



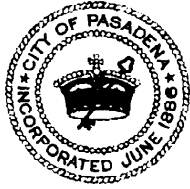
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- f. When the service conduit enters the end of terminating pull box, the opposite end shall not be less than 2 feet from an adjacent wall, ceiling or other obstruction. An obstruction is any projection that extends more than the depth of the box, extending from the surface on which the box is mounted.
- g. Service entrance conductors shall not pass through or under a building, unless in a conduit encased with 3 inches of concrete.
- h. When the customer desires to lock the access to the service entrance equipment, the customer must provide dual lock capability that can accept a City padlock with 5/16" hasp.

2. Terminating Pull Boxes

- a. All terminating pull boxes shall be sized per EUSERC drawing 343, have landing lugs per EUSERC drawing 347, and sealable covers. (See Department Utility Service ~~Advisor~~Planner for EUSERC drawing 343).
- b. Service conduits shall normally enter a terminating pull box from the bottom. The Department may require larger pull boxes in installations where conduits enter from the back or side.
- c. Each terminating pull box shall service only one main switch/meter-group combination. Where multiple meters are grouped at a single location, only one service wiring raceway or bus shall leave the terminating pull section.
- d. Where more than one terminating pull section or group of meters is installed on a premise, each pull box or service raceway shall be permanently identified to indicate the portion of the premises or building being served.
- e. If, subsequent to initial installation, additional metering equipment becomes necessary, consult Department for requirements.
- f. The main service disconnect switch(s) must be located immediately adjacent to the meter(s), and may not be separated by any walls or other partitions.

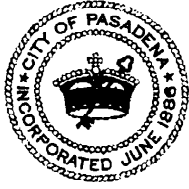


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3. Underground Service Pedestals

- a. Underground Service Pedestals may be used only when approved by the Department for a specific location.
- b. The approximate size of pedestals shall be 12 inches by 14 inches by 48 inches in height. Mobile home type pedestals will not be acceptable.
- c. The base must be mounted on a concrete slab.
- d. At least 3 feet of clearance must be maintained on all sides of pedestal.
- e. When being served by a power pole, eight (8) feet of clearance must be maintained from the face of the pole.



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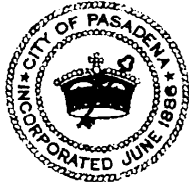
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IV. TRANSFORMER ENCLOSURES/VAULTS ON PRIVATE CUSTOMER'S PROPERTY

A. GENERAL

1. Installation of a vault/enclosure shall be required, at the ~~customer's~~ vault owner's expense, for any single-phase service that exceeds 200 amperes or any three-phase service that exceeds 100 amperes.
2. The design and installation must conform to all state and federal codes and regulations.
3. The Department must have unobstructed ingress and egress to conduct inspections of the vault/enclosure or maintenance on the electrical equipment located in the vault/enclosure¹. No structures or other obstructions are to be placed on, over or in front of any transformer vaults or enclosures.
 - a. Shrubs, trees, or other plantings, encroaching on vaults/enclosures, are subject to trimming, at the customer's expense, in order to permit ready access.
 - b. Maintenance and repair of the vault/enclosure remains the sole responsibility of the ~~customer~~ vault owner. ~~The customer or property owner~~ vault owner shall make the vault freely accessible to department employees or contractors, and properly maintain the vault/enclosure at all times, so that the Department's staff may operate safely and electrical equipment will function efficiently. Appropriate signs shall be on display to warn the public of the high voltage equipment that is located in the vault/enclosure. The exterior of the vault/enclosure shall always be maintained in a condition that will not cause any safety hazard to the public. Upon notification by the Department that a vault/enclosure is deemed unsafe, the customer or property vault owner shall take appropriate action within 10 business days. If, after the 10 days have passed, the customer vault owner has not taken appropriate action to remedy the issue, the Department will shall do the necessary work to bring the vault/enclosure to a safe standard. The

¹ Pasadena Municipal Code Chapter 13.04.125



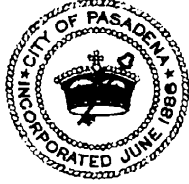
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customer vault owner shall be responsible to pay all expenses for such work, as incurred by the Department².

4. Vault designs that are not installed within one year of Department approval must be reviewed by the Department prior to construction in order to verify that service requirements have not changed.
5. The customer or property vault owner will be responsible for the installation and maintenance of the vault/enclosure, high and low voltage conduits and venting ducts on private property.
6. The customer or property vault owner will be responsible for the initial installation of the vault blower/fan, in accordance with Department standards. The Department, at no cost to the customer vault owner, will do subsequent maintenance or replacement of ventilating equipment in the vault.
7. The Department will, at the expense of the customer vault owner, furnish and install all cables and equipment in the vault, except ventilating fan or blower (as shown in 6). The Department, at no cost to the customer, will do subsequent maintenance or replacement of all transformers, cables and equipment in the vault, including ventilating fan or blower.
8. Services of 1200 amperes or greater shall be bus terminated with a standard bus head in accordance with EUSERC drawing 349, unless otherwise approved. (See Department Utility Service Adviser Planner for EUSERC drawing 349).
9. No foreign pipes may pass through any vault or enclosure.
10. Any high voltage conduits between the Department's manhole and the customer's transformer vault, which pass through a building, must be encased in a ~~3-inch~~ 3-inch envelope of red concrete, and must have permanent signs attached indicating "High Voltage."

² Pasadena Municipal Code Chapter 13.04.125



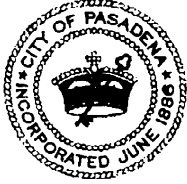
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V. METER INSTALLATIONS AND METERING EQUIPMENT

A. GENERAL

1. Meter installations shall comply with the Department's rules and requirements (Regulation 21 and EUSERC), and with the rules and regulations of other inspection authorities having jurisdiction (State regulations and NEC).
2. The Department shall determine the location and method of installation of all metering equipment
3. The customer, at its expense, shall provide automatic meter reading (AMR) capacity whenever there is new construction, service upgrades, or major modifications of service requiring a new meter panel in order to allow the Department to remotely read a customer's meter. For purposes of these requirements, and in order to stay current with available technologies, any reference herein to AMR meter connections shall include, but not be limited to, telephone line connections. Customers should contact a Department Utility Service ~~Advisor~~Planner in advance of construction to determine which AMR meter connection method is required.
4. Following the installation of the AMR meter, should the customer choose to contract with an energy service provider (ESP), other than the Department, the customer will be charged the published Direct Access Fee.
5. All materials, wiring methods and workmanship shall receive the approval of the Building Electrical Inspector and the Electrical Test Division before the Department will energize or install metering equipment.
6. *Whenever any electrical wiring is installed, new metering equipment complying with these service requirements shall be used, except when in the opinion of the Department, the existing metering equipment is satisfactory and adequate to measure all power/energy to be supplied.*
7. For each meter, the customer shall furnish and install a switch or other approved disconnecting means capable of being individually sealed in the open position. This disconnecting means shall be on the load side



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of the meter and shall control all the energy registered by that meter. For commercial installations, the disconnecting means shall be capable of accepting a Department padlock with a 5/16 inch hasp.

8. All new or existing apartment houses with security entrances and meter rooms will be required to install a Department approved lock box at the front entrance of the building. All new commercial accounts with meter rooms will be required to install a Department approved lock box next to the meter room.
9. For the purpose of these requirements, an installation shall be considered a commercial installation whenever a meter registers the current supplied to any occupancy and where the Basic Electrical Regulations of the California Administrative Code (Title 8) apply.
10. For single-phase service, the maximum allowable ampere rating of a main service switch or circuit breaker for each service is 600 amperes. Where the load requires greater capacity, two or three services with "totalized metering" may be required. In certain areas of the City where underground facilities are not available, single-phase services may be limited to 400 amperes.
11. Three-phase temporary installations will require a kWh meter and test switch only.
12. Provisions for "future metering" positions on switchboards must be fully installed, including test facilities (if required), line side wiring, and meter sockets.

B. METER TYPE

1. All meters shall be "S" (socket) base type.
2. An AMR electric meter junction box shall be provided within 3 feet of the customer electric meter. This junction box shall be waterproof if in an external location, and contain either a standard RJ 11 connection or, where AMR capacity is provided via telephone, a standard telephone termination strip. This box shall have provisions for accepting an external connection in the future without degrading its waterproof specifications, and be able to be secured to prevent tampering.



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3. As an alternative to the above, an AMR junction box connection can be provided within the meter panel as long as it does not interfere, obstruct, or impair clearances or the functionality of the panel. This internal junction box must not conflict with any code regulations. Future AMR connections from the electric meter to the AMR junction box, shall be made by the Department within the meter panel.

C. METER HEIGHT

1. Switchboards should be constructed so that the maximum height to the center line of any meter socket shall not be more than 72 inches (6 feet) above the bottom of the switchboard. Switchboards may be placed on a concrete slab of 3 inches maximum height. Total height from the level standing surface in front of the switchboard to the center line of the meter shall therefore not exceed 75 inches.
2. Other than switchboards – The center line of any meter socket shall not be more than 75 inches (6 feet 3 inches) above the level standing surface.
3. The minimum height to the centerline of all meters shall be not less than 48 inches above the standing surface when installed outdoors. If enclosed in a cabinet or installed indoors in a meter room, the minimum height may be reduced to 36 inches.

D. METER LOCATIONS

1. Sites where there are multiple meter locations grouped together, shall have a single AMR junction box mounted within three feet of the meter switchboard and have the capacity to contain connections for all the respective meters. This junction box shall be waterproof if in an external location and, where AMR capacity is provided via telephone, contain a standard telephone termination strip. This box shall have provisions for accepting external connections in the future without degrading its waterproof specifications, and be able to be secured to prevent tampering.
2. As an alternative, an AMR junction box connection can be provided within the meter panel as long as it does not interfere, obstruct, or impair clearances or the functionality of the panel. This internal junction box must not conflict with any code regulations. The



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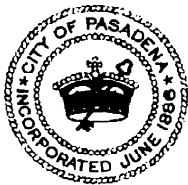
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Department shall make future AMR connections from the electric meter to the AMR junction box within the meter panel.

3. Where AMR capacity is provided via telephone, the telephone line provided to the AMR meter junction shall be connected in parallel to any active telephone line of the respective electric meter's bill paying customer.
4. Residences – Meter sockets shall be located on (or in) external walls so that meters will be accessible for reading or testing without entering the building. Future building modifications or changes shall not make meters inaccessible from the same property.
5. Commercial/industrial – Customers must consult Department for approved locations.

E. PROHIBITED METER LOCATIONS

1. No meter socket or service equipment shall be installed in any locations not readily accessible from the same property during normal business hours. If the meters are to be located in a separately locked utility room, the Department must be supplied a key to that room.
2. No meter socket or service equipment shall be located:
 - a. In any place where moisture, fumes or dust are present.
 - b. In any elevator shaft or hatchway.
 - c. In any room containing elevator equipment.
 - d. In any substation or transformers vault, unless such meter is in an enclosure, which is effectively screened from the high voltage compartment and contains no bare or exposed energized parts.
 - e. Behind a switchboard having bare and exposed live energized parts, unless such meter is located at least 5 feet from such parts and is effectively screened ~~there from~~.
 - f. In any projection room.



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- g. In any location that is hazardous, as determined by the Department or the inspection authorities.
- h. In any attic or place not readily accessible.
- i. In any enclosed show window or one having a bulkhead or raised platform.
- j. In any restroom, bathroom, laundry room or shower rooms.
- k. Directly over any stove or plumbing fixtures.
- l. Directly over any stairway, ramps or steps.
- ~~m.~~ On any balcony or mezzanine floor unless the balcony
- m. or mezzanine floor has clear stairways of normal tread and rise.
- n. On any surface subject to excessive vibration as determined by the Department.
- ~~p.~~ On or recessed in any bedroom wall of multiple occupancy buildings without permission from the Department.
- o. On or recessed in the exterior of any wall or structure located so that less than 3 feet clearance is provided in front of all metering equipment and its enclosing cabinets from property lines, public thoroughfares, alleys, driveways and walks.
- p. In an unlighted enclosed area.
- q. In any commercial occupancy which the meter does not serve.
- r. In any ~~driveways~~carport.
- s. In any patio area that could later be enclosed, thus preventing accessibility to meter and weatherhead.
- t. Within 32 feet of any gas meter.



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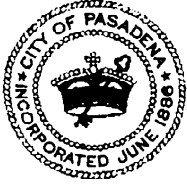
F. METER SOCKETS

1. General Requirements:

- a. All meter sockets shall be furnished, installed and wired by the customer in a true vertical position. Sockets mounted in walls exposed to the weather shall be designed for waterproof mounting and shall be installed in a manner that will prevent water from entering the walls of the building.
- b. Sockets shall not be flush mounted, but shall be semi-flush or surface mounted with not more than two sockets mounted on any one cover plate.
- c. New meter installations with more than two meter sockets must be installed in a factory-assembled unit and wired with factory color-coded conductors at socket terminals and at switch or circuit breaker.
- d. Sockets on multiple meter installations must be removable without interrupting main bus continuity.
- e. Test switches for transformer metering will be furnished and installed by the Department when required.

2. Meter Socket Clip Requirements:

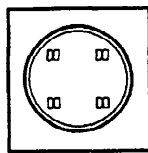
- a. The chart on the following page provides the Department meter socket clip requirements:



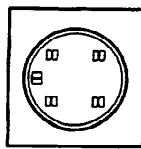
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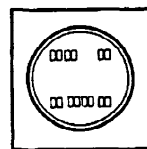
Type of Service	Number of Wire	Maximum Allowable AMPS	Number of Socket Clips	
			Self Contained Sockets	Transformer-Rated Sockets
1-Phase				
120 volt	2	50	4	N/A
120/240 volts	3	100	4	5
120/240 volts HD	3	200	4	
Network				
120/208 volts	3	200	5	N/A
3-Phase				
240 volts	3	100	5	8
240 volts HD	3	200	5	
120/208 volts Wye	4	200	7	13
480 volts Delta	3	200	5	N/A
277/480 volts Wye	4	200	7	13
2400 volts Delta	3		N/A	8
2400/4160 volts Wye	4		N/A	13
17000 volts Wye	3		N/A	8



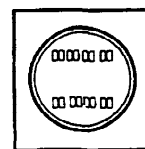
4 clip



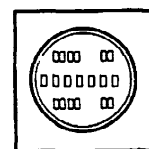
5a clip



7clip



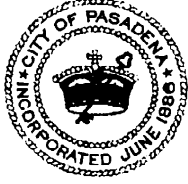
8 clip



13 clip

- b. No sockets shall be equipped with circuit-closing devices or bypasses.
- c. Totalizing two 3W 120/240v services requires 9 inch Switch Board Meter Test Slots and an ~~8-clip~~8-clip socket.
- d. Totalizing three 3W 120/240v services requires 10 inch Switch Board Meter Test Slots and a ~~13-clip~~13-clip socket.

* Not available for new service requests.



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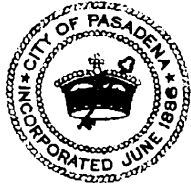
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3. Meter Socket Installations

- a. Customer shall connect conductors to binding posts in the socket for self-contained meters.
- b. For residential self-contained single-phase meter installations, any approved meter socket not exceeding No. 1 AWG wire may be used. Heavy duty approved meter sockets shall be used where wire size exceeds No. 1 AWG, but is not larger than 3/0 AWG; the meter switch rating is not over 200 amperes; service conduit is not greater than 3 inches.
- c. All residential underground combination pull boxes and meter terminating enclosures, when installed semi-flush in any portion of the building, shall be capable of accommodating heavy duty sockets.
- d. For all commercial self-contained meter installations, a safety socket box shall be used. Heavy duty approved safety socket boxes (EUSERC drawing 305) shall be used when wire size exceeds No. 1 AWG, but is not larger than 250 kcmil and the meter switch rating is not over 200 amperes.

4. Exceptions:

- a. Safety socket boxes are not required for house light service in multiple-family residential occupancies provided meter switches do not exceed 200 amperes, and each individual occupancy is separately metered. This includes miscellaneous service for laundry rooms, garages, halls, ~~exists~~exits, and similar non-commercial uses on the premises.
- b. When service is supplied to a signboard, for lighting only, or parking lot lighting, and the meter switch does not exceed 100 amperes, it may be installed as required for a separately metered single occupancy residential installation. Consult the Department when signboards have motor-driven equipment.

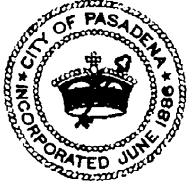


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G. MULTIPLE SERVICE METERING – "TOTALIZING METERS"

1. When one meter registers the kilowatt hours of more than one service, a separate instrument transformer compartment will be required for each service. A separate service wiring raceway shall be brought to an approved location for each service. Services to be totalized on one meter shall be of equal size with load balanced within 20 percent. Service sections shall be in the same room connected by a 1-1/2 inch rigid metal conduit, not to exceed 15 feet.



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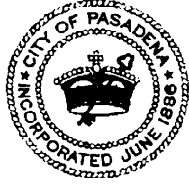
VI. METERING INSTALLATIONS 0 – 600 VOLTS (OTHER THAN SWITCHBOARDS)

A. GENERAL

1. A meter installation other than a switchboard (often referred to as an EXO installation) is any assembled service wiring installation, which does not employ a manufactured switchboard.
2. Service Wiring Raceway Defined:
 - a. Overhead – Service wiring enclosure from the service head to the meter socket.
 - b. Underground – Where a terminating pull box is used on an underground service, the wiring raceway from such box to the meter socket is the service wiring raceway. Where a combination terminating pull box is used for an underground residential service, the wiring enclosure from such a box to the meter switch or breaker is the service wiring raceway.
 - c. All openings in service wiring raceways shall be sealable and accessible to the Department.
 - d. Any service entrance equipment that is contained in a locked cabinet or other enclosure, must be provided with a means of accepting a Department padlock with 5/16 inch hasp. This padlock is in addition to any lock provided for the customer and/or tenants so that either lock will allow access to the equipment.

B. METER SPACE

1. Recessed Enclosed Meters:
 - a. The total inside dimensions for all recessed enclosed meters, with the exception of four-wire wye meters, shall be a minimum of 9 inches and a maximum of 11 inches from the face of the socket to the door or face of the enclosure. Four-wire wye meters shall have a minimum dimension of 13 inches from the face of the socket to the door or face of the enclosure.



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- b. All safety socket boxes shall have a minimum clearance of 1 inch on the sides of the box and 3 inches below and above the box. All clearances must be measured from horizontal or vertical plane extending from the front opening to the back of the recess. If a door is to be installed enclosing the recess, the total depth of recess shall be the depth of the box and socket ring plus 9 inches.
- c. If the enclosure is to be covered, it shall be with a side hinged door. Contact the Department if sliding doors are desired. The cover shall not be fastened shut with nails or screws.

2. Working Space in Front of Meter

- a. A clear, unobstructed working space shall be maintained in front of the meter for a minimum distance of 3 feet wide, 3 feet deep and 7 feet high measured vertically from the standing surface in front of the meter face. The standing surface must be level, or if outdoors, must gently slope away from the electrical equipment to promote proper drainage.
- b. The working space must be entirely on the property where the service is located.

C. MULTIPLE METER INSTALLATIONS

1. The Department shall require manufacturer drawings for all multiple residential and small commercial or industrial metering equipment prior to installation for approval. (See Section VII. A. 4, a, b, c, d, e.)
2. Where multiple meters are installed, their vertical center shall be a minimum of 8-1/2 inches apart; their horizontal center shall be a minimum of 7-1/2 inches apart for single-phase meters. Safety socket boxes shall have a minimum space of 1/2 inch between boxes, horizontal and vertical. All meters must be installed to comply with EUSERC drawings 353, 352, and Pasadena drawing 8-L-1362.
3. Sealable pull boxes and gutters shall be used for all multiple meter installations.



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4. When more than one meter is to be installed, the customer must provide ~~permanent markings~~ placards at each meter, sub main and unit entrance, indicating the address or unit number served by that meter.



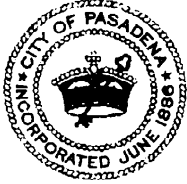
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VII. SWITCHBOARD METER INSTALLATION – 0 – 600 VOLTS

A. GENERAL

1. The requirements of this Section are in addition to those described in Section VI above.
2. Customer will be required to consult the Department regarding all switchboard installations of meter and accessory equipment. The Department shall be contacted for any metering changes on existing switchboards.
3. Switchboards with instrument transformer compartments are required for all installations rated over 200 amperes.
4. Prior to fabrication of any transformer rated switchboard, the customer shall submit at least three copies of a drawing of the service switchgear to the Department for approval. The drawing must include the following:
 - a. Job name and address, contractor's name, telephone number and address, manufacturer's name, telephone number and address
 - b. Voltage, current, and short circuit withstand rating
 - c. Bill of Materials, including number of poles and current rating of components
 - d. Front view of switchboard, including dimensions and location of all components listed on Bill of Materials
 - e. Statement that construction and labeling is in accordance with Underwriters Laboratories and other EUSERC and Pasadena requirements
5. Switchboards must meet the current EUSERC requirements that are accepted by the City of Pasadena in addition to any requirements of this Section



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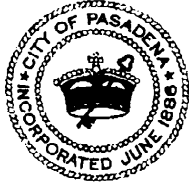
- a. A service section is a section of the switchboard for the meter service switch or breaker, the instrument transformer compartment, a panel for meter and test switch, and for the entrance of the service conductors.
 - b. For underground services, a separate terminating and pulling section (EUSERC drawing 345) will be required except where a separate pull box is installed. The opening shall have a rolled edge with an inside radius of not less than $\frac{1}{2}$ inch.
 - c. Indoor or rain-tight service sections with enclosed meter panels shall comply with the detailed requirements of applicable EUSERC drawings.
6. Where any underground pull sections or switchboard service sections have parts that can be removed that will give access to the service conductors before they leave the instrument transformer compartment, such removable parts shall be made sealable.
 7. Raceways used for meter secondary wiring shall be sealable.
 8. All switchboards shall be bussed.

B. METER TYPE AND HEIGHT

1. All switchboard meters shall be "S" (socket) base type.
2. The center line of the meter socket shall not be more than 72-1/2 inches, nor less than 52-1/2 inches for watt-hour / RKVAH meters.

C. METERS – SELF CONTAINED

1. Self-contained meters on switchboards shall have a sealable removable panel exposing safety test blocks.
2. Maximum meter service switch or breaker rating shall not be greater than 320 amperes and service conductors not greater than 250 kcmil.



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3. When more than one meter is to be installed, permanent markings must be provided by the customer at each meter, sub main, and unit entrance, indicating the address or apartment number serviced by that meter.
4. All residential service 320 class, 400 AMP combination meter assembly panels require a 400 AMP disconnect and are subject to final inspection by the Department. The customer must receive Department approval prior to any installation.

H. METERS – WITH INSTRUMENT TRANSFORMERS

1. Meter panels shall be drilled, tapped and slotted (EUSERC drawing 333) for the required number of meters and secondary test switches which the Department will furnish and install.
2. On all bussed instrument transformer compartment service sections, meters, instrument transformers and test switches will be furnished and installed by the Department.
3. Conductors shall not be rerouted through the instrument transformer compartment.
4. Each instrument transformer compartment shall be bussed with rectangular bus bar regardless of main service switch ampere rating.
5. All three-phase switchboards rated 400 amperes or more shall also have a RKVAH (reactive) meter. (ERSERC drawing 333).
6. Although not recommended by the Department, a fire alarm circuit may be connected ahead of the main switch and below the instrument transformer compartment.



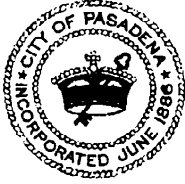
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VIII. SWITCHBOARD METER INSTALLATIONS – 4160 VOLTS AND HIGHER

A. GENERAL

1. Each switchboard for service of 4160 volts or higher will be considered as being specially engineered. The customer shall submit at least 3 copies of a drawing of the service entrance, main breaker, meter section and a plot plan of the proposed switchboard to the Department for approval prior to fabrication.
2. Isolating disconnect switches shall precede the metering transformers and test section, except that lockable, draw out switchgear or air load break fused disconnects may be used in lieu of the isolating disconnect switches.
3. Instrument transformers and test section shall be similar to EUSERC drawing 403 for three-phase four-wire, or EUSERC drawing 402.
4. Direction of feed through the test section may be as shown in EUSERC drawing 402 or 403.



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IX. TEMPORARY CONSTRUCTION POWER

A. GENERAL

1. Temporary construction power shall not serve a permanent installation, except for construction and testing purposes.
2. Temporary power conduits must be inspected by the Department prior to any backfilling.
3. The maximum length of span of overhead service drop wires shall not exceed 75 feet, except as permitted by the Department.
4. Customers may not use step-up or boost transformers without prior approval of the Department.
5. Unless special arrangements are made with the Department at time of application for service, temporary construction power installations may not exceed one year in duration and may be removed by the Department at the expiration of one year of service.
6. The Department will not energize any panel, nor set any meters in any meter group until the customer has removed all construction power backfeeds.
7. The customer shall pay the full cost of installation and removal of temporary service connections and related equipment as incurred by the Department. Prior to connecting any temporary service, the Department will require a non-refundable deposit for the estimated full cost of all labor and unsalvageable materials, subject to billing or refund, to be used by the Department prior to connecting any temporary service.



ELECTRIC SERVICE REQUIREMENTS

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X. COSTS TO CUSTOMERS FOR DEPARTMENT SUPPLIED EQUIPMENT

A. OVERHEAD SERVICE DROPS

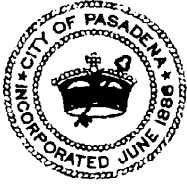
1. For permanent service, the Department will furnish and install the service conductors between the utility pole and the customer's service entrance conductors at the weatherhead. For overhead services spanning less than 100 feet, there will be a flat charge in accordance with the Department's current fee schedule. If a mid-span or additional utility pole is required, additional fees shall be required.
2. If necessary, the Department will supply a terminating service bracket for installation by the customer.

B. UNDERGROUND SERVICE CONNECTIONS

1. The Department will install any necessary conduits in the street between the Department's manhole and the nearest property line.
2. If service conduit terminates at a utility pole, the Department will install the necessary conduits on the pole.
3. The Department will furnish and install the service conductors in the customer's supplied conduit between the Department's system and the customer's terminating pull box.
4. For single family residences, the customer shall pay fees associated with the costs for labor and material listed in 1), 2) and 3) above, as incurred by the Department in providing services, subject to billing or refund.

C. SERVICE CONNECTIONS FROM A TRANSFORMER VAULT OR ENCLOSURE ON CUSTOMER'S PROPERTY (conduits and vault/enclosure furnished and installed by customer)

1. The Department will furnish and install all transformers and associated protective equipment.
2. The Department will install any necessary conduits in the street between the Department's manhole and the nearest property line.



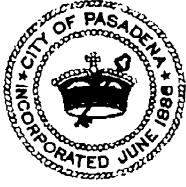
ELECTRIC SERVICE REQUIREMENTS

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3. For services terminating at a utility pole, the Department will install the necessary conduits on the pole.
4. The Department will furnish and install all high voltage cable between the Department's street vault and the customer's vault, all high voltage connectors and supporting vault materials, and all low voltage cable between the customer's vault and the service entrance equipment.
5. The customer shall be responsible for labor and material cost of all the items described in 1, 2, 3, and 4 above, as incurred by the Department in providing services, subject to billing or refund.
 - a. The above construction charges for electric service must be paid prior to work being done by the Department. For new customers, the City will also require a utility bill payment guarantee prior to the service being energized.
 - b. All charges are adjusted periodically to reflect current labor and material costs. The costs are based on size of vault, vault; size and length of conduits installed in the public right-of-way, along with size, number and length of high and low voltage cables.

D. DEPARTMENT FACILITIES INTERFERING WITH NEW CONSTRUCTION

1. The cost of moving, removing or relocating the Department facilities, which interfere with a customer's construction, will be borne by the customer, as incurred by the Department. This applies regardless of whether the interfering facilities are on the customer's property, an adjacent property, or the public right-of-way.
2. Should construction by a customer place the Department facilities in violation of clearances required by State or Federal codes, the City may place a hold on the customer's building permit until the violation is corrected.
3. The Department will require a deposit for the estimated cost of the relocation prior to starting the actual relocation.
4. The customer or property owner shall be responsible for the maintenance of any vault or transformer enclosure. All electrical



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equipment, including blowers and sump pumps, will be maintained by the Department.

E. NEW CONSTRUCTION OR UPGRADES TO EXISTING DISTRIBUTION INFRASTRUCTURE.

1. Should the Department find that the existing infrastructure is not adequate to serve any new development or project, and that a new distribution circuit is required to serve the new development or project, the full cost of constructing the new circuit will be the responsibility of the developer or property owner.
 - a. A pro-rated cost will be charged to developers or property owners for any subsequent development or projects served by the new circuit.
 - b. The pro-rated cost of construction would be refunded to the initial developer or property owner for all subsequent development that would be served by the new circuit.
2. Should the Department find that upgrades to an existing are required in order to serve a development or project, the full cost of completing the upgrades will be the responsibility of the developer or property owner.