

SMA OPERATIONS & MAINTENANCE





SYSTEM-WIDE OPERATIONS & MAINTENANCE

Full-service for your pv system

Even the best technology requires someone to look after it. Executing a successful O&M strategy is paramount to the long-term viability (and profitability) of a PV system. As the largest servicer of solar inverters, SMA is uniquely positioned to offer expert plant-wide O&M services, including array, racking, balance-of-system (BoS) and monitoring services.

Available as one of two plans: Preventative, and Proactive, SMA provides world-class O&M services that increase performance ratios, protect power production and simplify long-term planning.

Our team of electrical engineers, solar professionals and critical support staff provide our partners with the strength and experience of our global service organization. This network of service personnel ensures a system remains in peak shape and produces reliable power during its operational life.

A properly maintained solar system can increase yield up to 30%, accelerating investment payback.



THAT'S WHAT WE CALL SERVICE

A strong partner by your side

When service is needed, we are there for you immediately. Thanks to our comprehensive service network, our team is available wherever service is needed, anywhere in the world and as quickly as possible. So you can be sure that your system will be back in operation quickly.

Today, we can look back on more than 30 years of service experience. We want to continue to support and inspire you with our products and services, and the latest surveys show that we are succeeding.

For the third consecutive time, SMA was selected as the most popular brand in the inverter industry.* According to the survey, what impresses SMA customers most of all is our outstanding, reliable service. Don't leave anything regarding your PV project to chance. Rely on the manufacturer expertise of SMA. For enhanced system reliability. For greater success.

**Source: IMS Research 2012-2014*





PREVENTATIVE

Ensuring long-term operational reliability

Regular preventative maintenance is an essential building block of any O&M plan. Equipment manufacturers specify required maintenance to preserve the integrity of their equipment. Often, this maintenance is required to validate potential warranty claims, making proper care and documentation a necessity.

The SMA Preventative plan includes manufacturer preventative maintenance. It offers a visual inspection of the array and BoS components such as combiner boxes,

disconnects, and Data Acquisition Systems (DAS). Thermal scans on all electrical DC wiring, inverters, pad-mounted transformers, and other electrical equipment identify anomalies. Torque checks and DAS maintenance are also included. Expert advice is provided through remote system monitoring with 24/7 customer support, while a written maintenance summary after each visit and a regular maintenance report provide complete documentation.



PROACTIVE

Proactive service for maximum yields

Experienced professionals know O&M plays a critical role in ensuring long-term profitability and stable cash flow. They plan beyond the simple basics and have the foresight to account for deeper levels of service. For these individuals, SMA offers the Proactive plan.

Expanding upon the essential service components of the Preventative plan, Proactive service adds in a 24-hour emergency response time and written report for emergency care.

Spare parts inventory management simplifies maintenance planning and preserves uptime in the event of an unforeseen mechanical issue. Warranty administration allows for greater focus on revenue-generating activities.

System performance is improved through regularly scheduled sub-system testing and verification, real-time monitoring, thermography and calibration services.



O&M PLAN SUMMARY

	PREVENTATIVE	PROACTIVE
Pad Mount Transformers		
Inspections	●	●
Thermal Scan	●	●
Maintenance	●	●
DGA Analysis	●	●
E-House		
Inspections	●	●
Thermal Scans	●	●
Maintenance	●	●
Inverter		
Inspections	●	●
Thermal Scans	●	●
Maintenance	●	●
Pest Control		
Visual Inspection	●	●
Monitoring		
Technical Operations Management Services	●	●
Vegetation and Debris Control		
Electrical Equipment area-Removal of material	●	●
Civil Works		
Site Inspection	●	●
24/7 Customer Support		
365 days/yr	●	●
Emergency (24-hr Response)		
24 hr response dispatch billed	●	●
2 dispatches/yr included		●
Inspection of alarms/events		●
Incidental and minor repair		●
Reporting		
Annual	●	●
Bi-Annual		●
DC Wiring & Electrical Equipment		
Inspections	●	●
Thermal Scans	●	●
Maintenance		●
Performance Testing		●
Array Racking and Components		
Inspections	●	●
Maintenance		●
Meters and Sensors		
Inspections & Cleaning	●	●
Maintenance	●	●
Pyranometer Calibration		●
Generation Meter Calibration		●
Troubleshooting		●
Product Warranty Administration		
Creating/tracking/logging		●
Spare Parts		
Inventory Management		●
Accepting/Shipping New and Old parts		●



SUPPLEMENTAL SERVICE CHOICES

Flexible options for complete care

In addition to SMA's superior Preventative and Proactive O&M plans, we also offer individual services that can be integrated in a flexible fashion, resulting in a highly customized O&M solution.

Sometimes it's the smallest culprits that cause the biggest problems. Beyond our technical services, SMA offers pest management, array cleaning, system security and system-wide vegetation control. Many well-

thought-out designs have been felled by soiling due to unfortunate locations near bird sanctuaries, overgrown shrubbery, or cabling damage caused by rodents. SMA provides both individual and turnkey solutions for eliminating these difficulties.

