

1.0 INTRODUCTION

1.1 PURPOSE

The purpose of this book is to present information and specifications relative to the introduction and use of electricity supplied by LIPA. This book is to be used as a guide to installing electrical installations to protect the interests of our customers and to comply with regulations which experience has shown to be necessary for safe, adequate, and satisfactory service.

1.2 SCOPE

The information and specifications included in this book cover conductors and equipment connecting LIPA's electric supply system to the premises, and other related subjects associated with the supply of electricity that are of mutual interest to LIPA, customer, architect, engineer and electrical contractor. It should be noted that this is not a complete set of rules governing the installation of electrical wiring and equipment.

1.3 RATE SCHEDULE

For Rate Schedules and the Rules and Regulations pertaining thereto, reference is made to the "Long Island Power Authority Tariff for Electric Service". These schedules are available for examination at any LIPA Business Office or online at www.lipower.org.

1.4 COOPERATION

1.4.1 It is LIPA's sincere desire to provide and maintain dependable, safe and satisfactory electric service in a courteous and efficient manner.

1.4.2 Preliminary information leading to new or increased electric service requirements should be submitted to LIPA early in the planning stages. This will insure proper design and scheduling coordination of the work associated with the service connection. LIPA, when applicable, will advise the customer of any additional requirements for grounding, service equipment and metering facilities.

1.4.3 Cooperation of all interested parties and strict adherence to the specifications outlined in this book will provide for satisfactory electric service.

1.5 CODES

These specifications are a supplement to the National Electrical Code (NEC) and National Electrical Safety Code (NESC), but they are not a substitute for these codes or for municipal codes. LIPA requires the customer's wiring to be installed in accordance with applicable codes.

1.6 REQUEST FOR INFORMATION

LIPA will be pleased to assist the customer with any request for information in connection with the utilization of electric service. Representatives are available at its Distribution Design Offices to respond to these requests for information.

1.7 RESPONSIBILITY

It is the customer's responsibility to maintain his wiring and equipment in a safe and operating condition and in compliance with all applicable codes. LIPA does not accept any responsibility for the customer's wiring and equipment.

1.8 INSPECTIONS AND APPROVALS

To protect the customer's interests, as well as its own, LIPA requires the customer to furnish satisfactory evidence of the safe condition of his wiring before any service is connected. This will require an electrical inspection certificate from the authority having jurisdiction or an inspection agency approved by the authority having jurisdiction. Also, when service wiring is increased or extended, an inspection certificate is required and a certificate may be required for service reconnects. Inspections shall confirm compliance with the National Electric Code, any applicable municipal codes and any Company specification that may supercede portions of the aforementioned codes. The Company reserves the right to challenge the inspection when Company personnel observe deficiencies in the installation at any time prior to energizing the installation. Application for service and inspection should be made before the work is started. It is LIPA's intent that all electric services of outdated design be brought into compliance with these current specifications (as well as NEC and NESC code, as they may apply) when the service size is changed, load is added, or major service construction/replacement work is performed. This includes, but is not limited to, the abandonment of old-style customer-owned transformer vaults for pad mounted installations, installation of GFCI protection as required, and other measures.

On ALL fire reconnects, it will be necessary to obtain an electrical inspection certificate from an approved inspection agency and provide it to the appropriate Distribution Design office before re-connection.

1.9 WIRING ADEQUACY

Compliance with the NEC or local municipal code assures only that the installation will conform to recognized safe practices. The provision for adequate electrical capacity must be decided by the customer. The electrical contractor should assist the customer in determining that his electrical installation will have adequate capacity for future use. The Customer has the responsibility to maintain their wiring and equipment in a safe operating condition. Defects in Customer furnished apparatus, materials, and labor shall be rectified by the Customer at their expense. LIPA does not accept responsibility for the Customer's wiring and equipment.

1.10 CONTINUITY OF ELECTRIC SUPPLY

1.10.1 LIPA will endeavor, at all times, to provide a regular and uninterrupted supply of electric service. However, should it interrupt the supply of service for the purpose of making repairs or improvements in any part of its system, or should the supply of service be interrupted or defective or fail from causes beyond its control, or through ordinary negligence of employees, servants or agents, the Company will not be liable.

1.10.2 Service for electric furnaces, welders, x-ray apparatus and other types of equipment, which may interfere with satisfactory service to other customers require special consideration.

1.10.3 LIPA reserves the right to discontinue service where equipment used by a customer results in objectionable effects upon or interference with the operation of facilities of the Company, its customers, or of another public service company, unless the customer discontinues the use of such equipment or installs corrective equipment to overcome objectionable affect or interference.

1.11 POWER QUALITY

1.11.1 Voltage dips or spikes and brief service interruptions of varying duration and severity will occur due to operating conditions on the electric system. These irregularities will not cause malfunction of lighting or motor loads but may affect computers or similar equipment. If irregularities of this nature will be of consequence, the customer/contractor is advised to consider the installation of a motor generator set, uninterruptible power supply, or some other form of Uninterruptible Power Supply (UPS) to insure proper operation of critical equipment. LIPA shall not be liable for any damages arising from these voltage irregularities, momentary interruptions, or de-energization and re-energization of electric service.

1.11.2 In addition, normal electric distribution system operation includes reacting and responding to the following events, any of which can cause voltage spikes, dips, temporary low voltage, and even outages:

- Adverse weather conditions
- Overhead wires falling
- Underground wires failing
- Connections failing in service, or coming loose
- Trees and/or wildlife intrusion into wires
- Failure of another customer's equipment
- Capacitors being put on line, or being disconnected
- System switching
- Auto accidents, and events caused by others
- Intentional interruptions in contingency situations
- Operation of a customer's own equipment

Each of the above instances is either a normal electric utility operation, or an event which causes a normal, automatic fault clearing episode on the electric system, or an event generated within the customer's own building or home. LIPA will respond appropriately when notified by a customer, of any abnormal voltage incident involving its electric system. Voltage excursions generated during these events may effect electronic equipment, such as late model TV's, VCR's, computer systems, stereo equipment, etc. It is the customer's responsibility to provide adequate protection against such events, which typically includes use of a quality surge protection device and GFCI receptacle or circuit breaker, or an Uninterruptible Power Supply (UPS) as appropriate.

1.11.3 Adequate maintenance of a home or building's grounding system, which includes water piping ground connections, ground rods and/or structural grounds, can help minimize the effects of the above events. (See Section 7)

1.12 ACCESS TO CUSTOMER'S PREMISES

Authorized LIPA employees or agents shall have safe access, at all reasonable times, to its meters and equipment installed on the customer's premises.

1.13 IDENTIFICATION OF EMPLOYEES

LIPA employees, authorized to visit the Customer's premises, are furnished with photograph identification which they will show upon request. This is done to protect the Customer from unauthorized persons representing themselves as LIPA employees.

1.14 REVISIONS

- 1.14.1 These specifications will be revised or amended as required by developments and progress in the industry to protect the mutual interests of the Customer and LIPA. The latest revisions should always be used. Revisions shall also be posted on the LIPA website lipower.org.
- 1.14.2 Revisions can come in the form of single and/or multiple sheets, or the entire book. These revisions will be made available to the Five Borough Electric League www.5boroelectric.com, the International Association of Electrical Inspectors www.iaei.org, the Long Island Chapter of the National Electrical Contractors Association www.lineca.org, the Nassau Electric League www.nassauelectricleague.com, the Suffolk County Electrical Contractors Association www.sceca.com, and local supply houses.
- 1.14.3 New books will be issued every three years, or as required. They can be obtained at all of LIPA's Customer Service Offices. (See front of book). Complete text is available on the LIPA website www.lipower.org.