170 PROTECTIVE DEVICES

170.1 All motors that cannot be safely subjected to full voltage starting must be provided with a device to ensure that the motor will be disconnected from the line in case of voltage failure, unless otherwise equipped for automatic starting in case of such failure.

170.2 All single phase and three phase motors shall be equipped with overload protective devices as specified in NEC 430 Part III. It is also recommended that under voltage relays be provided having a time delay feature.

170.3 For three phase service, it is the Customer's responsibility to install phase failure and reverse phase relays.

170.4 All three phase elevator installations, cranes, traveling beds or decks and similar equipment must be provided with reverse phase relays and circuit breakers or equivalent devices to protect the installation in case of phase reversal.

170.5 The Company will not be responsible for damage to Customer's equipment as a result of the failure of the Customer to provide adequate protection, as specified in the National Electrical Code.

170.6 A service disconnect and over current protective device is required ahead of Customer owned equipment on all unmetered services. NEC Article 230 Part VI and Part VII.

180 FAULT CURRENT

180.1 The Company shall determine the available fault current at the delivery point. To do this, the Company must know the Customer's service size, service voltage, detailed load information and the location of the Company transformer and delivery point.

180.2 The Customer is responsible for the installation of protective equipment with an interrupting rating sufficient for the maximum available fault current.

180.3 On initial services and reconnection after alterations to existing services, the Company will limit the available fault current on single family detached homes (including mobile homes not in mobile home parks) to 10,000 symmetrical amperes. This is provided the service size does not exceed 200 amperes. For all other Customers, both on initial connection and reconnection of an existing service after alterations, the Company will only notify the Customer of the available fault current.

190 CUSTOMER GENERATION

190.1 A hazardous condition is possible whenever electric power is fed from the Customer on to Company lines. Call the Company (1-888-569-5700) if there are any questions about Company requirements. Call the local electrical inspector if there are any questions about NEC requirements.

190.2 Company approval is not needed for portable or standby generators that use either manual or automatic "break-before-make" switching processes to connect to loads. This process disconnects the Customer from Company electrical facilities and prevents a back feed situation.

190.3 Regardless of compliance with NEC requirements, prior written Company approval is required for processes that allow the Company's electrical facilities to be connected (even if only for a few cycles) in parallel or in closed-transition mode. Examples of these are:

- Portable or standby generators using "make-before-break" switch gear or transfer equipment;
- Power producing facilities that operate in parallel or in closed-transition mode with Company facilities. Examples are distributed generation, rotating generators, solar photo-voltaic systems, fuel cells, emergency lighting, essential equipment power sources, etc.

190.4 It is highly recommended that the written Company approvals required above be obtained during the design process and prior to the purchase of equipment.

190.5 Connections for Customer-owned emergency generation are made in the transfer switch. A transfer switch for Customer emergency generation must be connected to Customer-owned equipment beyond the meterbase. Customer emergency generation shall not be installed on the line side of the meter.

190.6 NEC References are listed below.

Article 700 - Emergency Systems

Article 701 - Legally Required Standby Systems

Article 702 - Optional Standby Systems

Article 705 - Interconnected Electric Power Production Sources

200 PARTICULAR APPLICATIONS

200.1 Service specifications should be obtained from the Company before the purchase of equipment such as:

- X-ray equipment, Variable speed drives, Radio transmitters
- New or unusual applications, Electronic computers, Data processing equipment
- Electric heaters, Silicon control rectifiers

200.2 The Company endeavors to provide an uninterrupted supply of electricity. It does not guarantee there will be no noise, transients, voltage dips or outages on its system. It is the Customer's responsibility to protect his equipment from these situations. Various Customer installed and owned conditioning equipment is available depending on the amount of protection deemed necessary.

200.3 The Customer can install a separate circuit within the facility to serve a sensitive system to protect it against most problems originating within the Customer's facility.

200.4 The Customer can install surge protectors to protect equipment against high voltage spikes. Such equipment must be used in accordance with manufacturer's specifications, especially with regard to energy handling capability. Surge protectors offer no protection against noise, voltage dips or flicker.