


TECHNICAL EVALUATION REPORT

(As Per Rule 35 of PP Rules, 2004)

1. Name of Procuring Agency: ... National Disaster Management Authority.....
2. Method of Procurement: Open competitive bidding.....
3. Title of Procurement: Installation of Solar Power System
4. Tender Inquiry No.: TN-22(2025-26).....
5. Date & Time of Bid Closing: 17-3-2026 at 1100 hours.....
6. Date & Time of Bid Opening: ... Technical 17-3-2026 at 1130 hours
7. No of Bids Received: 06.....
8. Criteria for Bid Evaluation: As per bidding documents
9. Details of Bid(s) Evaluation: As detailed below.....

Name of the firm	Technical compliant / Non-compliant	Rule/Regulation/SBD*/Policy/ Basis for Rejection / Acceptance as per Rule 35 of PP Rules, 2004.
M/s Arista Solutions	Compliant	Detailed evaluation report is attached 
M/s M/s I4 Junction	Compliant	
M/s FEL Power	Compliant	
M/s GSF Solar	Compliant	
M/s Triac Power	Compliant	
M/s MK Construction	Compliant	

Signature:



Official Stamp:

Abdul-Latif
Director (Proc)
National Disaster Management Authority*
Prime Minister's Office, Islamabad

TECHNICAL EVALUATION PROFORMA – SOLAR POWER SYSTEM

Ser	Specifications	C/NC	M/s Arista Solutions	M/s I4 Junction	M/s FEL Power	M/s GSF Solar	M/s Triac Power	M/s MK Construction	
1.	General Requirements	The system shall be designed, supplied, installed, tested, and commissioned by a qualified OEM/installer, firm.	C/NC	C	C	C	C	C	
		All equipment must comply with IEC, ISO, and relevant national standards for solar PV installations.	C/NC	C	C	C	C	C	
		The system shall operate reliably under local climatic conditions with an expected life cycle of 25 years for PV modules and 10 years for inverter.	C/NC	C	C	C	C	C	
		All components must be brand-new, high- efficiency, and from reputed manufacturers.	C/NC	C	C	C	C	C	
		Contractor shall provide all accessories, connectors, mounting structures, wiring, earthing, lightning protection, and documentation.	C/NC	C	C	C	C	C	
		Hybrid Solar System having inverter capacity of 8KW and PV of 14KW and battery capacity of 40KWh.	C/NC	C	C	C	C	C	
2.	Solar PV Power	PV Modules	Type: Tier I Solar Panels Bifacial N Type, mono-crystalline (12 years manufacturing and 25 years performance Warranty) (Company Standard warranty)	C/NC	C	C	C	C	
			Module wattage: 610W each	C/NC	C	C	C	C	C
			Efficiency: ≥ 20%	C/NC	C	C	C	C	C
			Cell type: 144 half-cut cells or equivalent	C/NC	C	C	C	C	C
			Frame: Anodized aluminum corrosion resistant	C/NC	C	C	C	C	C
			Glass: Tempered, ≥3.2 mm, low-iron, anti-reflective	C/NC	C	C	C	C	C
			Junction Box: IP67/IP68 with bypass diodes	C/NC	C	C	C	C	C

Specifications		C/NC	M/s Arista Solutions	M/s I4 Junction	M/s FEL Power	M/s GSF Solar	M/s Triac Power	M/s MK Construction	
		Standards Compliance:							
		IEC 61215, IEC 61730	C/NC	C	C	C	C	C	C
		PID resistance as per IEC 62804	C/NC	C	C	C	C	C	C
		Warranty:							
		Product: 10 years	C/NC	C	C	C	C	C	C
		Performance: 25years (80% output minimum)	C/NC	C	C	C	C	C	C
3.	Solar Array Mounting Structure	Material: I beam elevated with U channel Structure (Lead oxide and Paint work)	C/NC	C	C	C	C	C	C
		Design: Fixed tilt as per site latitude (adjustable optional)	C/NC	C	C	C	C	C	C
		Wind Load Resistance: ≥ 150 km/h	C/NC	C	C	C	C	C	C
		Installation: Ground-mount or rooftop as required	C/NC	C	C	C	C	C	C
		Standards: IS 875 / IEC structural safety guidelines	C/NC	C	C	C	C	C	C
4.	Hybrid Solar Inverter – 8 kW	Electrical Specifications:							
		Type: Single Phase Hybrid (On-grid/Off-grid)	C/NC	C	C	C	C	C	C
		Rated Power: 8 kW	C/NC	C	C	C	C	C	C
		Input Voltage Range (PV): 120–500 V DC	C/NC	C	C	C	C	C	C
		Maximum PV Input Power: ≥ 14 kW	C/NC	C	C	C	C	C	C
		MPPT: Minimum 2 MPPT trackers	C/NC	C	C	C	C	C	C
		Efficiency:							
		PV–AC efficiency $\geq 97\%$	C/NC	C	C	C	C	C	C
		MPPT efficiency $\geq 99\%$	C/NC	C	C	C	C	C	C
		AC Output:							
		Voltage: 230V $\pm 5\%$	C/NC	C	C	C	C	C	C
		Frequency: 50 Hz	C/NC	C	C	C	C	C	C
		Surge Rating: Min 2x surge capacity for 5 seconds	C/NC	C	C	C	C	C	C
5.	Functional Features	Smart monitoring via Wi-Fi/GPRS/RS485:							
		LCD touchscreen/LED display	C/NC	C	C	C	C	C	C
		Automatic grid changeover	C/NC	C	C	C	C	C	C

Sl. No.	Specifications	C/NC	M/s Arista Solutions	M/s I4 Junction	M/s FEL Power	M/s GSF Solar	M/s Triac Power	M/s MK Construction
	Programmable charging modes (Solar First / Grid First / Hybrid)	C/NC	C	C	C	C	C	C
	Anti-islanding protection	C/NC	C	C	C	C	C	C
6.	Protection							
	PV reverse polarity:							
	Overload/Short circuit	C/NC	C	C	C	C	C	C
	DC/AC surge protection (SPD Type II minimum)	C/NC	C	C	C	C	C	C
	Battery overcharge/discharge	C/NC	C	C	C	C	C	C
	Over-temperature protection	C/NC	C	C	C	C	C	C
7.	Compliance							
	IEC 62109-1, 62109-2	C/NC	C	C	C	C	C	C
	IEC 61683 (efficiency)	C/NC	C	C	C	C	C	C
	IEC 62116 (anti-islanding)	C/NC	C	C	C	C	C	C
8.	Warranty							
	Minimum 5 years, extendable to 10 years.	C/NC	C	C	C	C	C	C
9.	Battery Bank (Optional / If Required)							
	Type: Lithium Battery	C/NC	C	C	C	C	C	C
	Total Capacity: 40 kWh	C/NC	C	C	C	C	C	C
	Depth of Discharge: ≥ 80%	C/NC	C	C	C	C	C	C
	Battery Management System: Built-in BMS with cell balancing	C/NC	C	C	C	C	C	C
	Cycle Life: ≥ 6000 cycles @ 80% DOD	C/NC	C	C	C	C	C	C
10.	Warranty							
	10 years	C/NC	C	C	C	C	C	C
11.	Cabling, Earthing & Protection							
	Cables							
	Type: UV-resistant, XLPE/XLPO solar DC cable	C/NC	C	C	C	C	C	C
	Rating: 1000/1500 V DC for solar	C/NC	C	C	C	C	C	C
	Standards: IEC 62930 / TUV certified	C/NC	C	C	C	C	C	C
12.	Earthing							
	Dedicated DC earthing, AC earthing, and lightning protection	C/NC	C	C	C	C	C	C
	Earth resistance: ≤ 1 ohm	C/NC	C	C	C	C	C	C
13.	Protection Devices							
	DC isolator switch	C/NC	C	C	C	C	C	C
	AC isolator switch	C/NC	C	C	C	C	C	C
	SPD (Type II minimum, Type I if lightning-prone area)	C/NC	C	C	C	C	C	C
	MCB/MCB distribution board	C/NC	C	C	C	C	C	C
14.	Monitoring System							
	Real-time monitoring of:							
	PV production	C/NC	C	C	C	C	C	C

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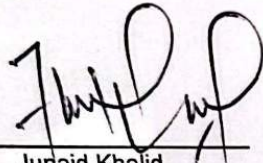
Item No.	Item Description	Specifications	C/NC	M/s Arista Solutions	M/s I4 Junction	M/s FEL Power	M/s GSF Solar	M/s Triac Power	M/s MK Construction
		Battery SOC	C/NC	C	C	C	C	C	C
		Grid interaction	C/NC	C	C	C	C	C	C
		Load consumption	C/NC	C	C	C	C	C	C
		Accessible via Web + Mobile App	C/NC	C	C	C	C	C	C
		Remote fault diagnostics	C/NC	C	C	C	C	C	C
15.	Solar Lights LED	Solar Street/ Area/ Gar den Light Components	Integrated Solar Street light 150-200 W high- efficiency LEDs having built in battery backup of 12 Hrs	C/NC	C	C	C	C	C
			Lumen Output: 12,000-18,000 lumens	C/NC	C	C	C	C	C
			Temperature : 6500 k	C/NC	C	C	C	C	C
			Lighting Mode: Automatic dusk-to-dawn + dimming	C/NC	C	C	C	C	C
			Body Material: Aluminum alloy, corrosion resistant	C/NC	C	C	C	C	C
			Ingress Protection: IP65/IP66 weatherproof	C/NC	C	C	C	C	C
			Backup: Minimum 12 hours, ≥ 2 nights autonomy	C/NC	C	C	C	C	C
			Warranty : 2 Years - extendable	C/NC	C	C	C	C	C
16.		Documentation & Deliverables	System design diagrams	C/NC	C	C	C	C	C
			SLD (Single Line Diagram)	C/NC	C	C	C	C	C
			PV Syst / equivalent generation report	C/NC	C	C	C	C	C
			Product datasheets & compliance certificates	C/NC	C	C	C	C	C
			Operation & Maintenance manual	C/NC	C	C	C	C	C
			Warranty certificates	C/NC	C	C	C	C	C
17.	Testing Commissioning	Functional testing of inverter, PV modules, and protection systems	C/NC	C	C	C	C	C	C
		Insulation resistance test	C/NC	C	C	C	C	C	
		Polarity check	C/NC	C	C	C	C	C	
		Performance test at full load	C/NC	C	C	C	C	C	
		Street light functional test	C/NC	C	C	C	C	C	
18.	Warranty Support &	PV Modules: 10 years product, 25 years performance	C/NC	C	C	C	C	C	C
		Inverter: ≥ 5 years	C/NC	C	C	C	C	C	C

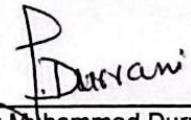
J.P. Durran

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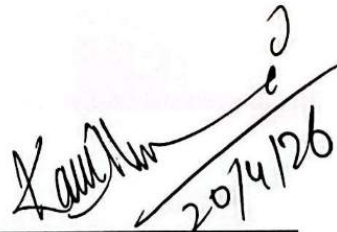
er	Specifications	C/NC	M/s Arista Solutions	M/s I4 Junction	M/s FEL Power	M/s GSF Solar	M/s Triac Power	M/s MK Construction
	Batteries : ≥10 years	C/NC	C	C	C	C	C	C
	Solar Lights: 2-3 years	C/NC	C	C	C	C	C	C
	Minimum 1 Year on-site service support	C/NC	C	C	C	C	C	C
Compliance/ Non-Compliance			Compliance	Compliance	Compliance	Compliance	Compliance	Compliance


 Juraid Khalid
 DM (Building), NDMA
 Co-opted Member


 Shahbaz Muhammad Durrani
 DM (Insp), NDMA
 Member


 Mir Hamza Storyani
 Director (Legal), NDMA
 Member


 Col Manzoor Ahmed
 Director (Log), NDMA
 Secretary


 Brig Kamran Ahmad
 Member (Ops), NDMA
 President TEC

20/4/26