



O&M Services

Looking toward future horizons

frv

The future happens here

FRV is a **global provider of renewable energy solutions** in Australia, Asia, the Middle East, Africa, Europe and Latin America.

For customers seeking comprehensive O&M Services including:



MONITORING



DATA ANALYSIS



MAINTENANCE



ADDITIONAL SERVICES

What can FRV O&M Services deliver for PV projects?



FRV understands the contracts and agreements in place and can ensure the best outcome for the owner of the project and the financiers



FRV O&M Services provide a comprehensive solution for optimal energy production that enhances the assets' long-term value



FRV understands the legislation and compliance with Local laws and regulations from Environmental to Electricity Generation



FRV O&M Services ensure maximum availability, performance, ROI, LCOE and regulatory compliance



Our O&M Services include: Monitoring, Preventive Maintenance, Corrective Maintenance, Spare Parts Management, Warranty Claim Management and Additional Services



With experience across PV plants around the world, FRV maintains strong relationships with suppliers and subcontractors in the solar industry



Commercial Offer for FRV and Third party

● Included ○ Cost plus not included

Maintenance (preventive and predictive)	Basic	Comprehensive		Basic	Comprehensive
PV Modules					
Visual inspection	●	●			
Module cleaning	○	●			
Thermography	●	●			
Trackers/Fix structure					
Visual inspection	●	●			
Scheduled maintenance	●	●			
LV/Dc Cabling					
Visual checks	●	●			
Continuity and dielectric test	●	●			
Thermography cables	●	●			
Thermography connectors	●	●			
Combiner Boxes					
Inspection	●	●			
Scheduled maintenance	●	●			
Thermography level 1 and 2 combiner boxes	●	●			
Inverters Maintenance (Central and String Inverters)					
Inspection	●	●			
Level 1 (Scheduled maintenance)	●	●			
Level 2 (Minor correctives and parts replacement)	○	●			
Level 3 (Firmware updates and major correctives)	○	○			
Thermography (Inverters, nodes and IGBTs)	●	●			
Transformer Stations					
Inspection	●	●			
Scheduled maintenance	●	●			
Thermography	●	●			
Ground resistance measurement	○	●			
Oil sample	○	●			
HV / AC cabling and RMU					
Visual checks	●	●			
Switchgear scheduled maintenance	●	●			
			Continuity and dielectric test	●	●
			Thermography cables	●	●
			Thermography connectors	●	●
			Substation		
			Visual inspection	○	●
			Scheduled maintenance	○	●
			Battery charger	○	●
			Switchyard thermography	○	●
			Voltage testing	○	●
			Dielectric oil degradation test	○	●
			Metrological Sensors/Utility Meters		
			Inspection	●	●
			Sensors scheduled maintenance	●	●
			Calibration	○	●
			Communications		
			Fibre and cabling inspection	●	●
			Server and routers inspection	●	●
			Security Camera/CCTV Maintenance		
			Inspection	●	●
			Scheduled maintenance	●	●
			Monitoring and SCADA Maintenance		
			Inspection and data tests	●	●
			Fire Prevention System		
			Inspection and test	○	●
			Backup Generator/Batteries		
			Inspection	●	●
			Scheduled maintenance	○	●
			Civil Maintenance		
			Inspection	●	●
			Vegetation Control		
			Vegetation clearing	○	●
			Buildings Maintenance		
			Inspection	●	●
			General cleaning	○	●



Commercial Offer for FRV and Third party

● Included ○ Cost plus not included

	Basic	Comprehensive
Corrective Maintenance		
Corrective Maintenance (labour)	○	●
Equipment Supply	○	○
Additional Services		
Security remote surveillance	○	●
Pest and rodent control	○	●
Waste management	○	●
Road corrective maintenance	○	○
Buildings corrective maintenance	○	○
Snow removal	○	○
HVAC maintenance	○	●
Landscaping and watering	○	●
Septic tank maintenance	○	●

	Basic	Comprehensive
Operations		
Monitoring	●	●
Real-time supervision	●	●
Remote plant monitoring	●	●
Ticketing service	●	●
24/7 emergency service	●	●
Performance and KPIs analysis	●	●
Issue detection	○	○
Dispatching		
Operation and Control	●	●
Plant controls	○	○
Power output forecasting	○	●
Grid operator interface	●	●
Maintenance scheduling		
Management		
Plant documentation management	●	●
Warranty claim management		●
Spare parts control and management	○	●
Spare parts procurement	○	○
Consumables procurement and management	○	●
Reporting		
Weekly	○	●
Monthly	●	●
Annually	●	●
WHS & EHS	●	●
Quality assurance		●
Environmental assessment	●	●
Guarantees		
Availability guarantee	●	●
Performance guarantee	○	○
Response time guarantee	○	●

FRV Portfolio

20
PLANTS

>2
GW

5
CONTINENTS



Mexico 638,34

FRV (Potosi) 341,97

FRV (Potrero) 296,37

Chile 117

FRV (Punta Colorada) 117,00

Uruguay 64,82

Third Party (Jacinta) 64,82

Spain 187,99

FRV (Solanilla) 50,00

FRV (San Servan, 6, 7 and 8) 137,99

Jordan 133,38

FRV (Mafraq I) 66,69

FRV (Empire) 66,69

Armenia 62

FRV (Masrik) 62,00

Australia 1051,38

FRV (Moree) 70,18

Third Party (Clare I) 127,82

FRV (Lilyvale I) 125,56

FRV (Winton) 99,45

FRV (Sebastopol) 110,36

FRV (Metz) 141,08

FRV (Goonumbla) 89,12

FRV (Dalby) 2,72

FRV (Walla Walla) 285,09



Contact us
www.frv.com