

**OILAND GAS DEVELOPMENT COMPANY LIMITED**  
**CSR DEPARTMENT**

**Instlation of solar system at BHU Gabari, Shakardara Rural Tehsil Lachi District Kohat**

SR #	Description	Unit	Quantities	Rate	Amount
1	Supplying of customized G.I pre-fabricated solar stand 12/14 swg, for fixing 02 solar panel on each stand, including 3/8"-1/2" anchor bolt including nuts, bolts ,washers making hole for anchor bolts on existing RCC roof Slab ,8 Anchor bolt for each frame.	Each	15		
2	supplying of solar panel polycrystalline (PV module),330 watts each, A quality.	Each	30		
3	Supplying of all in one pure sine wave, on grid/ off grid " 10kW 48 volts 98% efficiency with build in solar controller MPPT based, etc	Each	1		
4	Supplying of pure copper cable single core tin coated 10mm <sup>2</sup> form PV module inverter running of cables in PVC pipes best quality , 1" dia fixing the PVC Pipe with GI / PVC saddles from Pv Module to inverter.	Meter	100		
5	Supplying of pure copper cable (99.99) % single core/tin coated 50 mm <sup>2</sup> , for from inverter to batteries running of cables in PVC Pipes / Dura ducts 1" to 2" from batteries to inverter ,complet in all respect, of best quality.	Meter	30		
6	Supply of deep cycle storage batteries 230 amp 12 volts ,high TECH/non-spill able , with electrolyte and indicator deep cycle with lead terminals, Company charged with led terminal complete in all respect, all connection shall be made with proper size tin coated copper terminals etc.	Each	12		
7	Supplying of suitable solid Shaisham /partal/china commercial wooden tabel 2' ft X4' FtX2'ft with wooden frame 3"X3", china commercial wood ,wooden/rack ,for batteries height up to 2'-6" from ground level,in two shelves etc. as per Engineers instructons.	MR	3		

8	P/F concealed Main DB 2ft X 3f 16/18swg powder coated with front glass door and volt /amps /light indicator, with locking arrangement with following breakers.(1-DC Breaker Siemens or equivalent for batteries 100 amp 01 No), (2- DC Breaker for PV 100amp 01 No), (3- TP breaker 3phase for AC 100amp 01 No), ( 4- Surge arrester 01 Nos),(5-AC breaker 10amp 20Nos) , (6- 65amp double pole AC Breaker for Distribution 03 No), & (7-Change over best quality rotary type 100amp etc.	Each	1		
9	Earth of Main DB / Inverter and Solar Pannels with copper Plate(12'X12"X1/2") and 20ft deep and GI 2" dia perforated pipes copper plates to ground level, with all cables and copper patty lightning arrester / Air termination rod with base plate 02 Nos, compete in all aspect. as per MES Specification vide Para 25.4 etc	Each	1		
10	Installation of above items as per direction for the engineer incharge and engineering practice/ manufacture instructions connecting main DB with the Existing DB. Running the system compete in all respect as per direction of the engineer incharge.	Each	1		
11	Electric Water Coller , SP220/240 volt, cooling capacity 100ltr per hour complete and fixing	Each	1		
12	Contractor will provide original invoice with catalog of the inverter to the department an provide guarantee for free replacement of parts up to one year etc.				NIL
<b>Total Rs</b>					

  
**Muhammad Asif**  
 (Civil) (CSR/Land)