

#### MOTIVE POWER CASE STUDY | CUSTOMER "J"

# A PATH TO ZERO BATTERY CHANGES

#### **Situation & Challenge**

A lift truck dealer asked Concentric to conduct a power study and operational assessment for their customer, a manufacturer of everyday household items. Although the customer was not experiencing any particular pain in the management and operation of the DC power supporting their lift truck fleet, they were motivated to improve focus on the key drivers of their mission and leave everything else to outside experts.

The customer moved materials and products in their distribution operation with a fleet of more than 20 lift trucks that ran two shifts, five to seven days a week, depending on the season. Each truck required two batteries — one per shift and used battery swapping to stay powered.

#### Solution

Concentric recommended the customer eliminate battery swapping and move to opportunity charging, where the battery remains in the truck and the operator plugs into a charging source during lunch, on breaks, or between shifts. The benefits of opportunity charging include an increase in productivity by eliminating the time needed to swap batteries, and a dramatic reduction in the number of batteries needed.

The customer was compelled by the assessment, but was also justifiably concerned about a complete shift from 100% battery swapping to 100% opportunity charging.

Working together, Concentric and the customer developed a compromise where the customer retained battery swapping on the fleet, but implemented a First In, First Out (FIFO) battery swapping solution. Through the FIFO system, Concentric reduced the number of batteries in the fleet for the same number of lift trucks.

### **INDUSTRY**

Consumer Goods

### **APPLICATION**

Distribution

### SOLUTION

Started with FIFO system and management of equipment; converted all trucks to zero-batterychange over time with opportunity charging.

## FOCUS

Evolved from battery rotation management to zero battery change. "We have a good

partnership with

Concentric. They are great to work with. They can actually remotely monitor the batteries and let us know when someone is not charging.

There is no waiting anymore, so productivity is far better. And with no battery changing, there is no battery damage. The only maintenance is watering, and Concentric takes care of that. We have now converted our entire fleet to Concentric's GuaranteedPOWER® program." The customer also moved to Concentric's flagship GuaranteedPOWER® solution that covered battery and charger equipment, equipment repairs, battery watering and washing. With GuaranteedPOWER®, Concentric promised to handle any flaws in the system at no cost to the customer. When an expansion warranted the addition of 20 more trucks, the customer better understood the merits of opportunity charging and was ready to give it another chance.

The customer agreed to a three-year contract under Concentric's GuaranteedPOWER® solution to move the new 20 trucks to opportunity charging. The dual system (battery changing for 20 original trucks and opportunity charging for 20 new trucks) fully supported the DC power needs of Customer J's operations.

Further, Concentric's remote monitoring technologies gave the customer the growing assurance that their operational uptime would always be supported, even in a more precise opportunity/fast charging power system.

#### Results

After two years of opportunity charging on half the system, Customer J was so pleased with Concentric's approach, that it re-opened the prior contract on the first 20 trucks and converted those into a new opportunity/fast charging contract. This allowed Customer J to eliminate its battery changer altogether before having to invest significant capital in replacing or repairing it. Today, the customer has signed multiple contracts with Concentric dating back to 2004, and is still powering its operation with reliable power with no battery swapping.

– Senior Manager, Customer J