Section V. Service Equipment

1. General.

Each service entrance shall be provided with disconnecting means and overcurrent protection.

Service equipment shall conform to the National Electrical Code and local authorities having jurisdiction.

The location of the service equipment and the general electrical arrangement will be agreed upon after mutual consideration of all factors by the customer and the Company. The final location of the service equipment will be determined by an authorized Company representative.

2. Ampere Rating.

Service Connected to Overhead Lines: The capacity of service equipment for an installation of one meter shall not be less than 100 amperes.

Service Connected to Underground Lines: The capacity of service equipment for an installation of one meter shall not be less than 150 amps.

A reduction of the above minimum requirements to 60 amperes <u>may be</u> permitted with Company approval for signs, traffic signals, CATV power supplies, and for temporary construction buildings, etc., where the load will not exceed 3000 watts.

3. Commercial or Industrial.

Because each business establishment has their own particular electrical requirements, it is essential that details of each installation be reviewed with the Company at an early date. The Company will specify the service voltage and general electrical and arrangement, and will guide the customer in the selection of service equipment.

NOTE: The minimum ampere ratings stated above do not apply to individual meters in a group of stores (such as in a mall) where a main service switch exists. In this case a reduction in size of the individual service equipment to 60 amperes is permitted with the provision that #2 aluminum or equivalent conductor is installed on both the line and load side of the meter socket. The company shall be consulted before work is started.

4. Service Less Than 400 Amperes, Less than 600 Volts.

Service equipment shall conform to the requirements of the National Electrical Code. Refer to Section VII - Meters and Meter Boards, to determine when metering transformers are required.

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5. Service 400 Amperes and Above, Less than 600 Volts.

The customer should arrange an early meeting with the Company to review the service equipment and its arrangements. It is important that the customer provide the Company with detailed plans and specifications prior to the purchase of service equipment or proceeding with the installation.

The Company, upon request, will inform the customer concerning the magnitude of the current, which the service equipment may be called upon to interrupt.

Any tap made ahead of the main service equipment for fire pumps, exit lights, control power for the circuit breaker, etc., shall be provided with disconnecting means and overcurrent protection adequate for the duty. Such connections shall be made only where specifically approved by the Company and must be metered, either by the existing or an additional meter.

Services above 800 amperes shall normally be served underground by either a pole mounted or pad mounted transformer installation.

6. Requirements.

The customer shall install service equipment which is UL listed for the intended use, and which will meet the following criteria:

- a) A voltage rating suitable to the service.
- b) An ampere rating which is adequate for the initial and anticipated future load requirements. The device shall be capable of interrupting load current equal to its ampere rating.
- c) A fault current interruption capability at the service voltage of not less than the value specified by the Company.

If a disconnecting switch and fuse combination is utilized, it shall meet the following requirements in addition to those in 6a, b, and c above:

- d) The fuse shall conform to the latest NEMA Standard for Power Fuses.
- e) The customer shall take full responsibility for maintenance of a spare stock of fuses.

If an air breaker is utilized, it shall meet the following requirements in addition to those in items a, b and c:

- f) An operating mechanism of mechanically trip-free construction.
- g) An overcurrent tripping device on each pole arranged for delayed overcurrent protection with instantaneous tripping for currents of fault magnitude.
- h) Conformance with latest NEMA and ANSI Standards for Power Circuit Breakers.

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Notes:

- 1. The Company recommends that any undervoltage tripping devices required by the customer be arranged to trip individual feeder circuits rather than the main breaker.
- 2. The customer is responsible for the maintenance of the service equipment.