

Palermo Power Systems & Integration

Is your critical power system ready for an outage?

Utility failures are inevitable and can be disastrous if a healthy and reliable backup power source is not available. The reliance of technology to conduct business and remain operational is at an all-time high and when the infrastructure is not protected, the loss in productivity, revenue and efficiency can pose severe repercussions for any company or industry that simply cannot function in the dark.

Unplanned outages can be avoided with properly maintained uninterruptible power supplies and battery systems that are tested and replaced when nearing or at the end of life expectancy. A single failed battery renders the entire string useless and in the absence of redundant strings, the load is going down. In addition to battery replacements, uninterruptible power supplies contain consumables that will likely require replacement at least once while in service and are often overlooked until it's too late.

It's important to consider these factors when evaluating your critical power system:

Battery Systems

Batteries account for one of the most frequent causes of system failures despite the fact that periodic testing and maintenance can provide most predictive measurement of health and life expectancy. A standard VRLA UPS battery has a 10-year design life expectancy, *but only if you never use it*. The actual service life is 3 – 6 years depending on the quality, size, ambient temperature, the health of the UPS and maintenance to name a few. One failing battery can diminish the life and capacity of the entire string if left unnoticed or ignored. Replacing the suspect battery within a reasonable time frame will alleviate the deterioration of the surrounding batteries.

Age of the UPS

Single Phase Systems have a 4 – 5 year service life expectancy on average.

Three Phase Systems can range from 7 – 15 years depending on several factors that will ultimately determine the actual service life. As a UPS ages and becomes discontinued, parts become very difficult and expensive to locate, if at all. It is important to weigh the pros and cons of continuing to put money into a UPS and replacing it.

Running load:

A UPS that is operating well below its capacity causes energy inefficiencies and wastes valuable energy.

A UPS that is operating at 80% or above the rated capacity runs the risk of overloading the UPS and unintended shut downs.

UPS Systems and Floor Space

Similar to the majority of electronic equipment, UPS's are becoming more compact with higher density. The size of a 300kW UPS that is 7+ years old will have a larger footprint and is highly unlikely to have any scalable abilities that will allow a growing company to increase the capacity of the UPS in stages. This benefit also allows the battery systems to grow with the UPS and can be based on replacement schedules and budgetary restraints,

We are here to help and always happy to provide system evaluations at no charge. Preventative actions are far more cost effective than reactive responses.

Call or email us today!

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