

POLK-BURNETT ELECTRIC COOPERATIVE

Policy No.: **M-36**

Subject: **Motor Starting Currents**

Objective: To establish starting current limits for induction motors served by the cooperative in order to restrict power fluctuations to the primary distribution system resulting from such motors.

Policy: A single-phase motor or phase converter shall be provided service by the cooperative if the peak starting current is less than 260 amps. Three-phase motors shall be served without restriction if the peak starting current is less than 450 amps. If it is determined that a specific motor is causing unacceptable power fluctuations on the primary or secondary distribution system, the member will be required to resolve the problem at their expense. For purposes of determining starting current, the NEMA starting kVA code letter "F": (5.0-5.6 skva/hp) shall be used with the following formulae:

$$\text{Single-phase starting current} = \frac{(1000) (\text{Hp}) (5.6)}{\text{Rated Voltage}}$$

$$\text{Three-phase starting current} = \frac{(1000) (\text{Hp}) (5.6)}{(1.73) (\text{Rated Voltage})}$$

As an alternate to this formula the starting current may be computed at (6) x (full load current).

The cooperative shall have the right to deny or disconnect the service if installations do not meet this requirement or if it affects the cooperative's service to other consumers.

Edward O. Gullickson, President
August 24, 2015