



# **Guide to Electric Service**

***A CONSUMER'S***

***GUIDE TO***

***HAVING***

***ELECTRIC***

***SERVICE***

***INSTALLED OR***

***REVISED***

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# INTRODUCTION

This booklet was designed to serve as a guide for developers, homeowners, consultants, and contractors requesting new electric service, or a revision to existing electric service, from the Los Angeles Department of Water and Power (LADWP).

Please note that good communication, prompt submission of required information, and timely notification of development plan changes will result in the availability of construction drawings at the earliest possible date. All service commitments from LADWP will be in writing. If you have any questions regarding the information presented in this booklet, please contact the LADWP engineering office for your service area (see back page, or visit the LADWP website [www.ladwp.com/findtherightperson](http://www.ladwp.com/findtherightperson), or call the LADWP Connection Center at (213) EMPOWER (367-6937).

## EXISTING ELECTRICAL SERVICE ACCOUNTS



For connects, disconnects, or transfers of electrical service, go to [www.ladwp.com](http://www.ladwp.com) or call the toll-free Customer Service Hotline available Monday - Friday 7 a.m. to 7 p.m. and Saturday 7 a.m. to 2 p.m. at 800 DIAL DWP (342-5397).



# GETTING STARTED

## CONTACT LADWP

Your LADWP Electric Service Planner will be either an Electrical Engineer (ESP) or an Electric Service Representative (ESR), depending on the magnitude and character of the load being served. The ESP will assist you in coordinating your electric service installation and will give you the following:

- The location of your electric service facilities
- The method of service and voltage availability
- All necessary electric service requirements
- Customer requirement construction drawings
- All necessary inspection, charges, and fees

To contact the Electric Service Planner in your project area, refer to the service area map (see back page, or visit the LADWP website [www.ladwp.com/findtherightperson](http://www.ladwp.com/findtherightperson), or call the LADWP Connection Center at (213) EMPOWER (367-6937).

## Planning Electric Services

When considering the design of electrical facilities for residential, commercial or industrial premises, an Electric Service Planner will assist you in determining the service requirements for your project. You will be required to submit a full set of electrical drawings and a completed Service Planning Information Form. To prevent any delays in establishing your new electric service, please submit your plans as early as possible.

## Method of Service

LADWP will establish your method of service (overhead, underground or customer station) upon receipt of the required information. Do not make any assumptions on your method of service based on existing service within your project area. LADWP will determine your method of service in accordance with the LADWP "Rules Governing Water and Electric Service" and "Electric Service Requirements."

## Electric Service Requirements Manual

Every electrical consultant, architect and electrical contractor is strongly encouraged to obtain a copy of the LADWP Electric Service Requirements Manual since it contains the most current information on LADWP service equipment and electrical installation requirements. A copy is available on our website at [www.ladwp.com/codes](http://www.ladwp.com/codes).

## SUBMIT YOUR SERVICE APPLICATION

Electric service applications are necessary to ensure proper revenue billing. Submit your Electric Service Application when you initially contact LADWP to avoid delays in establishing service. Applications can be made in person at any LADWP Customer Service Branch Office or by calling:



**800-DIAL DWP (342-5397)**

**800-HEAR-DWP (432-7397) Hearing Impaired**

## REQUEST A METER SPOT

### What is a Meter Spot?

Meter spotting is a free service that LADWP provides to contractors and homeowners. A meter spot will verify the correct placement of a new electric service panel. Safety or code regulations may require the new panel to be placed in a different location. Obtaining a meter spot prior to installing the panel ensures the installer will not have to do the job over.

When applying for an electrical permit with the City of Los Angeles you must contact an LADWP ESR for a meter spot and arrange for a final inspection of electrical facilities prior to a meter being installed. You must obtain a Meter Spot Sheet from your Electric Service Representative (ESR) for all overhead residential services rated 400 amps or less before the inspection by the Los Angeles Department of Building and Safety (LADBS).

## REQUEST INSPECTIONS

Notify your ESR five working days prior to construction. To avoid scheduling delays in the installation of LADWP equipment, you must follow the time-line for installation of electric service found in this booklet. You are responsible for requesting inspections after the work is completed. After the final inspection for large projects involving the installation of underground facilities (vaults/pads), allow six to eight weeks for the installation of cable and equipment by LADWP construction forces.

## ACQUIRE A LOS ANGELES DEPARTMENT OF BUILDING AND SAFETY RELEASE (LADBS)

You must obtain an LADBS release by ensuring all electrical site wiring is approved and inspected by the LADBS. All releases are transmitted electronically to the LADWP Control Center. The service information (i.e., address, main switch size, phase, wires, service voltage, etc.) provided on the release must correspond to the service information on your electrical permit. Please allow several days for the LADBS to release this information to the LADWP.

## LADWP Fault Current Report

LADWP guarantees a fault current value of 10,000 amps for residential services up to 200 amps, and 22,000 amps for Class 320 services. For all other services, a fault current value will be calculated on an individual basis and a fault current report will be sent to the LADBS.

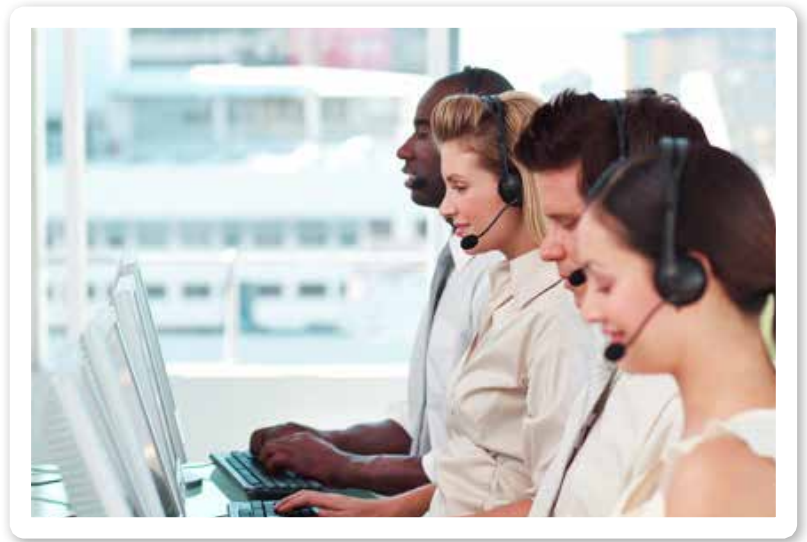
## SCHEDULING AND CONSTRUCTION

Inspections and approvals of customer-installed facilities from LADBS and LADWP are required before the installation of cable and equipment can be scheduled. After all required releases have been received and all charges paid, our construction crews will then schedule the work. Installation of facilities by LADWP will normally be scheduled during regular working hours. However, a customer may request that LADWP install facilities during premium (overtime) hours for their convenience. Request for premium time installations may be made by contacting your area LADWP engineering office (see back page). Customers will be required to remit payment prior to the installation of facilities.

## Customer Charges

Customers may be responsible for charges according to LADWP rules. Common charges are as follows:

- Engineering feasibility study charges.
- Engineering, drafting, and overtime charges.
- Equipment deposits.
- Temporary construction power.
- Conduit construction and excavation permits.
- Transformers on private property.
- Poles on private property.
- Excess service cable.
- Insufficient revenue.
- Unused transformer facility life.
- Inspection charges.
- Co-generation interconnection charges.



# TYPES OF SERVICE INSTALLATIONS

## SINGLE FAMILY RESIDENTIAL

### Single Family (0-320 AMPS)

#### Request a Meter Spot

A meter spot will verify the correct placement of a new electric service panel. Safety or code regulations may require the new panel to be placed in a different location. Obtaining a meter spot prior to installing the panel ensures the installer will not have to do the job over.

An ESR will schedule a site visit within five to 10 business days. A sketch of the panel location will be left at the jobsite. The Los Angeles Department of Building and Safety (LADBS) inspector may ask to see this document before approving the service panel.

To apply online for a single-family residential meter spot, go to <https://www.ladwp.com/ams>. This online request form is only for single family residential services up to 320 amps.

### Single Family (320-400 AMPS)

For 320 amp service panel installations or new construction, please complete a Residential Service Planning Information Form. This document can be sent by email to [ConnectionCenter@ladwp.com](mailto:ConnectionCenter@ladwp.com) or faxed to the appropriate office as indicated at the top of the form. For new construction, please call 1-800-DIAL-DWP (1-800-342-5397) to start a new service account.

### Large Single Family (Greater than 400 AMPS)

For the residential services that are greater than 400 amps or three-phase, you must submit the following information to your ESR:

- Address of residence, including city and ZIP code.
- Tract number and lot number (for new tract construction).
- Contact information including name, address, telephone number, and email address of the person coordinating your project.
- Square footage of residence.
- Site plan and elevation plan showing the location of any overhead conductors, landscaping, grading, or construction, which may obstruct access to electric facilities (for new construction and underground services only).
- One-line diagram indicating:
  - Meter panel and main disconnect amps.
  - Service voltage.
- Load schedule (size of air conditioners, heat pumps, water heaters and other major load information available).
- Desired in-service date and construction schedule.
- Service Planning Information Form (See ESR Manual for form).

The above information must be mailed to the appropriate LADWP engineering office, and may also be submitted in an electronic format (CAD files) via e-mail, CD, or DVD. Specific service requirements for your electrical service will be determined after the LADWP evaluates this information.



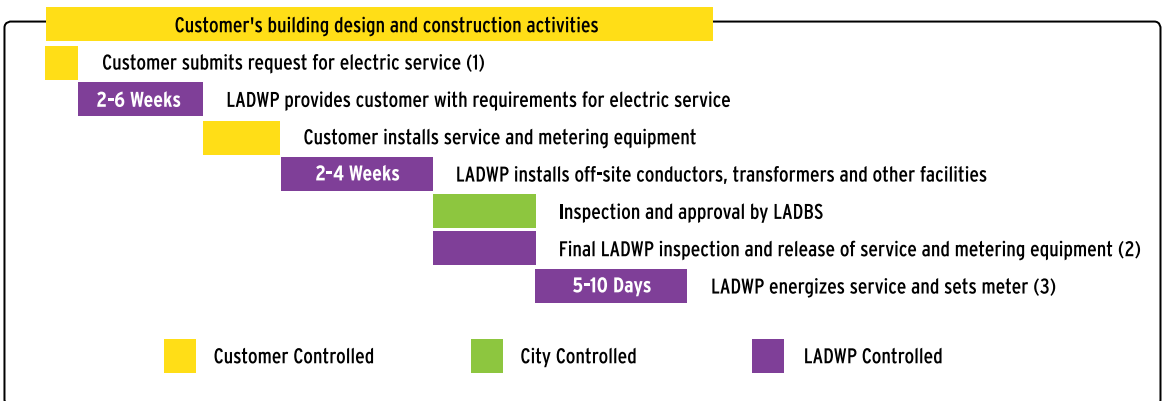
## Before We Energize

The following steps are required before the LADWP can energize your electric service:

1. Customer makes service application, for new service only.
2. Customer makes payment of any necessary construction, deposits, or application fees.
3. LADWP inspects and approves the electric service equipment.
4. LADBS inspects and approves customer's construction and notifies the LADWP of approval and meter release.
5. LADWP construction crews schedule work in the field.

## Typical Timelines for Installation of Electrical Service

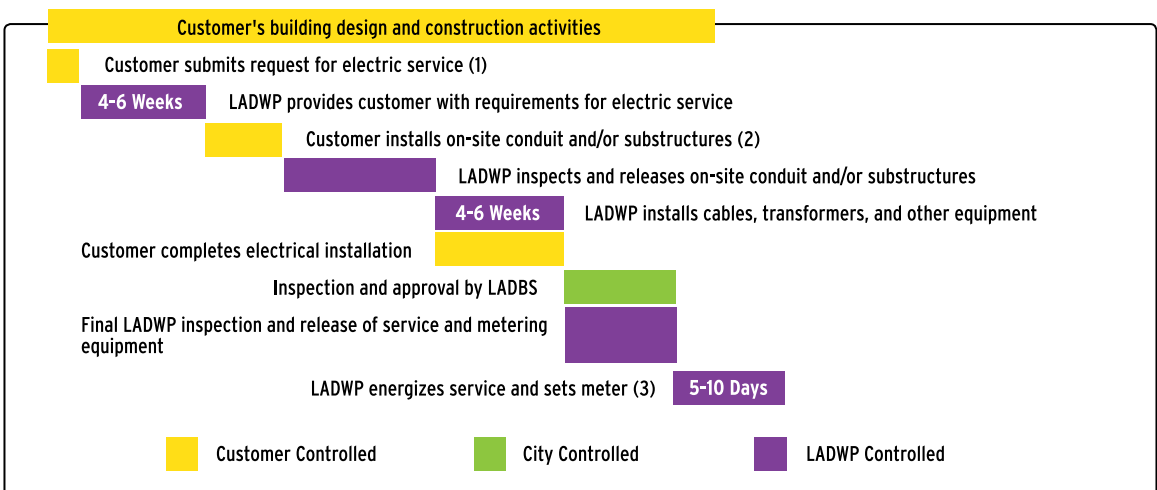
### 1. Overhead Residential Service



Notes:

- (1) Include a complete set of site and electrical plans required to evaluate and design the service.
- (2) LADWP will make a reasonable effort to complete service installations as quickly as possible. However, the time required to complete an installation will vary according to the complexity of the service and the number of services already scheduled or under construction.
- (3) For services rated up to 200 amps single phase, the LADBS inspector will provide the final inspection for LADWP.

### 2. Underground Residential Services



Notes:

- (1) Include a complete set of site and electrical plans required to evaluate and design the service.
- (2) This work must be completed four to six weeks prior to the completion of the customer's building construction to allow LADWP sufficient time to install the required cables and transformers. This will enable LADWP to provide electric service in a matter of days after LADWP receives the final release from LADBS, assuming the service application has been submitted and any required fees or deposits have been paid.
- (3) LADWP will make a reasonable effort to complete service installations as quickly as possible. However, the time required to complete an installation will vary according to the complexity of the service and the number of services already scheduled or under construction.

## COMMERCIAL, INDUSTRIAL, AND LARGE RESIDENTIAL SERVICE

The following written information must be submitted to the LADWP before electric service can be provided for commercial, industrial, or large residential service:

- Project address. If the project involves multiple units, provide a unit address list.
- Type of project.
- Site plan (two copies to scale) detailing the following:
  - Legal description (lot and tract number).
  - Property line lengths with dimensions to the centerlines of the street and nearest cross street.
  - Square footage of proposed or existing building.
  - Street names, north arrow, and address.
  - Location and outline of the proposed or existing buildings on site.
  - Preferred metering equipment locations.
  - Elevation or building profile plans.
  - Preferred transformer vault and/or pad locations.
  - Location of any existing overhead utilities in the vicinity.
  - Street improvement plans.
- One-line electrical diagram (two copies) detailing the requested service voltage and all the switch and bus amps.
- Load schedule (two copies) summarizing the service amps and all electrical loads. Specify air handling load, largest motor and unusual loads.
- Service Planning Information Form (see ESR Manual for form).
- Methane level assessment report.
- Contact information including name, address, telephone number, and email address of the:
  - Property owner.
  - Project manager/company contact.
  - Consultant engineer/architect.
- Desired in-service date and construction schedule.

The above information must be mailed to the appropriate LADWP engineering office (see back page, or visit the LADWP website [www.ladwp.com/findtherightperson](http://www.ladwp.com/findtherightperson)), and may also be submitted in an electronic format (CAD files) via e-mail, CD, or DVD. Specific service requirements for your electrical service will be determined after the LADWP evaluates this information.

## Electric Service Installation

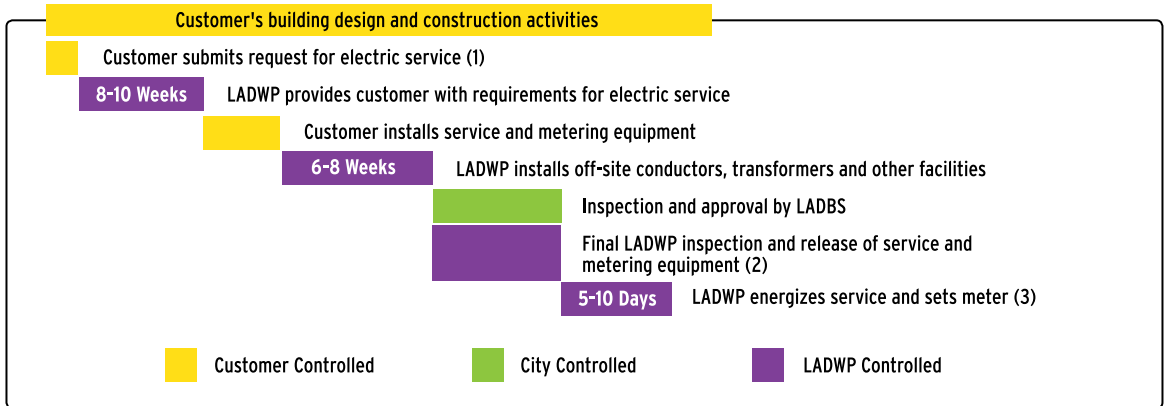
The following actions are required before the LADWP can energize your electric service:

1. Customer makes service application.
2. Customer makes payment of any necessary fees or deposits.
3. LADBS inspects and approves customer's construction and notifies the LADWP of approval and meter release.

4. LADWP inspects and approves of the electric service equipment.
5. LADWP energizes service.

## Typical Timelines for Installation of Electric Service

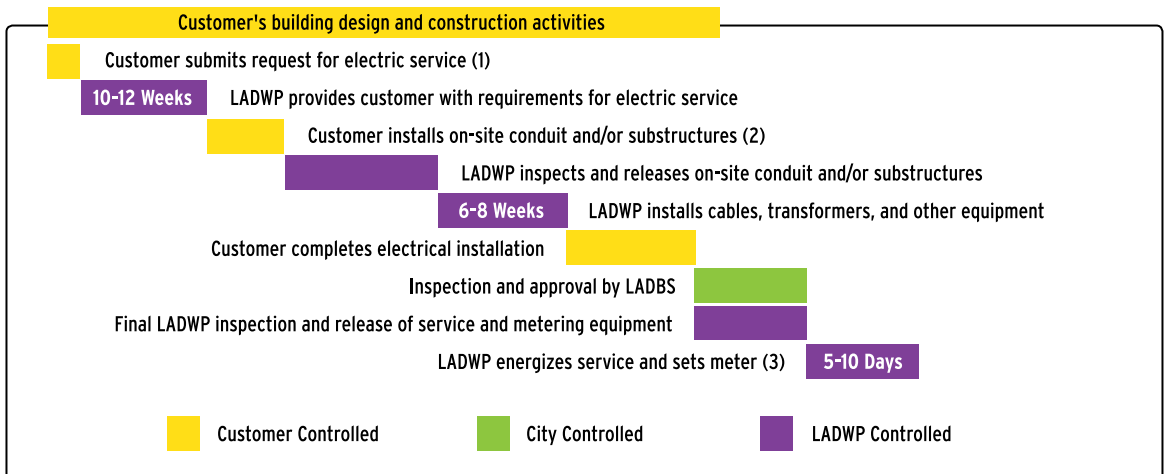
### 1. Overhead Commercial, Light Industrial, and Large Residential Service



Notes:

- (1) Include a complete set of site and electrical plans required to evaluate and design the service.
- (2) For services rated up to 200 amperes single phase, the LADBS inspector will provide the final inspection for LADWP.
- (3) LADWP will make a reasonable effort to complete service installations as quickly as possible. However, the time required to complete an installation will vary according to the complexity of the service and the number of services already scheduled or under construction.

### 2. Underground Commercial, Light Industrial, and Large Residential Service



Notes:

- (1) Include a complete set of site and electrical plans required to evaluate and design the service.
- (2) This work must be completed four to six weeks prior to the completion of the customer's building construction to allow LADWP sufficient time to install the required cables and transformers. This will enable LADWP to provide electric service in a matter of days after LADWP receives the final release from LADBS, assuming the service application has been submitted and any required fees or deposits have been paid.
- (3) The LADWP will make a reasonable effort to complete service installations as quickly as possible. However the time required to complete an installation will vary according to the complexity of the service and the number of services already scheduled or under construction.



## CUSTOMER STATION SERVICE

An on-site transformer station may be required for projects where a standard pad-mount installation cannot be accommodated and for larger projects.

LADWP will produce a Station Requirements Drawing to be used by your contractor to construct the station foundation, structure, and any required enclosure. We provide “point and line” information only. You may need to consult a structural engineer for additional requirements.

### Customer Station Requirements

To perform system studies and begin preliminary design work the following information must be submitted to LADWP:

- Site plan.
- Building floor plans.
- Building elevations and sections.
- Preliminary one-line diagram indicating:
  - Main bus size.
  - Meter panels.
  - Main switch size(s).
  - Requested service voltage(s).
- Load schedule (lighting, receptacles, air conditioning, elevators, general power, motors, and size of largest motor all summarized in kilowatts and horsepower).
- Building square footage and use.
- Methane level assessment report.
- Start of construction date.
- Desired in-service date and construction schedule.

The above information should be mailed to:

**Los Angeles Department of Water and Power**  
**ATTN: Customer Station Design**  
**2633 Artesian Street, Room 270**  
**Los Angeles, CA 90031-1805**

To expedite the preliminary design process, building plans should be submitted in an electronic format such as PDF and CAD formats via e-mail, CD, or DVD.

After this information is evaluated, discussions may be held with you or your representatives to clarify and refine the station configuration. In addition, the following information must be received before design documents can be finalized:

1. Final one-line diagram.
2. The location of all physical features, such as columns, beams, and ventilation equipment that could affect station access or equipment placement.
3. Mechanical ventilation design for the customer station.
4. Elevations and sections relevant to the station and station access.

After a station site is selected that satisfies both LADWP’s and your requirements, LADWP will begin the design of the station. It normally takes twelve to sixteen weeks to design, draft, and transmit drawings to you, depending on the size and complexity of the installation. You should allow the maximum time for these activities until a more precise schedule is prepared.

Because of the amount of engineering and drafting resources required to produce the final customer station requirement drawings, a non-refundable engineering deposit may be required before final design work may begin.

A guide with general information regarding space, available service voltages, and mechanical requirements for Customer Stations is available upon request.

For additional information regarding Customer Stations, please see back page or call (213) 367-8028.

## Installation of Equipment

After equipment is available, installation will be scheduled to start within 30 days after completion of the construction shown on the Station Requirements Drawing(s). Allow 60 days for installation for stations served from 4.8kV distribution facilities or 90 days if served from 34.5kV distribution facilities.

## Energizing The Station

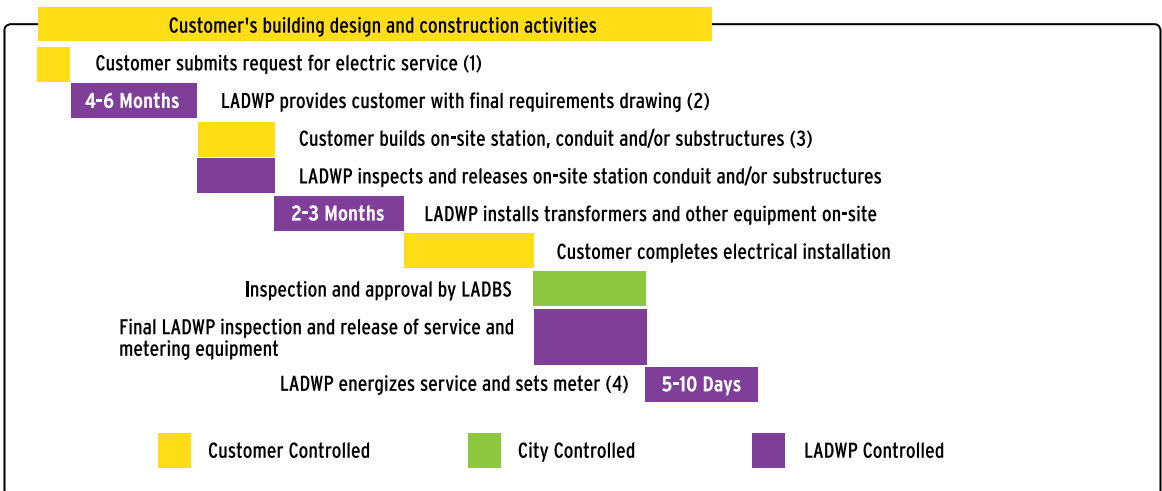
The following requirements must be completed before energizing can be scheduled:

1. The LADWP inspection release of onsite construction.
2. The LADWP inspection release of metering equipment.
3. Final list of meter addresses which are to be served.
4. Payment of all outstanding charges.
5. The LADWP receipt of the LADBS release to energize equipment installed under their jurisdiction.
6. Application(s) for service on file with the LADWP Customer Service Section.

After these requirements are completed, allow at least five (5) to ten (10) days to energize the station.

## Typical Timelines for Installation of Electric Service

### Service Supplied From a Customer Station Installation



Notes:

- (1) Include a complete set of site and electrical plans required to evaluate and design the service.
- (2) LADWP will provide preliminary requirements drawings within 2 to 3 months upon request.
- (3) This work must be completed 4 to 5 months prior to the anticipated in-service-date to allow LADWP sufficient time to install transformers and other equipment in the station. This will enable LADWP to provide electric service in a matter of days after LADWP completes the installation and receives the final release from LADBS, assuming the service application has been submitted and any required fees or deposits have been paid.
- (4) LADWP will make a reasonable effort to complete service installations as quickly as possible. However, the time required to complete an installation will vary according to the complexity of the service and the number of services already scheduled or under construction.



# TEMPORARY SERVICE

## Small Overhead Temporary Electric Services (0 - 200 AMPS)

For overhead-served temporary services (0 - 200 amps) where overhead facilities are available, the following is required:

1. A permit and final inspection approval from the Los Angeles Department of Building and Safety (LADBS).
2. An application made at an LADWP Customer Service Center along with payment of related fees and deposits. For more information, call 1-800-DIAL-DWP (1-800-342-5397) or visit one of our Customer Service Centers.

The Customer Service Center will need the following information:

- LADBS permit number for the temp service.
- Amps needed for the temp service.
- The service voltage (typically 120/240).
- Phase of the service (single phase or three phase).
- Number of wires needed.

For questions about the availability of overhead line facilities or for any temp service other than 0 -200 amps served overhead, please contact the Service Planning Connection Center at (213) EMPOWER (367-6937).

## Large Temporary Electric Services

For the following temporary service types, contact the Service Planning Connection Center at (213) EMPOWER (367-6937).

1. Underground single phase temporary services less than or equal to 400 amps
2. Overhead single phase temporary services 201 - 400 amps
3. 0 - 200 amps served overhead where no overhead facilities are available

For the following temporary service types, contact the appropriate LADWP engineering office for more information (see back page, or visit the LADWP website [www.ladwp.com/findtherightperson](http://www.ladwp.com/findtherightperson)).

1. All three-phase temporary services
2. All temporary services greater than 400 amps single phase
3. Non-standard service voltages, those other than 120/240 Volts

## Billing Application Fees

With all temporary services, LADBS permits and fees, along with the LADWP billing application fees, are required. Please be prepared to pay the necessary fees and any required deposits. For the billing application fee, the forms of payment accepted at our Customer Service Centers are check, cash, credit card (Visa and MasterCard), money order, and cashier's check. Make checks payable to LADWP. Please bring the LADBS permit number for the temporary service with you to the Customer Service Center.

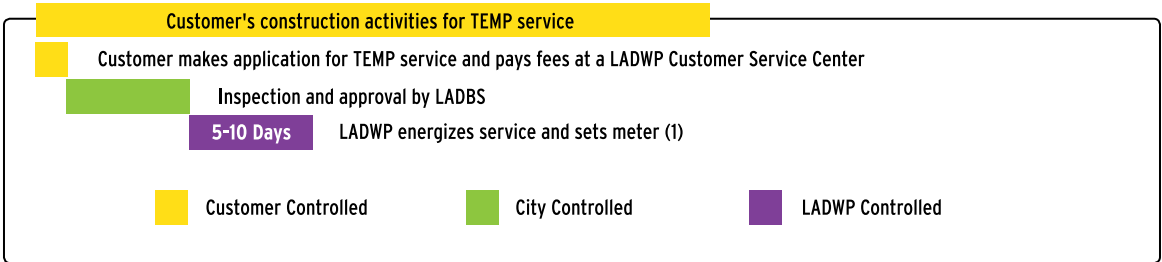
## Construction Fees

Underground and overhead temporary services with new conduit construction, transformer installations and upgrades, or system reroutes will incur additional LADWP charges. For an estimate of additional charges, contact the appropriate LADWP engineering office for more information (see back page, visit the LADWP website [www.ladwp.com/findtherightperson](http://www.ladwp.com/findtherightperson), or call the LADWP Connection Center at (213) EMPOWER (367-6937).

# Typical Timelines for Electric Service

To expedite the installation of temporary electric services, LADWP recommends work be scheduled in the following sequence for:

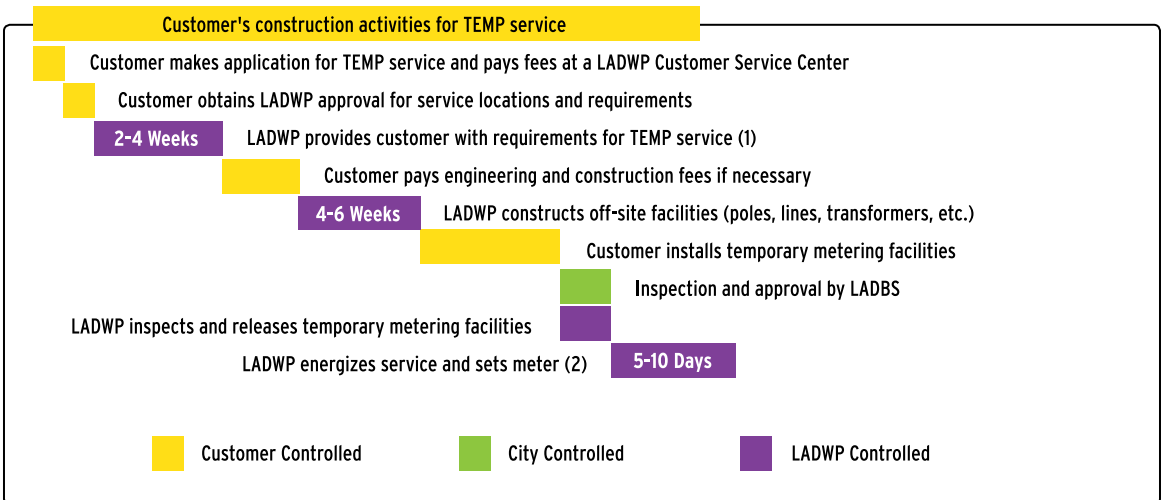
## 1. Overhead Temporary Service – Service and Meter Only



Note:

(1) LADWP will make a reasonable effort to complete service installations as quickly as possible. However, the time required to complete an installation will vary according to the complexity of the service and the number of services already scheduled or under construction.

## 2. Overhead Temporary Service – Service, Meter, and LADWP Facilities

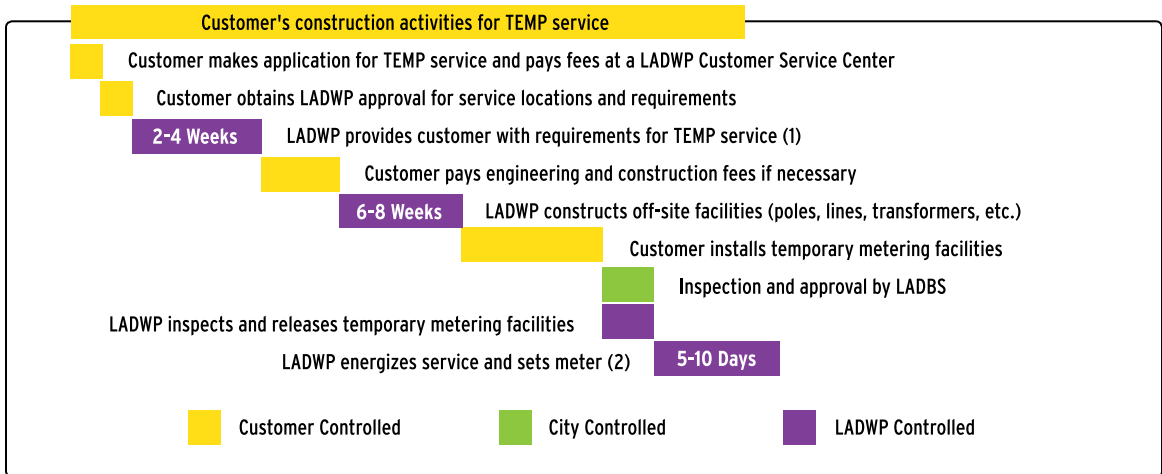


Notes:

- (1) For services requiring engineering, provide an additional two to four weeks in the construction schedule to allow LADWP to plan for the installation and removal of off-site facilities.
- (2) LADWP will make a reasonable effort to complete service installations as quickly as possible. However, the time required to complete an installation will vary according to the complexity of the service and the number of services already scheduled or under construction.



### 3. Underground Temporary Service



Notes:

- (1) For services requiring engineering or conduit construction in public property, provide an additional eight to sixteen weeks in the construction schedule to allow LADWP to plan for conduit construction and obtain permit from the Los Angeles Department of Public Works.
- (2) LADWP will make a reasonable effort to complete service installations as quickly as possible. However, the time required to complete an installation will vary according to the complexity of the service and the number of services already scheduled or under construction.

### MULTIPLE LOT SUBDIVISIONS SERVICE (TRACTS)

The LADWP Tract Design Group should be contacted in the initial planning stages of your project by calling (213) 367-8079. An LADWP Tract Design Engineer will be assigned to assist you in the planning and scheduling of your subdivision project.

The following written information must be submitted to the LADWP Tract Design Group before requirements for electric service can be established for a multi-lot (five lots or more) tract subdivision:

- Site plan (driveways, building footprints w/sq.ft., and proposed meter locations).
- Tract map (recorded or tentative).
- Street improvement plan with street lighting requirements.
- Grading plan.
- Sewer plan.
- Storm drain plan.
- Water plan.
- CAD files for the entire tract including all of the above plans.
- Address list approved by the Los Angeles Department of Public Works.
- Owner/corporation full name, title, address and telephone number for contract preparation.
- Electric load requirement summary for each home/model:
- Meter panel and main disconnect amps and service voltage.
  - Load schedule (size of air conditioners, heat pumps, water heaters, and other major load information).
  - Square footage of each house/model.
  - Contact names, numbers, and addresses of utilities participating in joint trench.
  - Construction schedule (grading, foundations, wet/dry utilities, sales).
  - Floor plans and elevations.
  - Desired electric in-service date for homes/models.



Final design of the electric distribution drawings cannot be completed until all items listed have been received. Items should be sent to:

**Los Angeles Department of Water and Power**  
**2633 Artesian Street, Room 210**  
**Los Angeles, CA 90031-1805**  
**ATTN: Tract Design Group**

## Typical Timelines for Electric Service

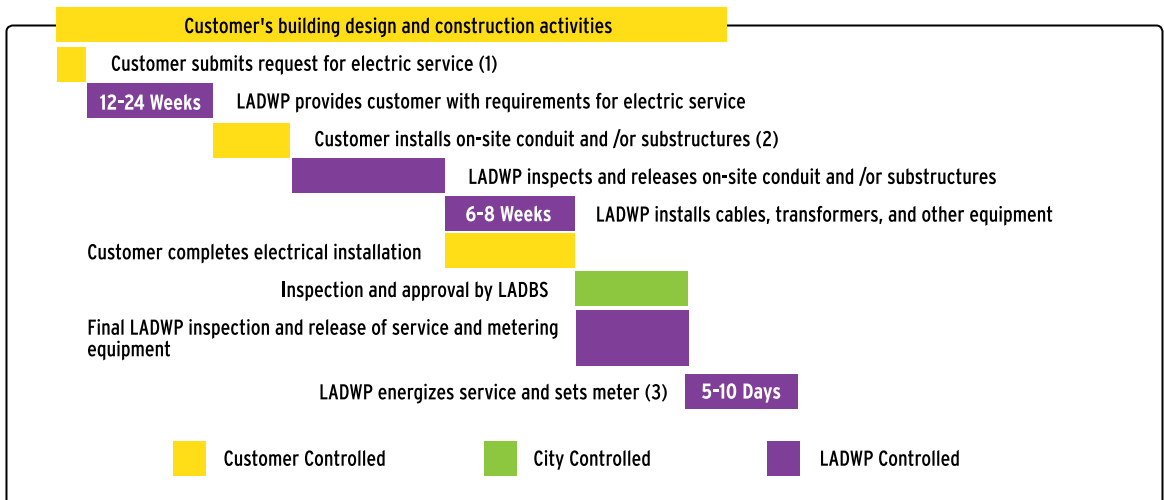
To expedite the installation of electric service, LADWP recommends work be scheduled in the following sequence depending on the type of service required:

1. Customer submits electric service request.
2. LADWP prepares preliminary Customer Conduit Requirement drawings (minimum of 180 days upon receipt of all items listed).
3. Preliminary conduit drawing is distributed to other utilities (see Note 1 below).
4. The Los Angeles Department of Public Works issues joint excavation permit.
5. LADWP finalizes and distributes permitted drawing.
6. Customer installs distribution conduit and/or substructures (see Note 2 below).
7. LADWP inspects and releases conduit and/or substructures.
8. LADWP installs cables, transformers and other equipment in conduit and/or substructures.
9. Owner or individual home owner makes application for electric service by calling 1-800-DIAL-DWP (1-800-342-5397) or by processing an on-line application through [www.ladwp.com](http://www.ladwp.com).
10. LADBS inspects and releases the electric meter panel.
11. LADWP inspects and releases the electric meter panel.
12. LADWP installs individual electric services as released (See Note 3 below).

Note 1: A minimum of eight weeks should be allowed to process plans using the joint trench procedure. Customer coordination required to expedite this process.

Note 2: This work must be completed six to eight weeks prior to completion of the customer's building construction to allow LADWP sufficient time to install the required cable and transformers. This will enable LADWP to provide electric service in a timely fashion after LADWP receives the LADBS final meter panel release, provided the service application has been submitted and any required fees or deposits have been paid.

Note 3: Refer to Residential Service section for individual service time frames and requirements.



# TELECOMMUNICATION POWER SERVICES

## Service for Telephone, Cellular, or Cable TV Facilities

The following written information must be submitted to LADWP before electric service can be provided to your facility:

- Project address. The address needs to be based on the street where the facility is located (include ZIP code).
- Type of facility (i.e. power supply for telephone or cable TV, or cellular site). Include company name and facility (site) number or name.
- Site plan (to scale) detailing the following:
  - Legal description (lot and tract number if applicable).
  - If facility is located on private property, provide location and outline of any existing structures on the property. Provide property line lengths with dimensions to the centerlines of the street and nearest cross street. Include dimensions of facility and location to property lines.
  - If facility is located on public property, provide location and outline of any substructures in the vicinity of the facility. Provide facility location with dimensions to the centerlines of the street and nearest cross street. Include dimensions of facility.
  - Street names, address, and north arrow.
  - Preferred proposed metering equipment location, and existing metering equipment locations (if applicable).
  - Location of any existing overhead utilities (power poles) in the vicinity.
  - Elevation and/or building profile plans.
- One-line electrical diagram detailing the requested service voltage and all the switch and bus amps. Show the existing and proposed electrical equipment (include existing meters with meter numbers).
- Load schedule summarizing the service amps and all proposed connected electrical loads. Specify air-handling load, largest motor and unusual loads.
- Service Planning Information Form (see ESR Manual for form).
- Methane level assessment report.
- Contact information including name, address, telephone number, and email address of the:
  - Property owner.
  - Project manager/company contact.
  - Consultant engineer/architect.
- Desired in-service date.

The above information must be mailed to the Telecommunication Power Services (TPS) office at 111 N. Hope Street, Room 869, Los Angeles, CA 90012, and may also be submitted in an electronic format (CAD files) via e-mail, CD, or DVD. Specific service requirements for your electrical service will be determined after the LADWP evaluates this information.

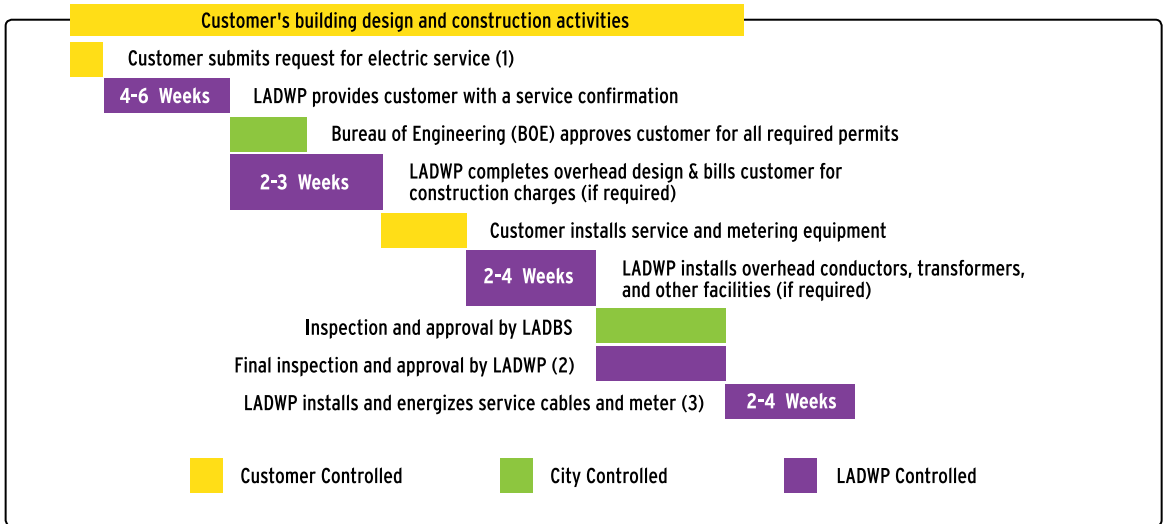
## Electric Service Installation

The following actions are required before LADWP can energize your electrical service:

1. Customer completes Service Application (Contact TPS office for form).
2. Customer makes payment for any construction fees or deposits.
3. LADBS inspects and approves customer's construction, and notifies LADWP of approval and meter release.
4. LADWP inspects and approves the customer's conduit construction (if applicable) and electric service equipment.

# Typical Timelines for Installation of Electric Service

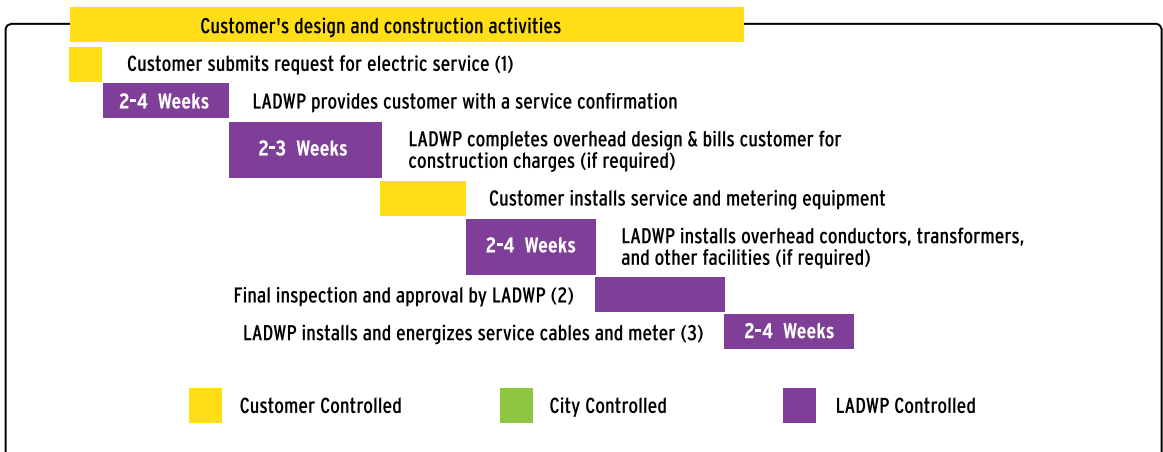
## 1. Overhead Service for Telephone, Cellular, or Cable TV Facilities on Private Property



Notes:

- (1) Include a complete set of site and electrical plans required to evaluate and design the service.
- (2) Assumes service application has been completed and all fees have been paid.
- (3) LADWP will make a reasonable effort to complete service installations as quickly as possible. However, the time required to complete an installation will vary according to the complexity of the service and the number of services already scheduled or under construction.

## 2. Overhead Service for Telephone, Cellular, or Cable TV Facilities on Power Poles

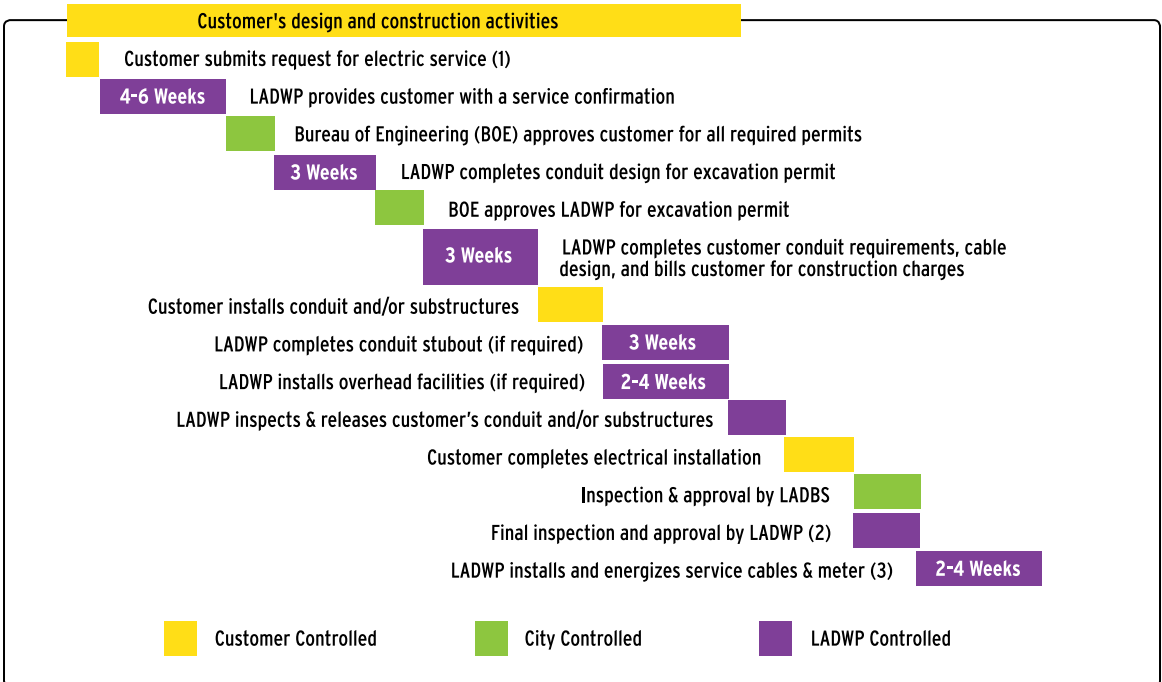


Notes:

- (1) Include a complete set of site and electrical plans required to evaluate and design the service.
- (2) Assumes service application has been completed and all fees have been paid.
- (3) LADWP will make a reasonable effort to complete service installations as quickly as possible. However, the time required to complete an installation will vary according to the complexity of the service and the number of services already scheduled or under construction.



### 3. Underground Services for Telephone, Cellular, and Cable TV Facilities



Notes:

- (1) Include a complete set of site and electrical plans required to evaluate and design the service.
- (2) Service application and all fees to be paid.
- (3) LADWP will make a reasonable effort to complete service installations as quickly as possible. However, the time required to complete an installation will vary according to the complexity of the service and the number of services already scheduled or under construction.

## SOLAR INTERCONNECTION

To streamline the interconnection process for photovoltaic (PV) systems, the Solar Incentive Program process has been separated from the solar meter installation process.

To apply for a rebate payment under the Solar Incentive Program the installer must first login to the PowerClerk system. For more information on PowerClerk and the Solar Incentive Process, please visit [www.ladwp.com/SOLAR](http://www.ladwp.com/SOLAR).

The PV meter application process generally falls into one of the following three categories:

### Fast Track Solar Process (Output less than 10kW CEC AC):

Customers or contractors can apply for the Fast Track Solar Process if the proposed installation meets all current LADWP electric service requirements, has an output of less than 10kW CEC AC and does not involve a service panel upgrade, a battery backup system, or additional generation systems connected to the customer's service. The Fast Track Process typically involves the following steps:

1. The customer completes the net meter application process by visiting [www.ladwp.com/NEM](http://www.ladwp.com/NEM).
2. The customer or contractor uploads the interconnection agreement and photos of the existing electric service.
3. After receiving an Interconnection Agreement approval, the contractor installs the PV system.
4. The contractor obtains an approval for the PV system from the Los Angeles Department of Building and Safety.

5. An LADWP crew will install the net meter. A permission to operate email will then be sent to the customer.

### **Solar Process (Output less than 30kW CEC AC):**

Customers or contractors will use this process if the PV system has an output of 10kW CEC AC or greater but less than 30kW CEC AC, or involves a panel upgrade, a battery backup system, or additional generating systems connected to the customer's service. This process typically involves the following steps:

1. The customer completes the net meter application process by visiting [www.ladwp.com/NEM](http://www.ladwp.com/NEM).
2. The customer or contractor uploads a completed interconnection agreement and a single-line diagram electrical drawing. (\*)(\*\*)(\*\*\*)
3. An Electric Service Representative (ESR) will visit the site and provide a location drawing.
4. After receiving an Interconnection Agreement approval, the contractor installs the PV system.
5. The contractor obtains an approval for the PV system from the Los Angeles Department of Building and Safety and the ESR.
6. An LADWP crew will install the net and performance meters. A permission to operate email will then be sent to the customer.

### **Solar Process (Output 30kW CEC AC or greater):**

Customers or contractors will use this process if the PV system has an output of 30kW CEC AC or greater. This process typically involves the following steps:

1. The customer begins the net meter application process by visiting [www.ladwp.com/SOLAR](http://www.ladwp.com/SOLAR) and downloading the Long-Form interconnection agreement from the program documents page.
2. The customer submits the interconnection agreement and single-line diagram electrical drawing to the Distribution Systems Engineering Co-Generation Coordinator at [SolarCoordinator@ladwp.com](mailto:SolarCoordinator@ladwp.com). (\*)
3. The contractor contacts the ESR for an initial site visit and feasibility assessment.
4. The contractor submits plans including a single-line diagram electrical drawing to the appropriate LADWP engineering office (see back page, or visit the LADWP website [www.ladwp.com/findtherightperson](http://www.ladwp.com/findtherightperson)). (\*)(\*\*)
5. A Service Planning engineer will provide solar commitment documents and an invoice for any engineering or system upgrades that may be required to accommodate the customer's PV system.
6. An ESR will visit the site and provide a location drawing along with a required Co-Gen sign information package.
7. After receiving an Interconnection Agreement approval, the contractor installs the PV system.
8. The contractor obtains an approval for the PV system from the Los Angeles Department of Building and Safety and the ESR.
9. An LADWP crew will install the net and performance meters. A permission to operate email will then be sent to the customer.

For further information, please visit [www.ladwp.com/SOLAR](http://www.ladwp.com/SOLAR).

(\*) Currently the aggregate capacity of a generating system that may be connected to a single-phase service, as determined by the inverters maximum output rating, is limited to 20kW. Systems that are greater than 20kW must be balanced and connected to a three-phase service.

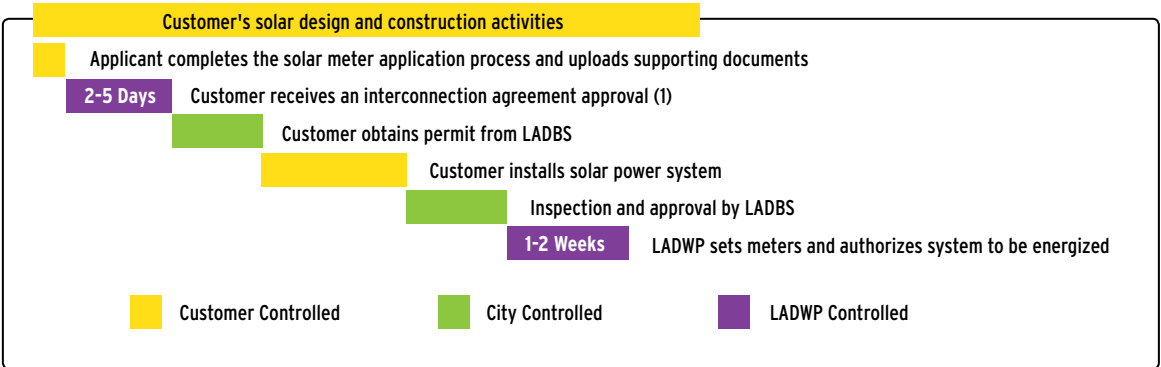
(\*\*) The customer may petition the Department for an engineer to perform a feasibility study, at the customer's expense, to determine the possibility and customer costs associated with connecting a single-phase system greater than 20kW but not exceeding 40kW to the Department's distribution system.

(\*\*\*) Additional engineering review may be required. Please submit plans including a single-line diagram electrical drawing to the appropriate LADWP engineering office (see back page, or visit the LADWP website [www.ladwp.com/findtherightperson](http://www.ladwp.com/findtherightperson)).



# Typical Timelines for Solar Projects

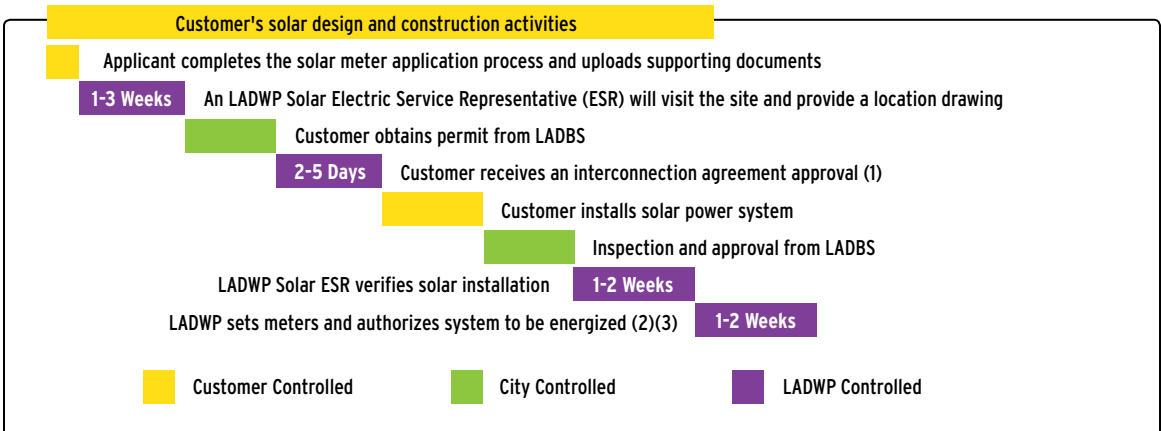
## 1. Fast Track Solar Process



Notes:

(1) After information submitted by the customer has been verified to be accurate and complete.

## 2. Solar Process (less than 30kW)



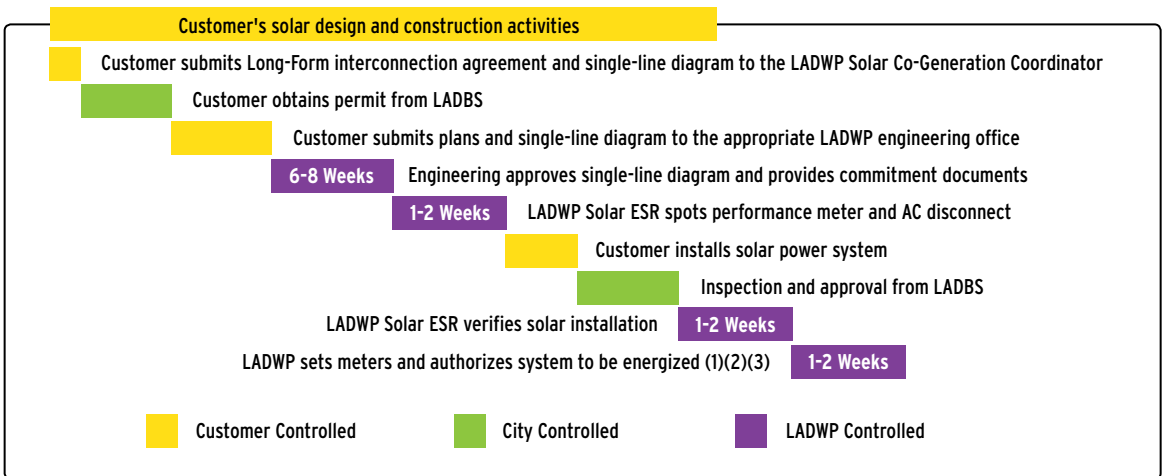
Notes:

(1) After information submitted by the customer has been verified to be accurate and complete.

(2) For new service installations, LADWP will install a non-net meter when energizing the incoming utility service and will replace it with a net meter when the solar power system is approved.

(3) Provided no LADWP distribution system upgrade is required.

### 3. Solar Process (30kW or greater)



Notes:

- (1) For new service installations, LADWP may install a non-net meter when energizing the incoming utility service and will replace it with a net meter when the solar power system is approved.
- (2) After receiving approval of the interconnection agreement from the LADWP Solar Co-Generation Coordinator
- (3) Provided no LADWP distribution system upgrade is required.

## ELECTRIC VEHICLE (EV) CHARGERS

### Who Will Install My EV Charger?

As the customer, you arrange for a licensed contractor to install the EV charger in compliance with local codes, permitting and inspection requirements. The EV manufacturer or vendor will often help arrange for installation. LADWP will not install the charger units.

### How Long Will It Take To Get A Permit for Charger Installation?

Permit approval will depend on the regulatory agency (state, county and/or city) and the required upgrades or electrical configuration of the property. Contact the designated regulatory agency for your property or business. For your convenience, the Los Angeles Department of Building and Safety (LADBS) has an online permit process (<https://www.permitla.org>).

For residences, owners of next generation EVs have the option to charge their cars from a 120 volt outlet (Level I) slow charge or a faster 240 volt (Level II) charging station. Level II chargers require a dedicated circuit much like an air conditioner or electric dryer. A service panel upgrade may be needed before the charging station is installed. Contact a licensed electrician or the car dealership to inquire about service assessments. Many dealerships offer a free assessment with a car purchase.

ESRs provide service assessments from a utility standpoint. While the electrical contractor will examine the wiring past the meter, an ESR will assess the service capacity up to the meter and let customers know if LADWP needs to change a transformer or the lines to the house. An ESR will also advise customers on the various meter options and rate incentives offered by LADWP. To avoid delays in service, contact an LADWP Electric Service Representative at least two weeks before installing a home charging system.

Commercial, public, and multi-family charging stations will require plans. Contact a Lead ESR for more information. A Service Planning Engineer will handle all 480 volt (Level III) charging stations.



## Level I - Residential Charger

A Level I charger is typically 120 volts and uses about 15 amps or less. It requires a standard electrical outlet and has a steady charge, taking up to 24 hours to charge an electric vehicle (EV). These chargers are more suited to plug-in hybrid vehicles. Customers who opt to use a Level I charger can simply plug into a dedicated standard outlet and begin charging.

## Level II – Residential/Commercial Charger

A Level II charger is typically 240 volts and uses about forty amps or less. It requires installation of a dedicated EV charging unit and may take up to eight hours to charge an EV. Several EV charging rate and meter options are available. Please visit [www.ladwp.com/EV](http://www.ladwp.com/EV) and read the EV program details. Customers opting for a Level II charger should follow these steps to get started:

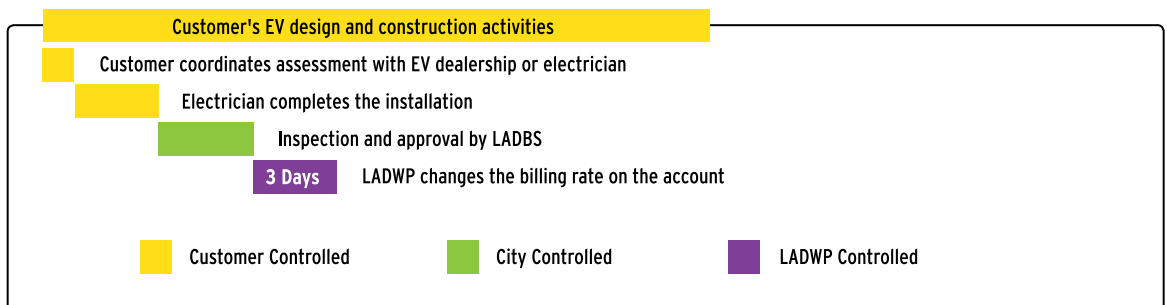
1. Call (866) 484-0433 or email [pluginla@ladwp.com](mailto:pluginla@ladwp.com) to notify LADWP you are installing a charger and schedule a preliminary home inspection.
2. Request an assessment by an electrician or charger installer to determine the nature and cost of the installation options. Many dealerships offer a free assessment with a car purchase.
3. Complete the applicable LADWP discount and rebate applications and an express permit from the LADBS at <https://www.permitla.org>.
4. Schedule your charger installation with your electrician or charger installer.
5. Your electrician or charger installer will arrange final inspections by the LADBS and the LADWP. After passing inspection, LADWP will install the new time-of-use meter, if necessary.

## Level III - Commercial, Public and Multi-Family Charging Stations

A Level III charger is typically a 480-volt three-phase charger. These charges can charge more than fifty percent of an EV's battery capacity in less than thirty minutes. Installation of a Level III charger is equivalent to a commercial service installation/upgrade; see the Commercial, Industrial, and Large Residential section of this guide for submittal requirements. Contact the appropriate LADWP engineering office for more information (see back page, visit the LADWP website [www.ladwp.com/findtherightperson](http://www.ladwp.com/findtherightperson), or call the LADWP Connection Center at (213) EMPOWER (367-6937).

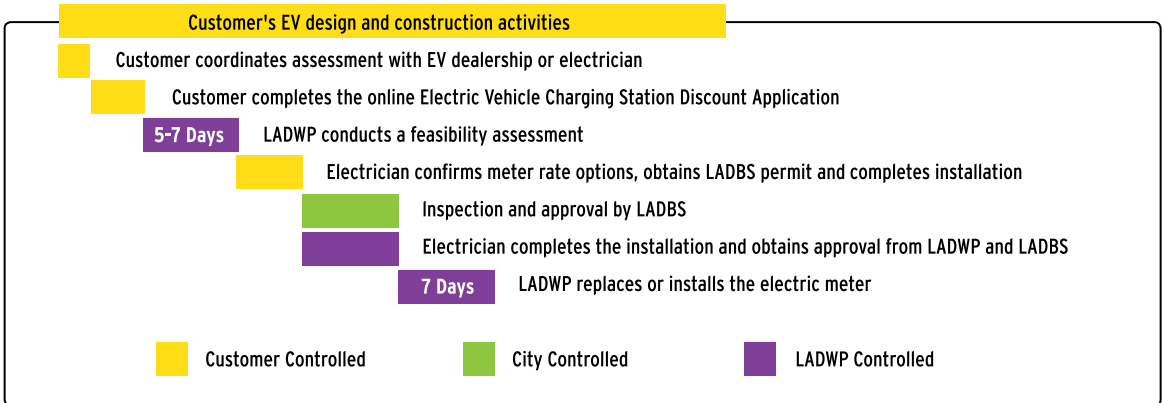
## Typical Timelines for Installation of EV Chargers

### 1. Level II – Residential/Commercial Charger – Only Requiring Inspection By The LADBS



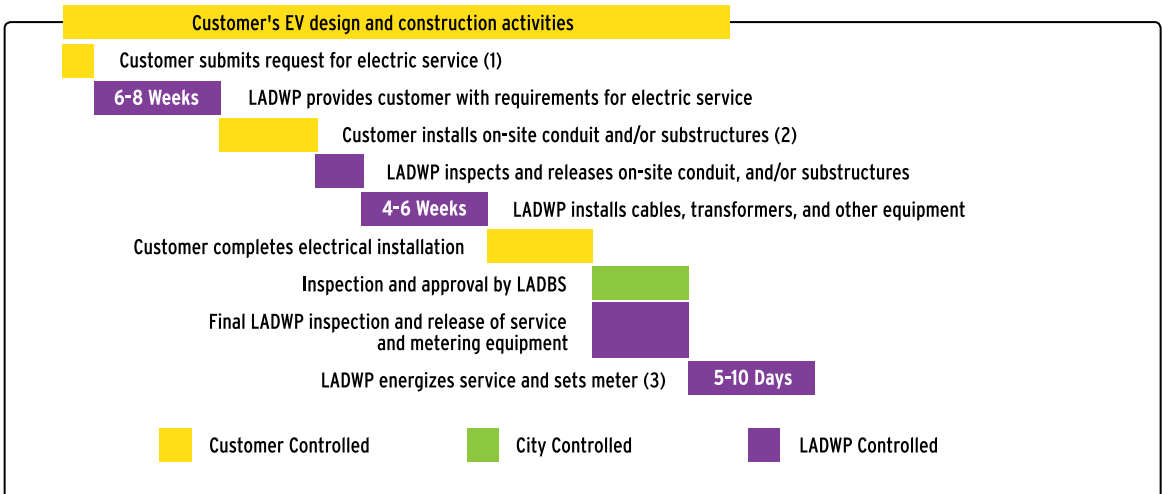


## 2. Level II – Residential/Commercial Charger – Requiring a New Meter from LADWP



Note: For projects requiring conduit installation, service cable upgrade, or transformer upgrade by LADWP, see the time-line for level three - commercial chargers.

## 3. Level III – Commercial Charger, Public, and Multi-Family Charging Stations



Notes:

- (1) Include a complete set of site and electrical plans required to evaluate and design the service.
- (2) This work must be completed three to five weeks prior to the completion of the customer's building construction to allow LADWP sufficient time to install the required cables and transformers. This will enable LADWP to provide electric service in a matter of days after LADWP receives the final release from LADBS, assuming the service application has been submitted and any required fees or deposits have been paid.
- (3) LADWP will make a reasonable effort to complete service installations as quickly as possible. However, the time required to complete an installation will vary according to the complexity of the service and the number of services already scheduled or under construction.



# CONSTRUCTION NEAR POWER EQUIPMENT

## CALL LADWP BEFORE YOU START: (213) 367-0562

If you are planning construction near LADWP power poles, wires and other equipment, there are a number of requirements and safety factors to consider.

Review the following guidelines and requirements whether you are working on a new home, remodel, business improvement, or other construction. Before you start, check to see if there could be a potential conflict with power poles, wires, and other electrical equipment. Take measures to ensure a safe work environment.

### Access

All power poles, transformers, and other electrical equipment require maintenance or upgrading periodically to ensure power reliability and community safety.

General Rule of Thumb: Leave 5 feet of unobstructed access around LADWP facilities.

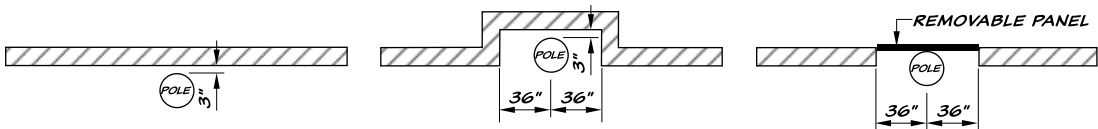
### Clearance

All building additions, remodels, and new construction, including temporary structures such as scaffolding and construction site trailers, must comply with state and local codes and regulations (California Public Utilities Commission General Order 95 and California Code of Regulations Title 8).

Contact the LADWP Real Estate Group at (213) 367-3650 to obtain an Encroachment Application.

### Fences And Block Walls

Measurements listed below are the minimum allowable distances between a pole and any type of wall. The pole must be accessible from the lot in which the pole is located.



### Questions

If you have questions regarding relocating overhead power lines, down guy wires, or utility poles, contact a Pole Spotter. Pole Spotters are responsible for overhead distribution system design and can advise customers on pole relocation options and costs. To contact a Pole Spotter, enter a job address at LADWP website [www.ladwp.com/findtherightperson](http://www.ladwp.com/findtherightperson).

#### Concerning Poles & Wires or Meter Panels

Metro Los Angeles (213) 367-6000

San Fernando Valley (818) 771-4100

#### Emergencies & General Questions

1-800-DIAL-DWP (1-800-342-5397)

# CONTACT LADWP

## LADWP CUSTOMER SERVICE TELEPHONE NUMBERS

Metropolitan Los Angeles	(800) 342-5397
San Fernando Valley	(818) 342-5397
Other Areas	(800) 342-5397
Assistance for the hearing or speech impaired customers	(800) 342-5397

**OFFICE HOURS** Monday-Friday (except Holidays) 9:00 a.m. to 5:00 p.m.

## CUSTOMER SERVICE CENTER LOCATIONS

[Application for Meters, Permanent, and Temporary Services]

## METROPOLITAN AND WEST LOS ANGELES OFFICES

Main Office Lobby	111 N. Hope Street
Boyle Heights	919 S. Soto Street, Suite 10
Central	4619 S. Central Avenue
Crenshaw/Baldwin Hills	4030 Crenshaw Boulevard
Hollywood	6547 Sunset Blvd, Unit B
Lincoln Heights	2417 Daly Street
Slauson-Vermont	5928 S. Vermont Avenue
Watts	1647 E. 103rd Street
West Los Angeles	1394 S. Sepulveda

## SAN FERNANDO VALLEY OFFICES

North Hills	9154 Sepulveda Boulevard
Van Nuys	6550 Van Nuys Boulevard
Winnetka-Canoga Park	7229 Winnetka Avenue

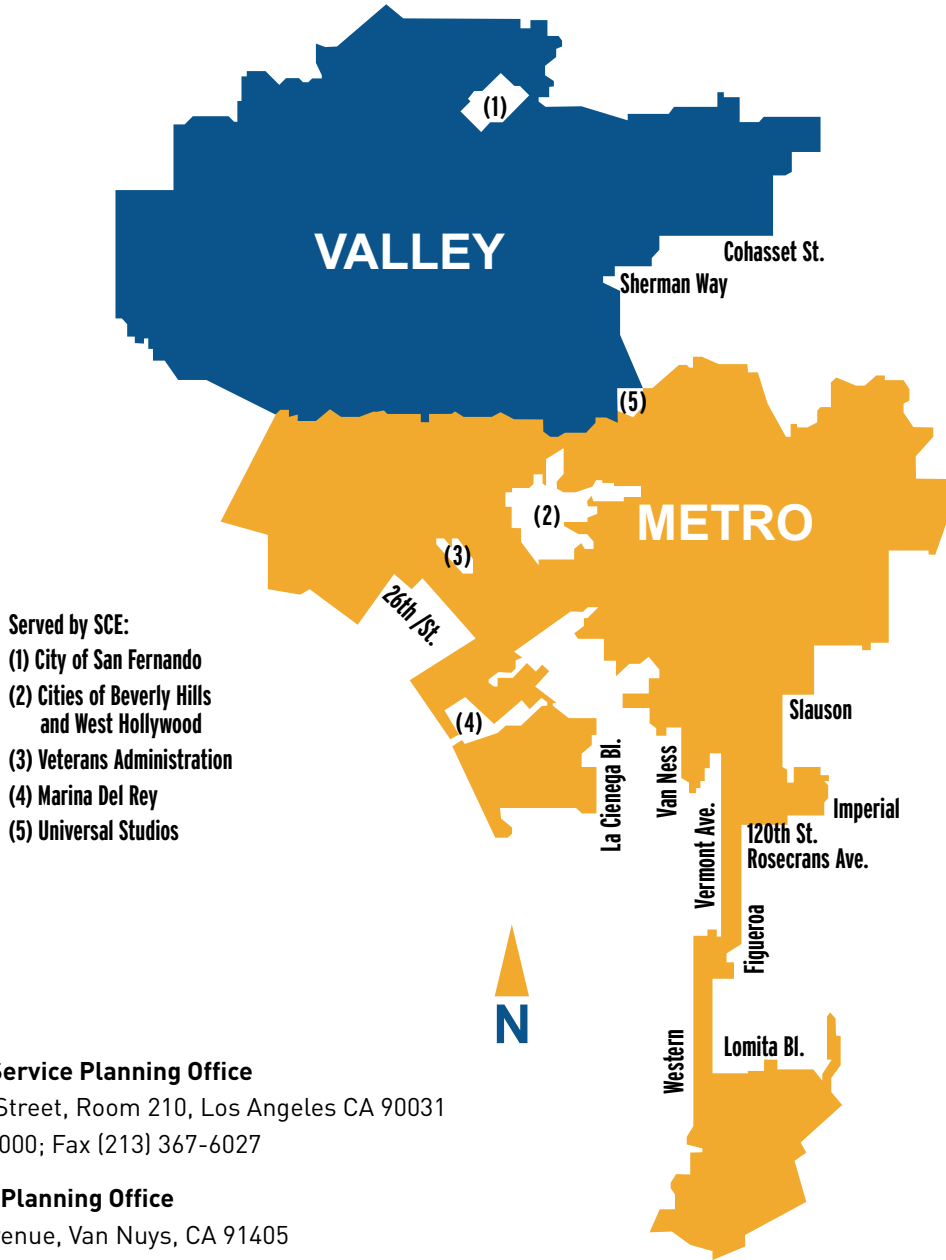
## HARBOR AREA OFFICES

San Pedro	535 W. 9th Street
Wilmington	931 N. Avalon Blvd

Note: For additional information or payment centers, visit the LADWP website at [www.ladwp.com](http://www.ladwp.com)



# SERVICE PLANNING AREA BOUNDARY MAP



- Served by SCE:
- (1) City of San Fernando
  - (2) Cities of Beverly Hills and West Hollywood
  - (3) Veterans Administration
  - (4) Marina Del Rey
  - (5) Universal Studios

## Metropolitan Service Planning Office

2633 Artesian Street, Room 210, Los Angeles CA 90031

Tel (213) 367-6000; Fax (213) 367-6027

## Valley Service Planning Office

7501 Tyrone Avenue, Van Nuys, CA 91405

Tel (818) 771-4100; Fax (818) 771-4066

## Tract Design Office

2633 Artesian Street, Room 210, Los Angeles, CA 90031

Tel (213) 367-8079; Fax (213) 367-6027

## Customer Station Design Office

2633 Artesian Street, Room 270, Los Angeles, CA 90031

Tel (213) 367-8028; Fax (213) 367-8099

