

## "Schedule of quantity and rates" cum "Unprice bid format"

Name of work : Supply, E&C of BOS for restoration of PCSS-4 at 1x65MW of Solar PV plant of NLC at Neyveli, Cuddalore District, Tamilnad

Tender Ref no. T0AWX00049 dated:23.09.2023

S. No.	DESCRIPTION OF ITEM	UOM	Qty	Rate in Rs.	Amount in Rs.	Weightage %
	<b>Section A: Electrical Works</b>					
<b>1</b>	<b>Dismantling of existing items, removal, transportation to the designated place (within the plant boundary), Supply and Installation of the following Miscellaneous items including material handling</b>					
1.1	Supply of Board for electric shock	NO	1			0.04320%
1.2	Supply of Board for artificial respiration	NO	1			0.04369%
1.3	Supply of Board displaying dos and donts.	NO	1			0.03357%
1.4	Supply of Board displaying fire extinguishers data	NO	1			0.02843%
1.5	Supply of No smoking board	NO	1			0.00979%
1.6	Supply of Danger boards with details such as value	NO	6			0.21042%
1.7	Supply of Identification boards, of suitable sizes	NO	2			0.11431%
1.8	Supply of DCP type 9kG capacity Fire Extinguishers with SBC powder catridge operated (200GM, IS 4947) with controllable discharge mechanism class B rating 34B as per IS 15683. including all necessary statutory certificates	NO	10			0.43496%
1.9	Two fire bucket with suitable MS Stand sets	NO	2			0.03380%
1.10	Insulating mat Class A 2mm thick upto 3.3kV class, 10x1m as per IS-15652	NO	5			1.63502%
1.11	Insulating mat Class C 3mm thick upto 33kV class, 10x1m as per IS-15652	NO	2			0.64666%
<b>2</b>	<b>Receipt, Unloading, Material Handling from Trucks / Trailers / Transport carriers / wagons etc., transportation to site / site stores &amp; storage yard, verification, stacking, documentation / updating MM package in computer systems for various stages of works &amp; preservation of materials, Erection &amp; Testing of Cables (Including removal of the existing damaged cables, terminations etc.), including providing all necessary crane (Pick and carry, forklift) equipment, manpower viz, T&amp;P consumables all complete as per instruction and direction of BHEL Engineer. Note: Supply of Cable glands, termination kits, and cable lugs will be in the scope of BHEL.</b>					
2.1	Glanding, Termination and jointing of '1Cx300 SQMM Al Armour,33kV (UE) grade HT cable at HT switchgear end .	Nos	9			1.4991%
2.2	Glanding, Termination and jointing of 1C X 240 sq.mm DC cable Copper conductor, EBXL XLPE insulated, Armored cable at PCU End.	Nos	80			0.4174%
2.3	Glanding, Termination and jointing of '1Cx 630 sqmm, LT power cable: Al conductor at PCU End	Nos	48			0.3915%
2.4	Glanding, Termination and jointing of '4Cx16 sqmm,LT power cable Al conductor	Nos	20			0.0647%

S. No.	DESCRIPTION OF ITEM	UOM	Qty	Rate in Rs.	Amount in Rs.	Weightage %
2.5	Glanding, Termination and jointing of 4Cx10 sqmm, ,LT power cable Al conductor	Nos	20			0.0647%
2.6	:4Cx4 sqmm,,LT power cable Al conductor including glanding & termination	Meter	362			0.5675%
2.7	3Cx4 sqmm, 'LT power cableAl conductor including glanding & termination	Meter	300			0.4703%
2.8	10Cx 2.5 sqmm,Control cable Copper conductor including glanding & termination	Meter	62			0.1276%
2.9	5Cx 2.5 sqmm,Control cable, Copper conductor including glanding & termination	Meter	144			0.2257%
2.10	2Cx 1.5 sqmm, ,Control cable,Copper conductor including glanding & termination	Meter	673			0.8902%
2.11	2Px0.5 sq.mm signal cable including glanding & termination	Meter	84			0.1523%
2.12	5Px0.5 sq.mm signal cable including glanding & termination	Meter	48			0.0776%
2.13	12Cx1.5 sq.mm signal cable laying glanding	Meter	48			0.1282%
2.14	CAT 5 ethernet cable including glanding & termination	Meter	111			0.9054%
2.15	RS 485 communication cable including glanding & termination	Meter	78			1.2610%
2.16	OFC cable for scada	Meter	500			3.4293%
2.17	OFC cable for telephone system	Meter	100			0.6859%
2.18	33KV,1Cx300Sq.mm (UE) Al cable Termination	Nos	9			1.4109%
2.19	Commissioning for the cables listed above (5% of the Sl.No.2.1 to 2.19)	Lot	1			0.6384%

S. No.	DESCRIPTION OF ITEM	UOM	Qty	Rate in Rs.	Amount in Rs.	Weightage %
3	<b>Receipt, Unloading, Material Handling from Trucks / Trailers / Transport carriers etc., transportation to site / site stores &amp; storage yard, verification, stacking, documentation / updating MM package in computer systems for various stages of works &amp; preservation of materials, Dismantling of existing equipment, removal from the PCSS room, transportation to the designated place (within the plant boundary) Erection and Testing, Commissioning of the following items in the PCSS, including providing all necessary crane (Pick and carry, forklift) equipment, manpower viz, T&amp;P consumables all complete as per instruction and direction of BHEL Engineer : Refer TCC part II</b>					
3.1	Power Conditioning Unit including base channel erection (1AU= 4 no. PCU, EACH PCU DIM:3800MM x1000MMx3000MM)	AU	1			1.4158%
3.2	33kV VCB Panel including base channel erection (1AU=2 I/C + 1 O/G=3 PNLs, 3900MMx2725MMx2600MM)	AU	1			1.8616%
3.3	415V ACDB including base channel erection (1AU= 1No ACDB, 3500MMx600MMx2400MM)	AU	1			0.0955%
3.4	110V DC VRLA Battery including base channel erection (1AU=55AH capacity having 54 cells, 750MMx450MM)	AU	1			0.2596%
3.5	110V DC 15A Battery charger including base channel erection (750MMx750MMx1500MM)	AU	1			0.2107%
3.6	SCADA RTU Panel including base channel erection (800MMx800MMx1600MM)	AU	1			0.4703%
3.7	230V 5KVA UPS including base channel erection (1320MMx750MMx1600MM)	AU	1			0.2107%
3.8	230V 5KVA UPS Battery including base channel erection (2550MMx800MM)	AU	1			0.2156%
3.9	Commissioning of equipment from Sl.3.1 to 3.8 (10% of the item sl no 3.1 to 3.8)	AU	1			0.4740%
3.10	Commissioning support for the Fire alarm panel (Commissioning supervision by OEM)	AU	1			0.0818%
4	Dismantling of PEB and disposal of the debris at a pre-identified location as directed by BHEL Engineer					
4.1	Steel items: Dismantling steel work in built up sections in angles, tees, flats and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc. including dismembering and stacking within 50 metres lead.	MT	10			0.9494%
4.2	Non-Steel items (Wall panels, roof panels etc.): Dismantling roofing, wall panels including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead	Sqm	250			0.6942%
5	Supply, fabrication, and installation of structural steel panel base frame	MT	0.5			0.8504%

S. No.	DESCRIPTION OF ITEM	UOM	Qty	Rate in Rs.	Amount in Rs.	Weightage %
6	Testing of Inverter transformers (Including oil filtration and other incidental activities)	Nos	2			1.5583%
7	Installation, testing, and commissioning of FDA system Note: Supply of the items shall be in the scope of BHEL	LS	1			0.7161%
	Section B: PEB Supply and installation					
1	Supply, receipt, unloading, preservation, handling, and installation of the Pre Engineered Building (PEB) as per BHEL specifications, and drawings, and as per the directions of BHEL Engineer. Payment Terms: 75% on supply, 20 % on Installation, 5 % on punch points closure	Nos	1			73.29%
	Grand Total (Excl GST)					100.00%
	Bidder to confirm having quoted their price in BHEL NIC portal ( <a href="https://eprocurebhel.co.in">https://eprocurebhel.co.in</a> ) in the manner described in Note:( a) below, by writing "QUOTED" here					
Note						
a	Bidder no need to quote the price here, lumsum Price quoted by bidder in BHEL NIC portal ( <a href="https://eprocurebhel.co.in">https://eprocurebhel.co.in</a> ) shall be cosidered as the total price of this tender SOQ. These rates & amount will be derived from the Total amount quoted and weightage factor assigned against respective items as indicated here.					
b	The rate and amount are inclusive of all applicable taxes, except for the GST. For details of taxes, clause no. 13.0 of the SCC will be applicable.					

**c** Details of SOQ items shall be read in conjunction with the corresponding specifications, drawings and other tender terms.