

The FlexSCADA solution to “shaky grid” headaches

While flexSCADA has a proven track record when it comes to monitoring crucial site functions in remote, off-grid locations, many are unaware that flexSCADA can also provide invaluable monitoring capabilities for AC grid powered sites, which utilize an AC charging source for the DC emergency systems designed to keep their systems up and running.

“While flexSCADA is designed to operate in a DC voltage environment,” notes Mark Dettmer, president of Mission Critical Energy, “the use of a small adapter known as the high voltage reducer (HVIN) allows customers to monitor the AC voltage of a location utilizing the flexSCADA Q5 line of products. This is incredibly useful in areas where the AC power grid is unreliable or “shaky.”



The HVIN adaptor (shown at left) replaces one analog input channel on the Q5 device. Removing the terminal block from the selected channel and replacing it with the HVIN allows the device to monitor incoming AC voltages. After placing the HVIN into the selected channel, all that’s required is connecting two-legs of the AC lines to the HVIN terminal block. The Q5 can then be used to show AC on the selected channel.

Configuration is completed the same as any other Q5 analog input. The only difference is that while configuring the HVIN, users will have to select AC voltage rules, rather than DC voltage rules (note that the Q5 must be powered by a DC source, never AC).

Once configured and operational, the HVIN provides a wide variety of useful monitoring and control options for sites that have unreliable AC power, including those subject to Public Service Power Shutoff (P.S.P.S.) where utilities have the option to preemptively shut down power to customers during emergency conditions.

As the Q5 is DC powered, a loss of AC power does not shut the device off, allowing it to register a loss of AC event independent of available AC power. Once a loss of AC power is detected, the Q5 can be pre-configured to trigger a notification alert to the client, as well as start a countdown timer displaying how long the DC power source will last without being recharged. The Q5 can also be configured to send a text or email notification to the client when AC power has been restored or when DC power source voltage reaches a critical, pre-determined level.

For more information on the flexSCADA line of products contact Mission Critical Energy at www.missioncriticalenergy.com .