POWER FACTOR CORRECTION

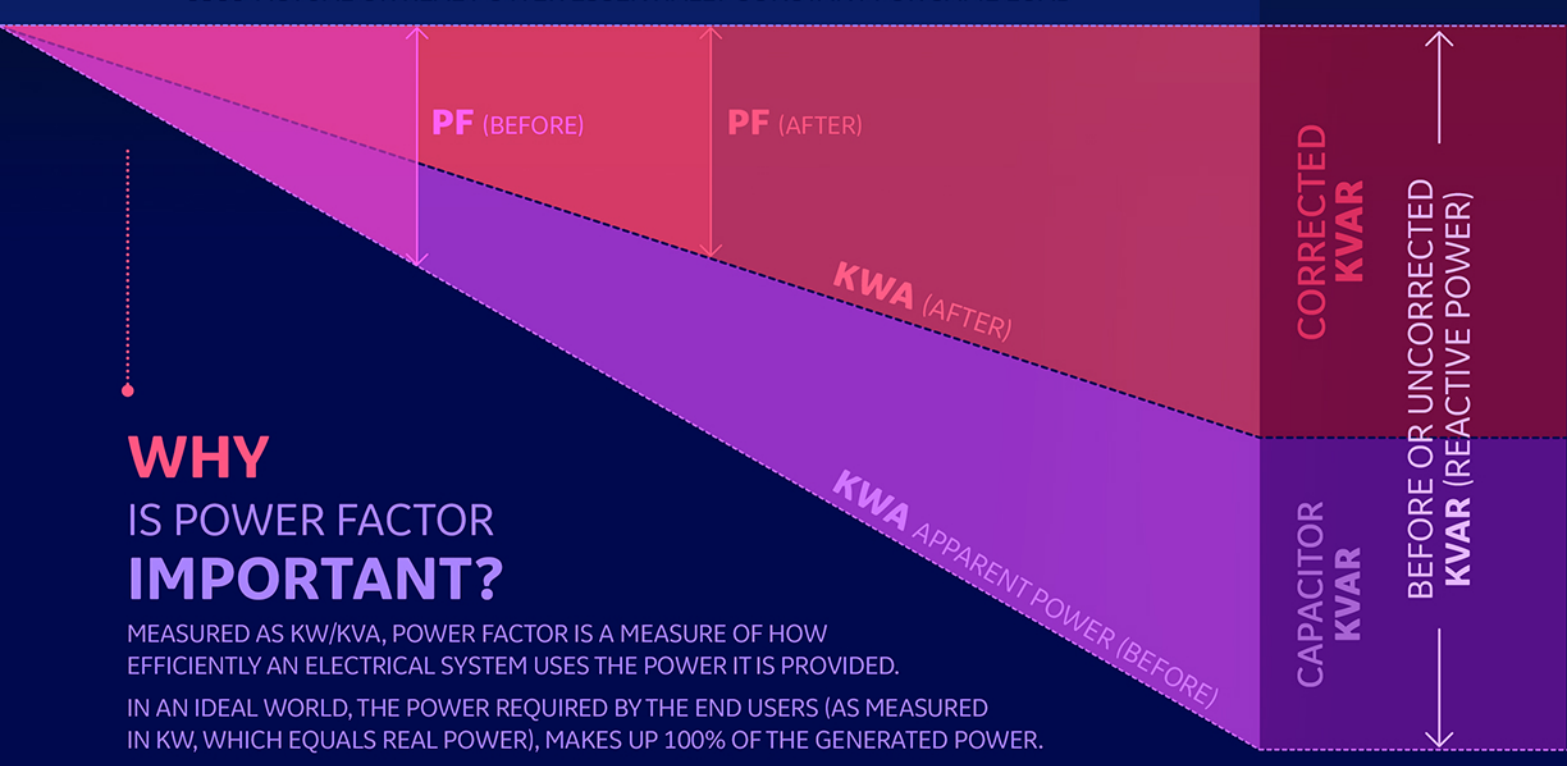
IMPROVE
YOUR **POWER FACTOR**

DRIVE COSTS DOWN
FOR ELECTRICITY

INCREASE
YOUR **EFFICIENCY**

POWER TRIANGLE

KW ACTUAL OR REAL POWER ESSENTIALLY CONSTANT FOR SAME LOAD



WHY
IS POWER FACTOR
IMPORTANT?

MEASURED AS KW/KVA, POWER FACTOR IS A MEASURE OF HOW EFFICIENTLY AN ELECTRICAL SYSTEM USES THE POWER IT IS PROVIDED.

IN AN IDEAL WORLD, THE POWER REQUIRED BY THE END USERS (AS MEASURED IN KW, WHICH EQUALS REAL POWER), MAKES UP 100% OF THE GENERATED POWER.

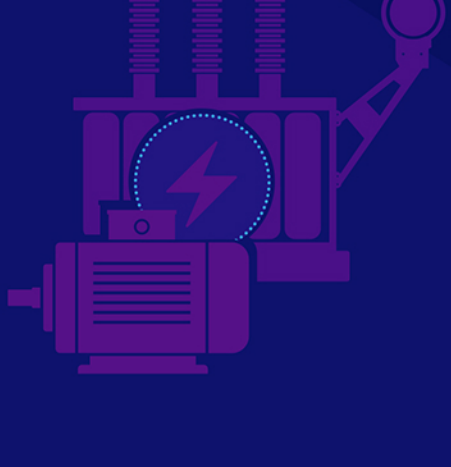
BUT
IN THE REAL WORLD,

INDUCTIVE DEVICES ON THE SYSTEM, SUCH AS **MOTORS** AND **TRANSFORMERS**, **CONSUME REACTIVE POWER**. SO, **UTILITIES MUST GENERATE REACTIVE POWER (KVARS)** AND **SEND IT TO THE END USERS**.

THIS TAKES AWAY FROM THE AMOUNT OF REAL POWER THAT CAN BE TRANSMITTED AS THERE IS A LIMITED CAPACITY ON THE TRANSMISSION OR DISTRIBUTION SYSTEM.

UTILITIES MUST ENSURE ENOUGH POWER IS BEING TRANSMITTED TO MEET THE DEMAND BY SUPPLYING THEIR OWN EQUIPMENT AND CAPACITY.

TO RECOUP LOSSES / COSTS, UTILITIES WILL OFTEN CHARGE A **POWER FACTOR PENALTY.**



THE RESULTS

IF YOUR POWER FACTOR IS LOW (BELOW 0.95), YOU HAVE A SIGNIFICANT DEMAND FOR REACTIVE POWER WITHIN YOUR FACILITY FOR WHICH THE UTILITY MUST SUPPLY AND CHARGE **EXCESSIVE PENALTIES** FOR. **TO SAVE MONEY**, YOU CAN **INSTALL YOUR OWN REACTIVE POWER SOURCE (LV CAPACITOR BANKS)** AND AVOID SUCH CHARGES.

YOUR POWER FACTOR
GOES DOWN

YOUR EFFICIENCY
GOES DOWN

YOUR **COSTS** FOR ELECTRICITY
GO UP

GE'S SOLUTION

ELIMINATE UTILITY CHARGES FOR YOUR REACTIVE POWER DEMAND BY IMPLEMENTING YOUR OWN POWER FACTOR EQUIPMENT, SUCH AS CAPACITORS FROM GE.

GE DELIVERS POWER FACTOR CORRECTION FOR LOW AND MEDIUM VOLTAGE SYSTEMS

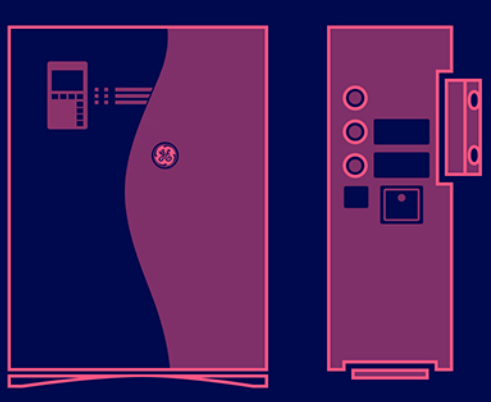
LOW VOLTAGE CAPACITORS

FIXED CAPACITORS & FIXED FILTERS

AUTOMATIC BANKS (UP TO 600V, 2000KVAR)

ACTIVE HARMONIC FILTERS (UP TO 690V, 300A OUTPUT)

PASSIVE FILTERS (UP TO 600V, 2300A OUTPUT) AND LINE REACTORS (UP TO 600V, 750A)



MEDIUM VOLTAGE CAPACITORS

MV FIXED CAPACITORS

MV METAL ENCLOSED SOLUTIONS (2.4 TO 38KV, REACTIVE POWER RATINGS UP TO 40MVAR)

FOR **MORE INFORMATION**, PLEASE VISIT
Renew.GE/Capacitors