



CASE STUDY: Deka Fahrenheit® batteries provide essential power at industrial substation with 87% capacity after 8 years.

THE BACKGROUND

A substation is a high-voltage electric system facility. Commonly referred to as switchgear, it is used to switch generators, equipment, and circuits or lines in and out of a system. It also is used to change alternating current (AC) voltages from one level to another, change AC to direct current (DC) or DC to AC. Substations are typically equipped with several transformers and dozens of switches and other sensitive equipment.

Substations also have batteries to ensure all the essential electrical systems continue to operate in the event of a power outage. The batteries supply the power to manage the protective devices and high voltage components to safely isolate electrical faults. This is crucial to keep the substation controls and remote access up and running to get the power restored as quickly and safely as possible. An absolute loss of electrical supply could result in damage to costly equipment.

THE CHALLENGE

Knowing how important power is to this system, specifying the best battery to supply industrial substations is critical. This solution featured proven long-life and the ultimate reliability that comes from the added durability of a high-heat tolerant design. Which is beneficial in an uncontrolled temperature application.

THE CLEAR SOLUTION

The ideal power solution choice was Deka Fahrenheit heat-tolerant (VRLA) batteries. This 12-volt monobloc front access design battery is built for safe access and to withstand extreme heat, surviving up to 3X longer in temperatures 140°F (60°C) or higher. This revolutionary performance is achieved through its exclusive Thermal Management Technology System featuring Helios™ Additive, THT™ Plastic, and TempX™ Alloy which limits corrosion, optimizes compression, and lowers float current. Additionally the Deka Fahrenheit is certified and meets NERC standard PRC-005 which emphasizes the safety and reliability of the electric system.

*Deka Fahrenheit®
heat-tolerant
(VRLA) batteries
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temperatures of
140°F (60°C)*



THE RESULTS

Two strings (20 total batteries) of the Deka Fahrenheit HT145ET were installed. After eight years in this high stakes and high voltage environment, the batteries did not leave this substation in the dark. At the end of the eight years, they provided capacities of 87% at the 8-hour rate, and over 82% for a 3-hour rate.

The dependability of Deka batteries and premium quality, built by East Penn employees, help power these solutions and systems to provide extraordinary results.

THE CONCLUSION

The consistent quality and performance, combined with a truly sustainable solution, make the Deka Fahrenheit the correct choice for high-pressure switchgear applications. Deka lead based batteries are the safe and reliable solution to help you reach your performance, sustainability, and cost goals. Call us today to learn how we can help you succeed.



Deka Fahrenheit® HT145ET

PROPOSITION 65 WARNING: Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Batteries also contain other chemicals known to the State of California to cause cancer. **WASH HANDS AFTER HANDLING.**



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