

Success Story: OneSubsea

Markets Served
Industry



We are absolutely happy with the (5PX) UPS. It provides everything we need to shut down in a safe and timely manner, and has more than exceeded our expectations.

Emanuel "Mel" Marone, field service technician

Offshore operations are smooth sailing with 5PX

Location:
Houston, TX

Segment:
Oil/Gas

Problem:
The oil production company needed a highly reliable UPS capable of cleaning up dirty power out at sea.

Solution:
Eaton® 5PX, Intelligent Power® software

Results:
The Eaton 5PX, combined with power management software, was the ideal choice to keep operations flowing 6,500 feet below the surface.

Background

With more than 6,000 employees in 23 countries operating in six divisions, OneSubsea provides products and services to oil and gas operators around the world. The company — jointly owned by Cameron and Schlumberger — delivers integrated solutions, products, systems, and services through integration and optimization of the entire production system. OneSubsea leverages Cameron's flow control expertise, process technologies, and world-class manufacturing and aftermarket capabilities and Schlumberger's petro-technical leadership, reservoir and production technology, and R&D capabilities.

Challenge

Some 65 miles south of the coast of New Orleans, a 24-foot offshore container currently serves as the living quarters for a crew of OneSubsea employees stationed on a drilling rig. And 6,500 feet below the surface of the container lies a range of oil and gas production equipment tied to underwater trees.

It's not surprising that delivering continuous, clean power to the equipment under those conditions presents some significant challenges.

"It's very bad power," acknowledges OneSubsea Field Service Technician Emanuel "Mel" Marone, noting that incoming 480V electricity from the drilling rig must be stepped down to 110V by a transformer on the container. "It's extremely dirty."

This poses an ongoing threat to the sensitive production equipment, which operates in the ocean 24/7. With a series of electronic and hydraulic valves responsible for maintaining oil production, OneSubsea needed to safeguard against damaging downtime.

"When we lose electrical power, the tree remains in the same status, but unfortunately we aren't able to open or close any of the valves on the tree," Marone notes.

Earlier this year, the company began investigating various uninterruptible power system (UPS) models.

"We needed a backup power source in case the offshore rig ever loses power," Marone explains. "We had to make sure that no matter what, there's uninterrupted power, as well as clean power."



Powering Business Worldwide

Solution

When it came to selecting a UPS, OneSubsea was focused on the three Rs: reliability, runtime and the ability to review operating parameters. In addition to exceptional reliability, the company desired extended backup capabilities, as well as the option of monitoring the UPS and incoming power.

"We did the research and based on the requirements we needed, plus the ability to get at 45 minutes of backup time, the 5PX was a great fit," Marone says.

Indeed, the Eaton 5PX incorporates all of OneSubsea's requirements in a single solution, while delivering additional benefits such as high efficiency and an impressive three-year warranty. Installed within the company's living quarters container, the unit delivers premium power quality to the equipment 6,500 feet below.

For ultimate availability, the 5PX incorporates Eaton's exclusive ABM® battery charging technology, which uses sophisticated sensing circuitry and an innovative three-stage charging technique to extend the service life of the batteries while optimizing recharge time. ABM technology also provides up to 60 days' notice of the end of battery service life, allowing ample time to hot-swap batteries without ever having to shut down connected equipment. Furthermore, incoming voltage fluctuations are corrected by the UPS so they don't affect the performance of connected equipment.

The UPS also enables users to add up to four extended battery modules (EBMs) to achieve maximum runtime. "In the event of an outage, we have enough runtime to function and get to a safe state," Marone reveals.

In addition, the 5PX protects more devices by providing 28 percent more wattage compared to traditional UPSs, plus the unit is protected by a three-year warranty that covers both the UPS and the battery — a benefit offered by no other manufacturer in the industry.

Thanks to Eaton's Intelligent Power® Software (IPS) Suite, which comes free of charge with the 5PX, Marone is able to keep a constant pulse on the status of the UPS. The innovative software solution combines the most critical applications to ensure system uptime and data integrity with power monitoring and management, and also facilitates graceful shutdown during an extended power outage.

"We enjoy the web browser function on it," Marone reports. "We utilize it a lot to monitor input and output voltages."

Operations for OneSubsea have been smooth sailing ever since the 5PX was installed. "We are absolutely happy with the UPS," Marone says. "It provides everything we need to shut down in a safe and timely manner, and it has more than exceeded our expectations."

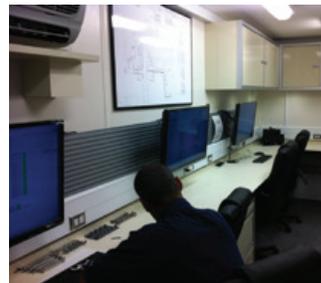
Results

With the 5PX in place, OneSubsea no longer has to worry about waves of dirty power in its ocean-based location. The company is now able to:

- Ensure continuous, clean power to its oil production equipment
- Rest assured that it will have plenty of time to safely shut down in the event of a power outage, thanks to the extended runtime afforded by the 5PX
- Easily monitor the UPS and receive status updates with included power management software
- Gain additional peace of mind with the unit's three-year warranty



Eaton 5PX UPS



Learn how the Eaton 5PX can help you at Eaton.com/5PX.

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