

2.	48V, Lead Acid Plante Battery bank complete in all respect meeting the load cycle requirement as per technical specification	Sets	2	2
3.	Mandatory Spares as per Cl. No. 1.3.2 below	Lot	1	-
4.	Supervision of erection at site for 220V, Lead Acid Plante Battery bank	Sets	2	2
5.	Supervision of erection at site for 48V, Lead Acid Plante Battery bank	Sets	2	2
6.	Supervision of testing & commissioning at site for 220V, Lead Acid Plante Battery bank	Sets	2	2
7.	Supervision of testing & commissioning at site for 48V, Lead Acid Plante Battery bank	Sets	2	2
8.	<u>Battery Type Test</u> : Discharge performance test at low temperature.	Lot	1	1
9.	<u>Battery Type Test</u> : Ampere-hour test & watt-hour efficiency test.	Lot	1	1
10.	<u>Battery Type Test</u> : Endurance test.	Lot	1	1
11.	<u>Battery Type Test</u> : Container (shall be type tested as per IS:1146)	Lot	1	1
12.	<u>Battery Type Test</u> : Sealing compound (shall be type tested as per IS:3116)	Lot	1	1

### 1.3.2 Mandatory Spares:

Bidder has to supply following items for 220V Battery (Kothagudem Project) as a mandatory spares

S. No.	Details	Unit	Qty
1.	Battery Cell (Uncharged, Dry)	Nos	20
2.	Inter connecting cell strips	Nos	20
3.	Vent plug	Nos	20
4.	Teak wood cable clamps with hardware	Nos	10
5.	Hydrometer	No	1
6.	Rubber gloves	Pair	1
7.	Voltmeter for measuring cell voltage (Center zero type)	No	1
8.	Insulated socket spanner with handle	No	1
9.	Thermometer	No	1

Please Note:-

- i) Refer Annexure-2 of Section-1 for 220V & 48V Load duty.
- ii) Minimum size of batteries shall be as below (for sl no. 1, 2 above)  
 220V Battery - 645AH Lead Acid Plante Type (Kothagudem & Bhadradi)  
 48V Battery - 400AH Lead Acid Plante Type (Kothagudem & Bhadradi)
- iii) Bidder to quote battery size meeting the load duty cycle requirement. The sizing calculation in the format of IEEE 485 shall be submitted with offer for review.

