

2 x 660MW UDANGUDI STPP						
BOQ-CUM-PRICE SCHEDULE FOR DC BATTERY - PACKAGE						
MAIN SUPPLY- LEAD ACID BATTERY (ANNEXURE-I)						
SL NO	ITEM CODE	ITEM DESCRIPTION/ SERVICE	HSN CODE	UOM	TOTAL QTY	REMARKS
A		220V BATTERY				
A.1	508-11013-A	BREAK UP DETAIL for 220V BATTERY 1 (Area 1)				FOR MAIN PLANT UNIT#1 & UNIT#2
A.1.1		220V, Lead acid plante battery suitable For MAIN PLANT as per Annexure-II (Load duty cycle)), 1.85 ECV, 108 cells, Lead-Acid plante High discharge type battery suitable For MAIN PLANT with all accessories listed as A.2 below	8507	Sets	4	One Set=> One Battery String comprising of 108 Cells If one string is not meeting the required AH capacity, multiple (n nos.) strings of 108 cells each shall be provided. The complete connectors (including inter cell, inter-row, inter-bank connectors), required to connect the "n" nos. strings shall be in bidder's scope
A.1.2		Electrolyte (first charge plus 10% extra)	2807	Sets	4	
A.1.3		Mild Steel racks properly treated with 3 coats of anti-acid paints	7301	Sets	4	
A.1.4		Stand insulators plus 5% extra	4415	Lot	4	
A.1.5		Cell interconnectors with 5% extra and one extra end take-off	8507	Lot	4	
A.1.6		Inter bank & Inter row connectors with 5% extra (Insulated)	8507	Lot	4	
A.1.7		Cell numbering tags with fixing arrangement (1 Set)	3919	Lot	4	
A.1.8		Anti-splash type vent plug	8507	Sets	4	
A.2		LIST OF ACCESSORIES - Area 1				
A.2.1		Inter-connector bolt wrench	8204	Nos	2	
A.2.2		Electronic Syringe type Hydrometer with temperature measurement and with built in memory.	9025	Nos	2	
A.2.3		Specific gravity correction chart	4901	Nos	2	
A.2.4		Acid resistant Jug	9025	Nos	2	
A.2.5		Thermometer with plug & cap, specific gravity correction scale	9025	Nos	2	
A.2.6		Cell testing voltmeter (digital) with leads (3-0-3V) with built in memory	9030	Nos	2	
A.2.7		Pocket Thermometer	9025	Nos	2	
A.2.8		Electrolyte resisting funnels	3924	Nos	4	
A.2.9		Electrolyte resisting jug of adequate capacity	3924	Nos	2	
A.2.10		Rubber apron	4015	Nos	2	
A.2.11		Pair of rubber hand gloves	4015	Set	2	
A.2.12		Cell lifting straps	8507	Set	2	
A.2.13		Insulated Spanner for cells	8204	Nos	2	
A.2.14		First aid box	3006	Nos	2	
A.2.15		Goggles (industrial)	9003	Nos	4	
A.2.16		'No smoking' notice	3926	Nos	4	
A.2.17		Wall mounting holders for hydrometer and thermometer	8466	Nos	4	
A.2.18		Wall mounted teak wood/Acid resistant rubber insulated steel rack for items at Sl. no. A.2.4, A.2.6, A.2.8, A.2.10, A.2.11 & A.2.13.	8466	No.	2	

A.3	508-11004-A	BATTERY HEALTH MONITORING SYSTEM FOR EACH SET OF BATTERY (Area 1) for Battery as per sl.no. A.1.1 above.	8536	Nos	4	
A.4	508-11014-A	BREAK UP DETAIL for 220V BATTERY 2 (Area 2)				FOR WATER TREATMENT & RO PLANT LOADS
A.4.1		220V, Lead acid plante battery suitable For AREA 2 as per Annexure-II (Load duty cycle), 1.85 ECV, 108 cells, Lead-Acid plante High discharge type battery suitable For AREA 2 with all accessories listed as A.5 below	8507	Sets	1	One Set=> One Battery String comprising of 108 Cells
A.4.2		Electrolyte (first charge plus 10% extra)	2807	Sets	1	
A.4.3		Mild Steel racks properly treated with 3 coats of anti-acid paints	7301	Sets	1	
A.4.4		Stand insulators plus 5% extra	4415	Lot	1	
A.4.5		Cell interconnectors with 5% extra and one extra end take-off	8507	Lot	1	
A.4.6		Inter bank & Inter row connectors with 5% extra (Insulated)	8507	Lot	1	
A.4.7		Cell numbering tags with fixing arrangement (1 Set)	3919	Lot	1	
A.4.8		Anti-splash type vent plug	8507	Sets	1	
A.5		LIST OF ACCESSORIES - Area 2				
A.5.1		Inter-connector bolt wrench	8204	Nos	1	
A.5.2		Electronic Syringe type Hydrometer with temperature measurement and with built in memory.	9025	Nos	1	
A.5.3		Specific gravity correction chart	4901	Nos	1	
A.5.4		Acid resistant Jug	9025	Nos	1	
A.5.5		Thermometer with plug & cap, specific gravity correction scale	9025	Nos	1	
A.5.6		Cell testing voltmeter (digital) with leads (3-0-3V)	9030	Nos	1	
A.5.7		Pocket Thermometer	9025	Nos	1	
A.5.8		Electrolyte resisting funnels	3924	Nos	2	
A.5.9		Electrolyte resisting jug of adequate capacity	3924	Nos	1	
A.5.10		Rubber apron	4015	Nos	1	
A.5.11		Pair of rubber hand gloves	4015	Set	1	
A.5.12		Cell lifting straps	8507	Set	1	
A.5.13		Insulated Spanner for cells	8204	Nos	1	
A.5.14		First aid box	3006	Nos	1	
A.5.15		Goggles (industrial)	9003	Nos	1	
A.5.16		'No smoking' notice	3926	Nos	2	
A.5.17		Wall mounting holders for hydrometer and thermometer	8466	Nos	2	
A.5.18		Wall mounted teak wood/Acid resistant rubber insulated steel rack for items at Sl. no.A.5.4, A.5.6, A.5.8, A.5.10, A.5.11 & A.5.13.	8466	No.	2	
A.6	508-11005-A	BATTERY HEALTH MONITORING SYSTEM FOR EACH SET OF BATTERY (Area 2) for Battery as per sl.no. A.4.1 above.	8536	Nos	1	
A.7	508-11015-A	BREAK UP DETAIL for 220V BATTERY 3 (Area 3)				FOR SEA WATER INTAKE LOAD SYSTEMS.
A.7.1		220V, Lead acid plante battery suitable For AREA 3 as per Annexure-II (Load duty cycle), 1.85 ECV, 108 cells, Lead-Acid plante High discharge type battery suitable For AREA 3 with all accessories listed as A.7 below	8507	Sets	1	One Set=> One Battery String comprising of 108 Cells
A.7.2		Electrolyte (first charge plus 10% extra)	2807	Sets	1	

A.7.3		Mild Steel racks properly treated with 3 coats of anti-acid paints	7301	Sets	1	
A.7.4		Stand insulators plus 5% extra	4415	Lot	1	
A.7.5		Cell interconnectors with 5% extra and one extra end take-off	8507	Lot	1	
A.7.6		Inter bank & Inter row connectors with 5% extra (Insulated)	8507	Lot	1	
A.7.7		Cell numbering tags with fixing arrangement (1 Set)	3919	Lot	1	
A.7.8		Anti-splash type vent plug	8507	Sets	1	
A.8		<u>LIST OF ACCESSORIES - Area 3</u>				
A.8.1		Inter-connector bolt wrench	8204	Nos	1	
A.8.2		Electronic Syringe type Hydrometer with temperature measurement and with built in memory.	9025	Nos	1	
A.8.3		Specific gravity correction chart	4901	Nos	1	
A.8.4		Acid resistant Jug	9025	Nos	1	
A.8.5		Thermometer with plug & cap, specific gravity correction scale	9025	Nos	1	
A.8.6		Cell testing voltmeter (digital) with leads (3-0-3V)	9030	Nos	1	
A.8.7		Pocket Thermometer	9025	Nos	1	
A.8.8		Electrolyte resisting funnels	3924	Nos	2	
A.8.9		Electrolyte resisting jug of adequate capacity	3924	Nos	1	
A.8.10		Rubber apron	4015	Nos	1	
A.8.11		Pair of rubber hand gloves	4015	Set	1	
A.8.12		Cell lifting straps	8507	Set	1	
A.8.13		Insulated Spanner for cells	8204	Nos	1	
A.8.14		First aid box	3006	Nos	1	
A.8.15		Goggles (industrial)	9003	Nos	1	
A.8.16		'No smoking' notice	3926	Nos	2	
A.8.17		Wall mounting holders for hydrometer and thermometer	8466	Nos	2	
A.8.18		Wall mounted teak wood/Acid resistant rubber insulated steel rack for items at Sl. no. A.8.4, A.8.6, A.8.8, A.8.10, A.8.11 & A.8.13.	8466	No.	2	
A.9	508-11006-A	<u>BATTERY HEALTH MONITORING SYSTEM FOR EACH SET OF BATTERY (Area 3) for Battery as per sl.no. A.7.1 above.</u>	8536	Nos	1	
B	508-11007-A	<u>E & C SPARES</u>				
B.1		<u>E & C SPARES FOR AREA-1</u>				
B.1.1		Gloves	4015	Set	6	
B.1.2		Vent Plugs	8507	Nos	30	
B.1.3		Intercell connectors	8507	Nos	30	
B.2		<u>E & C SPARES FOR AREA-2</u>				
B.2.1		Gloves	4015	Set	2	
B.2.2		Vent Plugs	8507	Nos	15	
B.2.3		Intercell connectors	8507	Nos	15	
B.3		<u>E & C SPARES FOR AREA-3</u>				
B.3.1		Gloves	4015	Set	2	
B.3.2		Vent Plugs	8507	Nos	15	
B.3.3		Intercell connectors	8507	Nos	15	
C	508-11025-A	<u>SUPERVISION OF E&C (Including Tests on all batteries, as mentioned in Section-I, to be carried out at Site on completion of E & C & immediately prior to putting battery in service)</u>		SET	6	
C.1		LUMP SUM CHARGES PER VISIT FOR ENGINEER (EXCEPT DAILY CHARGES)		VISIT	6	REFER NOTE-1 & 2

C.2		LUMP SUM DAILY CHARGES FOR ENGINEER		DAYS	50	REFER NOTE-1 & 2
D	508-11000-B	MANDATORY SPARES One Set for Area 1				
D.1		Inter cell connectors with insulated cover	8507	Nos.	20	
D.2		Inter row connectors with insulated cover	8507	Nos.	20	
D.3		Battery stand insulators	4415	Nos.	20	
D.4		Cell insulators	4415	Nos.	20	
D.5		Nuts, bolts & washers-each type	7318	Set	2	
D.6		Vent plugs	8507	Nos.	20	
D.7		Spare dry cell	8507	Nos.	20	
D.8		BHMS sensors for each type and rating	8536	Nos.	10 % of total population	
E	508-11000-B	MANDATORY SPARES One Set for Area 2				
E.1		Inter cell connectors with insulated cover	8507	Nos.	10	
E.2		Inter row connectors with insulated cover	8507	Nos.	10	
E.3		Battery stand insulators	4415	Nos.	10	
E.4		Cell insulators	4415	Nos.	10	
E.5		Nuts, bolts & washers-each type	7318	Set	1	
E.6		Vent plugs	8507	Nos.	10	
E.7		Spare dry cell	8507	Nos.	10	
E.8		BHMS sensors for each type and rating	8536	Nos.	10 % of total population	
F	508-11000-B	MANDATORY SPARES One Set for Area 3				
F.1		Inter cell connectors with insulated cover	8507	Nos.	10	
F.2		Inter row connectors with insulated cover	8507	Nos.	10	
F.3		Battery stand insulators	4415	Nos.	10	
F.4		Cell insulators	4415	Nos.	10	
F.5		Nuts, bolts & washers-each type	7318	Set	1	
F.6		Vent plugs	8507	Nos.	10	
F.7		Spare dry cell	8507	Nos.	10	
F.8		BHMS sensors for each type and rating	8536	Nos.	10 % of total population	

Notes:-

1. AMOUNT PAYABLE FOR ENGINEER PER VISIT TO SITE = VISIT CHARGES AS PER SL. NO. C.1 ABOVE + (DAILY CHARGES AS PER SL. NO. C.2 ABOVE X NO. OF DAYS AT SITE) (TO BE CERTIFIED BY BHEL SITE).
2. THE VISIT CHARGES SHALL BE INCLUSIVE OF CHARGES OF AIR FARE/ TRAIN FARE/ VISA FEES, BOARDING/ LODGING, LOCAL CONVEYANCE, MEDICAL, INSURANCE ETC.