

GENERAL INFORMATION

ARTICLE 1. GENERAL INFORMATION

SEC. 1.1 DEFINITIONS

ABBREVIATIONS found within this manual:

| | | |
|------|---|---|
| IPL | - | Independence Power & Light Department |
| NEMA | - | National Electrical Manufacturers Association |
| NEC | - | National Electrical Code |
| NESC | - | National Electrical Safety Code |
| AWG | - | American Wire Gauge |
| MCM | - | Thousand circular mils wire size |

COMMERCIAL CUSTOMER means any Customer who receives, uses or otherwise is responsible for consumption of electric service in a commercial building as defined by the City of Independence zoning ordinance.

CUSTOMER means any person or entity applying for, receiving, using or agreeing to receive electric service supplied by IPL under one rate schedule at a single point of delivery and for use within the premises occupied by such person or entity or; any person, firm or corporation that improves, changes or converts land for specific use.

CONTRIBUTION TO AID CONSTRUCTION means a non-refundable cash payment from a Customer to be paid toward the cost of extending its Distribution System, installation of street lights and other additions or modifications solely for the benefit of the Customer.

DISTRIBUTION SYSTEM means conductors, transformers, pedestals, conduits, manholes, pads, ground rods, substations, transmission facilities and other equipment owned or utilized by IPL to provide electric service. It does not include service lines.

ELECTRIC INDUSTRY TERMS means customary electric industry terminology that may be found throughout this document. Some knowledge of electric theory may be required for interpretation of certain topics.

FACILITIES means electric equipment installed for the purpose of facilitating the use or metering of electricity.

INDUSTRIAL CUSTOMER means any Customer who receives, uses or otherwise is responsible for consumption of electric service in an industrial facility that is primarily engaged in the manufacturing or processing of a product for indirect sale or resale.

INSPECTOR means an employee of the City/IPL that inspects work performed by others.

RATE means a pre-determined charge for electricity consumed by a particular customer type.

RESIDENTIAL CUSTOMER means any Customer who receives, uses or otherwise is responsible for consumption of electric service in a dwelling as defined by the City of Independence zoning ordinance.

SERVICE LINE OR DROP means the electric line extending from IPL's distribution system to a Customer's electric meter.

SERVICE POLE OR PEDESTAL means the pole or pedestal where a Service Line is connected to IPL's Distribution System.

STREET LIGHTING SYSTEM means the poles, luminaries, wires, etc. owned by IPL that are used to light public roadways.

SEC. 1.2 GENERAL

- A.** Due to continuing advancement in methods, some procedures outlined herein may need to be modified from time to time. Upon request, revised information will be supplied concerning these changes and revisions, if any. They may also be obtained through the City's website, <http://www.indepmo.org/pl/>.
- B.** Exceptions may be approved when written requests are received and approved by the Power & Light Director. Approval of the exception will be based on merits of quality customer service or sound business practices.
- C.** IPL should be contacted about proposed installations as early as possible to allow time for necessary planning, scheduling and proper coordination.
- D.** Where new electrical installations, additions or alterations are contemplated, inquiry should be made in advance of design or purchase of equipment relative to available voltage, point of delivery and extension of IPL's Distribution System.
- E.** Note, it is the Customer's responsibility to install their service entrance equipment and meter socket at the place indicated by IPL's representative. Failure to do so may result in unnecessary costs to the Customer for service relocations and possible delays in providing service.

- F. Installation of wiring capacity greater than minimum code requirements is strongly recommended. Appropriate wiring protects property investment by assuring the wiring system is capable of handling increased usage of electrical equipment.
- G. This manual is issued by IPL as a guide for obtaining electric service and to address available services, conditions for service and standards for materials and construction of the Customer's service entrance. It is not intended to specify nor limit the design of the Customer's wiring or equipment. The standards for materials and construction are necessary to assure efficient use of IPL's resources and are the minimum under which IPL will supply service. IPL reserves the right and authority to vary from the guidelines when it determines other solutions are more practical for the operation of IPL.
- H. Nothing contained in the standards shall require IPL to install area feeder circuits underground or require any part of its existing Distribution System to be placed underground.
- I. Standards identified herein supersede all previous publications of Electric Service Policies, Standards and Requirements issued by IPL prior to this date and are subject to change without notice.

J. Representative Availability

IPL has representatives whose services are available to Customers without charge. They endeavor to stay abreast of developments in safe and adequate practices in wiring, the latest developments in lighting and power application, and other data which pertain to the most efficient use of electricity. IPL will be pleased to provide requested information or to investigate utilization difficulties, which may arise. Customers may call IPL any time they believe IPL's knowledge and experience may be of assistance.

K. Right of Access

1. The Customer shall give authorized representatives of IPL, when properly identified, full and free access to the premises of the Customer at all reasonable hours. This access shall be for the purpose of installing, reading, inspecting, adjusting, repairing, maintaining, replacing or removing any of IPL's Facilities on the premises of the Customer or for any other purpose incidental to the electric service supplied by IPL.
2. Fences and other obstructions shall not be placed to restrict reading and maintenance of IPL's meters. Where meters are located beyond locked doors

or padlocked gates, the Customer's locking device shall have a keyway for dual key capacity that accommodates an IPL lock.

3. IPL representatives whose duty requires them to access the premises of the Customer has an identification card bearing the employee's photograph. The Customer should deny admittance to anyone claiming to be an employee who refuses to display a properly approved identification card. Any uncertainty of identity or purpose should be reported to IPL immediately.
4. Representatives of IPL may neither demand nor accept any compensation from a Customer for service rendered during the performance of their duty.
5. The Customer shall provide and/or describe all necessary easements or rights-of-way across property owned or otherwise controlled by the Customer for the construction, operation and maintenance of IPL Facilities required to supply electric service. Certain installations may require the Customer to sign an indemnification agreement.

L. Customer Responsibility for IPL Property and Clearances

1. Breaking of seals, tampering with meters, wires or any other property belonging to IPL by unauthorized representatives of IPL is prohibited and may be punishable by law.
2. The Customer, at all times, shall protect the property of IPL on the premises of the Customer and shall not permit anyone other than representatives of IPL and other persons authorized by law to inspect, work on, open or otherwise handle the wires, meters or other IPL Facilities. In case of loss or damage to IPL property due to carelessness, neglect or misuse by the Customer, their family, agents, servants or employees, the Customer shall pay to IPL the cost of any necessary repairs or replacements of such Facilities or the value of such Facilities.
3. Swimming pools (above or below grade) shall be constructed to provide a minimum distance of 10 feet as measured horizontally, from the vertical plane containing the nearest part of the pool or wading area, diving platform, deck or similar structure to vertical plane containing the nearest electrical conductor or equipment. Conductors are prohibited from passing over or under all pools and their associated decks.
4. Attachments of any kind or nature shall not be permitted on IPL poles without previous execution of IPL's Pole Attachment Agreement. The only exception to this will be temporary service.

5. If practicable, IPL may relocate its Facilities at the request of a Customer or as a result of a Customer's construction activities. The Customer may be required to pay all costs associated with relocating the Facilities. All estimated costs shall be paid by the Customer prior to issuance of a job order.
6. A Customer shall use the electric service supplied by IPL with due regard to the effect that the Customer's use has on other Customers and on IPL Facilities and equipment. IPL may refuse to supply service or may suspend service to a Customer if the Customer's service entrance wiring is not safe or is operated so as to disturb the electric service supplied by IPL to other Customers.
7. IPL will require a Customer to provide, at Customer's expense, special or additional equipment when a Customer's use of electric Facilities results in an interference with the quality of the Customer's own service or that of neighboring Customers, as determined by IPL.
8. Care shall be taken by the Customer in the installation of antennas near IPL power lines such that under all conditions, the installation will not be under or fall across IPL lines nor contact them in any way that may be considered hazardous to life or property.
9. IPL will provide clearances as specified in the NESC when installing or reconstructing its Facilities.
10. The Customer is responsible for providing clearances as specified in the NESC when constructing structures on their property. The Customer shall not construct or locate a building, structure or mobile equipment within 5 feet of IPL's Distribution System, as measured horizontally, from the vertical plane containing the nearest electrical conductor or equipment displaced by a 6 psf wind.
11. The location of buildings, structures (requiring building permit) or mobile equipment is prohibited above or beneath IPL's Distribution System and within utility easements or rights-of-way.
12. The Customer shall be liable to IPL for costs of any repairs or replacement of IPL Facilities located on the Customer's premises or projects that are lost or damaged due to change in characteristics of the Customer's load that have not been reported to IPL.

M. Discontinuance of Service

1. IPL may refuse to provide or may discontinue service for violation of any of its service policies; for failure to pay charges for electric service when delinquent; for violation of rate schedule or contract provisions; for theft or illegal diversion of energy; for situations that constitute a safety hazard or for code violations.
2. The discontinuance of service for any cause does not release the Customer from the obligation to pay for energy received or for charges otherwise specified.
3. A service that has been discontinued due to theft, illegal diversion, unsafe conditions, or damage to IPL metering equipment shall be upgraded to current codes by the Customer before service is reconnected.
4. IPL reserves the right and authority to vary from policy when failure to pay charges for electric service when delinquent; for violation of rate schedule or contract provisions; for theft or illegal diversion of energy; for situations that constitute a safety hazard or for code violations have been determined. IPL may open and tag customer disconnects in these situations. Violating such disconnecting or tagging may result in permanently disconnecting the service and will compound customer costs and legal actions respective to the situation.

N. Standby Service

1. The Customer shall not use any other electric power or lighting service, including stand-by generators, in conjunction with IPL's service without the written consent of IPL. Such written consent may be granted at the sole discretion of IPL if the Customer has critical operations where stand-by service is desirable. To prevent operation of the Customer's stand-by generating Facilities in parallel with IPL's service, the Customer shall be required to install a double-throw switch acceptable to IPL.
2. Devices or attachments shall not be connected to IPL's Facilities in such a manner as to permit the use of unmetered energy without prior written consent from IPL. The Customer must submit detailed plans, specifications, equipment description and other details pertinent to the proposed installation as may be required by IPL. These plans, specifications, etc., must be approved by IPL before parallel operation will be allowed.

O. Service Exclusive

Electric service supplied by IPL is for the exclusive use of the Customer on the premises to which such service is delivered. IPL will not supply electric service to a Customer for resale or redistribution by the Customer.

P. Submission of Plans

1. IPL does not design, plan, install or maintain the Customer's wiring or electric equipment.
2. Customers may contact IPL to obtain information relative to new electric service connections or changes in existing service. In order to obtain service at the time desired, an application should be submitted well in advance and the Customer should keep IPL informed as to the progress of the relative work and when service is anticipated.
3. Prospective Customers desiring the installation of new electric service or changes in service shall furnish a building plan, a one-line electric diagram and a completed "Request for Electrical Service Information" form before service will be considered. IPL will not design, plan, install or maintain any wiring or electrical equipment that is the property of the Customer. IPL reserves the right to determine availability of voltage, phase of service, route of service, metering procedures and maximum fault current in any given area.
4. Where three-phase service is required, it shall be the Customer's responsibility to balance distribution of the load between the three phases of service as evenly as possible to preclude an over-current condition on IPL equipment. Loss of IPL equipment due to an imbalance may result in Customer being billed for replacement costs for such equipment.
5. The Customer is responsible for notifying IPL of proposed all-electric services during the plan submission stages of development or service upgrade.

Q. Electric Rates

1. The rates that IPL charges for different types of electric service are available for inspection by any Customer during working hours at IPL's business office. They may also be obtained through IPL's website at www.ci.independence.mo.us/pl.
2. Upon request, an IPL representative will explain the rate schedules and assist in selection of the applicable rate best suited to the Customer's requirements. The Customer is responsible for the final selection of the applicable rate schedule.

R. Tree Trimming

The Customer shall permit IPL to trim or remove any trees on the Customer's property that may interfere with the safe operation of IPL's Facilities. Except in emergencies, IPL will trim trees not more than every three (3) to five (5) years. Routine trimming is vital to maintaining reliable service and is performed at no cost to the Customer. To avoid future problems and inconvenience, it is strongly recommended that Customers avoid planting tall-growing trees under or near overhead power lines.

1. Trimming and tree removal related to maintaining safe clearance for customer service drops to a Customer's Facilities, are the responsibility of the customer/property owner.
2. Damage to a service drop or the utility facilities due to customer/property owner neglect of trimming for service drop clearances may result in service upgrade or cost for repair.

S. Service Quality

1. IPL will use reasonable diligence to maintain continuous electric service to the Customer but does not guarantee the supply of electric service against interruptions. IPL shall not be considered at fault nor liable for any damages occasioned by system fluctuation or interruption of electric service.
2. IPL shall not be considered responsible or liable for failure by IPL to perform any obligation if prevented from fulfilling such obligation by reason of delivery delays, breakdowns of or damage to Facilities, acts of nature or public enemy, strikes or other labor disturbances involving IPL or the Customer, actions of civil, military or governmental authority or any other cause beyond the control of IPL.
3. IPL will use reasonable diligence to provide an adequate and uninterrupted supply of electrical energy within normal voltage limits. IPL shall not be liable, however, for personal injury, loss or damages, if the electrical energy supply should be interrupted or subjected to voltage variation due to circumstances beyond the control of IPL. IPL shall have the right to temporarily suspend service for the purpose of making repairs or improvements to the system.
4. It shall be the obligation of the Customer to notify IPL as soon as practicable if the Customer's service is interrupted, unsatisfactory or if any hazardous condition is proposed or thought to exist.

5. Any devices required to protect the Customer's equipment and premises shall be provided by the Customer. IPL shall not be responsible for any damage to the Customer's equipment due to improper Customer protective devices or improper use, installation or lack of appropriate protective devices.
6. Electric service is subject to occasional voltage fluctuation that may adversely affect the operations of sensitive controls in or on a Customer's electric equipment. Devices available for use with most electric equipment will minimize the effect of such disturbances. IPL will assist the Customer in identifying the source of the disturbance. IPL will not, however, assume any liability for damage to the Customer's equipment nor disturbances in processes arising from such variations.
7. IPL reserves the right to limit the use of electrical energy any time that power shortages or equipment failures require IPL to place into effect a curtailment program which may include voltage reduction and rotating blackouts.

T. Extension of Distribution System

1. Costs associated with the extension of, or addition to, IPL's Distribution System must be recovered by IPL or justified by some combination of the following, as determined by IPL.
 - a. IPL's Distribution System will be enhanced or be made more reliable.
 - b. The extension is not solely for the benefit of the requesting Customer and will serve future Customers.
 - c. The anticipated revenue to be received after implementation of the extension or addition will offset IPL's investment within ten years.
 - d. The Customer submits a Contribution to Aid Construction, prior to start of work, for costs of the extension or addition as determined by IPL.
2. IPL will determine the feasibility of a proposed system expansion or addition prior to undertaking the work.
3. It shall be the responsibility of the Customer to provide any information and/or property surveying as required for any work.
4. The Customer may be required to provide a Contribution to Aid Construction for costs in excess of the standard Facilities installed for the applicable rate class.

Non-standard Facilities may include items such as multiple phases, additional size/shape or other requirements necessary to serve the Customer.

5. IPL facilities (conduits & vaults) required along new or improved roadways (not in new subdivision) shall be installed by the roadway or IPL's contractor.

U. Conversion of Overhead Distribution System to Underground

1. Costs associated with the burial of IPL's Overhead Distribution System must be recovered by IPL or justified by some combination of the following, as determined by IPL.
 - a. IPL's Distribution System will be enhanced or be made more reliable.
 - b. The extension is not solely for the benefit of the requesting entity and will benefit others.
 - c. The anticipated costs of the conversion is sufficiently funded in IPL's Underground Program budget.
 - d. The entity requesting the conversion submits a Contribution to Aid Construction, prior to start of work, for costs of the conversion as determined by IPL.
2. The anticipated work shall be consistent with criteria established in IPL's Underground Program.
3. IPL will determine the feasibility of a proposed system conversion prior to undertaking the work.
4. It shall be the responsibility of the entity requesting the conversion to provide any information and/or property surveying as may be required for any work.
5. The entity requesting the conversion may be required to provide a Contribution to Aid Construction for costs in excess of the standard allowable investment for the applicable rate class.
6. IPL facilities (conduits & vaults) required along new or improved roadways (not in new subdivision) shall be installed by the roadway or IPL's contractor.
7. Relocation of electric utilities due to roadway improvements associated with subdivision development shall be consistent with city code sections 14 (subdivisions) and 20 (use of right of way.)