POWER FACTOR ADJUSTMENT RATE SCHEDULE

Power factor is the ratio of working power or energy (kilowatts or KW) to apparent or total power (kilovolt-amperes or KVA) delivered by CRMU. It measures how effectively total delivered power is being used. A high power factor signals effective utilization of electrical power, while a low power factor indicates poor utilization of electrical power. However, this is not to be confused with energy efficiency or conservation which applies only to energy or KW. Improving the efficiency of electrical equipment reduces energy consumption but does not improve the power factor.

The power factor charge is an adjustment to the demand charge if the customer's power factor is less than 0.95 or 95%. This fee is charged to electricity users to recover the CRMU costs for maintaining a good power factor on our distribution system.

The average "Power Factor" and "Adjusted Demand" for that billing period is shown on the customer's bill. The Demand charge shown on the bill includes the adjustment due to low power factor. Power factor is calculated from measured quantities using a meter capable of measuring both kilowatt hours (KWH) and kilovolt-amperes-reactive-hours (KVARH). The demand is increased by one percentage point for each hundredth (.01) the average power factor is less than 0.95.

<u>The formula is as follows:</u>

Average Power Factor = KWH divided by square root of (Kilowatt-Hours^2 + Reactive Kilovolt Ampere Hours^2)

or

$$PF_{avg} = \frac{KWH}{\sqrt{(KWH^2 + KVARH^2)}}$$

Adjusted Demand = KW Demand * (($.95 - PF_{avg}$) + 1)