPORTANT: The range of services listed in the following table may not be applicable in all districts due to the restrictions imposed by the distribution system in certain areas.

Rate/Customer Class	Electrical Ownership Demarcation Point	Civil Ownership Demarcation Point	Service Connection Charges (subject to annual review)	Service Disconnection Charges (initiated by Customer)
Metered Connections in Public Road Allowance				
Underground-Supply (1) Customer supply from Distributor's pole	• Line side of Customer's meter base, or • Line side of Customer's main disconnect switch.	1.0 metre from the base of the distribution pole or at the end of the bend from distribution pole	• Standard Allowance recovered through hydro rates ($3,059.00). • Customer charged the actual costs of the connection assets above and beyond what is covered by the standard allowance. • Any additional work (e.g., design, construction) required due to changes in Customer's initial proposal are to be paid by the customer as a variable connection cost, including additional electrical and/or civil inspections.	Customer charged the actual costs associated with disconnection and/or removal of connection assets up to the demarcation point.
(2) Customer supply from Distributor's underground infrastructure (e.g. Cable Chamber, Tap Box, Vault)	• Line side of Customer's meter base, or • Line side of Customer's main disconnect switch.	1.0 metre from Toronto Hydro infrastructure		

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Table 1 – Ownership Demarcation Points and Charges for Connections/Disconnections (continued)

IMPORTANT: The range of services listed in the following table may not be applicable in all districts due to the restrictions imposed by the distribution system in certain areas.

Rate/Customer Class	Electrical Ownership Demarcation Point	Civil Ownership Demarcation Point	Service Connection Charges (subject to annual review)	Service Disconnection Charges (initiated by Customer)
Temporary Services				
Overhead-Supply Secondary Service (Not requiring Transformation Facilities on private property)	Top of Customer's service mast	The Customer owns all civil infrastructure on private property and is responsible for all construction, installation and maintenance.	• Standard Service Charge ($2,040.00) – not recovered through hydro rates. • Any additional work (e.g., design, construction) required due to changes in Customer's initial proposal are to be paid by the customer as a variable connection cost, including additional electrical and/or civil inspections.	No charge – covered under the standard service charge.
Underground-Supply Secondary Service (Not requiring Transformation Facilities on private property)	• Line side of Customer's meter base, or • Line side of Customer's main disconnect switch.		• No standard allowance. Actual connection costs collected directly from the Customer. • Any additional work (e.g., design, construction, feeder switching/scheduling) required due to changes in Customer's initial proposal are to be paid by the customer as a variable connection cost, including additional electrical and/or civil inspections.	Customer charged the actual costs associated with disconnection and/or removal of connection assets up to the demarcation point.
Overhead-Supply Primary Service (Requiring Transformation Facilities on private property)	Top of Customer's service mast			
Underground-Supply Primary Service (Requiring Transformation Facilities on private property, or on Public Road Allowance provided City of Toronto approval)	• Transformer Secondary Spade of pad-mounted transformer, • Line side of Customer's main disconnect switch, • Line side of Customer's collector bus, or • Primary Terminations at line side of Customer's high voltage switchgear.			

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Table 2 – Toronto Hydro Supply Offerings from Secondary Distribution System in Public Road Allowance

Customer Type	Example (not exhaustive)	Primary Voltage	Supply Voltage (< 750V)	Maximum Service Size (service entrance capacity)[2, 4]
Residential (≤ 6 dwelling units)	• Detached • Semi-detached • Townhouse • Duplex • Triplex • Fourplex • Garden/Laneway Suite [1]	All	120/240 V, 1ph, 3w	200 A
				400 A [3]
General Services • Commercial • Industrial • Institutional • Mixed-Use • Multi-Residential (>6 dwelling units)	• Commercial Establishments • Restaurants • Schools • Plazas • Mixed-Use Buildings • Office Buildings • Condominiums • Apartments • Industrial Complexes • Electric Vehicle Charging Stations	All	120/240 V, 1ph, 3w	200 A
				400A
			120/208 V, 3ph, 4w	200 A
				400A
			347/600 V, 3ph, 4w	200 A

ph = phase, w = wire

Notes:

[1]Garden or laneway suite is considered as one of the dwelling units on the property.

[2]Services up to 200A are supplied overhead or underground based on area availability, where services at 400A are typically supplied underground subject to system conditions in the vicinity.

[3]400A residential services are to be supplied via underground supply arrangement only. Where the service is located in an area with an overhead secondary distribution system, then the service must be connected directly to the transformer via an underground supply arrangement.

[4]Depending on the system availability, Customers located in the downtown core seeking a demand load greater than 400A at 120/208 V, may have the option of being supplied from the secondary network distribution system.

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Table 3 – Toronto Hydro Transformer Supply Chart on Private Property

Primary Voltage	Supply Voltage	Pad-mounted Transformer		Vault Transformer		Network Transformer ***	
		Maximum Service Size	Maximum Transformer Size	Maximum Service Size	Maximum Transformer Size	Maximum Service Size	Maximum Transformer Size
All	120/240 V, 1ph, 3w	-	167 kVA	-	167 kVA	-	-
4.16/2.4 kV	120/208 V, 3ph, 4w	800 A	300 kVA	800 A	300 kVA	-	-
	347/600 V, 3ph, 4w	400 A	300 kVA	400 A	300 kVA	-	-
13.8/8 kV	120/208 V, 3ph, 4w	1,600 A	500 kVA*	-	1,500 kVA	-	1,000 kVA (2-unit) 2,000 kVA (3-unit)
	347/600 V, 3ph, 4w	600 A	500 kVA*	2,500 A	2,500 kVA	-	2,000 kVA (2-unit) 4,000 kVA (3-unit)
27.6/16 kV	120/208 V, 3ph, 4w	2,000 A	750 kVA**	-	1,500 kVA	-	-
	347/600 V, 3ph, 4w	3,000 A	3,000 kVA	2,500 A	2,500 kVA	-	-

ph = phase w = wire

Notes:

For all service sizes and types, the Customer is required to install appropriate fusing to ensure that demand load does not exceed the transformer capacity.

* 750 kVA sized pad-mounted transformers may be available in some areas of the pre-amalgamation Metro Toronto area with 13.8/8 kV primary voltage, and is subject to Toronto Hydro's review and approval.

** 1,500 kVA sized pad-mounted transformers may be available in some areas of Etobicoke, York, North York, East York and Scarborough with 27.6/16 kV primary voltage, and is subject to Toronto Hydro’s review and approval.

*** Customers seeking demand loads greater than the two-unit and three-unit transformer vault thresholds above may be supplied from additional transformers. These transformers may be situated within the same vault or additional vaults. The availability of supply options can vary by area. Selections are subject to Toronto Hydro's review and approval.

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Table 4 – Toronto Hydro Supply Offerings for Temporary Services

Service Type	Primary Voltage	Supply Voltage	Maximum Service Size
Secondary Distribution (Overhead or Underground)	All	120/240 V, 1ph, 3w	200 A
		120/208 V, 3ph, 4w	200 A
		347/600 V, 3ph, 4w	200 A
Dedicated Overhead TX (situated on public road allowance or private property)	All	347/600 V, 3ph, 4w	600 A
Dedicated Pad-mounted TX (situated on private property)	All	120/208 V, 3ph, 4w	1,600 A
		347/600 V, 3ph, 4w	600 A
Dedicated Customer-Owned Substation (situated on private property or public road allowance)	All	Subject to Toronto Hydro Review and Approval.	

ph = phase w = wire

Note:

* Customer seeking temporary services greater than the demand load specified above should consult with Toronto Hydro for alternatives.

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Table 5 – Streetlighting Services – Point of Demarcation and Connections Charges

Types of Street Lighting Distribution Systems	Ownership Demarcation Point	Service Connection Charges (*)	Service Disconnection Charges (initiated by Customer)
Municipal Lights attached to Distributor's poles and connected to Distributor's *overhead* 120/240 V secondary bus.	Connections at the overhead bus.	Customer charged actual costs for connection assets.	Customer charged actual costs for disconnection of service and associated assets.
Municipal Lights attached to Distributor's poles (in mixed use urban setting)** and connected to Distributor's *underground* 120/240 V secondary bus.	At the base of the Street Lighting bracket connected to the pole.	Customer charged actual costs for connection assets (e.g. cable chamber/tap box breakout, underground conduit and cables, additional connections).	Customer charged actual costs for disconnection of service and associated assets.
Municipal Lights attached to Municipality's poles (in residential setting) and connected to Distributor's *underground* 120/240 V secondary bus.	Line side of the protective device (i.e. circuit breaker, fuse) in the pole's handhole.	Customer charged actual costs for connection assets (e.g. cable chamber/tap box breakout, underground conduit and cables, additional connections).	Customer charged actual costs for disconnection of service and associated assets.

* Consulting and engineering work are not included and may be separately charged.

** Mixed use urban setting, where streets are classified as Collector or Arterial.

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Table 6 – Customer-Owned Transformers (Article 3.4.1)

Transformer Voltage (Volts)		Recommended Primary Tap Voltage (Volts)					
Primary	Secondary	+5%	+2½%	0	-2 ½%	-5 %	-7 ½%
27,600 grd. Y/16,000	less than 750	28,980	28,290	27,600	26,910	26,220	-
27,600 grd.Y/16,000	13,800 grd.Y/8,000						
27,600	2,400/4160 Y	-	28,290	27,600	26,910	26,220	25,530
13,860	2,400/4,160 Y	-	14,206	13,860	13,513	13,167	12,820
13,860 13,860 grd.Y/8,000	less than 750	14,553	14,206	13,860	13,513	13,167	-

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Table 7 – Meter Sockets (Article 2.3.7.1.2)

Self-Contained Socket Metering			
Voltage (Volts)	Phase	Wire	Maximum Service Switch Size Rating Amperes
120/240	1	3	200
120/240	1	3	400*
120/208	2	3	200
120/208	3	4	200
347/600	3	4	200
600 **	3	3	200

* A 400-amp transformer-rated meter socket contains a 3-wire current transformer and transformer type meter. Refer to *Section 6, Reference #6 – "Toronto Hydro Metering Requirements 750 Volts or Less"* Table I, for a list of manufacturer's meter sockets approved by Toronto Hydro.

** Used only for existing services where grounded supply is not available.

Notes:

1. Only CSA approved meter sockets are to be used.
2. Meter sockets shall be mounted so that the midpoint of the meter is set at 1,700 mm ± 100 mm.
3. Where the supply is grounded, 600 V metering shall be 4 wire. Where the Customer does not require a neutral, a full-size neutral conductor sized in accordance with Table 16 of the Ontario Electrical Safety Code must be provided to all meter cabinets or sockets. The neutral conductor is to be terminated in the socket (or cabinet) on an insulated block in accordance with the Ontario Electrical Safety Code.

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Table 8 – Meter Cabinets (Article 2.3.7.1.2)

Meter Cabinets				
Voltage (Volts)	Phase	Wire	Main Switch Size in Amperes	Meter Cabinets (see description below)
120/240	1	3	Over 400	A
208/120 416/240 600/347	3	4	Over 200 – 800	A
			Over 800	B
600*	3	3	Over 200 – 400	A
			Over 800	B

***** Only for existing services where grounded supply is not available.

Meter Cabinet Descriptions

A – 48” x 48” x 12” complete with removable 44” x 44” backplate.
B – 36” x 36” x 12” connected to switchgear instrument transformer compartment.

Notes:

1. Meter cabinets shall be fabricated of minimum # 16-gauge steel.
2. Cabinets shall have side-hinged doors opening at the centre and be equipped with three-point latching and provision for padlocking.
3. The maximum distance from the floor to the top of the cabinet shall be 1830 mm.
4. Where two or more circuits are used in one-meter cabinet, Toronto Hydro will issue specific metering requirements.

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Table 9 – Instrument Transformers and Enclosures (Article 2.3.7.2)

Metering Transformers and Compartments						
Voltage (Volts)	Phase	Wire	Service Size (Amperes)	Compartment Size	Number of Metering Transformers (Provision for)	
					Current	Voltage
240/120 208/120 N/W	1 3	3 3	Up to 800	A	1 or 2	0
			Over 800 Up to 4,000	B		
120/208 240/416 347/600	3	4	Up to 800	A	3	3
			Over 800 Up to 4,000	B	3	
600 (*)	3	3	Up to 800	A	2	2
			Over 800 Up to 4,000	B	2	
Voltages up to 600	3 (*) 3	3 (*) 4	Over 400	C	2 3	2 3

***** Only for existing services where grounded supply is not available.

MINIMUM COMPARTMENT SIZES [width x height x depth (from CT mounting plate)]

A – 762 mm x 762 mm x 210 mm (30” x 30” x 8.25”)
B – 915 mm x 762 mm x 324 mm (36” x 30” x 12.75”)
C – 965 mm x 914 mm x 381 mm (38” x 36” x 15”)

Notes:

1. Instrument transformers will be provided by Toronto Hydro and shall be installed in the switchgear by the manufacturer. The manufacturer shall not disassemble and/or change in any manner the Toronto Hydro equipment sent to the manufacturer.

2. Voltage transformer connections shall be connected on the line side of the current transformers. Current transformers shall be installed with their polarity marks towards the incoming Toronto Hydro supply.

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Table 10 – Meter Centres (Article 2.3.7.1.2)

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

1. Side-hinged doors or panels shall be installed over all sections of the switchboard where Toronto Hydro may be required to work, such as unmetered sections and those sections containing breakers, switches and meter mounting devices. Hinged doors or panels shall have provision for sealing and padlocking in the closed position. Where bolts are used, they shall be of the captive knurled type. The hinged covers over breakers or switches shall be so constructed that the covers cannot be opened when sealed or padlocked.

2. Breakers or switch handles shall have provision for positive sealing and padlocking in the “off” position.

3. Meter mounting devices shall be wired so as to be on the “load” side of the breakers or switches.

4. Each combination meter socket and breaker panel shall have adequate space for permanent Customer identification with respect to street address and/or unit number.

5. The centre of the bottom row of meter sockets shall be not less than 600 mm from the finished floor. The centre of the top row of meter sockets shall be not more than 1800 mm from the finished floor.

6. The distance between adjacent meter socket rims in the horizontal plane shall not be less than 152 mm.

7. The distance between adjacent meter socket rims in the vertical plane shall be as follows:

    a. For 100 A., 4 or 5 jaw, not less than 76 mm.

    b. For 100 A., 7 jaw, not less than 152 mm.

8. The meter mounting socket and sealing ring shall be acceptable to Toronto Hydro.

9. Where a neutral is required, the meter mounting device shall have a pre-wired, ungrounded neutral connection to the fifth or seventh terminal. The connection, if not made directly to the neutral bus, shall be not less than #12 AWG copper or equivalent.

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Table 11.1 – Unmetered Scatter Load Process Map: Customer Connection / Transfer / Disconnection / Removal Services

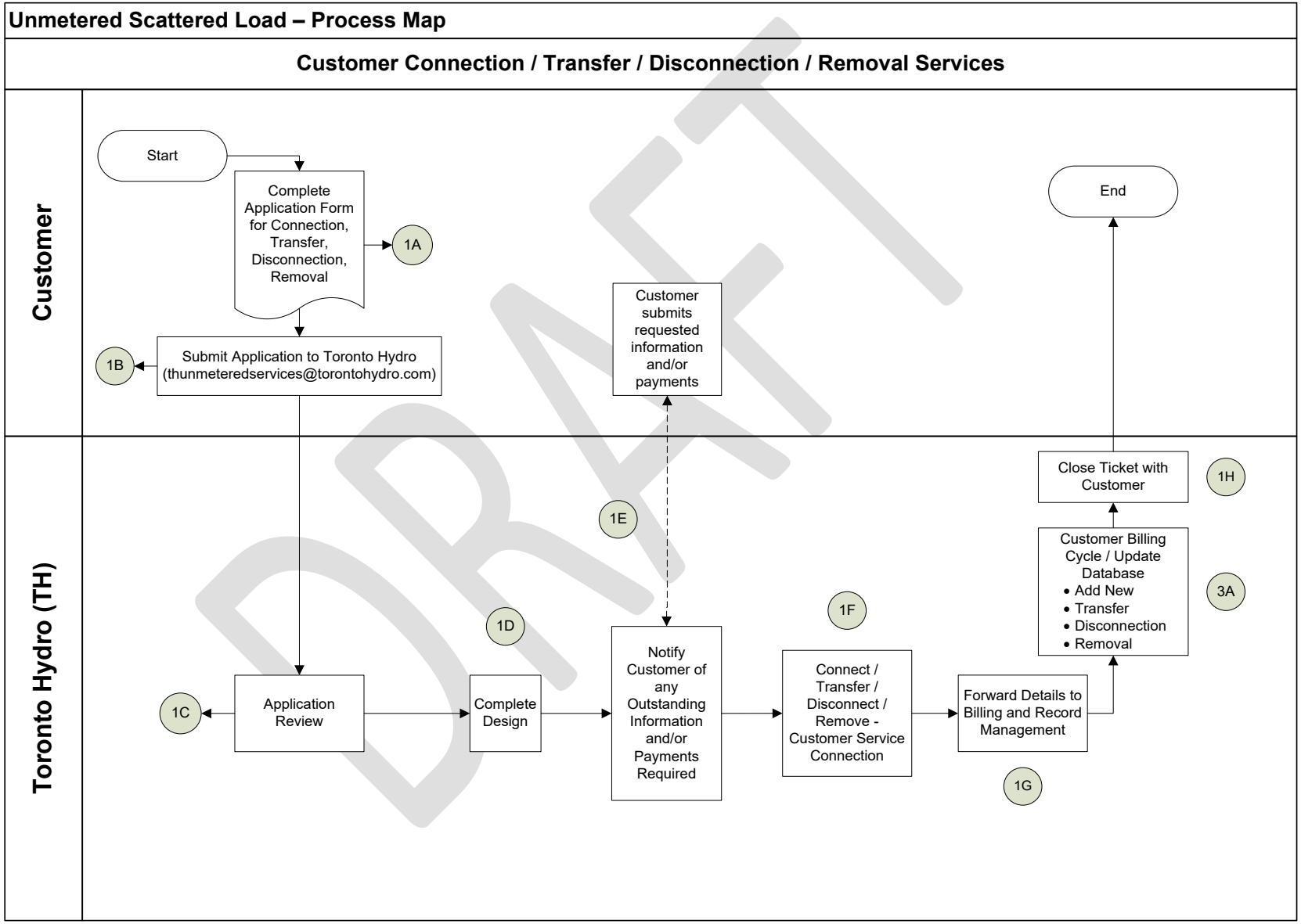


Table 11.2 – Toronto Hydro / Customer Interactions for Table 11.1 Process Map: Customer Connection / Transfer / Disconnection / Removal Services

	Refer to Table 11.1	Description
Rights and Obligations	**1A**	**Customer** • Clarifications with regards to Application Form requirements can be directed to thunmeteredservices@torontohydro.com. • Fill out the Application Form complete with all required information and documentation for a new connection, transfer or disconnection of services. **Toronto Hydro** • Toronto Hydro requires a completed Application Form including load in order to process the Customers requested service. • Make available to the Customer, the Application Form and contact information for application support.
	1B	**Customer** • Submit an Application Form complete with all required information and documentation to thunmeteredservices@torontohydro.com. • Information submitted shall be an accurate representation of the unmetered connection. **Toronto Hydro** • Acknowledge receipt of Application Form.
	1C	**Customer** • To receive acknowledgement of receipt of Application Form. • Provide any additional information that Toronto Hydro may request. **Toronto Hydro** • Toronto Hydro shall not proceed with the Customer's request unless the Application Form is complete and accurate. • Review submitted Application Form for completeness. • Notify Customer of any additional requirements to complete the Application Form.
	1D	**Customer** • Provide any additional information that Toronto Hydro may request. • Should Toronto Hydro deny the Customer's request, the Customer will be provided with a reason for denial in writing. **Toronto Hydro** • Toronto Hydro will make every effort to accommodate the Customer's request; however there may be incidences where the Customer's request may be denied. • Complete design and installation review. • Discuss issues with Customer which may transpire.

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Table 11.2 – Toronto Hydro / Customer Interactions for Table 11.1 Process Map: Customer Connection / Transfer / Disconnection / Removal Services (continued)

	Refer to Table 11.1	Description
Rights and Obligations	**1E**	**Customer** • Acknowledgment of receipt. • Provide any outstanding information and/or payments required. **Toronto Hydro** • Notify the Customer of any outstanding information and/or payments required. • Refuse connection if any of the requirements are not met. • Once the requested information is received and approved by Toronto Hydro and payment is received and processed, Toronto Hydro will proceed with the Service request.
	1F	**Customer** • Customer shall perform any work that is the responsibility of the Customer. • Customer shall comply with all of the requirements of Toronto Hydro's Conditions of Service, Toronto Hydro Construction Standards, and the Ontario Electrical Safety Code to ensure public safety in performing the work. **Toronto Hydro** • Toronto Hydro shall perform any work that is the responsibility of Toronto Hydro.
	1G	**Toronto Hydro** • After completion of all work Service information is sent for billing processing.
	1H	**Customer** • To receive acknowledgement from Toronto Hydro that the Service request has been completed. **Toronto Hydro** • Toronto Hydro will notify Customer that the Service request has been completed.
Billing Update Process	**3A**	**Toronto Hydro** • Create, remove, or modify a Customer's Service in accordance to the work completed for the Customer. • Update billing system and cycle to reflect updates to a Customer's Service.

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Table 11.3 – Unmetered Scatter Load Process Map: Existing Customer Service Updates and Validation

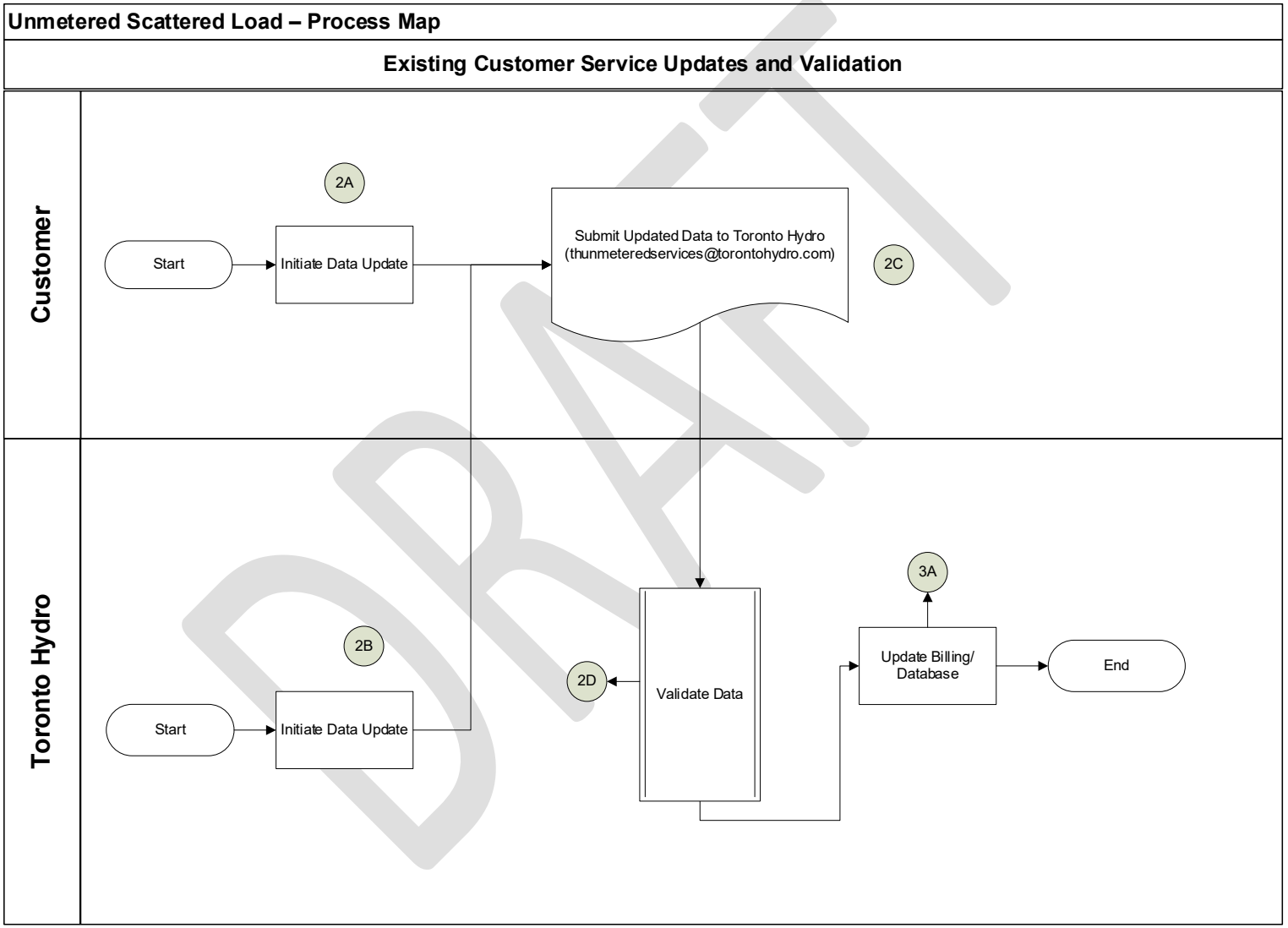


Table 11.4 – Toronto Hydro / Customer Interactions for Table 11.3 Process Map: Existing Customer Service Updates and Validation

	Refer to Table 11.3	Description
Data Updating and Validation Process	**2A**	**Customer** • Customer to provide a complete data update on a regular interval basis. • Customer to provide a data update immediately upon any Customer changes.
	2B	**Customer** • Upon request by Toronto Hydro, the Customer shall provide a data update. Requested data update may include details such as the precise location, service size, load profiles, and account information. **Toronto Hydro** • In addition, Toronto Hydro may require the Customer to provide a data update at any time.
	2C	**Customer** • Data updates shall be provided in a format acceptable to Toronto Hydro. • Data updates shall be submitted to Toronto Hydro. • A Customer Load Accuracy Declaration shall be submitted with any data update submitted by the Customer.
	2D	**Customer** • Provide any additional information that Toronto Hydro may request. This may include field audits and Customer's work documentation to support changes and validation. **Toronto Hydro** • Any updated data will be reviewed for accuracy and completeness. • Notify Customer of any additional information required or audit requirements in order to complete the updated data review. • Periodical audits of existing Customer accounts to validate the data accuracy. • Perform audits which may include field audits, and/or on-site measurements of unmetered accounts to validate the data provided by the Customer.
Billing Update Process	**3A**	**Toronto Hydro** • Update its records based on the information received from the Customer subject to verification through a validation process. • Toronto Hydro will inform the Customer of any changes to their account in writing.

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Section 6 – REFERENCES

6 REFERENCES

1. Economic Evaluation Model for Distribution System Expansion
   Refer to Appendix B of the Distribution System Code:
   "Methodology and Assumptions for an Economic Evaluation"

2. Standard Toronto Hydro Connection Agreements - Terms of Conditions

    - Schedule A: Toronto Hydro-Electric System Limited Connection Agreement

3. Toronto Hydro Distributed Energy Resource Requirements

4. Toronto Hydro Requirements for the Design and Construction of Customer-Owned High Voltage Substations

5. Toronto Hydro Requirements for the Design and Construction of Customer-Owned Structures

6. Toronto Hydro Metering Requirements 750 Volts or Less

7. Toronto Hydro Metering Requirements for 13.8 kV & 27.6 kV Customer-Owned Substations

8. Toronto Hydro Metering Services and Charges

9. Electric Vehicle Charging Connection Requirements for Toronto Hydro Customers

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