




**London  
Hydro**

# Engineering Instruction EI-28

## *Disconnection & Reconnection of Residential Meters and Service Cables*

Instruction Number: <b>EI-28</b>	Revision: <b>R6</b>
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<b>Approved By:</b>	
<p style="text-align: center;"> For Bill Milroy Aug 13/18</p>	
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### REVISION INDEX

Changes from the previous edition of this Engineering Instruction are listed below. Relocation of paragraphs or editorial changes is not shown.

Revision Number	Issue Date	Section	Description of Change
R1	May, 1990		Initial Release
R2	May, 1994	Title	Revised to include the disconnection and reconnection of residential meters.
		1.2 (i)	Permits pre-qualified Electrical Contractors to remove and replace meters rated up to 200 amp, single-phase, provided certain procedures are followed.
		2.7	New section describing the administration and safety procedures a Contractor must follow in order to receive permission to disconnect and later reconnect a residential electric meter.
R3	May, 2001		All references to <i>London PUC</i> revised to read <i>London Hydro</i> , and all references to <i>Ontario Hydro's Electrical Inspection Department</i> revised to read <i>the Electrical Safety Authority</i> .
		1.2 (i)	Removed clauses permitting electrical contractors to remove and replace meters as London Hydro's Meter Shop Accreditation / ISO-9002 quality management system no longer permits this activity.
		2.7	Removed clauses permitting electrical contractors to remove and replace meters as London Hydro's Meter Shop Accreditation / ISO-9002 quality management system no longer permits this activity.
R4	April, 2003	1.4	New section
		2.7	Reference to ESA's fee schedule updated.
		Appendix A	Prices for premium time work revised.
R5	May, 2006	Appendix A	Prices for premium time work revised.
R6	August, 2018	Appendix A	Prices for premium time work revised.

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## **1.0 INTRODUCTION**

### **1.1 Scope**

This Engineering Instruction describes the procedure for disconnecting and later reconnecting the secondary supply service cables to residential buildings.

This Engineering Instruction is intended to coordinate the activities of London Hydro, the provincial Electrical Safety Authority, and the Contractor and is to be followed whenever a residential customer's consumer service equipment is to be renovated, upgraded or otherwise modified.

### **1.2 Purpose**

Electrical contractors making upgrades or other changes to residential single-phase consumer's service equipment are governed by Rule 2-012, *Connection Authorization*, of the Ontario Electrical Safety Code. As part of the work, it is often necessary for the Contractor to remove and replace the revenue meter or arrange for London Hydro to disconnect and later reconnect the aerial or underground supply service cables.

This instruction stipulates the manner in which Rule 2-012 is to be administered. There are two fundamental objectives for the procedure, namely:

(i) safety -

London Hydro does not incorporate secondary overcurrent protection on the aerial or underground supply service cables extending from London Hydro's supply transformer or supply bus to the consumer's service equipment. As a consequence, London Hydro does not permit Contractors to disconnect, reconnect, or otherwise tamper with the supply service cables.

(ii) efficiency -

The customer will be better served if the Electrical Contractors, London Hydro, and the Electrical Safety Authority adopt a uniform procedure to coordinate the location of consumer service equipment, permits, disconnection of supply service cables, electrical inspection, and reconnection of supply service cables.

To adapt to changes in the business environment, London Hydro intends to review and update this procedures document periodically. As such, all suggestions for improvement are encouraged and will be considered provided neither of the above stated objectives is compromised.

### **1.3 Definitions**

The terms listed following are defined in Section 0, *Definitions*, of the Ontario Electrical Safety Code:

- Connection Authorization
- Consumer's Service
- Contractor
- Inspection Department
- Inspector
- Permit
- Supply Service



## **1.4 Document Revisions and Distribution**

This Engineering Instruction is distributed within London Hydro as controlled distributions document (i.e. all registered holders of Engineering Instruction manuals automatically receive updates as they are generated).

London Hydro customers and their agents can receive the current release of this Engineering Instruction in response to a formal application request but no updates thereafter. If there is an extended time period between an initial inquiry and carrying out of the work, the customer (or their agent) shall be responsible for ensuring that they have the most updated version of this Engineering Instruction before proceeding.

## **2.0 PROCEDURE FOR SERVICE CABLE DISCONNECTION & RECONNECTION**

### **2.1 Overview**

The steps to be followed by Contractors are outlined following:

- [1] Obtain a "Residential Service Layout" from a representative of London Hydro. (Refer to Subsection 2.2 below). A "Residential Service Layout" form is not required if all work will take place downstream of the load side of the revenue meter.
- [2] Schedule a date and time, which is mutually convenient to both London Hydro and the Contractor, for the supply service cables to be disconnected and reconnected. (Refer to subsections 2.3 and 2.5 herein)  

Note: Upon completion of steps 1 and 2, London Hydro will automatically send the above-described information to the Electrical Safety Authority (e-mail).
- [3] Apply to the Electrical Safety Authority for a "permit". (Refer to subsections 2.4 herein)

Details of the individual steps are given in the subsections that follow.

### **2.2 Service Layout**

The Contractor shall contact London Hydro to arrange a mutually agreeable consumer's service location and supply service arrangement. (See Subsection 2.6 on page 3 if only a meter removal and reconnect is required).

London Hydro's contacts are identified following:

- (i) for aerial supply service conductors -  
Arrangements for a service layout may be made with the London Hydro's Dispatch Office at ☎ (519)-661-5555.
- (ii) for underground supply service conductors -  
Arrangements for a service layout may be made directly with the Engineering Design team at ☎ (519)-661-5800 Ext. 5385.

London Hydro's representative will record the pertinent information in a multi-part "Residential Service Layout" form. A sample residential service layout form is included as Appendix B.

Note: Contractors are reminded that the completed residential service layout forms have a limited validity period.

Note: Contractors are reminded to verify at this stage that the proposed equipment and arrangement is in accordance with the latest release of London Hydro's policies.

Note: Contractors are advised that, wherever possible, London Hydro will disconnect the supply service conductors at the street.

### 2.3 Scheduling

The onus is on the Contractor to schedule the removal and reinstallation of electric meters and the disconnection and reconnection of the supply service cables with London Hydro. Arrangements may be made by contacting London Hydro's Dispatch Office at ☎ (519) 661-5555.

London Hydro's Dispatch Office will record the scheduling information on the multi-part "Residential Service Layout" form. A copy can be made available to the Contractor if requested, and London Hydro will retain the remaining copies.

The onus is also on the Contractor to schedule the inspection of the consumer's service equipment with the Electrical Safety Authority.

Contractors are reminded of the following requirements and limitations:

- (i) For scheduling the disconnection and reconnection of service cables, London Hydro's normal hours of work are: 7:30 a.m. to 4:00 p.m., Monday to Friday except holidays.
- (ii) The Electrical Safety Authority has subdivided the City of London into 'inspection areas'. The inspection schedule for each area is available from the Electrical Safety Authority.
- (iii) London Hydro generally requires at least three (3) working days advanced notification to schedule the disconnection and reconnection of supply service cables. In the summer months as long as ten (10) days may be required.
- (iv) In cases where the old revenue meter is mounted within the building, the onus is on the Contractor to make access arrangements with the Owner so that the meter can be recovered and a final reading taken at the time of reconnection.

In the event that London Hydro is unable to perform scheduled work due to inclement weather, distribution system emergency, or similar, London Hydro's Dispatch Office will contact the Contractor to reschedule the work.

### 2.4 Application for Inspection

The Contractor shall contact the Electrical Safety Authority and complete an "Application for Inspection".

### 2.5 Connection Authorization

Contractors are reminded that London Hydro is unable to reinstall electric meters or reconnect supply service cables until connection authorization has been received from the Electrical Safety Authority.

In an effort to improve inspection efficiency, the Electrical Safety Authority has an "Authorized Contractor Program" available to **qualified** Contractors. Under this system, the Contractor shall provide the Electrical Safety Authority's Inspection Clerk with at least two working days advanced notification of scheduled work. Provided that a permit has been issued for the work, the Electrical Safety Authority will issue an advanced connection authorization to London Hydro. The Electrical Safety Authority will perform the actual inspection following reconnection of the supply service cables on the next normal day of inspection for that area.

Note: The onus is on the Contractor to make access arrangements with the Owner on behalf of the Inspector.

Note: For emergencies on weekends, evenings or holidays, the Electrical Safety Authority will waive permits and connection authorizations until the next working day for residential authorized contractors (refer to <http://www.esainspection.net/> for a current listing of qualified contractors).

## 2.6 Revenue Meter Removal and Reinstallation ONLY

London Hydro's Electric Metering Shop is accredited by the Federal Government to calibrate, re-verify and seal revenue meters. Pursuant to this program, only trained London Hydro staff is authorized to remove and reinstall revenue meters. Even if all work is scheduled to take place downstream on the load side of the meter, Contractors are no longer permitted to remove or reinstall the meter themselves.

Arrangements can be made to schedule the removal and reinstallation of the electric meters by contacting London Hydro's Dispatch at ☎ 661-5555 to describe the location of the work, the nature of the work, and the date on which it will be carried out.

## 2.7 Service Fees

Provided the supply service cables can be disconnected and reconnected during London Hydro's normal working hours, this work will be performed at no cost.

Arrangements may be made to have supply service cables disconnected or reconnected, or both, outside London Hydro's normal working hours. The Contractor will, however, be required to make advanced payment (to the field staff) of a flat-rate charge for this service. For convenience, the charges are identified in Appendix A.

Note: Contractors are advised that for Connection Authorizations received after 3:00 pm, the Line or Underground Supervisor will make a judgement of whether the reconnection can be carried out without interfering with ongoing commitments or if the reconnection fee for work outside normal working hours should apply.

Note: In instances where the residential building is supplied via underground supply service cables, and the planned modifications to the customer's consumer service equipment requires London Hydro to extend or relocate the existing underground supply service cables, an additional charge shall apply. In general, London Hydro will directly invoice the customer for the additional charge.

The fee schedules for Electrical Inspection are established in their publication "*Electrical Inspection Wiring Fee Schedule*". This schedule can be found on the ESA's Internet site (<http://www.esainspection.net/>). Note that this publication is revised annually.



### **Appendix A – 2018 Price Schedule**


This appendix identifies the service charges payable to London Hydro for the disconnection and reconnection of supply service cables to residential buildings. The flat rate charges are as follows:

- (i) During London Hydro's normal working hours:
  - Disconnection - no charge
  - Reconnection - no charge
  
- (ii) Outside London Hydro's normal working hours:
  - Disconnection - \$201.40 + HST = \$227.58
  - Reconnection - \$201.40 + HST = \$227.58

The price schedules are updated annually. The onus is on the Contractor to ensure that he/she holds the most recent revision of the price schedule.

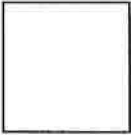



## Appendix B – Example Residential Service Layout Form



### Residential Service Layout

Phone: 661-5555

<b>CUSTOMER INFORMATION</b>						
Name: _____						
Address: _____						
<b>SCHEDULING INFORMATION</b>						
Contractor: _____				Telephone: _____		
Scheduled Disconnection Date & Time: _____						
Scheduled Reconnection Date & Time: _____						
Connection Authorization: _____						
<b>ELECTRIC SERVICING ARRANGEMENT</b>						
Prepared By: _____				Date: _____		
Mast:						
YES <input type="checkbox"/>						
NO <input type="checkbox"/>						
METER						
INSIDE <input type="checkbox"/>						
OUT <input type="checkbox"/>						
TRANS LOC NO.	TRANS SIZE	TRANS VOLTAGE	SERVICE SIZE	SERVICE CONDUCTOR SIZE	SERVICES ON TRANSFORMER	NUMBER OF METERS.
NOTES:						
(1) This Service Layout form is valid for six months only.						
(2) All existing indoor residential meters must be relocated outdoors whenever the service mast or service wires are changed.						
(3) Only rectangular meter bases will be accepted. Existing round meter bases must be replaced.						
(4) The installation of jumpers to provide power in the absence of a meter will not be permitted.						
Remarks:						

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