

PACSystems™ RX3i Solutions Selected by Nor-Cal Controls to Revamp Control Systems at Solar Power Plant

RESULTS

- Control system architecture allows flexibility and scalability for fast-developing solar power site
- Robust control and data collection significantly enhance the reporting of power generation and financial metrics
- Access to widely expanded plant and machine insights improves operations and maintenance



APPLICATION

Solar SCADA and control systems modernization.

CUSTOMER

Nor-Cal Controls for solar power plant in western U.S.

CHALLENGE

The original owner of a 50 MWac western U.S. solar project was seeking to transfer ownership to a new company. The legacy control system, however, was a proprietary software and hardware solution which made the plant less desirable to the potential owner as well as increased the difficulty in transferring operations and maintenance responsibilities to the prospect. The decision was made to retrofit the control system. The retrofit project had a limited budget, so the solution had to be scalable and easy to re-engineer and port existing logic and user displays to the new owner, while still being cost effective. This is in addition to meeting the increasing regulatory compliance requirements from NERC (North American Electric Reliability Corporation).

“The PACSystems RX3i control system uses an open architecture platform that is not only user friendly, but our customers are able to implement edits or upgrades to their systems without having to incorporate expensive replacements. In this industry, that is a huge advantage!”

Rob Lopez
Chief Business Development Officer
Nor-Cal Controls

SOLUTION

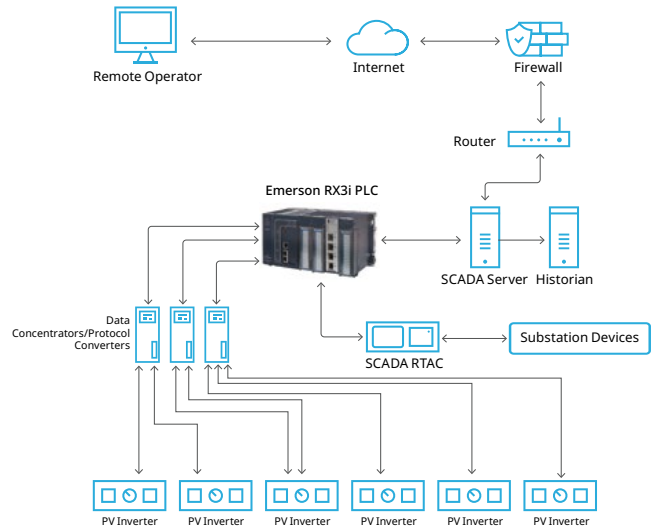
The solar power site owner selected Nor-Cal Controls for the site's transformation. Nor-Cal Controls is a renowned solution provider to the renewable power generation industry globally and is based in El Dorado Hills, CA. Nor-Cal is also Emerson's preferred solar industry automation solution provider and this relationship is based upon Nor-Cal's strong experience in the solar power industry and its adoption of PACSystems as a preferred controls platform.

Nor-Cal redesigned the controls schema for the site utilizing the PACSystems RX3i control solution based on its open architecture and support for multiple protocols. The open design allows the PACSystems RX3i control system to connect to numerous devices, providing operational and diagnostics data. This in turn significantly improved the visibility and control of production metrics from solar panels, string combiner boxes and other devices, increasing the troubleshooting, reporting and diagnostics capability of the plant and reducing operations and maintenance costs.

Another important factor in the selection of the PACSystems solution was its ability to integrate with older I/O families. By retaining existing I/Os, the company realized tremendous savings in cost, testing time and rewiring, as well as increased speed and reliability of migration.

RESOURCES

www.Emerson.com/PACSystems



Flexible control solution is based on open architecture and supports multiple protocols.

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