

REGULATION NO. 1A

CHARACTER OF SERVICE

A. GENERAL:

All service will be alternating current, single-phase or three-phase at a regulated frequency of 60 cycles.

Single-phase, alternating-current service is supplied generally at 120 or 240 volts through 2 or 3-wires. Single-phase loads when supplied at 120/240 volts, 3-wire, must be reasonably balanced as between the two sides of the service with respect to the neutral wire.

Three-phase service is supplied at 120/208 volts, three-phase, 4-wire, 120/240 volts, three-phase, 4-wire and 277/480 volts, three-phase, 4-wire. Loads supplied from such service must be reasonably balanced as between phases. The availability of three-phase service is governed by the location of existing lines and such extensions from those lines as may be made subject to Regulation No. 15.

The District will supply primary service of 2400 volts or higher only when, in its opinion, the size or special character of the load or the location thereof warrants the supplying of such high-tension service.

The voltage values stated herein are nominal. Actual voltages will vary within reasonable limits from the nominal voltage.

The following paragraphs outline the usual voltage available for various classes of service, but there are certain cases wherein the available voltage may be different from that stated. In any case, the District should be requested to furnish information as to the type of service available for any particular installation.

B. LIGHTING LOADS:

Service for general lighting and miscellaneous uses will be single-phase, 60-cycle alternating current and normally will be supplied through 3-wires at 120/240 volts.

In the case of certain types of lighting equipment having an inherently low power factor, the District may require power factor corrective apparatus as provided in Regulation No. 5 (g).

C. HEATING, COOKING AND MISCELLANEOUS POWER LOADS:

Heating, cooking and miscellaneous power loads will normally be supplied with single-phase, 60-cycle alternating current through a 3-wire service at a nominal voltage of 120/240 volts.

X-ray units of 5-kilovolt-ampere individual capacity or less and welders, heating units and rectifying equipment units of 2-kilovolt-ampere individual capacity or less and other small power loads normally will be supplied single-phase at 240 volts.

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Electric welders, furnaces and rectifying equipment units of over 2-kilovolt-ampere capacity and X-ray units of over 5-kilovolt-ampere individual capacity, wireless telegraph apparatus and other such devices will normally be supplied through a service separate from other load.

Single stereopticons, outlets for battery charging and other devices that are most economically operated at 120 volts will be served at this voltage. Where more than one such device is installed in the same premises, they shall be balanced as nearly as possible and will be supplied through a 3-wire service at a nominal voltage of 120/240 volts.

D. MOTOR LOADS:

The character of service supplied to motor loads will be as follows:

Single-phase, 60-cycle alternating current at a nominal voltage of 240 volts will be supplied for motor installations aggregating 5 horsepower or less, except that motors of less than ½ horsepower rating may be served at 120 volts.

Motor installations aggregating 2 horsepower of units each rated at 1 horsepower or more may be served at a nominal voltage of 240 volts, either single-phase or three-phase. Three-phase service from existing lines is limited to motor installations of not less than 1 horsepower capacity, where such installations can be served from existing secondary circuits with only service wires and meters required. Where extensions of existing lines are required to supply three-phase service, there must be a connected load of not less than 7½ horsepower of motor load in units of not less than 1 horsepower and with at least one unit of 5 horsepower or more, as provided in Regulation No. 15.

Motor installations in excess of 7½ horsepower capacity will not be supplied with single-phase energy except with special permission.

Three-phase service will not be supplied at 120 volts.

Motor loads connected to the District lines will be furnished energy subject to the provisions of Regulation No. 5 regarding size limitations, protective devices, starting current limitations, et cetera.

E. RURAL SERVICE:

In general, power service available to the rural areas served by the District consists of single-phase, 60-cycle alternating current at nominal voltages of 120 and 240.

In some areas where three-phase lines now exist, three-phase service can be provided subject to the restrictions governing size and character of load and construction of line extensions in these regulations. In any case, the District should be requested to furnish information regarding the voltage and type of service available for any rural installation.

Motor loads of 75 horsepower or more shall be supplied with three-phase, 60-cycle alternating current at a nominal voltage of 277/480 volts.

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F. SPECIAL POWER LOADS:

Mercury arc rectifiers shall be considered as power apparatus and receive service under the applicable power-rate schedules and shall be rated for the purpose of determining charges of their alternating current maximum capacity as given on the nameplate of the apparatus. Service to installations of 7½ horsepower or less may be rendered at 120 or 240 volts, at the option of the District. Installations in excess of 7½ horsepower, but less than 75 horsepower, shall be served at 120/240 volts or 277/480 volts.

Motor-generator sets shall be considered as power apparatus and receive service under the applicable power-rate schedules and shall be rated for the purpose of determining the charges on the nameplate rating of the alternating-current motor of the set.

G. GENERAL PROVISIONS:

Normally, only a single voltage will be supplied for any one class of service.