



PowerGen
Renewable Energy
Africa

PowerGen Renewable Energy implements hybrid power systems with solar, battery storage and generator back-up to supply electricity to underserved communities where grid expansion is not an option. PowerGen has established microgrids in over 120 communities across Africa, with New Sun Road’s technology providing remote power management solutions to ensure seamless operations and optimization of its power assets across the continent.

CHALLENGE

While Africa is the second-largest and second-most populous continent, it is the most “electricity poor” region in the world and supplying clean and affordable electricity to remote communities remains a challenge. PowerGen brings electricity to these communities by deploying solar powered microgrids with generator and battery storage as back-up.

Key for reliable, cost-effective electricity is the control system. PowerGen uses New Sun Road’s Stellar MicroGridOS™ Platform to manage all aspects of its business, including remote monitoring, incident management and customer service, ensuring availability and offer significant savings in operations and maintenance.



Monitoring / Management:

New Sun Road
Stellar MicroGrid OS™

Features Include:

- Power System Management
- Generator Control
- Incident / Ticketing
- Customer Service
- Hybrid System Optimization

Controller:

New Sun Road
Stellar Edge™

Device agnostic connectivity



“NSR's Stellar Platform enabled us to offer improved service to microgrid customers and take better care of our power systems. As our business scales, Stellar interfaces will be of critical importance to ensure that our services remains reliable and cost-effective. Stellar's combination of functionality and usability has made it an immediate hit with our internal teams which use it on a day-to-day basis.”

Sam Slaughter

Co-Founder, PowerGen Renewable Energy

BENEFITS

New Sun Road's Stellar Microgrid OS™ is the asset monitoring and management platform of choice for PowerGen's microgrid portfolio.

Offering the following benefits:

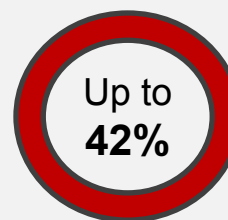
- Unified interface for day-to-day operations and business management
- Dashboard data at the portfolio and site level
- Streamlined customer service & quicker response to O&M issues
- Reduction in fuel consumption utilizing proprietary Stellar AI to run generators more efficiently
- Reduced truck rolls to microgrid sites by operations team

SOLUTION

New Sun Road's vendor agnostic solution allows PowerGen the flexibility to deploy the best power equipment for each situation. The platform provides a detailed list of site features and smart component status which makes it easier for a customer service agent or operations technician to respond quickly and troubleshoot customer issues, especially for remote off-grid systems.

Stellar Microgrid OS™ also significantly reduces PowerGen's operating costs by using Stellar AI. These predictive analytics generate key system metrics 24 hours ahead that are combined with automated systems control to deliver optimal performance.

RESULTS



Estimated fuel savings at PV-hybrid sites with Stellar Microgrid OS™

- PowerGen's microgrids managed with Stellar Microgrid OS™ not only provide much needed access to electricity, they also increase economic opportunities for community inhabitants.
- PowerGen's customer agents can easily manage customer issues utilizing the payment and ticketing features of Stellar Microgrid OS™.



New Sun Road's solutions are available globally. We offer outstanding technical support, provided by our application engineers.

Call +1.510.550.5252 or visit www.newsunroad.com