GUIDE TO electric service

We're Working for LA!
Water for Life, Power to LA
This booklet has been designed to serve as a guide for developers, homeowners, consultants, and contractors requesting electric service from the Los Angeles Department of Water and Power (LADWP) with information they will need for their service installations. This booklet has been divided into the following five sections based on the types of services generally requested:

1. Residential (0-600 Amperes) Service
2. Commercial, Light Industrial, and Large Residential Service
3. Customer Stations Service
4. Temporary Service
5. Multi-Lot Subdivisions (Tracts) Service

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 the form of a written service agreement. If you have any questions regarding the information presented in this booklet, please contact the LADWP Service Representative for your service area, shown on page 13.

**NOTICE:** The information in this guide is subject to change without notice. LADWP shall not be liable for technical or editorial errors or omissions contained herein. This guide contains information protected by copyright. No part of this guide may be photocopied or reproduced in any form without prior written consent from the Los Angeles Department of Water and Power.
EXISTING ELECTRICAL SERVICE ACCOUNTS
For connects, disconnects or transfers of electrical service, use the on-line LADWP Customer Service forms, which can be accessed on the Department website at http://www.LADWP.com or by calling the LADWP toll free Customer Service Hotline available 24 hours a day.

The telephone number is:
1-800-DIAL-DWP (1-800-342-5397)

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

a. The location of your electric service facilities
b. The method of service and voltage availability
c. All necessary electric service requirements
d. Customer Requirement Construction drawings
e. All necessary inspections, charges and fees

To contact the ESP in your area, refer to the service area map on page 13.

DESIGN AND PLAN APPROVAL
When considering the design of electrical facilities for residential, commercial, or industrial premises, customers should contact the respective Service Planning Office, located in your project area. The ESP 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 Sheet, (faxed upon request). This information can be mailed or faxed to the appropriate Service Planning Office, see page 13. To prevent any delays in establishing your new electric service, please notify LADWP in writing, of any design changes you may have as early as possible.

METHOD OF SERVICE
The LADWP will establish your method of service (Overhead, Underground or Customer Station) upon receipt of the required information for your type of service as specified in the appropriate section of these pages. Do not make any assumptions on your method of service based on existing services within your area. The LADWP will determine your method of service in accordance with the LADWP "Rules Governing Water and Electric Service” and "Electric Service Requirements."
SERVICE APPLICATION
Electric service applications are necessary to assure proper revenue billing. This should be done at the time of initial contact with LADWP, to avoid delays in establishing service. Applications can be made in person through any LADWP Customer Service Branch Office or by calling any of the following customer service numbers:

1-(800) DIAL DWP (1-800-342-5397)
1-(800) HEAR DWP (1-800-432-7397) Hearing impaired

PERMIT AND METER SPOT PROCESS
When applying for an electrical permit with the City of Los Angeles, you must also contact a LADWP ESR, for a meter spot and arrange for a final inspection of electrical facilities, prior to a meter being installed. A Meter Spot Sheet, for all overhead residential services rated 200amps or less, must be obtained from the ESR, prior to inspection by the Department of Building and Safety (DBS).

INSPECTION PROCESS
Notify your ESR, two (2) working days prior construction. To avoid scheduling delays in the installation of LADWP equipment, the contractor must follow the Time–Lines for Installation of Electric Services, found in this booklet. The customer is responsible for requesting inspections when the work has been completed. After final inspection is completed for large projects involving the installation of underground facilities (vaults/pads), allow six weeks for the installation of cable and equipment by LADWP construction forces.

DEPARTMENT OF BUILDING & SAFETY RELEASE (DBS)
The customer is responsible for obtaining this release by ensuring that all electrical site wiring is approved and inspected by the Department of Building and Safety. 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 DBS to release this information to LADWP.

SCHEDULING AND CONSTRUCTION
Prior to energizing a customer’s service, inspections and approvals of construction work by the LADWP and the Department of Building and Safety (DBS) are required before scheduling the installation of cable and equipment. Upon receipt of all required releases and charges paid in full, a Field Order will be sent to our construction field forces, authorizing them to schedule the work. Installation of facilities by LADWP will normally be scheduled during regular working hours. However, a customer may request the LADWP to install facilities during premium (overtime) hours for the convenience of the customer. Request for premium time installations may be made by contacting the appropriate engineering office. Customers will be required to remit payment prior to the installation of facilities.

ELECTRIC SERVICE REQUIREMENTS MANUAL
Every electrical consultant, architect and electrical contractor is strongly encouraged to obtain a copy of this manual since it contains the most current information on LADWP service equipment and electrical installation requirements.

You may make arrangements to purchase a copy of this manual by contacting David Reusch at telephone number (213) 367-6182 or by e-mail at david.reusch@ladwp.com. This manual may also be accessed on-line at the LADWP’s website at http://WWW.LADWP.com
ELECTRIC SERVICE REQUEST
The following written information must be submitted to the Department of Water and Power (LADWP) before electric service can be provided for single or multiple metered residential service.
1. Address of residence
2. Tract Number and Lot Number (for new tract construction)
3. Name and telephone number of the person doing your job coordination
4. Square footage of residence
5. Plot plans and elevation plans showing the location of any overhead conductors, landscaping, grading, or construction, which may obstruct access to electric facilities. (For residential services exceeding 400 amp only)
6. Meter panel and main disconnect ampacities
7. Service voltage
8. Load schedule (size of air conditioners, heat pumps, water heaters and other major load information available)
9. Desired in-service date

The above information should be mailed to the appropriate LADWP Service Planning Office, see page 13 for service areas and the listing of office locations. Specific service requirements for your electrical service will be determined after the LADWP evaluates the information described above.

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. LADWP inspects and approves of the electric service equipment
4. Department of Building and Safety (DBS) inspects and approves customer’s construction and notifies LADWP of approval and meter release

TYPICAL TIME-LINES FOR INSTALLATION OF ELECTRIC SERVICES
1. Underground Residential Services
To expedite the installation of single-family residential electric services supplied from underground facilities, the Department recommends that work be scheduled in the following sequence:
Customer's building design and construction activities

Customer submits request for electric service (1)

Department provides customer with requirements for electric service

Customer installs on-site conduit and/or substructures (2)

Department installs cables, transformers and other equipment in conduits and/or substructures

Customer completes electrical installation

Inspection and approval by DBS

Final department inspection and release of service and metering equipment

Department energizes service and sets meter (3) 5-10 days

Customer Controlled  Department Controlled

(1) Includes complete set of site and electrical plans required to evaluate and design service.
(2) This work must be completed 3 to 5 weeks prior to the completion of the customer’s building construction to allow the Department sufficient time to install the required cables and transformers. This will enable the Department to provide electric service in a matter of days after the Department receives the final release from DBS, assuming the service application has been submitted and any required fees or deposits have been paid.
(3) The Department 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 Residential Services
To expedite the installation of single-family residential electric services supplied from overhead facilities, the Department recommends that work be scheduled in the following sequence:

Customer's building design and construction activities

Customer submits request for electric service (1)

Department provides customer with requirements for electric service

Customer installs service and metering equipment

Department installs off-site conductors, transformers and other facilities

Inspection and approval by DBS

Final Department inspection and release of service and metering equipment (2)

Department energizes service and sets meter (3) 3-5 days

Customer Controlled  Department Controlled

(1) Includes complete set of site and electrical plans required to evaluate and design service.
(2) The Department 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 amperes, the Los Angeles Department of Building and Safety (DBS) inspectors will provide the final inspection for the Department.
ELECTRIC SERVICE REQUESTS
The following written information must be submitted to the Department of Water and Power before electric service can be provided for commercial, light industrial or large residential service.
1. Job address. If the project involves multiple units, provide a unit address list.
2. Type of project
3. Plot plans and/or site plan (2 copies to scale) detailing the following:
   a. Legal description (Lot and Tract Number)
   b. Property line lengths with dimensions to the centerlines of the street and nearest cross street
   c. Square footage of proposed or existing building
   d. Street names, north arrow, and address
   e. Location and outline of the proposed or existing buildings on site
   f. Preferred metering equipment locations
   g. Elevation or building profile plans
   h. Preferred transformer vault and/or pad locations
   i. Location of any existing overhead utilities in the vicinity
4. One-line electrical diagram (2 copies) detailing the requested service voltage and all the switch and bus ampacities
5. Load schedule (2 copies) summarizing the service ampacity and all electrical loads. Specify air handling load, largest motor, and unusual loads.
6. Name, address and telephone number of the:
   a. Property owner
   b. Person to be contacted for job coordination
7. Desired in-service date

The above information should be mailed to the appropriate LADWP Service Planning Office. See page 13 for service areas. The above information may be submitted in an electronic format, floppy disk, CAD file or e-mail.

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. LADWP inspects and approves of the electric service equipment
4. Department of Building and Safety (DBS) inspects and approves customer’s construction and notifies LADWP of approval and meter release
TYPICAL TIME-LINES FOR INSTALLATION OF ELECTRIC SERVICES

1. Underground Commercial, Light Industrial and Large Residential Services

To expedite the installation of commercial, light industrial, and large residential electric services supplied from underground facilities, the Department recommends that work be scheduled in the following sequence:

- Customer Controlled
  - Customer submits request for electric service (1)
  - Customer installs on-site conduit and/or substructures (2)
  - Customer completes electrical installation
  - Final department inspection and release of service and metering equipment

- Department Controlled
  - Department provides customer with requirements for electric service
  - Department installs cables, transformers and other equipment in conduits and/or substructures

(1) Includes complete set of site and electrical plans required to evaluate and design service.
(2) This work must be completed 3 to 5 weeks prior to the completion of the customer’s building construction to allow the Department sufficient time to install the required cables and transformers. This will enable the Department to provide electric service in a matter of days after the Department receives the final release from DBS, assuming the service application has been submitted and any required fees or deposits have been paid.

(3) The Department 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 Commercial, Light Industrial and Large Residential Services

To expedite the installation of commercial, light industrial, and large residential electric services supplied from overhead facilities, the Department recommends that work be scheduled in the following sequence:

- Customer Controlled
  - Customer submits request for electric service (1)
  - Customer installs service and metering equipment

- Department Controlled
  - Department provides customer with requirements for electric service
  - Department installs off-site conductors, transformers and other facilities
  - Inspection and approval by DBS
  - Final Department inspection and release of service and metering equipment

(1) Includes complete set of site and electrical plans required to evaluate and design service.
(2) The Department 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.
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
LADWP cannot begin project design or schedule until the following written information is received:

1. Requested Service Voltage
2. Main Switch Size(s)
3. Load Schedule, including lighting, receptacles, air conditioning, elevators, general power and the nature of any special or unusual loads, all in kilowatts or horsepower.
4. Size of largest motor
5. Preliminary one-line diagram
6. Plot plan (2 copies)
7. Building plans (2 copies)
8. Building elevations (2 copies)
9. Estimated date service will be required

Mail this information to:
Los Angeles Department of Water and Power
ATTN: Customer Station Design Group
P.O. Box 51111, Room 923
Los Angeles, CA 90051-0100

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 effect station access or equipment placement
3. Switchboard and busway drawings for approval

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

For additional information regarding Customer Stations, please call (213) 367-1732.
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 30 days for installation for stations served from 4.8kv distribution facilities or 60 days if served from 34.5kv distribution facilities.

ENERGIZING THE STATION
The following requirements must be completed before energizing can be scheduled:
1. LADWP inspection release of onsite construction
2. LADWP inspection release of metering equipment
3. List of addresses which are to be served
4. Payment of all outstanding charges
5. LADWP receipt of Los Angeles Department of Building and Safety (DBS) release to energize equipment installed under their jurisdiction
6. Application(s) for service on file with LADWP Customer Service Section

After these requirements are completed, allow at least 3-5 days to energize the station.

TYPICAL TIME-LINES FOR INSTALLATION OF ELECTRIC SERVICE
Services Supplied From Customer Station Installations
To expedite the installation of commercial, light industrial, and large residential electric services supplied from customer station facilities, the Department recommends that work be scheduled in the following sequence:

<table>
<thead>
<tr>
<th>Customer’s building design and construction activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer submits request for electric service (1)</td>
</tr>
<tr>
<td><strong>4-6 months</strong> Department provides customer with final requirements drawing (2)</td>
</tr>
<tr>
<td>Customer builds on-site station, conduit, and/or substructures (3)</td>
</tr>
<tr>
<td>Department installs transformers and other equipment on-site</td>
</tr>
<tr>
<td>Department inspects and releases on-site station conduit and/or substructures</td>
</tr>
<tr>
<td>Customer completes electrical installation</td>
</tr>
<tr>
<td>Inspection and approval by DBS</td>
</tr>
<tr>
<td>Final Department inspection and release of service and metering equipment</td>
</tr>
<tr>
<td>Department energizes service and sets meter (4) <strong>3-5 days</strong></td>
</tr>
</tbody>
</table>

■ Customer Controlled   ■ Department Controlled

(1) Includes complete set of site and electrical plans required to evaluate and design service.
(2) The Department 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 the Department sufficient time to install transformers and other equipment in the station. This will enable the Department to provide electric service in a matter of days after the Department completes the installation and receives the final release from DBS, assuming the service application has been submitted and any required fees or deposits have been paid.
(4) The Department 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.
The Department of Water and Power (LADWP) will supply temporary electric service to events of transitory nature such as construction work, special proceedings and fairs. The LADWP generally limits the length of time use of a temporary installation. Contact your service planning office for more information.

ELECTRIC SERVICE INSTALLATION
The following is required before the LADWP can provide you with temporary electric service:
1. Customer makes application for service.
2. Customer makes payment of fees or deposits.
3. LADWP inspects and approves electric service equipment
4. Department of Building and Safety (DBS) inspection and approval
5. Department of Building and Safety notifies LADWP of its approval and meter release.

TYPICAL TIME LINES FOR ELECTRIC SERVICE
To expedite the installation of temporary electric services, the Department recommends that work be scheduled in the following sequence for:

1. **Overhead Temporary Service**
   (a) Requiring installation of a meter, service drop conductors, and construction of Department facilities:

   - **Customer’s construction activities**
   - Customer makes application
   - Customer obtains Department approval for service location and requirements
   - Customer pays required fees or deposits
   - **2-3 weeks**
   - Department constructs off-site facilities (poles, lines, transformers, etc.)
   - Customer installs temporary metering facilities
   - Inspection and approval by DBS
   - Department inspects and releases temporary metering facilities
   - Department energizes service and sets meter (1)

<table>
<thead>
<tr>
<th>Customer Controlled</th>
<th>Department Controlled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer makes application</td>
<td>Customer obtains Department approval for service location and requirements</td>
</tr>
<tr>
<td>Customer pays required fees or deposits</td>
<td>Department constructs off-site facilities (poles, lines, transformers, etc.)</td>
</tr>
<tr>
<td>Customer installs temporary metering facilities</td>
<td>Inspection and approval by DBS</td>
</tr>
<tr>
<td>Department inspects and releases temporary metering facilities</td>
<td>Department energizes service and sets meter (1)</td>
</tr>
</tbody>
</table>

   (1) The Department 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.
(b) Requiring only the installation of a meter and service drop conductors:

<table>
<thead>
<tr>
<th>Customer’s construction activities</th>
<th>Customer makes application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer obtains Department approval for service location and requirements</td>
<td>Inspection and approval by DBS</td>
</tr>
<tr>
<td>Customer installs on-site conduit substructures, and temporary metering facilities (2)</td>
<td>Department inspects and releases temporary metering facilities</td>
</tr>
<tr>
<td>Department energizes service and sets meter (1)</td>
<td>3-5 days</td>
</tr>
</tbody>
</table>

- Customer Controlled  - Department Controlled

2. Underground Temporary Services

(a) Requiring only the installation of a meter and underground service cables:

<table>
<thead>
<tr>
<th>Customer’s construction activities</th>
<th>Customer makes application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer obtains Department approval for service location and requirements</td>
<td>Customer pays necessary fees or deposits</td>
</tr>
<tr>
<td>Customer installs on-site conduit substructures, and temporary metering facilities (2)</td>
<td>Inspection and approval by DBS</td>
</tr>
<tr>
<td>Department inspects and releases temporary metering facilities</td>
<td>Department energizes service and sets meter (1)</td>
</tr>
<tr>
<td></td>
<td>5-10 days</td>
</tr>
</tbody>
</table>

- Customer Controlled  - Department Controlled

(1) The Department 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) For services exceeding 200 amperes, the customer should provide an additional 5 to 10 working days in the construction schedule to allow the Department sufficient time to install any transformer facilities that may be required.
MULTIPLE LOT SUBDIVISIONS (TRACTS) SERVICE

A Department of Water and Power (LADWP) Tract Design Engineer will be assigned to assist you in the planning and scheduling of your subdivision project. The LADWP Tract Design Engineer should be contacted in the initial planning stages of your project by calling (213) 367-2888.

ELECTRIC SERVICE REQUEST

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

1. Sewer plans
2. Street improvement plans
3. Storm drain plans
4. Tract maps (2 sets)
5. Grading plans
6. Plot Plan (showing building footprint, driveway and meter locations)
7. Street lighting plans
8. CAD file for the entire tract that incorporates 1 through 4 from the list
9. Address List approved by the Bureau of Engineering
10. Electric Load requirement summary for each home/model including:
   - Meter panel and main disconnect ampcapities
   - Service voltage
   - Load schedule (size of air conditioners, heat pumps, water heaters, and other major load information)
   - Square footage of each house/model
11. Owner/Corporation full name and address for contact preparation
12. Desired electric in-service date for homes/models

The design and preparation of the power distribution design drawings can begin upon receipt of unsigned drawings and CAD files of the plans listed above. Plans should be sent to:

Los Angeles Department of Water and Power
ATTN: Underground Tract Design
P.O. Box 51111, Room 804
Los Angeles, CA 90051-0100

Specific service requirements for your proposed subdivision can only be established after the LADWP receives the information listed above.

TIME FRAMES FOR ELECTRIC SERVICE

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

1. Customer’s building design and construction activities
2. Customer submits electric service request.
3. LADWP prepares preliminary Customer Conduit Requirement drawings and coordinates drawing distribution through owner, other utilities and City/State permitting agencies.
4. Los Angeles Department of Public Works issues joint excavation permit (see Note 1 below)
5. Customer installs distribution conduit and/or substructures (see Note 2 below)
6. LADWP inspects and releases conduit and/or substructures
7. LADWP installs cables, transformers and other equipment in conduit and/or substructures
8. Owner or individual home owner makes application for electric service by calling 1-800-DIAL-DWP or by processing an on-line application through www.LADWP.com
9. The Department of Building & Safety (DBS) inspects and releases the electric meter panel.
10. LADWP inspects and releases the electric meter panel
11. LADWP installs individual electric services as released (See Note 3 below)

Note 1: A minimum of 8 weeks should be allowed to process plans using the joint trench procedure.
Note 2: This work must be completed 6-8 weeks prior to completion of the customer’s building construction to allow the LADWP sufficient time to install the required cable and transformers. This will enable the LADWP to provide electric service in a timely fashion after the LADWP receives the Department of Building and Safety 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 page 4, for individual service time frames and requirements.

This information should be made known to your contractor, developer, etc. and particularly to the contractor doing the electrical and conduit work on the project.
Served by SCE
[1] City of San Fernando
[3] Veterans Administration
[5] Universal Studios

ENGINEERING OFFICES

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
LADWP CUSTOMER SERVICE 24-HOUR 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.

BRANCH OFFICE LOCATIONS

METROPOLITAN AND WEST LOS ANGELES OFFICES
Main Office 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 Boulevard, Unit B
Lincoln Heights 2223 N. Broadway
Slauson-Vermont 5928 S. Vermont Avenue
Watts 1686 E. 103rd Street
West Los Angeles 1394 S. Sepulveda Boulevard

SAN FERNANDO VALLEY OFFICES
Winnetka-Canoga Park 7229 Winnetka Avenue
Mission Hills 11100 Sepulveda Boulevard, Suite 3
Van Nuys 6550 Van Nuys Boulevard

HARBOR AREA OFFICES
San Pedro 535 W. 9th Street
Wilmington 931 N. Avalon Boulevard

Note: For additional payment centers, visit the Department’s website at LADWP.com