

# Requirements for Electric Service Connection (RESC)

## REVISION HISTORY

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Rev. Date	Description
DECEMBER 2020	<ul style="list-style-type: none"> <li>▪ <b>Update to published revision made on December 17, 2020:</b> <b>Section 6.4:</b> Added a statement erroneously deleted from this section, "Commercial services require either a block bypass or a safety socket."</li> </ul>
DECEMBER 2020	<ul style="list-style-type: none"> <li>▪ <b>Section 1.3:</b> Per Mike Haynes, modified data in Table 1.3, "Estimated Turnaround Times Per Phase of Application Process, Looped Radial" in response to COVID-19-related impacts.</li> <li>▪ <b>Section 3.6.1:</b> Removed Figure 3.6.1, "Vertical Clearances in the Spans" as it conflicts with updated information in SCL 0130.30. In boxed-out text at end of section, added the word "clearances" after the term "service drop."</li> <li>▪ <b>Section 3.6.1.1:</b> Removed stray reference to Figure 3.6.1.1g.</li> </ul>
AUGUST 2020	<ul style="list-style-type: none"> <li>▪ Per request of James Noblin: <b>Section 8.2:</b> Sentences changed from "For Network, Transfer switches must be the "open transition" type. For Looped Radial, transfer switches may be either open or closed transition." to a single sentence that reads, "Transfer switches must be the "open transition" type." <b>Sections 8.2.1–8.10</b> removed as redundant. Requestor stated, "The reason for this request is closed transition transfers do not work with SCL's Hold Open Safety Procedures. Currently there are a handful of these facilities which require special treatment if a crew is working on the associated feeder. The SCC, if possible, performs switching to move the facility to a feeder not being worked on by a crew. If that is not possible the feed will be de-energized and tagged until the crew completes their work. Most of these customers have two or more SCL feeds so this is not as impactful to them as it sounds."  <ul style="list-style-type: none"> <li>▪ Per Dan Langdon, sentence from <b>8.2.1</b>, "All specifications and drawings of the closed transition transfer switch must be submitted to City Light prior to construction." changed to "Specifications and drawings of the open transition switch must be submitted to City Light as part of the application process." and relocated to Section <b>8.2</b>.</li> </ul> </li> </ul>
MAY 2020	<ul style="list-style-type: none"> <li>▪ <b>Section 1.5:</b> Added the sentence, "Charges must be paid prior to the work being done, either at a SCL Payment Counter or by mail. Field representatives are not allowed to accept payments." Request per SCL auditors.</li> <li>▪ <b>Section 1.6.2:</b> Language added to the statement, "A typical plan package consists of the following elements" to read, "A typical plan package provided for both permanent and temporary construction, consists of the following elements." And at bottom a new paragraph: "Additional documents, such as easements, in-building vault details, street improvement plans, and short plat/unit lot subdivision information may be required to complete the project. The City Light Representative assigned to your project will advise customers of any additional documents required." Request per Rabi Asgar and the ESE group.</li> <li>▪ <b>Sections 3.2 and 4.2:</b> Per request of Emeka Anyanwu, changed title from "Single-Service Rule" to "Availability of Services". Replaced entire section with paragraphs below, as follows:  Individual structures shall typically be serviced by a single service drop. If the customer requires additional amperage to an existing structure, the customer shall upgrade the existing service. If the customer requires a different voltage, they may provide the</li> </ul>

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transformation from the voltage provided by City Light. Please see table 3.3, "Available Service Voltages and Maximum Secondary Service Entrance Ratings" for more information.

City Light may provide additional secondary services to development sites in some circumstances, for example:

- To allow for an additional secondary voltage to serve the same site if a pole or underground facility is available to accommodate the necessary equipment. If City Light needs to add equipment to the distribution system to provide a second service, the customer will be billed the full cost of that addition, including the equipment.
- If site has need for physically separated point of service not intended to serve its main structure(s) or operation.

Additional service drops shall not be attached to, or feed equipment in, buildings with existing electrical service, and shall not be bridled. (See Glossary.)

For an additional primary feed with a different voltage on an existing site, the customer must install a load break vault with the second primary run feeding a separate vault or pad mount transformer cabinet.

City Light may require a utility easement for placement of equipment that will be owned and maintained by the utility. It is the customer's responsibility to provide legal description(s) and a professional approved surveyed drawing of the property. City Light will secure the easement at the customer's expense. See section 1.6.8 for more information.

- **Sections 3.5 and 3.7.1:** Final bullet additional language to the existing bullet, "Watertight conduit sealing for customer/contractor installed conductors to prevent water from entering the service conduits" to include, "The vault interior must remain dry. The customer must prevent water from entering the vault. Request per Rabi Asgar and the ESE group.

**Section 3.6.2:** Additional language to the fourth paragraph: "It is the customer's responsibility to ensure required clearances between City Light underground structures and other utilities' structures, and to trench up to and expose the location of entry into the SCL facility. A City Light Electrical Reviewer or Underground Crew must supervise the last five feet of conduit installation. Under no circumstances shall a customer or contractor enter an energized facility. Request per Rabi Asgar and the ESE group.

**Section 5.1:** Solar-related paragraph requested for addition by Bob Orenstein, Conservation: "City Light will allow net metering up to 100 kW AC of generating capacity from the following sources: water, wind, solar energy, or biogas from animal waste as a fuel" and "Solar installations above 100 kW-AC of generating capacity, but not larger than 2 MW AC, are eligible for City Light's Large Solar Program. Contact your City Light Representative for information on this program."

- **Section 6:** Changes to various paragraphs per Siriphan Clayton and the Technical Metering team:

**Section 6.3:** Voltages in exception statement changed from 277/480Y to 480Y/277

Phrase "all high-voltage services 601 V and above" changed to "all primary voltage services (4160 V, 13,800 V and 26, 400 V)".

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Phrase "...for high-voltage metering requirements" changed to "...for primary voltage metering requirements."

**Subsection 6.5.3:** Second paragraph, "Metering equipment enclosures..." struck. New sentence added to the end of the paragraph that begins with "Pedestal metering equipment" that reads, "Contact your City Light Representative for requirements."

**Section 6.4:**

Section revised to clean up language, remove unneeded items, and provide more logical presentation.

Sentence, "Customer must shim meter sockets..." struck, and new sentence added, "Sockets must be plumb and securely attached to the supporting structure." For paragraph beginning with "Unfused threaded...", paragraph separated in to two sentences. In the second sentence, the term "weatherproof" replaced with "raintight NEMA 3R rated."

**Section 6.5.1:** In final paragraph, change the term "closest point" to "vent."

**Section 6.6.2:** The term "regulator" changed to "vent." Dimensions changed from feet to inches in text and figure where applicable.

**Section 6.7:**

Subheading that reads, "Single Meters Self Contained" changed to "Single Self-Contained Meter Installation."

Paragraph that begins with "The sequence of service equipment..." changed to "The meter socket shall be installed ahead of the fused disconnect/circuit breaker. A fused disconnect/circuit breaker cannot precede the meter except in certain multi-unit installations (described below).

Subheading that reads "Multi-Unit Installations" changed to "Multi-Unit Self-Contained Meter Installations." Bullet that begins, "A main disconnect may be installed ahead of the meter in multi-unit installations involving more than six individual sockets..." changed to "A main disconnect/breaker may be installed ahead of the meter sockets in multi-unit installations of more than six individual sockets." Bullet that begins, "In multiple meter socket installations...", the first part of sentence, "In multiple meter socket installations, which have a switch or breaker ahead of the meters..." is struck. The sentence now reads "The breaker must be the common trip type..."

**Section 6.8:** The word "Special" struck from subheading title. In the fourth bullet regarding minimum clearances for meter rooms, the clearance is corrected from "2 ft 24 inches" to "24 inches". In the fifth bullet, the words "regulator" and "tap can" are struck. Image of gas meter removed from figure and "18" from conduit if present" added to figure, with dashed lines to indicate conduit location, other dimension lines slightly reconfigured, and dimensions changed from feet to inches where applicable.

- **Section 6.15:** Per Bob Orenstein, Conservation, paragraph rewritten as follows, "City Light allows net metering on approved customer generation installations of up to 100 kW-AC in most areas of the service territory. For more information, see Chapter 5, Customer Generation."
- **Glossary:** Per Bob Orenstein, Conservation, definition changed for Net Metering to the following: "A method of crediting customers for electricity that they generate on site in excess of their own electricity consumption. Customers with their own generation offset the

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	<p>electricity they would have purchased from their utility. If such customers generate more than they use in a billing period, they will be credited for the amount of power received by City Light.”</p>
DECEMBER 2019	<ul style="list-style-type: none"> <li>▪ <b>Section 5.2:</b> Statement “20% of the Network’s anticipated minimum load” changed to “a previously selected percentage of the Network’s anticipated minimum load or percentage of the installed capacity.”</li> <li>▪ <b>Section 5.2:</b> New sentence added following the sentence that ends with “...installed at customer expense” as follows: “The installation can be simplified to a Current Transformer (CT) at a downstream panel, a low voltage breaker, and a relay that is connected to both the CT and the breaker.”</li> <li>▪ <b>Section 6.6.2:</b> Bullet changed from “Between any meter socket and a gas meter: 36 inches” to “Between the closest edge of a gas meter regulator and the closest edge of any electric utility enclosure, e.g. meter socket, CT cabinet, tap can, etc.: 36 inches.”</li> <li>▪ <b>Figure 6.6.2:</b> Label changed from “FOREIGN UTILITY (FOR EXAMPLE: GAS METER)” to “GAS METER”. Also, simplified box to represent “foreign utility” redrawn to show a gas meter and regulator.</li> <li>▪ <b>Section 6.8:</b> 5<sup>th</sup> bullet changed from “Between closest edge of a gas meter regulator and the closest edge of the meter pack enclosure: 3 ft” to “Between the closest edge of a gas meter regulator and the closest edge of any electric utility enclosure, e.g. meter socket, CT cabinet, tap can, etc.: 36 inches” to match language in Section 6.6.2.</li> <li>▪ <b>Figure 6.8:</b> Label changed from “FOREIGN UTILITY (FOR EXAMPLE: GAS METER)” to “GAS METER”. Also, simplified box to represent “foreign utility” redrawn to show a gas meter and regulator.</li> <li>▪ <b>Section 6.9.2:</b> Third paragraph replaced with the following text: “All services rated at 800 A or less that use current transformer landing pads having mechanical lug provisions for termination of line and load conductors. Landing pads must be centrally mounted in the current transformer enclosure and the conductors will enter and leave near the corners.”</li> </ul>
NOVEMBER 2019	<ul style="list-style-type: none"> <li>▪ <b>Sections 1.6.1 and 1.6.2:</b> Email address changed from applications@seattle.gov to SCL_serviceapplications@seattle.gov</li> </ul>
OCTOBER 2019	<ul style="list-style-type: none"> <li>▪ <b>Section 6.4:</b> Paragraph 3 standard reference changed from DU13-4/NMT-30 to 1553.03.</li> </ul>
JULY 2019	<ul style="list-style-type: none"> <li>▪ <b>Section 2.7:</b> Figure 2.7 label for “RIGID STEEL CONDUIT” deleted because conduit can be either PVC or steel.</li> <li>▪ <b>Section 3.1:</b> New figure 3.1 added to show vertical clearances on the span. A reference to SCL 0130.30, which contains that figure, also added.</li> <li>▪ <b>Section 3.6.1.1:</b> Figures 3.6.1.1 a and 3.6.1.1b revised to change the label on the middle RH side of the figure from “12’-0” MINIMUM” TO “20’ MAXIMUM”.</li> <li>▪ <b>Section 3.6.2:</b> <ul style="list-style-type: none"> <li>○ Statement added that reads, “It is the customer’s responsibility to ensure required clearances between City Light Underground structures and other utilities’ structures.”</li> <li>○ Figure 3.6.2 added to show all City Light standards that govern underground secondary service.</li> <li>○ Descriptive introductory statement for that figure also added.</li> </ul> </li> <li>▪ <b>Section 6.13:</b> Totalized Metering chapter title changed to “Communications Provisions for Large Metered Loads”; first and third paragraphs added to add back content that was in previous version of the RESC.</li> </ul>

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MAY 2019

Major revision of 2007 RESC published.

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