



GUIDELINES FOR COMMERCIAL ELECTRIC SERVICE HOOKUP

Steps to Commercial Service

Pay the Design Deposit

- Commercial Buildings:
 - Up to 10,000 sq ft = \$1,000.00
 - 10,000 – 50,000 sq ft = \$2,000.00
 - Over 50,000 sq ft = \$3,000.00

Commercial jobs require meter department approval on load calculation and line drawings before engineering starts

Apply for Membership:

- The Customer has the option of using his membership for all tenants or he may require that they provide their own. In either case, the Customer will be required to be a member of the Company.

Complete and submit CT Services & Commercial Load Information and Details form

Complete and Submit a Commercial Load Data Sheet for each metered space

Submit Construction Plans and Specifications

- Site Plan showing:
 - Any building on the property
 - Street designation and address
 - Location of service entrance, switchgear, and meter centers
 - “North” or direction arrow
 - Property boundary designations
 - Legal description (as required)
 - All existing and proposed: utilities, buildings, parking lots and roadways
- Building drawings showing:
 - Electrical rooms (must be pre-authorized by Company)
 - Square footage
 - Building Layout (see sample) with location of electrical panels, and each separate metered space showing ID of each space. This drawing must be signed by the developer once finalized.
 - A detailed sketch of the proposed route of service conductors from the service termination point to the main disconnect or bus
 - Provisions for metering
 - Switchgear Drawings
- Electrical drawings showing:
 - Meter Base Configuration (see sample) showing layout of all meters and associated power distribution equipment. Space ID's must be shown (unit 302, etc).
 - 1 line electrical drawing from the service termination point to the main disconnect or bus

- Specifications Including:
 - Switch gear specifications
 - Voltage requirements
 - The size of the main disconnect bus
 - The size, type, and number of service conductors and conduits

□ **Pay for Estimated Construction Costs:**

Prior to ordering materials and/or transformer(s), the Company will require that the Customer pay the estimated construction costs of the project.

Other Useful Information:

Available Voltage:

Electric service will be made available at alternating current, 60 hertz, at one of the nominal voltages stated below:

A. SINGLE PHASE SERVICES are available on all primary circuits except for network metering. However, depending on the primary distribution system, there may be voltage and loading limitations for some applications and the Customer should check with the Company prior to purchasing his equipment. Network metering will only be available on three phase primary systems. Single phase voltages are as follows:

1. 120/240 volts, 3 wire, grounded neutral
2. 240/480 volts, 3 wire, grounded neutral
3. 120/208 volts, 3 wire, grounded neutral, network metering

B. THREE PHASE SERVICES are available on three phase primary circuits. However, depending on the primary distribution system, there may be voltage and loading limitations for some applications and the Customer should check with the Company prior to purchasing his equipment. Available three phase voltages are:

- 120/208 volts, 4 wire, grounded wye
- 277/480 volts, 4 wire, grounded wye

If a non-standard voltage is desired, the Customer is responsible for installing transformation or conversion on the load side of their meter base. Three phase and network secondary voltages are only available in areas that have three phase primary power available.

Any existing 3 phase delta loads that are replaced need to be converted to 3 phase wye. Notify PLC at the time of conversion for the needed transformer modification.

C. THREE PHASE SERVICE: The Company will only provide three phase power for loads equal to or greater than 30 kva of demand load. Loads smaller than 30 kva will be served single phase unless there is an existing three phase transformer bank available that can be utilized.

D. POWER QUALITY: Motor starting at full voltage can cause voltage reductions that will cause lights to dim and electronic equipment to stop operating properly. The voltage reductions can affect several customers in the general area of the motor being started. To protect customers in the area from a customer who operates a motor, the Company requires the following:

1. For motors greater than 5 Hp and less than or equal to 10 Hp, a reduced voltage motor starter shall be installed.
2. For motors greater than 10 Hp, a “soft start” type motor starter shall be installed.

TRENCHING:

All secondary trenches (from building to electric power device or electric power pole) must allow at least 24 inches of earth cover over the service conductor from final grade of ground. Joint utilities are allowed in a secondary trench (power, phone, water, CATV) with a minimum horizontal or vertical separation of 6 inches. Gas lines require a minimum horizontal separation of 12 inches from secondary power cables. Sewer tight lines installed parallel to service conductors shall have a horizontal separation of no less than 4 feet.

In order to reduce the risk of an accident or electrocution during excavation, service laterals shall have their location identified by a warning ribbon that is placed in the trench at least 12 inches above the underground installation.

Trenching is the responsibility of the developer/contractor. All trenching must be completed to within 2 feet of the power source.

Telephone and cable TV companies need to be contacted to determine their conduit needs, as they can share the same trench that you have made for the power system. Contact them early as they may need their trench to branch off the power line trench to their connection points. Be sure to keep all conduits at least 6 inches apart in the trench to improve heat dissipation and reduce interference.

Utility	Type	Contact Name	Contact Number
Century Tel	Telephone	Customer Svc.	1-800-201-4099,3,1
Comcast	Cable	Aaron Cantrell	(206) 510-4222
Broadstripe	Cable (South of Key Center)	Chris Wals	(206) 571-2232
Puget Sound Energy	Gas	Customer Svc	1-888-225-5773

NOTE: State law requires that before any underground digging begins of 12 inches in depth or more, customers must contact the Utilities Underground Location Center, Phone #1-800-424-5555, and request utility lines to be marked. A minimum two business days notice is required, and there is no charge to the customer for this service.

Facility Ownership:

Peninsula Light Co. owns and maintains the power distribution system up to the transformer or secondary junction box (handhole). Secondary wiring (at facility voltage) is owned and maintained by the customer.

Important Contact Numbers

Peninsula Light Company
PO Box 78
13315 Goodnough Dr NW
Gig Harbor, WA 98335
(253)857-1545 Engineering
(253)857-5950 Main Office
1-888-809-8021 Toll Free
Engineering@penlight.org

State of Washington
Department of Labor and Industries
Electrical Division
950 Broadway Suite 200
Tacoma, WA 98402
(253)596-3808
www.lni.wa.gov

Utilities Underground Location Center
“Call Before You Dig”
1-800-424-5555
www.callbeforeyoudig.com

Engineering Services Fee Schedule

December 1, 2009

MEMBERSHIP FEE \$100.00

Peninsula Light Company, a Mutual Corporation, is a non-profit organization that is owned by its members and governed by an elected Board of Directors.

All new services must be covered by a membership. The membership Fee is refundable, provided there are no outstanding bills, if the member leaves the Company's serving area.

ENGINEERING DESIGN DEPOSIT \$500.00

The Engineering Design Deposit is assessed for jobs more involved than a simple connection from the structure to an existing transformer, and is intended to help recover some of the costs incurred when it is necessary for the engineer to visit the project site, discuss the project details, consult with other utilities or public agencies, and to calculate associated labor and material costs.

Upon request, Peninsula Light Company will provide rough cost estimates free of charge for any standard line extension project. Overhead to underground conversions or system relocations shall require detailed cost estimates since costs may vary considerably depending on extent of job.

Those requests that require a detailed cost estimate shall first pay the design deposit. The design deposit shall be based on a percentage of the anticipated cost of construction or a minimum flat deposit, and shall be applied toward the final job costs provided full payment is received within 90 days of the estimate date.

Detailed cost estimates are valid for a period of 90 days from the date of the estimate. Additional design deposits shall be required if the 90 days has expired OR if any changes require the project to be redesigned or costs recalculated.

TEMPORARY SERVICE HOOKUP FEE..... \$200.00

Underground Service - In addition to the hookup fee, all equipment, conductor, and trenching is the responsibility of the customer.

Overhead Service - In addition to the hookup fee all equipment is the responsibility of the customer. Overhead temporary services are limited to a maximum drop distance of 200 feet. Beyond 200 feet, consult the company for details.

RESIDENTIAL PERMANENT SERVICE HOOKUP FEE..... \$245.00

In addition to the hookup fee, all equipment, conductor, conduit, and trenching is the responsibility of the customer.

COMMERCIAL PERMANENT SERVICE HOOKUP FEES:

1 Phase self contained meter	\$245.00
1 Phase CT meter (includes meter base, TS, meter labor).....	\$400.00
3 Phase self contained meter	\$245.00
3 Phase CT meter (includes meter base, TS, meter labor).....	\$650.00
Metering with customer interface (ie: KYZ pulses).....	quote based on customer needs

Apartment buildings OR commercial projects that utilize a common service cable will pay a hookup fee of \$245.00 for the first meter. Additional meters for that project will be charged \$125.00 each.

OVERHEAD TO UNDERGROUND SERVICE CONVERSIONS - All equipment, conductor, conduit, and trenching is the responsibility of the customer. Peninsula Light Company installs the conduit riser on the power pole at the customer's expense (secondary riser fee).

SECONDARY RISER FEE \$150.00

It is the customer's responsibility to provide the additional conductor needed for the conduit riser on the power pole. Peninsula Light Company will install the customer's conductor within the conduit system.

ADDITIONAL RISERS: For those services requiring multiple risers an additional \$150.00 shall be charged for each.

RENTAL LIGHTS \$80.00

Installation of a rental light will be charged a trip fee plus the cost of any additional materials that are needed to operate a rental light. Rental lights must be installed for a minimum of 1 year. Peninsula Light Company has the option to charge the customer for the removal of a rental light if it's removed prior to the first year.

TRIP FEE..... \$80.00

Trip fees shall be charged when the following situations occur:

- A hook-up is requested by a customer prior to the service connection approval by the State Electrical Inspector.
- Additional trips are necessary for disconnecting and/or reconnecting temporary services, altered services, or permanent services.
- Additional trips are necessary to check for trench backfill or service approval.

Trip fees must be paid before any service connections will be made.

NOTE: If customers are connecting to a private line they will also need to pay a proportionate share of repayment. Private Main Line repayments, if any, are in addition to normal hookup fees and shall be paid prior to hookup.

Commercial Load Data

Project Name:

Order Number:

PLC Use Only

Load		Total KW	% Load Factor	Estimated KW
Air Conditioner	Number of Units: <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="0"/>
Heat Pump	Total Tonnage: <input type="text"/>	<input type="text"/>		
Compressor	Largest Single Unit: <input type="text"/>	<input type="text"/>		
Heat Gas? <input type="checkbox"/> Yes <input type="checkbox"/> No	Strip Heat: <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="0"/>
	Resistance Heat: <input type="text"/>	<input type="text"/>		
	Air Handling Fans: <input type="text"/>	<input type="text"/>		
Lighting (list type)	Indoor: <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="0"/>
	Outdoor: <input type="text"/>	<input type="text"/>		
Water Heater Gas? <input type="checkbox"/> Yes <input type="checkbox"/> No	Number: <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="0"/>
	Gallons: <input type="text"/>	<input type="text"/>		
Motors (over 7.5 HP)	Number of Units: <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="0"/>
	Total Horsepower: <input type="text"/>	<input type="text"/>		
	Largest Motor: <input type="text"/>	<input type="text"/>		
Receptacles		<input type="text"/>	<input type="text"/>	<input type="text" value="0"/>
Other (describe)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="0"/>
	<input type="text"/>	<input type="text"/>		
	<input type="text"/>	<input type="text"/>		
Future (describe)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="0"/>
	<input type="text"/>	<input type="text"/>		
	<input type="text"/>	<input type="text"/>		
Outbuilding (describe use)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="0"/>
Totals:		<input type="text" value="0"/>		<input type="text" value="0"/>

Transformer Size - PLC Use Only

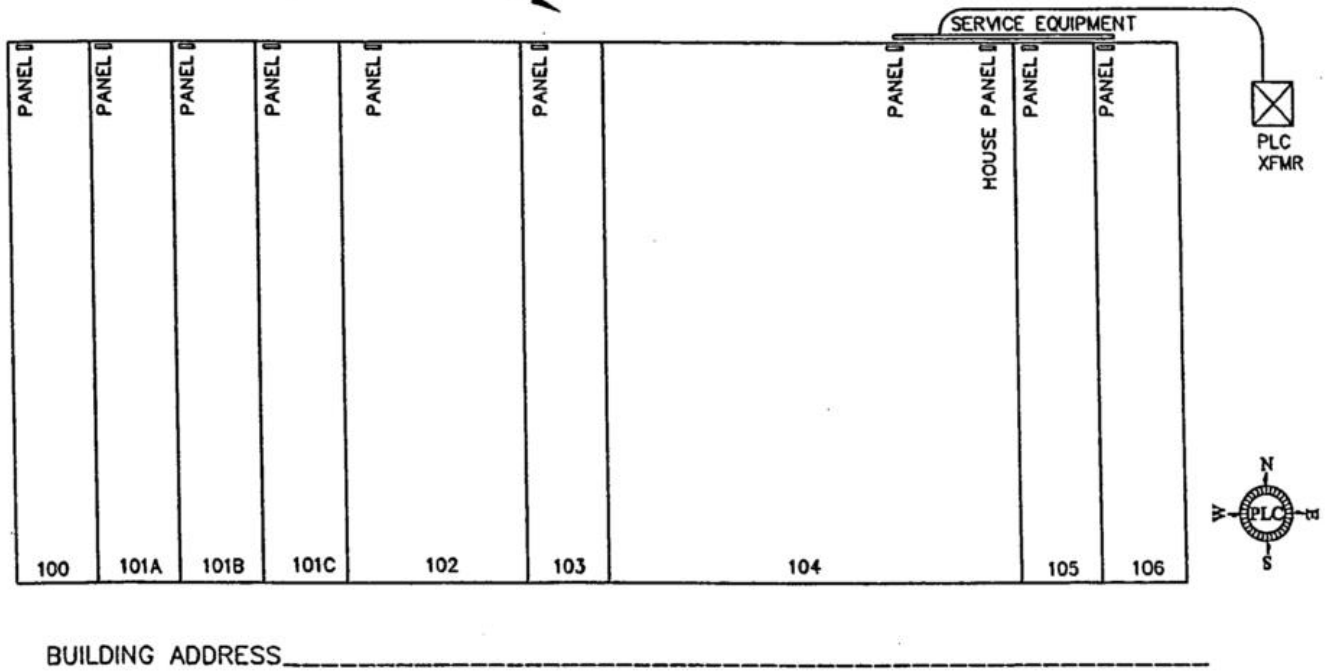
Other factors used in determining transformer size:

Transformer size to be set:

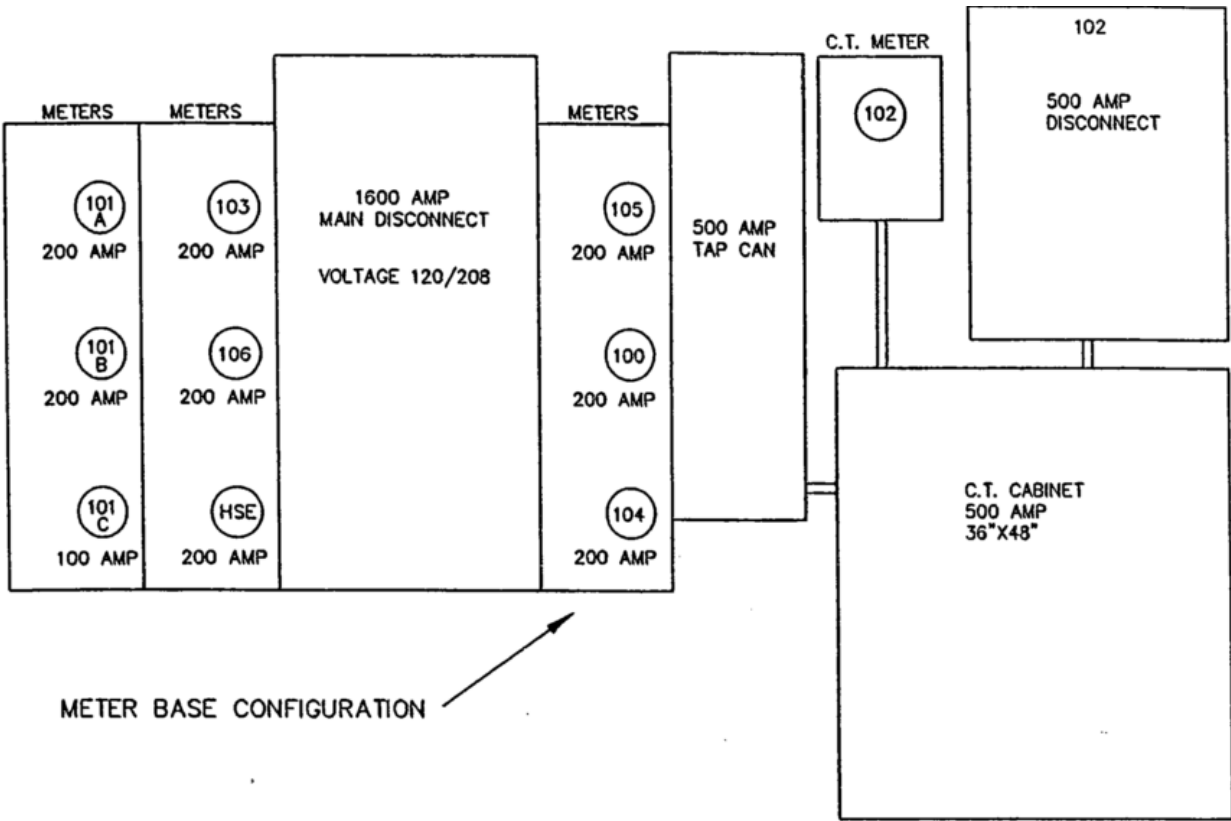
Approved By:

Date:

BUILDING LAYOUT



Sample Building Layout Map



Sample Meter Base Configuration