

KINGDOM OF BAHRAIN

Electricity & Water Authority | Electricity Distribution Directorate

PAGE

1

OF 3

Application for Solar PV System's Commissioning & Grid-Connection						
Application BENAYAT Number	NM / (SN) / (Year)					
Application betvarativamber TVM /(SN) /(Tear)						
Information of the Applicant's POC						
Organization (if applicable)		CR				
First Name	Last Name	<i>CPR</i>				
Block	RoadBuilding					
Telephone	Mobile EWA Account Number					
Solar PV Panels CapacitykW Solar PV Inverter CapacitykW						
Voltage Delivery	V Tariff Meter #					
PV Meter #	Applicant's Signatu	ıre				
Information of the Assigned Contractor						
Name	CR	EDD License #				
Level	Block	Road				
Building	Telephone	Mobile				
<i>Fax</i>	e-mail	Company's Stamp				
Information of the Assigned Consultant(s)						
Consultant 1	Name CRPEP License #					
Consultant-1	Level	Company's Stamp				
Congultant 2 (if any)	Name	CRPEP License #				
Consultant-2 (if any)	Level	Company's Stamp				
Civil & Structural						
		Pass?				
Foundations (state, breakage, deteri	oration of the surface)					
Structural and PV modules alignmen						
Roof-integrity and ingress-protectio						
General conditions of the cabins/end						
Integrity and layout of cableways &						
Mounting of supporting structures						
Condition of the components (damag						
Bolts and tightening conditions						



KINGDOM OF BAHRAIN

Electricity & Water Authority | Electricity Distribution Directorate

PAGE

OF

2

Kingdom of Bahrain	
Solar PV Equipment	
	Pass?
Mechanical integrity of the components (faults, breakdowns or incomplete assembly)	
Labeling of all components	
Correct equipment's sizing as per the approval submitted designs	
No shading obstructions for all PV modules	
Tightening of cable glands with the correct installation as per EWA's regulations	
Assembly and crimping of plug-in connectors	
Positioning and fixation of all components, with enough inverter's ventilation	
IP-degree of all equipment as per the submitted design	
DC & AC Protection & Labeling	
	Pass?
The measured maximum PV array voltage is as per the submitted design	
Functional earthing (if applicable) and bonding for all equipment	
PV array's earth residual current monitoring detection is functional (if applicable)	
All circuits, protective devices, switches and terminals suitably labeled	
Means of isolation on the AC side is clearly labeled, with healthy-fuses (if applicable)	
Dual supply warning labels are fitted at point of interconnection	
A SLD with shutdown-procedure are displayed on-site where PV modules are installed	
All signs and labels are suitably affixed and durable	
Strings' Voltage and Cables' Insulation Resistance & Continuity	
	Submitted?
Strings' Voltages with date, ambient temperatures and contractor's signature	
DC cables' continuity & insulation resistance seclude with date and contractor's signature	
AC cables' continuity & insulation resistance seclude with date and contractor's signature	
Interface-Protection for Inverter(s) and External IP (if applicable)	
	Pass?
The enabled functions of the interface protection are those required by EWA	
The thresholds are those required by EWA	
Interface protection settings are attached herewith	



KINGDOM OF BAHRAIN

Electricity & Water Authority | Electricity Distribution Directorate

PAGE

OF

3

Measured Data at Commissioning Connection – Witnessed by EWA						
				Measurement?		
In-plane irradiance	(POA)					
PV modules' temper	ature					
Ambient air temper	ature					
DC side:						
 Cumulative arra 	y voltage					
— Cumulative array current						
AC side:						
 Cumulative arra 						
 Cumulative arra 						
Output power-factor						
Requirement to measure the voltage and current for each string (shall be enclosed)						
Interface device switches off in case of power-cut (anti-islanding)?						
After a power recovery the interface-protection recloses the dedicated switch?						
Power-Quality & Special Requirements While Commissioning (if applicable) – Witnessed by EWA						
				Measurement?		
Voltage Total-Harm	onic-Distortion (AC side):				
— R-G						
— <i>Y-G</i>						
— <i>В-G</i>						
— <i>N-G</i>						
Current Total-Harmonic-Distortion (AC side):						
— R-G						
— <i>Y-G</i>						
— B-G						
— <i>N-G</i>						
Post-submission for a detailed harmonics' readings, if necessary?						
Special testing for both external interface-protection and the transformer, if applicable? \Box						
Submitted by			. Date, signature & stamp			
Application Number			. Witnessing Date & Stamp			
EWA's Result	□ Pass	□ Fail	PV Meter(s) CT ratio			