POWER FACTOR CORRECTION AND COMPENSATION FOR PHILIPPINE FOREMOST MILLING CORPORATION POWER PLANT SYSTEM

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ABSTRACT

We are all aware that our electric bills have increased significantly due mainly to the increase in the price of fuel oil and the devaluation of the peso. There is usually no better opportunity to discuss energy conservation than immediately after or just before an increase in energy.

For industrial plants, power factor is an indicator of the efficiency with which the load utilizes the available power. Whenever the power factor of your operation is low, it imposes some strain on your electric system and contributes to higher line loads. At present, 85% is the industry standard. This is the reason why Energy Regulatory Board regulates the rate schedule of Utility Company which penalizes power factor lower than 85%. On the other hand, power factor higher than 85% is given a discount or reward. In effect sharing with whatever savings is realize in achieving a higher power factor.

The study focus on the feasibility of the project for the installation of power capacitor for power factor correction and compensation for Philippine Foremost Milling Corporation Power Plant System. The study present an alternative in its cost evaluation, to continue paying the penalty and investment for the installation of power capacitor will be deposited to the bank at highest interest rate. Installation of power capacitor to correct the poor power factor of PFMC power plant system pays a handsome dividends in the form of electric bill reductions with a pay back period of less than 6 months.