MINUTES OF MEETING REAGRDING SOLARIZATION OF KPEMA HEAD QUARTER

DATE: 3rd November, 2022
TIME: 11:30 AM
VENUE: KPEMA HEAD QUARTER
PROJECT: SOLARIZATION OF KPEMA HEAD QUARTER PESHAWAR
AGENDA: PRE-BID MEETING

CLIENT REPRESENTATIVE:

1.	Jamshed Khan	Director	KPEMA
2.	M.Abbas Khan	Deputy Director Finance	KPEMA
3.	Pir Aimal	Assistant Director (G)	KPEMA
4.	Burhan uddin	Assistant Director (F)	KPEMA
5.	Fasil Nawab	Web Developer	KPEMA
6.	M. Affan Shaukat	Education Data Analyst	KPEMA

CONTRACTOR REPRESENTATIVE:

1.	Mr. Sajid Yaqoob	Project Manager	M/S Renewable Stars Pvt Ltd
2.	Mr. Fazal Rabbi	Project Manager	M/S TSK Engineering International
3.	Aftab Haider		M/S GMD Solar
4.	Kifayat ulah		M/S GMD Solar

1. The meeting regarding subject agenda was held on 3rd November, 2022 at the Head Quarter of KPEMA under the Chairmanship of Director KPEMA.

2. The Chair welcomed the participants and explained the project requirements and objectives.

3. Assistant Director (G)/(C) KPEMA, further explained the project requirements, mandatory criteria and technical details of the project.

4. The contractor representatives had some queries which were addressed by the concerned officers. The summary of those points is presented below:

Annex-A

S#	Contractor Name	Contractors Observation / Question	Client remarks
1	Renewable Stars	Is Electrical Inspectorate License a compulsion?	Yes. As per KP Electrical Inspectorate (Energy & Power Dept) Notification No/LS/PWR/3281-93 dated 25/08/2022, it is mandatory as per rule 48 of Electricity Rules 1937 that Electrical installation works including additions, repairs, alterations and adjustments to existing works in public and private sectors including autonomous and semi-autonomous agencies and corporations across the province shall only be performed through electrical contractors duly licensed by the board of licensing as per rule 48 of the Electricity Rule 1937.
2	GMD Solar	If we don't have AEDB License, can we JV with someone and qualify for this requirement?	As per bidding documents, the Lead Partner of the JV must have AEDB License in Category C-2 or above.
3	Renewable Stars / TSK Engineering	How many projects of 50 kW Net Metering are required by the client?	The contractor must have executed 05 Projects of 50 kW (minimum) with Net Metering License. OR A single project having 05 or more systems (each above 50 kW) Net Metering based. Note: In both cases the contractor must attach NEPRA Net Metering Licenses specifically mentioning the contractor name. These will be verified from NEPRA Website as well.
4	TSK Engineering	Due to import restriction, can we use Solar Panels without date Label?	No. As per KP Approved specifications, the solar panels must have Date of Manufacturing Label Laminated inside the glass of the PV Module.
5	TSK Engineering	Due to prevailing conditions, the time for completion of project may be extended to 08 Months.	Not agreed. The time period will remain as 04 Months. Contractors must note that goods for this project must be delivered to site at the earliest possible upon receipt of work order. The intended time line mentioned is the maximum time

			period. The client requested all contractors to prepare goods in advance and only apply if they can assure the supply of goods at the earliest possible.
6	TSK Engineering	The Battery cycles and terminal voltage may be clarified.	The battery must be 48 Volt Standard. It must have 6000 Cycles @ 50% Depth of Discharge (As per KP Approved specs and MRS 2022)
7	TSK Engineering	The specific works data and BOQ do not match. Please clarify which one should we follow for the bid?	The BOQ is correct and should be used for financial bids. The revised **"Specific works data"** is attached at Annex-B **PV Capacity = 39.24 kW** **Inverter Capacity = 30 kW** **Battery Capacity = 28.8 kWhr**
8	Client	Project DLP and Warranty	The client explained that Project DLP will be 12 months from the Date of Handing Taking Over. While the warranty for each item will be 03 years from the date of Installation/Commissioning at site.

Annex-B

REVISED SPECIFIC WORKS DATA

The project consists of following equipment

1. Supply and Installation of **39.24 kW** PV Modules, Mono-Crystalline, A Grade, 17.5% Module efficiency minimum.
2. Supply and Installation of On-Grid Hybrid Inverter with Remote Monitoring feature accessible with Mobile Data with minimum size of **30 kW** capacity.
3. Supply and Installation of LiFePO4 Battery Backup system of size **28.8 kWh (4.8 kWhr per Battery).**
4. Supply and Installation of PV Mounting Structure as per BOQ.
5. Supply and Installation of Sub-Main Distribution Box for AC Critical Load as per BOQ description and Single Line Diagram.
6. Supply and Installation of DC Copper Cable Double Insulated for connections from PV Modules to DC Combiner and Inverter.
7. Supply and Installation of AC Wiring for Internal Circuits.
8. Supply and Installation of HDPE Pipe for DC Cables (76.2 mm and 50 mm dia).
9. Supply and Installation of Power System Earth.
10. Supply and Installation of DC Earth Equipment (6 mm sq Single Core)
11. Supply and Installation of AC Earth Equipment (16 mm sq Single Core PVC Insulated)
12. Application for Net-Metering and Installation of Bi-directional Energy Meter.

The Chair thanked all the participants and ended the meeting with a vote of thanks.