

TELANGANA STATE RENEWABLE ENERGY DEVELOPMENT CORPORATION LTD

TSREDCO:HYDERABAD

CORRIGENDUM - I

Ref: TSREDCO/SE/SPV/Hybrid -Rurban /2020-21

Dt: 28-12-2020.

Tender for Design, Supply, Installation, Testing and Commissioning of various capacities for aggregated capacity of 36KWP roof top solar photo voltaic Hybrid power plants with five years of comprehensive maintenance contract at various Rurban Clusters under R-URBAN scheme in Telangana State.

The tender document reference: Tender ID: 212965

1. Tender Notice No: - TSREDCO/SE/SPV/Hybrid -Rurban /2020-21, Dt. 18-12-2020

The following corrigendum is

Description	Particulars	As per Original tender	As Per the Corrigendum
TIME SCHEDULE OF TENDER RELATED VARIOUS EVENTS	Last date for uploading of online documents	28.12.2020 till 3.00 PM	31.12.2020 till 10.30 AM
	Last date for submission of Hard copies of documents uploaded online	28.12.2020 till 5.00 PM	31.12.2020 till 11.00 AM
	Pre-qualification & Technical Bid opening date/time	29.12.2020 till 11.00 AM	31.12.2020 till 11.30 AM
	Price Bid opening date/time	31.12.2020 till 3.00 PM	31.12.2020 till 3.30 PM
Section II Instructions to Bidder(ITB) and General Conditions			
Minimum Eligibility Financial Criteria	The firms are having the Turnover not less than 1Cr, in any one financial year during the last 3 financial years.	The firms are having the Turnover not less than 50.00 Lakhs, in any one financial year during the last 3 financial years.	
Section-V Technical Specifications			
6.A. BATTERY BANK	The battery should be Lithium Ferro phosphate (Lifepo4) having capacity motioned in the chart at standard conditions. The battery Voltage & AH can be changed keeping the overall KWH same. The voltage selection should be close to Vm of combinations of modules having 72 cells. The configuration of battery assembly should be as per requirement of capacity. The cell	BATTERY: I. MNRE Empanelled Batteries shall be low maintenance only tubular gel valve regulated lead acid (VRLA) type batteries of 12 Volts cell of capacity 150 AH as indicated in the scope of works of the system to be installed with suitable battery stand.	

should be prismatic type having capacity not less than 150 Ah The other feature of the battery should be:

Sr. No.	Description	Specification
1	Battery Configuration minimum cell capacity	12V- 150 AH; LiFePO4
2	Working Temperature Range (both for charging & discharging)	0-60 Deg C
3	Storage Temperature Range	@ 0-40 Deg- 6 months
4	Cycle Life (Full charge to full discharge @ 25 deg C before capacity of battery falls below 75%)	more than 3000 Cycles
5	Battery Warranty 5 years	Battery Warranty 5 years
6	Type of Cell Prismatic	Prismatic

- Depth of Discharge : up to 85%.
- Maximum Discharging rate : up to C rate of battery Capacity.
- Maximum Charging Rate : up to 0.5 C rate of battery capacity.

The Lithium iron phosphate battery needs a very good “Battery Management Systems” BMS to ensure the proper charging and discharging of each cell of battery with temperature compensation. This battery also needs constant current and constant voltage charging methodology related to upper voltage limit of battery. BMS primary focus is therefore on the safety and the protection of the battery pack, to minimize the risk of sudden failure and to maximize the life cycle of the battery. The secondary function of the BMS is to perform battery diagnosis, such

II. 75 % of the rated capacity of the battery should be between fully charged & load cut off conditions.

III. Battery should conform to the latest BIS/ International standards.

IV. The Battery makes should be empaneled with MNRE.

V. The Battery warranty should be 5 years

as state of charge (SOC) estimation, state of health (SOH) estimation and state of power (SOP) estimation. Hence a very good battery management system to be incorporated and got it tested with battery from MNRE/NABAL accredited lab as per IEC/BIS standard. The BMS of the LFP battery must also communicate with PCU in some standard protocol like RS485/232 or CAN so that PCU can adapt to requirements of battery and extend its life. Communication between PCU and BMS and the compatibility of 2 should be ensured.

The cell and battery should be got tested as per IEC62133-2012 or BIS specifications with MNRE/NABAL accredited center. However, the Battery should conform to the latest BIS/ International standards and The Batteries makes should be empaneled with MNRE.

In case of any query or clarification please contact General Manager, TSREDCO, Hyderabad.

Sd/xxxx
VC &MANAGING DIRECTOR
TSREDCO