

1. 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 PSEG Long Island. This book is to be used as a guide for installing electrical installations in order to protect the interests of our customers and to comply with regulations. These guidelines are necessary for safe, adequate, and satisfactory service.

1.2 Scope

The information and specifications included in this book cover conductors and equipment connecting Long Island Power Authority's (LIPA) electric supply system to the premises. It also encompasses other related subjects associated with the supply of electricity that are of mutual interest to PSEG Long Island, customers, architects, engineers, and electrical contractors. 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 PSEG Long Island Business Office or online at www.psegliny.com. PSEG Long Island will make the initial assignment of the appropriate electric rate, based on information supplied in the application and load letter. If the characteristic of electric usage changes after the service is energized, it will be the customer's responsibility to notify PSEG Long Island of such change, so that the appropriate rate may be selected.

1.4 Cooperation

1.4.1 It is PSEG Long Island'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 PSEG Long Island early in the planning stages. This will ensure proper design and scheduling coordination of the work associated with the service connection. PSEG Long Island, 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 electrical 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. PSEG Long Island requires the customer's wiring to be installed in accordance with applicable codes.

1.6 Request for Information

PSEG Long Island will be pleased to assist the customer with any request for information in connection with the utilization of electrical service. Representatives are available at PSEG Long Island's Building and Renovation Services Department to respond to these requests for information.

1.7 Responsibility

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

1.8 Inspections and Approvals

To maintain compliance with code requirements, the Authority Having Jurisdiction (AHJ) requires customers to furnish satisfactory evidence of the safe condition of a structure's wiring. AHJ's perform electrical inspections or accept an electrical inspection certificate from an inspection agency approved by the AHJ as evidence that the structure's wiring is safe, meets all applicable code requirements, and is ready for connection to LIPA system. This certificate also serves as notification to PSEG Long Island that the AHJ, or the inspection agency approved by the AHJ, has deemed the wiring meets all applicable codes and is ready for connection to the system. PSEG Long Island reserves the right to challenge an inspection, when PSEG Long Island personnel observe deficiencies in the installation any time prior to energizing the installation.

For new service installations, PSEG Long Island requires an application for service and an electrical inspection certificate from the AHJ, or an inspection agency approved by the AHJ. For name changes to an existing service, PSEG Long Island requires an application.

Changes and/or modifications to an electric service will require an inspection certificate from the AHJ, or an inspection agency approved by the AHJ.

An electrical inspection certificate from the AHJ, or an inspection agency approved by the AHJ, may be required for service reconnects.

Inspections shall confirm compliance with the NEC, any applicable municipal codes, and any Company specifications that may supersede portions of the aforementioned codes. Application for service and inspection should be made before the work is started. It is PSEG Long Island'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.

For ALL fire and flood damaged homes and buildings, it will be necessary to obtain an electrical inspection certificate from the AHJ, or an inspection agency approved by the AHJ, and the certificate must be provided to PSEG Long Island prior to re-connection. This certificate also serves as notification to PSEG Long Island that the AHJ has deemed the wiring meets all applicable codes and is ready for connection to the LIPA system.

During large-scale flood/storm events, PSEG Long Island will coordinate an initial assessment of homes to be energized. If it is determined that the house cannot be safely energized due to flooding or physical damage, PSEG Long Island will require an inspection certificate, or possibly a certification from a licensed electrical contractor, that the building has been made safe and power can be restored.

1.9 Wiring Adequacy

Compliance with the latest adopted 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 their 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 apparatuses, materials, and labor shall be rectified by the customer at their expense. PSEG Long Island does not accept responsibility for the customer's wiring and equipment.

1.10 Continuity of Electric Supply

1.10.1 PSEG Long Island will endeavor, at all times, to provide a regular and uninterrupted supply of electric service. However, PSEG Long Island will not be liable under the following:

- Service is interrupted for the purpose of making repairs or improvements in any part of its system.
- Service is interrupted, defective, or failed from causes beyond its control.
- Ordinary negligence of employees, servants, or agents

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 PSEG Long Island reserves the right to discontinue service where equipment used by a customer results in objectionable effects upon, or interference with, the operation of LIPA's facilities, its customers, or of another public service company, unless the customer discontinues the use of such equipment or installs corrective equipment to overcome objectionable effects 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 (UPS), or some other form of UPS to ensure proper operation of critical equipment. PSEG Long Island/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 operations include 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 online, 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, 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. PSEG Long Island will respond appropriately, when notified by a customer, of any abnormal voltage incident involving the electric system.

Voltage excursions generated during these events may affect 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, GFPE receptacles or circuit breakers, or a 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 PSEG Long Island employees or agents shall have safe access, at all reasonable times, to meters and equipment installed on the customer's premises.

1.13 Identification of Employees

PSEG Long Island employees, authorized to visit the customer's premises, are furnished with photograph identification, which they will show upon request. This is being done to protect the customer from unauthorized persons representing themselves as PSEG Long Island 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 PSEG Long Island. The latest revisions should always be used. Revisions shall also be posted on the PSEG Long Island website www.psegliny.com.
- 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 (5) Borough Electric League (www.fiveboroelectric.com), the International Association of Electrical Inspectors (IAEI) (www.iaei.org), the Long Island Chapter of the National Electrical Contractors Association (www.lineca.org), the Nassau Electric League (NEL), the Suffolk County Electrical Contractors Association (www.sceca.com), and local supply houses.
- 1.14.3** New books will be issued as required. Copies can be obtained by contacting PSEG Long Island's Building and Renovation Services (BRS) Department. The complete text is available on the PSEG Long Island website (www.psegliny.com).
- 1.14.4** Visit www.psegliny.com/buildingrenovationservices to access the latest notices and updates to the Redbook.