



Failure Is Not An Option

Case Study

Solution

- Q00J CPU
- Q62DAN Analog Module
- QX80 Input Module
- QY10 Output Module
- Modbus Master
- GT16 HMI

Saunders Electric Benefits

- Higher reliability
- Improved power quality
- Greater operator effectiveness

Mitsubishi Electric Value-added Advantages

- Strong build quality
- High speed sampling
- Intuitive HMI screen designs with greater viewing angle



"We've been using Mitsubishi Electric control systems on our load command systems since 1994 and never had a failure."

- Saunders Electric, Inc.

BACKGROUND

Saunders Electric has been in the business of supplying the broadcast industry reliable power solutions through its studio quiet generators since the early 1990s. The company takes an active role in refining their products, and in 1994 turned to Mitsubishi Electric's A-PLC solution to synchronize generator and landline power sources. This helped create a power signal that more closely replicated the main grid supply. With a higher quality power signal, Saunders Electric is able to better support the hypersensitive media equipment used in the film and broadcast industry with zero interruption and no degradation of signal during grid outages.

CHALLENGE

We have all experienced the frustration of a power outage at home and work, but have you ever wondered why you never see an outage in show business? Saunders Electric solves the problem of grid outages and brown outs by providing portable, temporary power services to the broadcast industry. In testimony to the quality and reliability of their services, Saunders Electric's broad portfolio entertainment events includes:

- The Academy Awards
- The Emmy's®
- The Grammy's
- The American Music Awards
- ESPN College Basketball

SOLUTION

In 2010, after 16 years of using the A-series solution to control their generators, Saunders Electric decided it was time to modernize their generator control system and take advantage of features offered by modern automation controllers. During the selection process, Saunders Electric considered a variety of options. However, in an industry where power failure is unacceptable, a track record for reliability goes a long way. After years of using the A-series control system without a single failure, upgrading to Mitsubishi's Q-series was the only logical choice.

The Q-series controller also provides other benefits including faster processing speeds, advanced analog control and a more flexible graphical interface. From a hardware perspective, the new controller significantly reduces its hardware footprint, increasing space in the cabinet for other devices.



Saunders Electric Generator

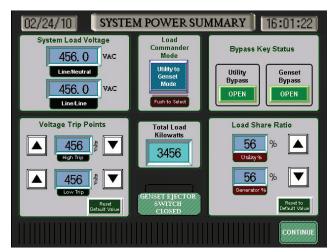
RESULTS

Saunders Electric benefited from a short implementation time, completing the transition to the Q-series control system in just one month. This shorter implementation period kept costs down and the company was able to see a return on their investment much more quickly.

From a power quality perspective, the Q62DAN high speed, digital to analog signal conversion permits faster response times when matching the generator speed to the grid power signal. This minimizes the effect of overshoot, providing a cleaner power signal for a customer's broadcasting equipment.

Operator effectiveness was also improved. The GT16's extended viewing angle enables operators to be more mobile while the power system is in use. Furthermore, the wider screen viewing angle is complemented by a design software that creates more intuitive screens, improving setup and monitoring efficiencies.

Finally, the reliability requirement was essential to the system upgrade. With the new system now in place, Saunders Electric is confident, thanks to proven experience with Mitsubishi Electric's stringent quality control program, that their synchronous power system will keep on running, providing highly dependable, temporary power services to the broadcast industry.



GOT16 Interface screen

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