

# Supply and Installation of Solar Based Pressure Pump at Nara Azad Khel, District Lakki Marwat

## TERMS OF REFERENCES

The requirement for Solar Based Pressure Pump at Nara Azad Khel, District Lakki Marwat

### Abstract of Cost

Sr. No	Description	Unit	Qty
1.	Boring with percussion method/rotatory method 8 inch Dia in any type of soil up to 250 feet depth including supply and fixing of PVC casing pipe/GI Pipe/Strainer 6 inch Dia including lowering pipe in bore hole with rope and jointing the pipe with solvent and steel clamp for holding pipes in bore hole etc. Along with Mobilization and Demobilization of boring machinery at site	Feet	250
2.	Shrouding with Pea Gravel 1/8" to 1/4" filling around the bore hole	Lumpsum	1
3.	Providing and fixing Submersible Pump 03 HP (single phase) of reputable brand and must be of Stainless steel with stainless steel impellers,50 Hz, 220 Volt with complete installation along with all fittings, control /penal complete in all respect.	No	1
4.	Supplying of VFD(Inverter), fixing of vfd within steel DB powder coated having size 2'x1.6'x1'made with steel having 16/18 guage along with breakers. The detail of breakers are as follows: <ul style="list-style-type: none"> <li>a. Providing /Fixing DC Breaker 32-50 Amps 01 no best quality for PV</li> <li>b. Main switch/breaker for Pump on /Off function Earthing the DB and solar panels.</li> </ul>	No	1

5.	Supply and installation of Prefabricated GI Solar stand 2''x 2'' x ¼'' angle frame, including fixing of 02 solar panels on each frame with all anchor bolts including concrete blocks for stability . The installation of solar system should be complete in all respects	No	5
6.	Supplying and installation of Solar Panels , Best quality of reputable brand , Monocrystalline/Monoperc , 575-600 watts each .The installation of solar system should be complete in all respects. The solar panels should run pressure pump smoothly.	No	9
7.	Supplying of pure DC Cables single core tin coated 6 to 8 sq mm, best quality of reputable brand , The cable should be laid in PVC Conduit from PV module to vfd/db	Lumpsum	1
8.	Supply and fixing DC Cables single core tin coated from 50/60 sq. mm with thimbles best quality in PVC conduits 1.5'' dia with thimbles from PV Modules to inverter/DB and to existing main DB/Main switch of suitable size and fixing the PVC Pipes with saddles etc.	Lumpsum	1

- i. Solar Panel must be brand new & should have panel warranty/guarantee not less than 10 years.
- ii. The quoted solar panel manufacturer must be tier 1 brand.
- iii. Bid bond amount will be Rs. 19,760/-
- iv. Delivery, installation and commissioning of mentioned location is 60 days from issuance of PO, on FOR basis.
- v. Payment shall be made after successfully supply, installation & testing of the Solarization projects at mentioned site.
- vi. Bid validity must be 120 days from bid opening.
- vii. Evaluation shall be carried out on full consignment wise basis.
- viii. All quoted solar equipment and VFD and Pressure Pump should be of reputable brand.

- ix. The bidder should read and will accept the TOR and OGDCL Tender Documents Terms and conditions mentioned on OGDCL Website. If bidder required any information, it should be cleared prior to bid submission. For any query kindly contact  
Regional Office Kohat  
Bungalow No.22, Plot No.8  
C.M.H. Road Kohat Cantt  
Ph # 0922-511565 Fax # 0922-9260006
- x. Single phase power is available at mentioned site.
- xi. Prior experience in installation of Solar Pressure Pump is mandatory, Previous Work completion certificates regarding installation of Solar Pressure Pumps are required.
- xii. FBR registration is must. The vendor must be on FBR Active Tax Payer list and should not be black listed firm from any organization.
- xiii. PEC Registration is must.
- xiv. All issues arising during execution of Installation of Solar pressure pump such as boring issues, skilled/unskilled manpower, machinery and equipment are responsibility of Contractor