

**USE:** Rules and procedures for overhead or underground services.

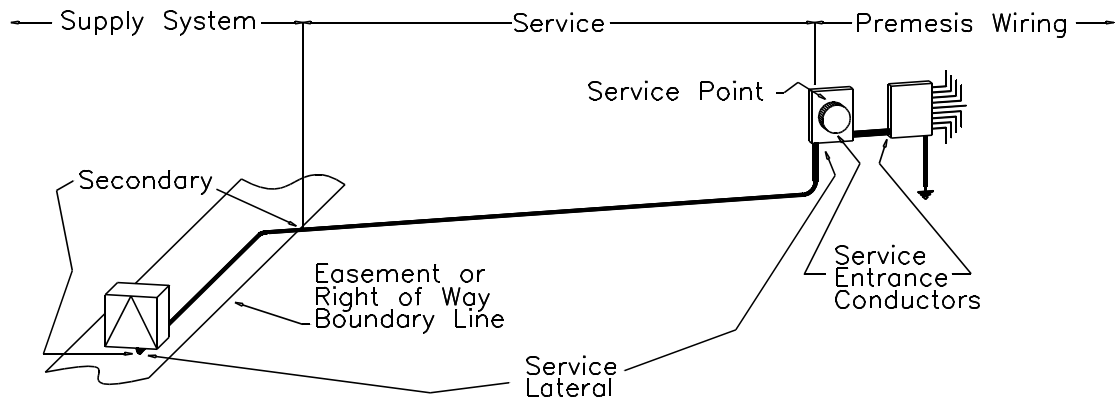
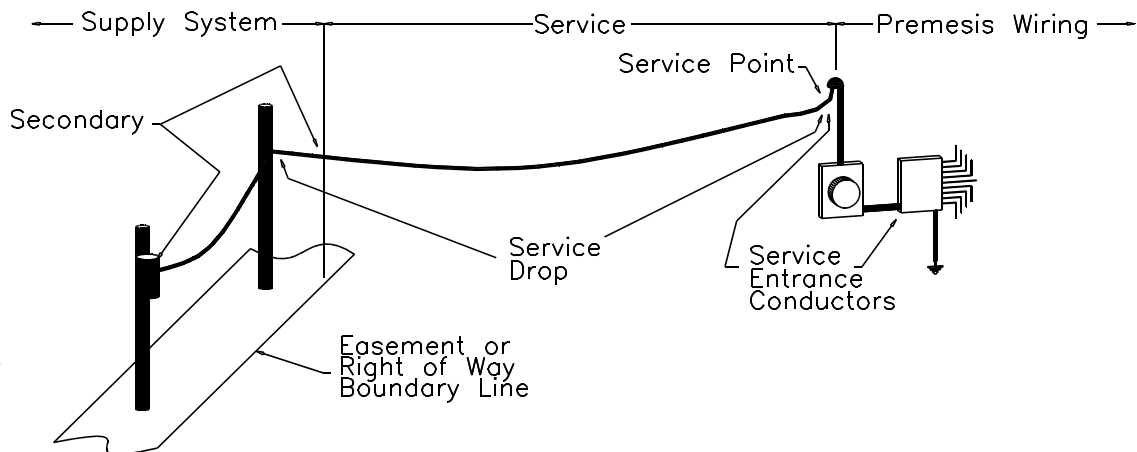
<b>PREVIOUS REVISION</b> 10-01-03	<b>ORIGINATED</b> 03-94	<b>PREVIOUS NUMBER</b> ER 1-290-B, 07-15-93
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LATEST REVISION: Updated references throughout document. Updated "building" description, who does connections, Facility Extension and Multiple Services sections.

**REFERENCE:** Indiana Electrical Code / National Electrical Code (IEC/NEC), latest revision  
170 IAC 4-1-27 & 4-1-28  
IURC Rules for Electrical Utilities, latest revision.  
IURC Electric Service Tariff - General Rules and Regulations Applicable to Electric Service, latest revision

**SPECIFICATION:**

**1. DEFINITION:**



- 1.1 The service point is defined as the point of connection between the electric system of the company and the customer owned premises wiring.
- 1.2 Premises wiring is defined as the customer owned, interior and exterior wiring, that extends from the service point to feed a structure and any contiguous structure with electricity. A single premises is defined as all property and structures which are fed from one premises wiring system. A separate premises is therefore defined as the property and structures which are electrically isolated from another premises, having a dedicated premises wiring system to itself.
- 1.3 A building shall be defined, from the standpoint of providing service, as a structure that stands alone or is electrically isolated from adjoining structures with all openings therein, protected by approved fire barriers.
- 1.4 Service entrance conductors are defined as the conductors between the terminals of the customer's service disconnecting equipment and the point of connection to the service.
- 1.5 A service is defined as the facilities necessary for delivering energy from the electric supply system of the company to the wiring system of the premises served.
  - 1.5.1 A service drop is defined as the overhead service conductors that extend from the last pole or aerial support, to and including the splices if any, connecting to the service entrance conductors of the premises.
  - 1.5.2 A service lateral is defined as the underground service conductors between the companies facilities and the first point of connection to the service entrance conductors of the premises, in a terminal or meter box.
- 1.6 A secondary service is defined as one operating at 600 volts and below.  
A primary service is defined as one operating above 600 volts.

## **2. GENERAL (Secondary and Primary):**

- 2.1 The customer or his contractor shall consult the Company prior to construction, and provide the Company with load and demand characteristics of the requested service.
- 2.2 See figures, in specification 5, for examples delineating service ownership.
- 2.3 The Company will locate the point to which the service will be attached to the customer's building. The section of the customer's service entrance, to which the overhead or underground service will be attached, shall be installed according to the IEC/NEC and the rules of the Company. (see ER 19-290)
- 2.4 The Company shall make all connections at the service point for Company installed and owned services. For Customer owned services, the responsibility of supplying connectors and making the connections shall be determined on a per case basis by the LOA personnel and practices, and the customer.



2.5 Facility Extension:

2.5.1 The Company shall provide, as a normal installation, facilities required to supply service at a single point of delivery for a single premises. These facilities shall include one transformation, where required, and metering adequate to measure the energy consumption of the entire premises. Arrangements may be made with the Company in the case of facility requests outside the scope of a normal installation.

2.5.2 Distribution lines and service lines, installed, owned and maintained by the Company, will be provided at no charge when the "Margin Credit" is greater or equal to the estimated cost to serve, subject to service length limitations indicated in this standard (specification 3.1). When the estimated cost to serve exceeds the "Margin Credit", refer to the Company's current New Business Policy.

2.6 Facility Modification:

(See ER 6-100)

2.7 Multiple Services:

A building or other structure shall be served by only one service unless permitted by IEC/NEC (Article 230-2, Exceptions). If more than one service to each of these areas, a permanent plaque or directory shall be installed at each service entrance location denoting all other services, feeders, and branch circuits supplying that building or structure and the area served by each. Notification received from the building inspection authority shall be sufficient approval of meeting these requirements.

2.8 Underground Services:

2.8.1 Conduit shall be installed, to maintain the reliability of the Company's underground system, under the following existing or planned conditions:

2.8.1.1 Paved areas with high vehicular traffic, or which provide the only access or emergency access to a location.

2.8.1.2 Large paved areas such as driveways or parking areas.

2.8.1.3 Limited access areas such as:

2.8.1.3.1 Sites which restrict equipment/vehicular access

2.8.1.3.2 Zero lot line, close building clearances, and areas of congested utility installations.

2.8.1.3.3 Undersized easements

2.8.1.3.4 Geographic features; hills, landscape mounds, grade issues, water, trees, etc.

2.8.1.3.5 Soil type, hard clays, sand, muck, etc...

2.8.1.3.6 Development styles which have resulted in previous conflicts

2.8.1.3.7 Areas where future restoration is expected to be expensive

2.8.2 Conduit usage should be minimized to reduce our installation, maintenance, and future repair costs, at sites where developers/customers have provided adequate, accessible areas.

**SERVICE - GENERAL**  
Residential, Commercial, Industrial

2.8.3 Conduit shall be an electrical raceway that is approved and suitable for the intended application. Conduit shall be buried in clean soil free from ashes, cinders, and muck.

2.8.4 The customer shall furnish, install, own and maintain all service conduit on his property and the company will install, own, and maintain all service conduit on public thoroughfares and utility easements. The Company will install, own and maintain all conduit and U-Guard on Company poles.

**3. SECONDARY SERVICE (600 volts and below):**

3.1 The Company will furnish, own, and install a service, with associated hardware, up to 135 feet in length from the easement line (or property line if no easement exists). Service in excess of 135 feet will be installed and owned by the Company at the customer's expense.  
(see ER 19-295)

3.2 Services for industrial or commercial service entrance sizes, in excess of 400 amps, single or combined, of like voltage or phases, shall be considered *large*, in accordance with Rule 3 of the Company's "IURC Electric Service Tariff - General Rules and Regulations Applicable to Electric Service", and therefore shall be owned, installed, and maintained by the customer.

3.3 Customer option to install service:

The "IURC Rules for Electric Utilities" permits the customer to install and own a secondary service subject to specifications and inspection by the Company. When a customer elects to install his own service, the Company shall assume no responsibility for such service.

**4. PRIMARY SERVICE (over 600 volts):**

4.1 Overhead

An overhead primary service line of unspecified length, transformer, transformer pole, and primary metering equipment will be provided by the Company. The customer is to install, own, and maintain any additional line and supporting poles.

4.2 Underground

An underground service line of unspecified length, transformation and primary metering equipment will be provided by the Company.

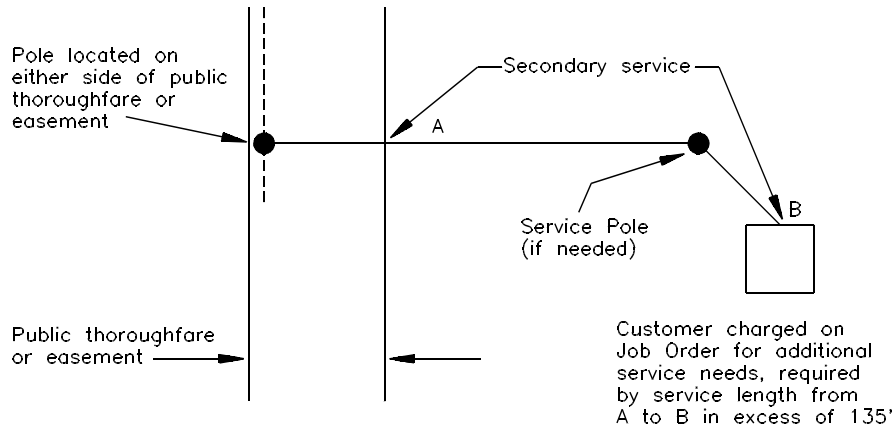
**5. EXAMPLES - Typical service installations:**

5.1 Legend

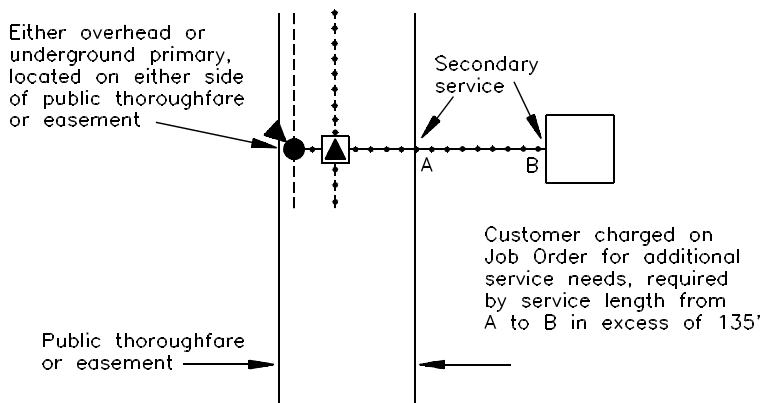
-----> Company owned, UG, Secondary	-----> Customer owned, UG, Secondary
- - - - -> Company owned, UG, Primary	- - - - -> Customer owned, UG, Primary
----- Company owned, OH, Secondary	----- Customer owned, OH, Secondary
- - - - - Company owned, OH, Primary	- - - - - Customer owned, OH, Primary
● Company owned pole	○ Customer owned pole
●▲ Company owned OH transformer	○△ Customer owned OH transformer
▲ Company owned UG transformer	△ Customer owned UG transformer
Ⓜ Company owned OH primary metering	
Ⓜ Company owned UG primary metering	

5.2 Secondary Service

5.2.1 Overhead

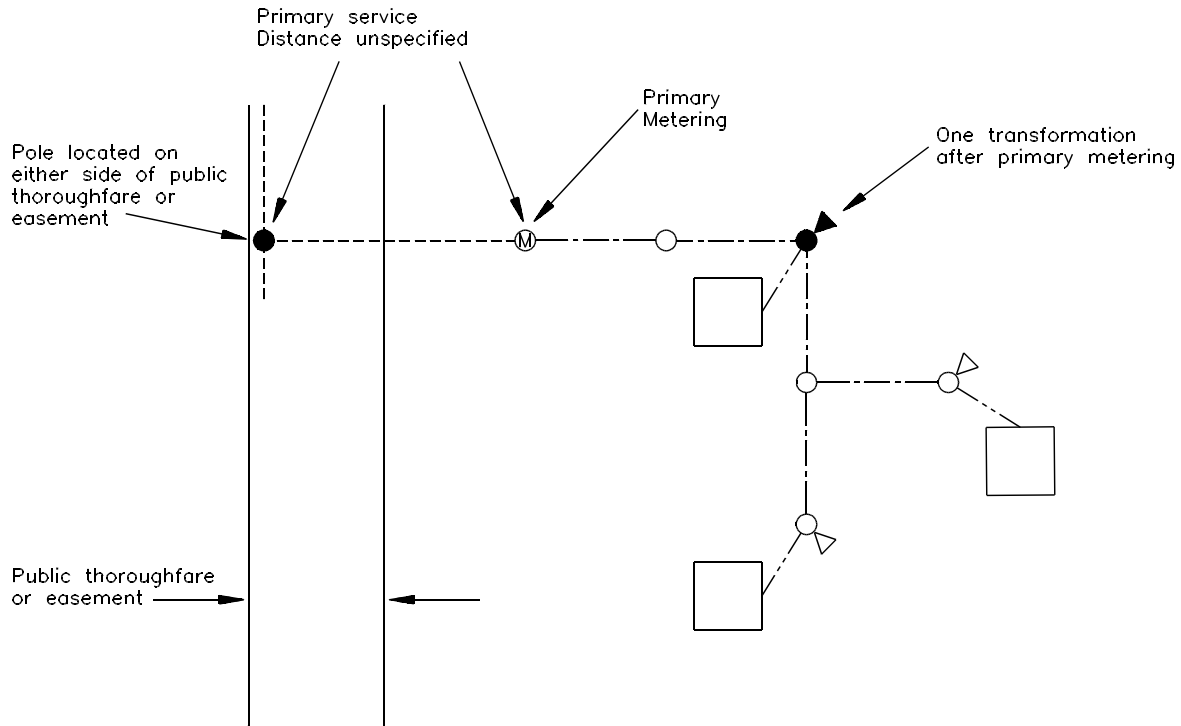


5.2.2 Underground

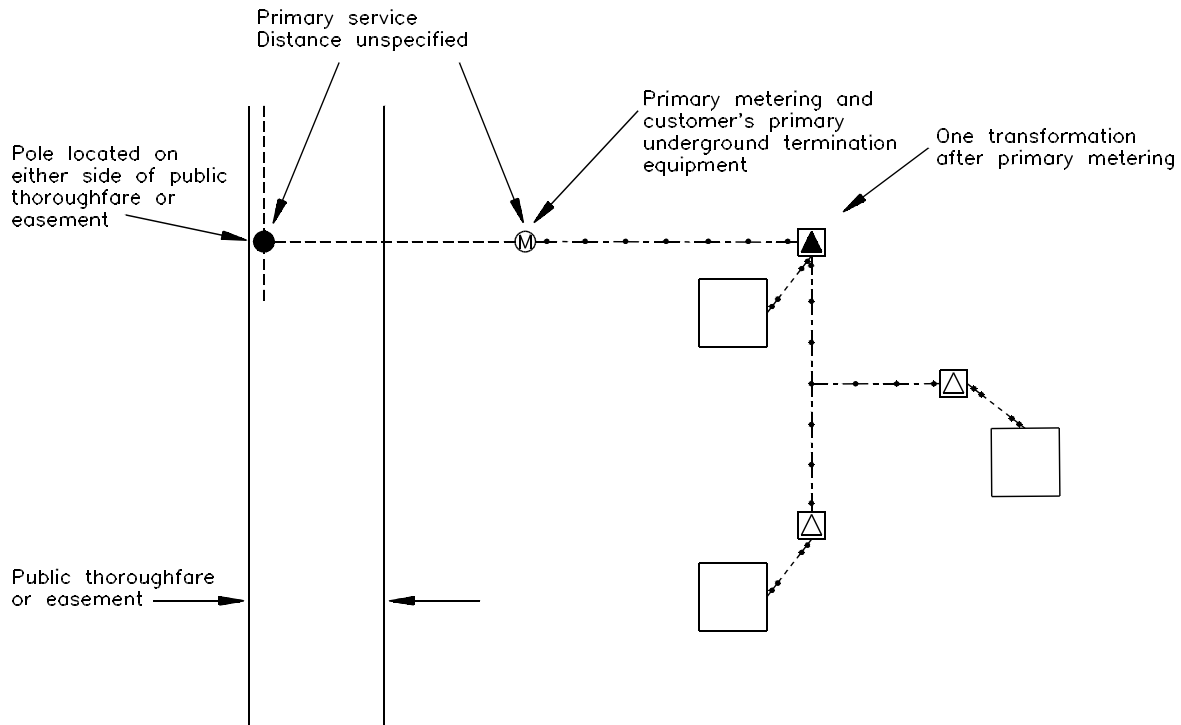


5.3 Primary Service

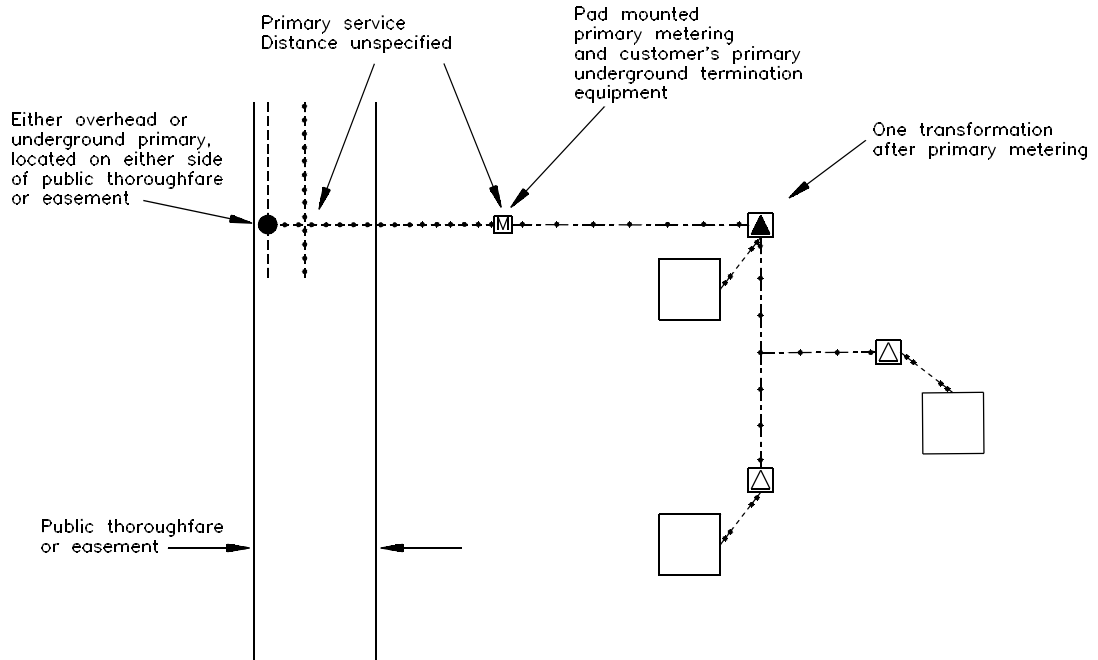
5.3.1 Overhead to an Overhead Customer System



5.3.2 Overhead to an Underground Customer System



5.3.3 Underground to an Underground Customer System



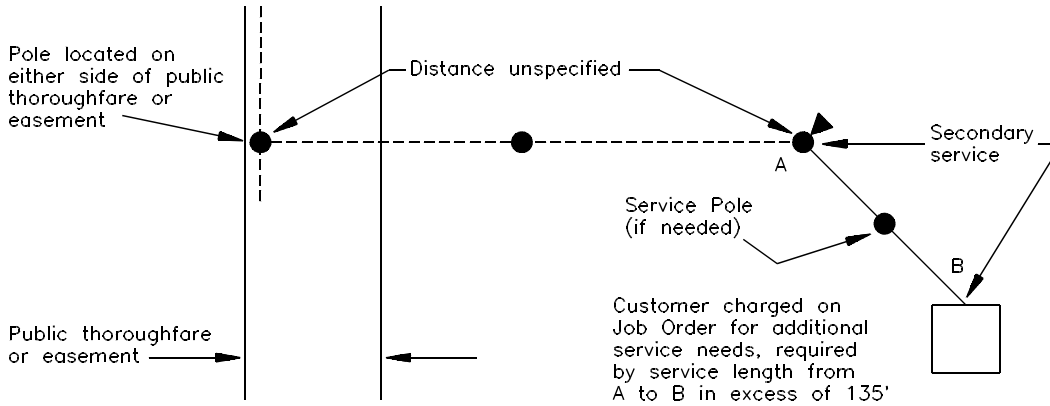
SERVICE - GENERAL

Residential, Commercial, Industrial

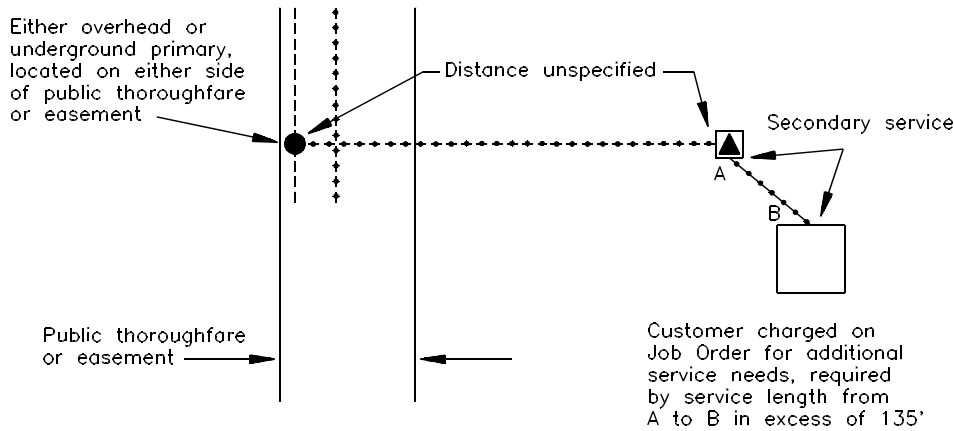


5.4 Primary Extension - Single Customer - No Easement Needed

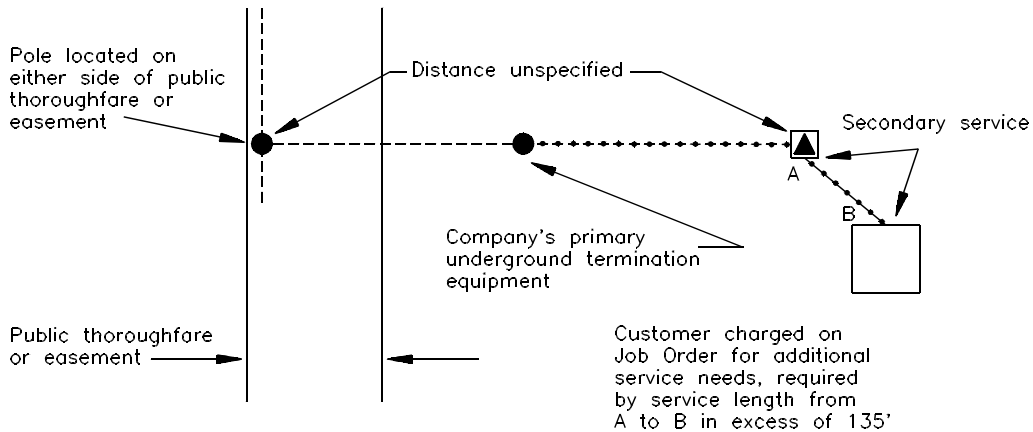
5.4.1 Overhead - Radial



5.4.2 Underground - Radial



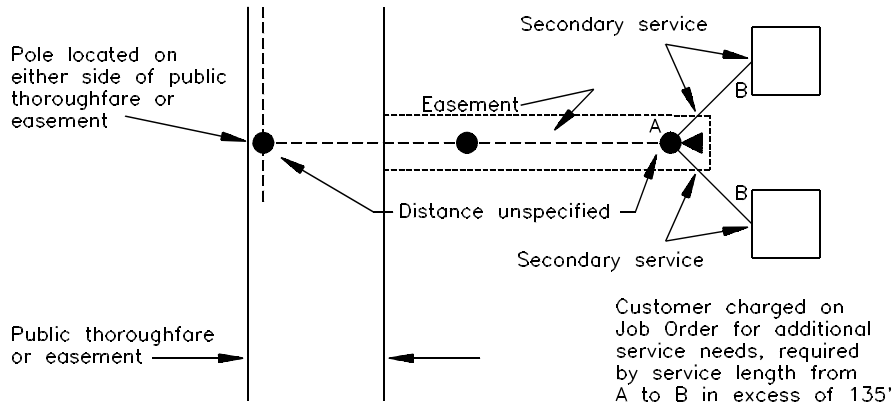
5.4.3 Overhead and Underground - Radial



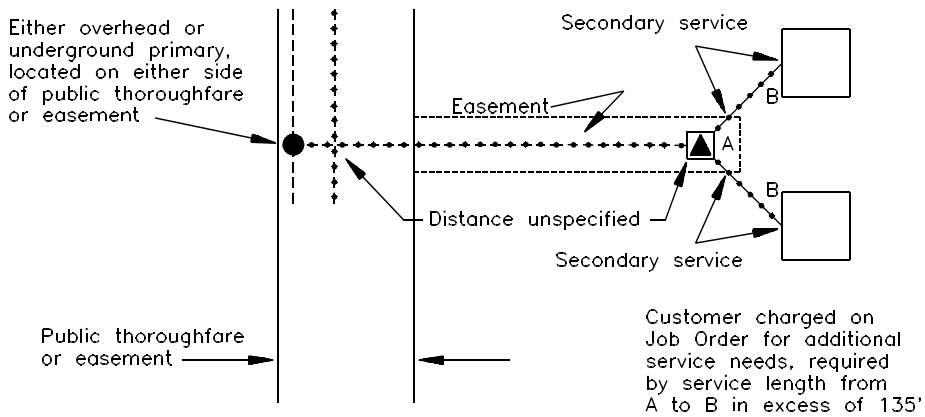


5.5 Primary Extension - Multiple Customers - Easement Needed

5.5.1 Overhead - Radial



5.5.2 Underground - Radial



5.5.3 Underground - Loop

