

TENDER SPECIFICATION

BHEL/PSSR/USTPP/SCT&P/SCT/250

for

**Part works of Erection, Testing & Commissioning of
Illumination works of Unit#1 (Main plant) and identified BOP
areas at 2X660 MW Udangudi Supercritical Thermal Power
Project, Kallamozhi, Tiruchendur Taluk, Tuticorin District,
Tamil Nadu**

VOLUME –II

PRICE BID



BHARAT HEAVY ELECTRICALS LIMITED

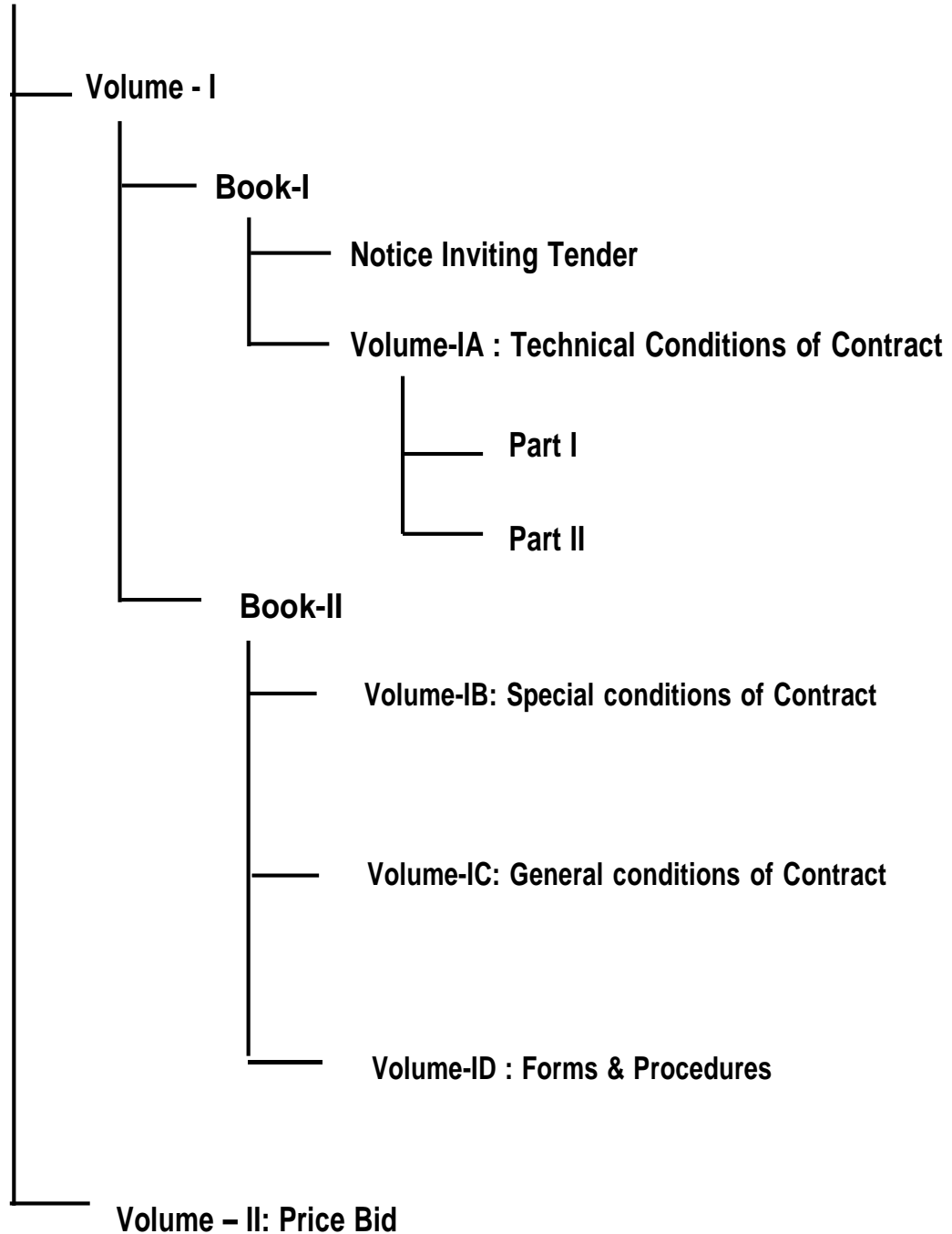
(A Government of India Undertaking)

Power Sector – Southern Region

BHEL site office, 2X660 MW Udangudi STPP,
Kallamozhi, Tiruchendur-628206

TENDER SPECIFICATION CONSISTS OF

Tender Specification



PRICE BID

CONTENTS	
Description	No. of pages
Part A of Price Bid: Instructions to the Bidders	01
Part B : Format for total amount (Enclosed as a separate Excel File)	(Separate Excel File)
Part C: Bill of quantities with weightage for amount of each items with respect to the total quoted price	01

PART A

Instruction to Bidders:

1. The quantity indicated in the BOQ in Part C of Price Bid is approximate only and is liable for variation. Payment will be as per actual quantity executed and as certified by BHEL Engineer.
2. Tenderers are requested to affix their company seal and authorized signature in all pages.
3. Bidders shall quote 'Total Amount' in the format enclosed as a separate Excel File and password protect it. The same shall be taken into account for evaluation and awarding and hence, shall be complete in all respect for the full scope of work defined in specification and in accordance with terms & conditions of the tender. Any other entry elsewhere in the price bid shall be treated as Null and Void. Quoting of rates in any other form/formats will not be entertained. Password for the file shall be furnished by the bidder through email to BHEL on price bid opening date.
4. The above mentioned 'Total amount' is for the entire Bill of Quantity (BOQ) given in Part -C of the Price Bid.
5. BHEL has pre-fixed the weightages for the amount of individual items of Bill of Quantity with respect to the 'Total Amount' in Part C of Price Bid.
6. Based on the pre-fixed weightages, the amount for the individual items of the Bill of Quantity shall be arrived at. This amount shall be rounded off to the nearest rupee.
7. Based on the quantities of individual item and the amount arrived in Sl. No: 6 above, unit rate of individual items shall be derived. This unit rate shall be rounded off to four decimal places.
8. Bidders to note that this is an item rate contract. Payment shall be made for the actual quantities of work executed as certified by BHEL Engineer.

Part C : Bill of Quantities

Tender Specification BHEL/PSSR/USTPP/SCT&P/SCT/250 for Part works of Erection, Testing & Commissioning of Illumination works of Unit#1 (Main plant) and identified BOP areas at 2X660 MW Udangudi Supercritical Thermal Power Project, Kallamozhi, Tiruchendur Taluk, Tuticorin District, Tamil Nadu

Sl.No.	Description	Unit	QTY	Weightage for amount of each item(Nearest to the 7 decimal points) w.r.t.to the total amount
1	Lighting Luminaires (complete with accessories) including fixing of lighting lamps			
1.2	Type FC06 (LED)-40W LED TUBE LIGHT-Indoor-Surface/Hanging-Industrial type LED fixture suitable for conduit /surface/ suspended mounting, with integral driver aesthetically designed for Switchgear / Equipment room/ Staircase/ Corridor	Nos	181	0.0150648
1.3	Type FC26 (LED)-40W LED RECESS 1X4 PANEL LIGHT (300mm x 1200mm)-Indoor-Recess-Panel (approx. 1200 mm X 300 mm) LED luminaire suitable for recess mounting in false ceiling with integral driver aesthetically designed for Control Room/ Office	Nos	2	0.0002815
1.6	Type FC07 (LED)-14W LED SURFACE PANEL LIGHT,220V DC-Indoor-Surface-Industrial type LED fixture suitable for conduit/ surface/ suspended/ column mounting, having integral driver. Fixture shall operate on 220V DC input supply with necessary accessories like DC to AC convertor etc.	Nos	18	0.0023110
1.8	Type FC34 (LED)14W LED BULKHEAD LIGHT,220V DC-Indoor-Hanging/Wall-Well glass, dust proof type LED fixture having integral driver. Fixture shall operate on 220V DC input supply with necessary accessories like DC to AC convertor etc.	Nos	15	0.0012485
1.12	Type SB11 (LED)-100W LED BAY LIGHT-Indoor/Outdoor-Hanging/Ceiling/Wall-Medium bay, Industrial type LED fixture	Nos	13	0.0010820
1.13	Type SB02 (LED)-150W LED BAY LIGHT-indoor/Outdoor- Hanging/Ceiling/Wall-High Bay Industrial type LED fixture	Nos	32	0.0052635
1.16	Type SS63 (LED)-150W LED STREET LIGHT-Outdoor-Pole mounting-Street light LED fixture	Nos	38	0.0051906
1.17	Type SW41 (LED)-45W LED WELL GLASS LIGHT-Outdoor/Semiclosed-Wall/Hanging-Well glass type, vapour proof LED fixture suitable for Boiler / ESP platforms	Nos	673	0.0700179
1.18	Type SW42 (LED)-70W LED WELL GLASS LIGHT-Outdoor-Wall/Hanging-Well glass type, vapour proof LED fixture suitable for Boiler / ESP platforms	Nos	260	0.0270500

Part C : Bill of Quantities

**Tender Specification BHEL/PSSR/USTPP/SCT&P/SCT/250 for
Part works of Erection, Testing & Commissioning of Illumination works of Unit#1 (Main plant) and identified BOP areas at 2X660 MW
Udangudi Supercritical Thermal Power Project, Kallamozhi, Tiruchendur Taluk, Tuticorin District, Tamil Nadu**

Sl.No.	Description	Unit	QTY	Weightage for amount of each item(Nearest to the 7 decimal points) w.r.t.to the total amount
3	Switch boxes for individual control of circuits (Switchboards consisting of switch boxes, switches, switch plates and fixing accessories.)			0.0000000
3.1	Type SWB1	Nos	95	0.0049418
3.2	Type SWB2	Nos	99	0.0051499
3.4	Type SWB4	Nos	10	0.0005202
4.0	Junction boxes			
4.1	Type JB-F	Nos	1147	0.0536995
5	Receptacles			
5.1	Type RA	Nos	55	0.0028611
5.3	Type RB	Nos	30	0.0015606
5.4	Type RC	Nos	26	0.0035283
8	Flexible electrogalvanised conduit			0.0000000
8.1	20 mm dia flexible electrogavanised PVC coated conduits, 1.6 mm thick	Mtr	1575	0.0196633
11	EXIT SIGN with lamp	Nos	42	0.0013109
14	Lighting Panels (LP)			0.0000000
14.1	AC Normal / Emergency indoor Type LP-A(6) [with timer] (app. Weight 20 kg)	Nos	2	0.0010826
14.2	AC Normal / Emergency indoor Type LP-A(12) [without timer] (app. Weight 30 kg)	Nos	6	0.0015606
14.5	AC Normal/Emergency Indoor Type LP-A (18) [with timer] (app. Weight 50 kg)	Nos	10	0.0026010
14.7	DC indoor Type LP-D (6) (app. Weight 20 kg)	Nos	5	0.0013005

Part C : Bill of Quantities

**Tender Specification BHEL/PSSR/USTPP/SCT&P/SCT/250 for
Part works of Erection, Testing & Commissioning of Illumination works of Unit#1 (Main plant) and identified BOP areas at 2X660 MW
Udangudi Supercritical Thermal Power Project, Kallamozhi, Tiruchendur Taluk, Tuticorin District, Tamil Nadu**

Sl.No.	Description	Unit	QTY	Weightage for amount of each item(Nearest to the 7 decimal points) w.r.t.to the total amount
18	Conduits including laying of Wires (GI Wires, Cu PVC Wires, etc.)			
18.1	GI CONDUITS, 1.6MM THICK, 20MM DIA	Mtr	18000	0.4213560
18.2	GI CONDUITS, 1.6MM THICK, 25MM DIA	Mtr	150	0.0036674
20	Fabrication Of J-Pole of 4.5 m height from 40mm dia Metal Conduits	Nos	500	0.0468896
22	Earthflats			
22.3	GS FLAT 25 X 6 mm	Mtrs	200	0.0016448
23	Structural Steel for supports (Angles,Channels,etc)	Mtr	1.9	0.0046974
24	Laying of Power Cables			
24.2	3.5C-50sq.mm	Mtr	2000	0.0356384
24.6	2C-95sq.mm	Mtr	1000	0.0109658
25	Termination of Power cables			
25.2	3.5C-50sq.mm	Nos	100	0.0048089
25.6	2C-95sq.mm	Nos	30	0.0013978
BOQ For items already erected by Unit#1 Agency M/s.Avaids and Requires Charging, Completion of Commissioning and Successful Demonstration				
28	Charging of Lighting Luminaries, Fans, Emergency Lighting Units, Exit Signs,Completion of Commissioning and Successful demonstration of already erected items by Existing agency			

Part C : Bill of Quantities

Tender Specification BHEL/PSSR/USTPP/SCT&P/SCT/250 for Part works of Erection, Testing & Commissioning of Illumination works of Unit#1 (Main plant) and identified BOP areas at 2X660 MW Udangudi Supercritical Thermal Power Project, Kallamozhi, Tiruchendur Taluk, Tuticorin District, Tamil Nadu

Sl.No.	Description	Unit	QTY	Weightage for amount of each item(Nearest to the 7 decimal points) w.r.t.to the total amount
28.1	BOQ NO:1.2. Type FC06 (LED)-40W LED TUBE LIGHT-Indoor-Surface/Hanging-Industrial type LED fixture suitable for conduit /surface/ suspended mounting, with integral driver aesthetically designed for Switchgear / Equipment room/ Staircase/ Corridor	Nos	86	0.0021474
28.2	BOQ NO:1.12. Type SB11 (LED)-100W LED BAY LIGHT-Indoor/Outdoor-Hanging/Ceiling/Wall-Medium bay, Industrial type LED fixture	Nos	73	0.0018228
28.3	BOQ No:1.13 Type SB02 (LED)-150W LED BAY LIGHT-indoor/Outdoor- Hanging/Ceiling/Wall-High Bay Industrial type LED fixture	Nos	234	0.0115468
28.4	BOQ No:1.17 Type SW41 (LED)-45W LED WELL GLASS LIGHT-Outdoor/Semiclosed-Wall/Hanging-Well glass type, vapour proof LED fixture suitable for Boiler / ESP platforms	Nos	512	0.0159803
28.5	BOQ No:1.18 Type SW42 (LED)-45W LED WELL GLASS LIGHT-Outdoor/Semiclosed-Wall/Hanging-Well glass type, vapour proof LED fixture suitable for Boiler / ESP platforms	Nos	250	0.0078029
29	Charging of LDBs / LPs / SBs /JBs / 24V Lighting Modules/ Receptacles & Miscellaneous equipment,Completion of Commissioning and Successful demonstration of already erected items by Existing agency			
29.1	BOQ No:4.1 Type JB-F	Nos	600	0.0084271
29.2	BOQ No:14.1 AC Normal / Emergency indoor Type LP-A(6) [with timer] (app. Weight 20 kg)	Nos	4	0.0006496
29.3	BOQ No:14.2 AC Normal / Emergency indoor Type LP-A(12) [without timer] (app. Weight 30 kg)	Nos	8	0.0006242
29.4	BOQ No:14.5 AC Normal/Emergency Indoor Type LP-A (18) [with timer] (app. Weight 50 kg)	Nos	5	0.0003901

Part C : Bill of Quantities

**Tender Specification BHEL/PSSR/USTPP/SCT&P/SCT/250 for
Part works of Erection, Testing & Commissioning of Illumination works of Unit#1 (Main plant) and identified BOP areas at 2X660 MW
Udangudi Supercritical Thermal Power Project, Kallamozhi, Tiruchendur Taluk, Tuticorin District, Tamil Nadu**

Sl.No.	Description	Unit	QTY	Weightage for amount of each item(Nearest to the 7 decimal points) w.r.t.to the total amount
29.5	BOQ No:14.7 DC indoor Type LP-D (6) (app. Weight 20 kg)	Nos	2	0.0001561
30	BOQ No.18.1 Pulling & termination of wires and earth wires,Completion of Commissioning and Successful demonstration of Conduits including laying of Wires (GI Wires, Cu PVC Wires, etc.) by Existing agency	Mtrs	20000	0.1872693
31	BOQ No.8.1 Completion of Commissioning and Successful demonstration of 20 mm dia flexible electrogalvanized PVC coated conduits, 1.6 mm thick by Existing agency	Mtrs	700	0.0013109
32	BOQ No.20 Completion of Commissioning and Successful demonstration of Fabrication Of J-Pole of 4.5 m height from 40mm dia Metal Conduits erected by Existing agency	Nos	250	0.0035163