

Power Factor Correction Project - The Process

Below are steps in assessing how a capacitor system would raise power factor in a commercial (or industrial) building, the economic benefit, and the milestones from start to finish.

(1) Electric Bills - When a new potential customer would like to know more, they simply provide a recent month of bills for their electric meter accounts. When the PDF document is received, Hillhouse Power Solutions (HPS) creates a letter of authorization for the customer to sign, and forwards the letter to the utility company account manager. The account manager then sends a spreadsheet with electric power usage data for the last 12 months, for each electric meter in the set.

(2) Power Usage Data - With a full year of data, HPS can design much of the project and calculate the exact amount of “Power Factor Charges” that the customer could have avoided during that last year if a capacitor system project had been in service already. A budgetary project total cost plus simple payback, ROI, and present value is provided. The customer has no obligation or cost at this point.

(3) Site Visit Survey, Project Design - If the customer would like to obtain a firm turnkey project proposal, HPS quotes a small engineering fee, to send an engineer to every candidate electric meter site. The site survey includes a visit to the electric meter to confirm that the serial number matches historic power usage records. The “service transformer” and main electrical switchgear is photographed, diagrammed, and measured (with no interruption or effect on the building power, since the measurement is totally passive). Once all utility meters are surveyed, HPS finalizes all the capacitor system designs and creates an installation scope. The scope shows all project technical details, and meets requirements and standards of the “National Electric Code”. In the case of a school district, an install contractor that has already passed a rigorous background check would be used. HPS obtains equipment pricing from 2-3 manufacturers.

(4) Turnkey Proposal - When pricing is confirmed, HPS creates a written project proposal. The turnkey proposal includes all design, equipment, shipping to customer sites, installation, startup, and training for customer staff. HPS will credit the cost of the engineering survey against the project total, if the customer provides a Purchase Order within 3 months. Some customers also choose a maintenance package, where HPS extends the normal 1 year warranty to longer periods (such as 3, 5 or 10 years). In addition, HPS also partners with several firms to fund the project for customers with low cash flow.

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