

Lot:	13	Solarization/ Power Backup of labs									
		1. Solarization of Pesticide Testing Lab (PQC)									
		2. Solarization of Modern Virology Lab (VL)									
		3. Power back up for advance equipment (PCSIR, SIAH, BFA)									
Lot	Ref	Description	Product ID	Specification	Quantity PQC	Quantity VL	Quantity PCSIR, SIAH, BFA	Total Quantity	Unit	Unit price (USD)	Total Price (USD)
13	1	Solar Energy System		8.00 kWh, Hybrid (Solar+ Electricity), Off Grid	1	1		2	Solar Unit		
13	1.1	Battery		9.6 kWh Total Battery Storage, 2 x UP5000, PylonTech or equivalent, 5 Year Battery Product Warranty	9.6	9.6			kWh		
13	1.2	Inverter		8.000 kW Total Inverter Rating, 1 x Nitrox Hybrid 8 kW SP-48V, Inverex or equivalent, 5 Year Inverter Product Warranty	8	8			kWh		
13	1.3	Solar Panels		10.440 kW Total Solar Power, 18 x 580 Watt Panels (580 Wp N-Type - 72 Cells), 16,295 kWh per year, Jinko / JA Solar Co. Ltd. or equivalent, 12 Year Panel Product Warranty, 30 Year Panel Performance Warranty	10.44	10.44			kWh		
13	1.4	Frame		L2/L3 Aluminum Mounting Structure: Local Made Aluminum Mounting Structure, 10 x Aluminum Mounting Structure	1	1		2	set		
13	1.5	Other Devices		Protection Devices (Breakers , SPD's & etc.): DC , AC Breaker , AC SPD's, 1 x Protection Devices, Miscellaneous Accessories (Balance of System): 10 x Miscellaneous,	1	1		2	set		
13	1.6	Cables		DC Cables (1000VDC): 10 x DC Cables, AC Cable (400V/600V): 10 x AC Cables,	1	1		2	set		
13	1.7	Additional Requirements		The following should be included: Civil Work (if any), Lightening arrestors, System delivery and installation at Quetta (Pakistan). Maintenance: 2 Year against workmanship.							
13	2	10.0 KVA UPS with batteries for uninterupted power supply to modern analytical instruments		Capacity/Rating 10 KVA, Technology Microprocessor based Digital Control, IGBT based, True on line double conversion, AC to DC conversion and then DC to AC. Waveform Pure Sine wave Input Voltage 110-270V Input Frequency 45-55 Hz (Generator Compatible), Input Power Factor > 0.85, Output Voltage 208V/220/230/240V, AC -Selectable Out Put Power Factor 0.85 or higher, Output Frequency 50Hz +/- 0.05%, Protection Input Over/Under Voltage, Output Overload, Short Circuit, Battery Low/High, Battery reversed polarity, protection for IGBT & thermal overload. Display LCD/LED Alarms Audible Alarms should be provided for Mains Fail, Battery Low and Fault Conditions. Operating Conditions 0-40 degree C, 0-90% RH maximum, non-condensing Cooling Air forced type, Back Up Time 60 mins on full load, Minimum VAH Required 10800, Batteries: maintenance free dry batteries 12 V 7Ah (Bidders can choose battery capacity accordingly), Approved standard EN 62040-2 or IEC 62040-2 of 2005 or later 1. Make of UPS INVEREX/EMERSON/APC or equivalent, Make of Batteries LONG or equivalent, Warranty (with parts, consumables & services): 01 Year Complete Warranty			3 (one for each institution: PCSIR, SIAH, BFA)	3	set		
								TOTAL PRICE DDP			

- Delivery Address:

1 **PQL**

PQL Contact:

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- 2 **SIAH**

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- 3 **PCSIR**

PCSIR Contact:

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Director General

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- 4 **VL**

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- 5 **BFA**

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for PQL, VL, BFA

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