## Corrigendum 1 Dated 08/04/2025 CPC Tender No.: BHEL/CPC/YNR/ENB-1/25/090

Work Description: MANUFACTURING, SUPPLY, RECEIPT AT SITE, ERECTION INCLUDING CIVIL, SANITARY WORK, INTERNAL/ EXTERNAL ELECTRIFICATION, PAINTING, FINISHING WORK, ADJOINING ROADS & DRAINS ETC. ALL COMPLETE AS PER DRAWINGS, TECHNICAL SPECIFICATIONS AND HANDING OVER TO SITE OF REMOVABLE/ RE-ERECTABLE TYPE PRE-ENGINEERED, PRE-FABRICATED OFFICE BUILDING, CLOSED STORAGE SHEDS. & SAFETY PARK FOR 1X800 MW DCRTPP, HPGCL, YAMUNA NAGAR, HARYANA.

PACKAGE-A: IMMOVABLE MATERIAL PACKAGE- B: MOVABLE MATERIAL

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### A) Time Extension: Clause No. 1.0 Salient Features of NIT in NOTICE INVITING TENDER is revised as below:

Sl. No.	Clause No.	Existing in NIT	Revised As
1	SI. No. v) DUE DATE & TIME OF OFFER SUBMISSION	Date: 08/04/2025, Time: 10:00 Hrs	Date: 11/04/2025, Time: 10:00 Hrs
2	SI. No. vi) OPENING OF TENDER	Date: 08/04/2025, Time: 16:30 Hrs	Date: 11/04/2025, Time: 16:30 Hrs

### B) Rate Column in BOQ CUM RATE SCHUDLE OF PACKAGE A AND PACKAGE-B (attached herewith as Annexure -A) is modified as below:

Sl. No.	Clause No.	Existing in Tender	Revised As
1	BOQ Cum Rate Schedule (Package A-	RATES (INR)= VALUE FOR PACKAGE-A * WEIGHTAGE	RATES (INR)= TOTAL QUOTED PRICE
	IMMOVABLE ITEMS)	/(QUANTITY*100) (ROUNDED OFF TO TWO PLACES AFER	* WEIGHTAGE /( QUANTITY*100)
	Heading of Column no. 5	DECIMAL)	
2	BOQ Cum Rate Schedule (Package A-	AMOUNT (INR) TOTAL QUOTED PRICE * QUANTITY	AMOUNT (INR)= RATE * QUANTITY
	IMMOVABLE ITEMS)		
	Heading of Column no. 6		
3	BOQ Cum Rate Schedule (Package B-	RATES (INR)= VALUE FOR PACKAGE-B* WEIGHTAGE /(	RATES (INR)= TOTAL QUOTED PRICE
	MOVABLE ITEMS)	QUANTITY*100) (ROUNDED OFF TO TWO PLACES AFER	* WEIGHTAGE /( QUANTITY*100)
	Heading of Column no. 5	DECIMAL)	
4	BOQ Cum Rate Schedule (Package B-	AMOUNT (INR) TOTAL QUOTED PRICE * QUANTITY	AMOUNT (INR)= RATE * QUANTITY
	MOVABLE ITEMS)		
	Heading of Column no. 6		

### Note:

- 1) All other terms and conditions against this NIT shall remain unchanged.
- 2) This corrigendum is to be submitted duly signed and stamped along with the Techno-commercial bid (Part-I).

for BHARAT HEAVY ELECTRICALS LTD
Deputy Manager/ SCT- CPC

## Annexure - A Revised BOQ CUM RATE SCHEDULE

#### PROIECT: 1X800 MW DCRTPP YAMUNA NAGAR PACKAGE A- BOO CUM RATE SCHEDULE (IMMOVABLE MATERIAL) **BOO CUM RATE SCHEDULE (PRICE BID)** RATES (INR)= TOTAL QUOTED PRICE \* WEIGHTAGE /( AMOUNT (INR)= RATE \* WEIGHTAGE (IN **QTY** ITEM NO. DESCRIPTION OF ITEM UNIT QUANTITY PERCENTAGE) QUANTITY\*100) CIVIL WORKS EARTH WORK Earth work In excavation, backfilling and disposal including necessary men/women, C-1 materials, equipment, loading, transportation, unloading, dewatering etc. as per specification. drawing and as directed by engineer- in-charge for the following. Earth work in stripping of top soil upto a maximum depth of 0.30m below ground level so as to exclude all debris, grass, vegetation, bushes, trees having girth upto 300mm including roots and organic materials etc for leveling and grading including dressing to specified levels & C-1.1 SQM 4775 0.1292170100 grades and compacting the graded/stripped surface by manual/mechanical means, disposal of stripped materials within a lead upto 1km etc all complete as per specification, drawing and as directed by the engineer-in-charge. Preparation of sub grade by excavating earth to required depth for all types of soil/ rock C-1.2 dressing to camber and consolidating the base including making good the undulation etc. and CUM 785 0.0509845500 disposal of surplus earth within a lead upto 1 km etc. all complete. Earth work in excavation in all types of soil including ash which can be excavated by any means including setting out, levelling, dewatering (but excluding special type of dewatering viz. well point method), dressing the sides & bottom, all lifts, ramming/compacting the excavated C-1.3bottom, stacking, disposal of surplus excavated materials within a lead upto 1Km. spreading/levelling of disposed materials etc all complete for following depths below ground C-1.3.1 Depth from ground level but not exceeding 2 m 1349 0.1387245200 CUM C-1.3.2 Depth exceeding 2 m but not exceeding 4 m CUM 117 0.0150712900 Earth work in excavation in soft rock including weathered rock which can be excavated by means of crow bar, pick axe, pneumatic rock breaker attachment with excavator machine etc but does not require chiselling or blasting including setting out, levelling, dewatering C-1.4 (wherever required), dressing the sides & bottom, all lifts, ramming/compacting the excavated bottom, stacking, disposal of surplus excavated materials within a lead upto 1 Km, spreading / levelling of disposed materials etc all complete for following depths below ground level. C-1.4.1 Depth from ground level but not exceeding 2 m CUM 169 0.0257942900 C-1.4.2 Depth exceeding 2 m but not exceeding 4 m CUM 113 0.0206964800 Earthwork in Back filling upto any depth below ground level around foundations, plinths, trenches, drains etc. to proper grade and level in layers not exceeding 250 mm thickness using/with selected materials from compulsorily excavated earth available within a lead upto C-1.5 1Km and compacted as specified including re-excavation of stacked earth, watering, ramming/compaction by manual/mechanical means, dressing etc. all complete for the Each layer compacted so as to achieve at least 90% maximum dry density as per IS2720 (Part-C-1.5.1 970 0.0903000300 Earthwork in Back filling upto any depth below ground level around foundations, plinths, trenches, drains etc. to proper grade and level in layers not exceeding 250 mm thickness using/with selected materials directly from excavation within a lead upto 1Km and compacted as specified including watering, ramming/compaction by manual/mechanical means, dressing etc. all complete for the following: Each layer compacted so as to achieve at least 90% maximum dry density as per IS-2720 (Part-C-1.6.1 CUM 295 ₹ ₹ 0.0124538700 Extra over ST No. C-1.1 to C-1.6 for carriage of excavated earth/selected materials for every 1 C-1.7 289 ₹ 0.0037540200 CUM

km or part thereof beyond an initial lead of 1Km.

# PROJECT: 1X800 MW DCRTPP YAMUNA NAGAR PACKAGE A- BOQ CUM RATE SCHEDULE (IMMOVABLE MATERIAL) BOQ CUM RATE SCHEDULE (PRICE BID)

	BOQ CUM RAT	<b>TE SCHEDU</b>	JLE (PR	ICE BID)		
ITEM NO.	DESCRIPTION OF ITEM	UNIT	QTY	RATES (INR)= TOTAL QUOTED PRICE * WEIGHTAGE /( QUANTITY*100)	AMOUNT (INR)= RATE * QUANTITY	WEIGHTAGE (IN PERCENTAGE)
C-1.8	Earthwork in backfilling upto any depth below ground level around foundations, plinths, trenches, drains etc. to proper grade and level in layers not exceeding 250 mm thickness so as to achieve required compaction with approved borrowed soil (borrowed soil to be arranged by the bidder) and compacted as specified including supplying boorowed soil, royalty/seignorage fee (if any), sorting, spreading, breaking clods, watering, ramming/compaction by manual/mechanical means, dressing, finishing to required lines, grades and slopes, tesing, all lead and lifts etc. all complete as per specification, drawing and as directed by the engineer for the following:					
C-1.8.1	Each layer compacted so as to achieve at least $90\%$ maximum dry density as per IS-2720 (Part-VII)	CUM	2372	₹ -	₹ -	0.5596488600
C-1.9	Construction of granular sub-base (GSB) by providing close graded material confirming to specification, mixing in a mechanical mix plant at OMC. GSB shall be provided in two layers of 75mm each. Each Carriage of mixed material by tippers to work site for all lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density complete as per specification and direction of EIC including supply of all material, T&P, labour etc all.	CUM	1125	<b>₹</b>	₹ -	2.5817017600
C-1.10	Providing and Filling in trenches, plinths, area paving and other underground structures with graded stone aggregate of size range 63 mm to 45 mm in layers not exceeding 230 mm in thickness including breaking of stone boulders to required sizes, filling the interstices with selected sand and compacting to 85 % of original volume of stone stack for all lifts etc. all complete. Payment shall be made for the measurement of the volume of the compacted fill.	CUM	166	₹ -	₹ -	0.2792394600
C-1.11	Providing & filling in soak pit with brick bats 40-80mm including sand packing etc. complete, as per standard specification and instructed by bhel engineer.	CUM	28	₹ -	₹ -	0.0467066100
C-2	CONCRETE WORKS (INCLUDING SUPPLY OF CEMENT) Providing and placing concrete work including cost of labour, materials and equipment for handling, transportation, batching, mixing, placing, vibrating and curing, (excluding cost of centering, shuttering and reinforcement) with mechanised equipments like batching plant / concrete mixers, transit mixer, concrete pump etc. complete as per drawing, specifications and as per direction of engineer in charge for the following.					
C-2.1	Concrete of grade M7.5 (1 part cement, 4 part sand, 8 parts of 20mm graded aggregate by volume) as filling course at any depth below finished floor level, under and around foundations/floors, mass fill etc.	CUM	182	₹ -	₹ -	0.8036052800
C-2.2	Concrete of grade M10 (1 part cement, 3 part sand, 6 parts of 20mm graded aggregate by volume) as lean concrete, levelling course, plinth protection, mud mat under and around foundations/floors at any depth below finished floor level etc.	CUM	99	₹ -	₹ -	0.4626312100
C-2.3	Concrete of grade M15 (1 part cement, 2 part sand, 4 parts of 20mm graded aggregate by volume) as lean concrete, levelling course, mud mat under and around foundations/floors at any depth below finished floor level etc.	CUM	1107	₹ -	₹ -	5.7434485700
C-2.4	Concrete of grade M20 (1 part cement, 1.5 part sand, 3 parts of 20 mm graded aggregate by volume) for reinforced concrete works with sand and graded hard stone aggregate of 20mm nominal size in foundations / sub-structure / superstructure for any shape, position or thickness etc complete including use of plasticizer/ superplasticizer conforming to IS:9103 (latest) to achieve required slump in concrete all complete as per specification & drawings.	CUM	631	₹ -	₹ -	3.6214856600

# PROJECT: 1X800 MW DCRTPP YAMUNA NAGAR PACKAGE A- BOQ CUM RATE SCHEDULE (IMMOVABLE MATERIAL) BOO CUM RATE SCHEDULE (PRICE BID)

ITEM NO.	DESCRIPTION OF ITEM	UNIT	QTY	RATES (INR)= TOTAL QUOTED PRICE * WEIGHTAGE /( QUANTITY*100)	AMOUNT (INR)= RATE * QUANTITY	WEIGHTAGE (IN PERCENTAGE)
C-3	FORM WORKS: Providing, fixing and removing formwork at any elevations for all structures, as per specifications and including all labour, material, scaffoldings and centereing complete including pockets etc. complete as per drawing, specifications and as per direction of engineer in charge for the following.					
C-3.1	Fairface form work with good quality water proof ply wood of minimum 12mm thickness and smooth surface below finished ground floor level for foundations, footings, base of columns, walls, columns, pilasters, beams, mass concrete, trenches etc. including chamfering of edges as per drawing, specification and instruction of engineer in charge.	SQM	3175	₹ -	₹ -	2.1173550700
C-3.2	Fairface form work with good quality water proof ply wood of minimum 12mm thickness and smooth surface above finished ground floor level for columns, beams, suspended floors, roofs, lintels, cantilevers, staircases, landings, balconies etc. including chamfering of edges as per drawing.for all heights as per specification, drawing and instruction of engineer in charge.	SQM	416	₹ -	₹ -	0.3365428500
C-4	REINFORCEMENT (INCLUDING SUPPLY OF REINFORCEMENT STEEL)					
C-4.1	Providing, straightening, cutting, bending, placing in position at all level, binding in position of steel reinforcements of TMT steel of grade Fe500D/Fe-550D or 500EQR or any other grade confirming to IS:1786 including cost of reinforcement steel, binding wire, labour, scaffolding, transportation to & from stores etc. complete all as per specifications, drawings and as directed by Engineer.	MT	27	₹ -	₹ -	2.4165294700
C-4.2	Transporation, Straightening, Cutting, Bending, Placing in position at all level, binding in position of steel reinforcement of TMT steel of grade Fe-500D or 500 EQR confirming to IS:1786 including cost of binding wire, labour, scaffolding, transportation from stores etc. complete all as per specifications, drawings and as directed by Engineer In-charge. Note: BHEL to supply TMT steel free of cost either from scrap in cut pieces or fresh steel.	МТ	6	₹ -	₹ -	0.0682880100
C-4.3	Supply & Fixing of bamboo splint rinforccement as per IS 15192 (2018) for footing, beam, column and slab including supply, loading, transportation, unloading & making in shape and size as per drawing & fixing with binding wire etc. all complete as per drawing specifications.	KG	5786	₹ -	₹ -	0.0881782000
C-5	MS EMBEDMENTS					
C-5.1	Supply, fabricating and fixing of mild steel embedments, foundation bolt, inserts, pipe sleeves, angle pieces, rungs of various diameters, plates of dimensions as required etc. including welding, bolting, cutting, drilling, scaffolding, setting etc. all complete.	MT	6	₹ -	₹ -	0.7066373700
C-6	BRICKWORK Brickwork masonry including all labour, material, equipment, transportation, handling, scaffolding etc. at all levels as per specification, drawings and as directed by engineer - in - charge.					
C-6.1	Providing brick work in cement mortar 1:6 (1 part cement 6 parts coarse sand) in walls, chambers etc. in thickness varying from 230mm to 460mm at all depths, places and positions below plinth including raking out joints, curing, scaffolding etc. complete excluding plastering and painting.					
C-6.1.1	Using fly ash lime bricks confirming to IS 12894 with crushing strength of 50 kg/cm2	CUM	161	₹ -	₹ -	1.1181702100
C-6.2	Providing brick work in cement mortar 1:6 (1 cement 6 coarse sand) in walls, chambers etc. in thickness 230mm at all heights, places and position above plinth including raking out joints, curing, scaffolding etc complete excluding plastering and painting.					

# PROJECT: 1X800 MW DCRTPP YAMUNA NAGAR PACKAGE A- BOQ CUM RATE SCHEDULE (IMMOVABLE MATERIAL) BOO CUM RATE SCHEDULE (PRICE BID)

ITEM NO.	DESCRIPTION OF ITEM	UNIT	QTY	RATES (INR)= TOTAL QUOTED PRICE * WEIGHTAGE /( QUANTITY*100)	AMOUNT (INR)= RATE * QUANTITY	WEIGHTAGE (IN PERCENTAGE)
C-6.2.1	Using fly ash lime bricks confirming to IS 12894 with crushing strength of 50 kg/cm2	CUM	137	₹ -	₹ -	1.1860954900
C-6.3	Dismantling stone masonary work/ Brick work for all types of structures at all levels including stacking of servicable material to a lead of 500 m and disposal of unservicable material upto a lead of 2 km, cutting of reinforcement, labour, equipment, safety precautions etc all complete as per drawings, specification and instructions of engineer in charge.	CHM	17	₹ -	₹ -	0.0339334100
C-7	DAMP PROOF COURSE:  Damp proof course including all labour, material (unless otherwise specified in BOQ/contract specification), equipment, transportation, handling, shuttering, centering, curing etc. at all level as per specification, drawings and as directed by Engineer-in-charge.					
C-7.1	Providing Damp Proof Course of 50mm thickness with 1:1.5:3 concrete (10mm and down graded aggregate) with 2% of approved admixture of water proofing compound all complete. Two layers of hot bitumen coating 85/25 grade as per IS:702 @ 1.7Kg./sqm shall be applied one before & one after the DPC.	SOM	84	₹ -	₹ -	0.0417358900
C-8	CEMENT MORTAR PLASTER:  Cement mortar plaster including making grooves whereever required including all labour, material, scaffolding, curing etc at any level as per specification, drawings and as directed by engineer - in - charge.					
C-8.1	Providing 18mm thick plaster in two layers outside the building/boundary wall in cement mortar 1:6 on walls, finished to a smooth finish including providing 3mmx3mm size grooves at junctions of two dissimilar materials all complete.	SQM	795	₹ -	₹ -	0.3268510200
C-8.2	Providing 12mm thick plaster inside the building/boundary wall in cement mortar 1:6 on walls finished to a smooth finish as per specification all complete.	SQM	743	₹ -	₹ -	0.2524075100
C-8.3	Providing 2mm thick neat cement finish using PPC confirming to IS 1489 (part-1) / OPC grade 43/53 over concrete base for flooring, paving, plastered surface, etc. including curing & cleaning and scafolding complete.		94	₹ -	₹ -	0.0053074200
C-9	FINISHES TO CONCRETE / PLASTERED SURFACES: Finishes, painting to concrete, plastered surfaces including all labour, material (unless otherwise specified in BOQ/contract specification), equipment, surface preparation, scaffolding etc. at all level as per specification, drawings and as directed by engineer-in-charge.					
C-9.1	Two or more coats of white wash/ colour wash as per IS 627 of approved brand and manufacture to give an even shade including a priming coat as per specifications.	SQM	1284	₹ -	₹ -	0.0507312500
C-9.2	Providing and applying two or more coats of oil bound destemper as per IS 428 of approved brand, shade and manufacture to give smooth, hard, durable & glossy finish over a coat of primer over prepared plaster surface as per manufacturers guideline.		20	₹ -	₹ -	0.0021303100
C-10	FLOORING AND SKIRTING: Flooring and Skirting including all labour, material, equipment etc as per specification, drawings and as directed by engineer - in - charge.					

# PROJECT: 1X800 MW DCRTPP YAMUNA NAGAR PACKAGE A- BOQ CUM RATE SCHEDULE (IMMOVABLE MATERIAL) BOQ CUM RATE SCHEDULE (PRICE BID)

ITEM NO.	DESCRIPTION OF ITEM	UNIT	QTY	RATES (INR)= TOTAL QUOTED PRICE * WEIGHTAGE /( QUANTITY*100)	AMOUNT (INR)= RATE * QUANTITY	WEIGHTAGE (IN PERCENTAGE)
C-10.1	Providing and laying 50 mm thick heavy duty cement concrete in flooring with metallic hardener pigmented topping 12mm thick uniform graded treated iron particles in flooring. Under layer of 38mm thick cement concrete mix 1:2:4 (1 cement: 2 sand: 4 stone aggregates 12.5 mm 20 well graded) and top layer of 12mm thick metallic concrete of mix 1:2 (1 cement hardner mix with approved quality metallic hardening compound: 2 stone aggregate 6mm nominal size) by volume including cement slurry, rounding off edges, aluminium strips etc. all complete for following (Quoted item rate shall be inclusive of providing glass joint strips).	SQM	8160	₹ -	₹ -	5.9269377500
C-10.2	Providing and laying vitrified ceramic tiles of polished variety from reputed / approved manufacturer confirming to applicable IS standard complete including underbed of cement mortar 1:3 minimum 20mm thick for flooring and 12mm thick underbed for dado/skirting with neat cement slurry @3.3Kg/sqm etc. all complete as approved by BHEL Engineer-Incharge for following:					
	7mm thick tiles of size 600x600 mm In flooring	SQM	1149	₹ -	-	1.4775907200
C-10.2.2 C-10.3	7mm thick tiles of size 300x300 mm In skirting and dado upto specific height Providing and laying vitrified ceramic tiles of matt finish (antiskid) from reputed / approved manufacturer confirming to applicable IS standard complete including underbed of cement mortar 1:3 minimum 20mm thick underbed for flooring and 12mm thick underbed for dado/skirting with neat cement slurry @3.3Kg/sqm etc. all complete as approved by BHEL Engineer-In-charge for following:	SQM	30	-	-	0.0405087900
C-10.3.1	7mm thick tiles of size 300x300 mm In flooring	SQM	81	₹ -	₹ -	0.1145106500
C-10.3.2	7mm thick tiles of size 300x300mm In skirting and dado upto specific height	SQM	14	₹ -	₹ -	0.0204436100
C-11	MISCELLANEOUS WORKS: Miscellaneous works including all labour, material, equipment etc. at any level unless otherwise specified as per specification, drawings and as directed by engineer - in - charge.					
C-11.1	Providing and placing approved quality of 250 micron thick heavy duty low density polyethylene liner (LDPE) films manufactured from polyethylene resin over cement sand mortar 1:4 in the base of reservoir/pond as well as on side slopes of embankment to prevent seepage including joining with approved method including testing, necessary excavation, fixing at the edges in plain cement concrete by providing 400mm wide and 300mm thick plain cement concrete 1:2:4 on the top of embankment (the cost of plain cement concrete 1:2:4 shall be excluded and shall be payable separately) as shown in the drawing etc. all complete as per specification and as directed by the engineer-in-charge. Minimum width of LDPE liner shall be 6m.	SQM	500	₹ .	₹ -	0.0303092900
C-11.2	Bore well: Providing 6" dia. boring upto depth of 150 ft. with truck mounted mechanical rig	EACH	3	₹ -	₹ -	0.0664485700
C-11.3	machine with yield test of water.  Extra for boring over 150 ft. depth for every additional 10 ft. or part thereof.	PER FEET	60	-	₹ -	0.0212527600
C-11.4	Supply & fixing 6" dia PVC heavy duty (8-10 kg pressure) casing pipe of standard make (kishan/kasta or equivalent) with approval of BHEL in both the borings.	PER FEET	540	₹ -	₹ -	0.0538299400
C-11.5	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut Granite Kitchen Platforms, Vanity counters, Window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.	SQM	13	₹ -	₹ -	0.0458463500

ITEM NO.	DESCRIPTION OF ITEM	UNIT	QTY	RATES (INR)= TOTAL QUOTED PRICE * WEIGHTAGE /( QUANTITY*100)	AMOUNT (INR)= RATE * QUANTITY	WEIGHTAGE (IN PERCENTAGE)
C-12	WATER SUPPLY: Water supply work including men, material (unless otherwise specified in BOQ/contract specification), equipment etc. at all level as per specification, drawings and as directed by engineer - in - charge.					
C-12.1	Providing and fixing in position of 15 mm dia nominal size screw down type chromium plated brass bib cocks of standard type of approved make and quality as per standard specification. Rate includes jointing materials, sockets, union nut, testing, labours for carrying and fixing etc. complete	NOS.	25	₹ -	₹ -	0.0297139300
C-12.2	Providing and fixing in position of 15 mm dia nominal size screw down type chromium plated brass stop cocks of approved make and quality confirming to IS:8931 as per standard specification. Rate includes cost of jointing materials, sockets, union nut, testing, labours for carrying and fixing etc. complete	NOS.	25	₹ -	₹ -	0.0264123800
C-12.3	Providing and fixing in position of 15 mm dia concussion push button type brass/ gun metal self closing tap including necessary socket, testing etc. complete for urinals as per direction of bhel engineer.	NOS.	14	₹ -	₹ -	0.0113264300
C-12.4	Providing and fixing in position of 25 mm dia gun metal gate valve including all necessary fitting & fixture etc. complete as per standard specification.	NOS.	15	₹ -	₹ -	0.0083692600
C-12.5	Providing and fixing in position of 40 mm dia gate valve including all nacessary fitting & fixture etc. complete as per standard specification.	NOS.	13	₹ -	₹ -	0.0115982800
C-12.6	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all cpvc plain & brass threaded fittings this includes jointing of pipes & fittings with one step cpvc solvent cement, trenching, refilling & testing of joints complete as per direction of engineer in charge. (prior approval of sample and brand by bhel engineer is necessary before supply.)					
C-12.6.1	40mm dia	RM	200	₹ -	₹ -	0.0396142400
C-12.6.2	25mm dia	RM	200	₹ -	₹ -	0.0289020700
C-12.6.3	20mm dia	RM	190	₹ -	₹ -	0.0250711900
C-12.6.4	15mm dia	RM	140	₹ -	₹ -	0.0149591500
C-13	SANITARY: Sanitary work including all labour, material (unless otherwise specified in BOQ/contract specification), equipment etc. at all level as per specification, drawings and as directed by engineer - in - charge.					
C-13.1	Providing and fixing colour floor mounted glazed vitreous china European type water closet conforming to IS:2556 with siphon, open front solid plastic seat and plastic cover, low level 12.5 litre PVC flushing cistern (same colour as WC) with valveless fittings, 2 way bibcock with health faucet necessary C.P connections etc all complete.	NOS.	12	₹ -	₹ -	0.1403276700
C-13.2	Providing and fixing colour glazed vitreous indian type Orissa pattern (580x440mm) water closet conforming to IS:2556 part 3 with all fittings including foot rests, low level 12.5 litre PVC flushing cistern with valveless fittings, 2 way bibcock with health faucet necessary C.P connections etc all complete.	NOS.	3	₹ -	₹ -	0.0271776900
C-13.3	Providing and fixing white flat back glazed vitreous china urinals of size 370x315x620 mm with photo voltaic control flushing system as per IS:2556 (part 6, section 1) with flush pipes, lead pipes, gratings, traps and necessary C.P. fittings etc. all complete.	NOS.	11	₹ -	₹ -	0.2986688000

# PROJECT: 1X800 MW DCRTPP YAMUNA NAGAR PACKAGE A- BOQ CUM RATE SCHEDULE (IMMOVABLE MATERIAL) BOQ CUM RATE SCHEDULE (PRICE BID)

	BUQ CUM KA I	E SCHEDU	TE (FK	,		
ITEM NO.	DESCRIPTION OF ITEM	UNIT	QTY	RATES (INR)= TOTAL QUOTED PRICE * WEIGHTAGE /( QUANTITY*100)	AMOUNT (INR)= RATE * QUANTITY	WEIGHTAGE (IN PERCENTAGE)
	Providing at working site, carrying and lowering into trenches, laying to proper alignment, level and grade, jointing with cm (1:1) and testing of joints etc. of the following size of salt glazed stoneware pipe inclusive of all necessary specials tarred hemp yarn and all jointing materials complete as per standard specifications including all necessary excavation, backfilling, disposal of surplus earth, lead and lift as per site conditions. Rate shall include cost of all materials, labour charges and incidental charges etc. complete.					
C-13.4.1	100mm dia stoneware pipeline including all specials complete.	RM	200	₹ -	₹ -	0.0563925900
C-13.5	Providing, laying light duty non pressure NP2 class RCC pipes with collars jointed with stiff mixture of cement mortar 1:2 including testing of joints etc complete for following.					
C-13.5.1	250mm dia	RM	130	₹ -	₹ -	0.1808273700
C-13.5.2	300mm dia	RM	90	₹ -	₹ -	0.1416526200
C-13.5.3	450mm dia	RM	90	₹ -	₹ -	0.1995217100
C-13.5.4	600mm dia	RM	60	₹ -	₹ -	0.1569155100
	Providing and fixing of precast 80 mm thick RCC cover of mix 1:1.5:3 for man holes of various sizes with reinforcement of 10 mm dia both way tied with tack welding @ 150 mm c/c with 2 hooks of 12 mm dia bars etc. complete.					
C-13.6.1	750mm x 600mm	NOS.	5	₹ -	₹ -	0.0045254500
C-13.6.2	1050mm x 750mm	NOS.	4	₹ -	₹ -	0.0063346400
C-13.7	Providing and fixing in position of 100mm x 50mm HCI "Nahani" trap with HCI gratings, bends, connecting pieces of CI pipe upto outside face of the wall. Making good the damaged surface, testing etc complete as per standard specifications.	NOS.	25	₹ -	₹ -	0.0049758600
C-13.8	Providing and fixing square-mouth S.W. gully trap (100mm x 100mm size p type) class SP-1 complete with C.I. grating brick masonry chamber using common burnt clay non-modular bricks of class designation 7.5, with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design.	NOS.	12	₹ -	₹ -	0.0302270200
C-13.9	Providing & fixing in position of CI vent pipe of dia. 100mm (approx. ht. 3m ) in septic tank. Rate to include all necessary fitting & fixture, labour etc.	RM	23	₹ -	₹ -	0.0447397500
C-13.10	Construction of 230mm thick burnt clay / fly ash lime brick chamber (using OPC grade 43/53) of the following dimensions (inner dimension) with 20mm thick internal & external cement plaster of mix 1:5 (1 cement & 5 coarse sand), neat cement finish, top CI – cover and connectors for sewer lines. rate shall be inclusive of all necessary excavation & filling, PCC-100 mm thick of 1:3:6 for bedding on 100mm thick oversizer soling with 80 mm metal etc. complete.					
	600x450x450 with C.I. cover	NOS.	5	₹ -	₹ -	0.0181778900
	900x600x450 with C.I. cover	NOS.	3	₹ -	₹ -	0.0226484100
ST	STRUCTURAL WORKS					

#### PROIECT: 1X800 MW DCRTPP YAMUNA NAGAR PACKAGE A- BOO CUM RATE SCHEDULE (IMMOVABLE MATERIAL) **BOO CUM RATE SCHEDULE (PRICE BID)** RATES (INR) = TOTAL QUOTED PRICE \* WEIGHTAGE /( AMOUNT (INR)= RATE \* WEIGHTAGE (IN UNIT **QTY** ITEM NO. DESCRIPTION OF ITEM QUANTITY\*100) QUANTITY PERCENTAGE) Erection of structural steel of mild steel/High strength steel rolled section / built up section / combination of both conforming to IS:2062, pipe sections true to line, level, plumb & dimension, rectification if any, installation of erection/connection bolts and application of final finish paint coat as per approved drawing, specification and approval of engineer in charge. Erection bolts shall be arranged by the bidder and is not payable. The work shall be 218 2.3340883000 satisfactorily completed with required tightening of HSFG bolts along with DTI (DIRECT TENSION INDICATOR) washers to be supplied by the bidder (Cost of DTI washer is included in this item and not payable). Payment shall be made for weight of structure & splice plate but not for erection bolts & nuts. DTI washers, gusset plates, stiffeners etc. ELECTRICALS AND ILLUMINATION WORK: Supply, fixing and commissioning of electrical works required for modular office, closed sheds and safety park all complete as per specfiifcation & approved drawings. Bidder to supply & install electrical items like Main Switch with earth leakage protection (30A TPN) suitable sockets/switch units for A/C points, wires, conduits, tees, bends, clamps, IBs, 5amps socket, Modular switch boards & points for computers & telephone for each table/desk, earthing wires etc. complete as per specifications / site requirement. Lighting system shall be designed to meet minimum 300Lux of modular type suitable for false ceilings (for office areas). Also, the bidder should take care of aesthetics and energy conservation. A detailed schematic with BOM (brands/makes) of the electrical fittings shall be submitted for approval from BHEL. Providing earthing pits with 40 mm dia, 4.5 m long GI earth pipes with flange & GI wires with charcoal, salt and as per the standard practice for electrical connection. Rate shall be NOS. 26 0.0888485800 inclusive of all materials, labours, etc complete. (as per relevant IS code) Installation of cables 3 -1/2 core x 95 sqmm aluminium armoured PVC insulated cable confirming to IS 1554 (part -I) including laying of cable below ground, excavation of trench of 600 mm depth in all kind of soil, termination of cables cores with crimp type luggs, providing RM 490 0.1062310200 sand layer below/ above the cable, brick laying both side /above the above the cable and back filling etc complete. Cables are to be laid from 415 volt AC distribution board to feeder pillar board. Installation of cables 3 -1/2 corex 35 sqmm aluminium armoured PVC insulated cable confirming to IS 1554 (part -I) including laying of cable below ground, excavation of trench of 600 mm depth in all kind of soil, termination of cables cores with crimp type luggs, providing RM E-3 700 0.1470227700 sand layer below/ above the cable, brick laying both side /above the above the cable and back filling etc. cables are to be laid from feeder pillar board to lighting panel. Installation of cables 2 core x 10 sqmm aluminium armoured pvc insulated cable confirming to is 1554 (Part -I) including laying of cable below ground, excavation of trench of 600 mm depth (minimum) in all kind of soil, termination of cables cores with crimp type luggs, providing sand RM700 0.1441661200 E-4 layer below & above the cable, brick laying both side & above the cable and back filling etc

NOS.

NOS.

NOS.

6 ₹

₹

0.0040451400

0.0179101900

0.0006416500

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Networking: Supply of networking works required for modular office all complete a sper

specification & approved drawing

Telephone Junction boxes (MDF) Krone type with lock & key

24 port loaded patch panel

9U network rack

N-1

N-2

#### PROJECT: 1X800 MW DCRTPP YAMUNA NAGAR PACKAGE A- BOQ CUM RATE SCHEDULE (IMMOVABLE MATERIAL) **BOQ CUM RATE SCHEDULE (PRICE BID)** RATES (INR)= TOTAL QUOTED PRICE \* WEIGHTAGE /( AMOUNT (INR)= RATE \* WEIGHTAGE (IN QTY UNIT ITEM NO. **DESCRIPTION OF ITEM** QUANTITY PERCENTAGE) QUANTITY\*100) N-4 Supply & Erection of data line system such as I/O and Cat 6 cable NOS. 100 0.0245494400 0.0125032300 N-5 Supply & Erection of voice line system such as I/O and 2 pair telephone cable NOS. 90 ₹ ₹ --0.0279248100 N-6 NOS. Patch Cord 220 ₹ HORTICULTURE WORKS Grassing with selection no. 1 grass including watering and maintenance of the lawn for 60 days H-1 or more till the grass forms a thick lawn, free from weeds and fit for mowing including supplying good earth, if needed etc. all complete as directed by BHEL (I/C) 0.0534038800 H-1.1 In rows 5 cm apart in both directions SQM 1500 ₹ 0.0050026600 H-1.2 With grass turf SQM 150 ₹ Providing and laying brick on edge flooring with bricks of class designation 7.5 on a bed of 12mm cement mortar, including filling the joints with same mortar with common burnt clay non modular bricks: H-2.1 1:4 (1 cement:4 coarse sand) SQM 200 ₹ 0.1103950866 TOTAL AMOUNT (PACKAGE-A) 35.7398481666

	DOQ 001-111112 50111	(1 1				
ITEM NO.	DESCRIPTION OF ITEM	UNIT	QTY	RATES (INR)= TOTAL QUOTED PRICE * WEIGHTAGE /( QUANTITY*100)	AMOUNT (INR)= RATE * QUANTITY	WEIGHTAGE (IN PERCENTAGE)
СМ	CIVIL WORKS (MOVABLE ITEMS)					
CM-1	DOORS & WINDOWS: Doors, windows, ventilators, louvers, roof ventilators, rolling shutters, partitions including all labour, material (unless otherwise specified in BOQ/contract specification), equipment, transportation, handling, preparation of working drawings etc. at all level as per specification, drawings and as directed by engineer - in - charge.					
CM-1.1	Providing and fixing of best quality country wood doors comprising of frame $95 \times 70 \text{mm}$ and $38/40 \text{mm}$ thick flush shutters of solid core type using commercial ply including hold fasts, wind appliances, handles, tower bolts and aldrops, mortise or suitable locks etc. as per the standard practice and applying two coats of synthetic enamel paint of approved shade & color over a coat of primer as directed by BHEL engineer.	SQM	25	₹ -	₹ -	0.1963067600
CM-1.2	Providing and fixing powder coated aluminium work (minimum thickness of powder coating 50 micron) for doors, windows, ventilator and office partition frames including neccessary fittings and fixture e.g. handles, door locks, stoppers etc. with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of engineer-in-charge. (Glazing, Paneling and Dash fasteners to be paid for separately).		700	₹ -	₹ -	0.3872011400
CM-1.3	Providing and fixing steel windows, ventilator with steel sections as per IS:1038, IS:1361 & IS:7452 (latest revision) including all fittings, metal beadings, hold fasts, shop and final painting, glazing etc. all complete. (Glazing shall be paid separately)	SQM	180	₹ -	₹ -	0.5654414000
CM-1.4	Providing and fixing of door closers as per IS 3564 of approved make & quality all complete of following type:					
CM-1.4.1	Over head hydraulic door closures	NOS.	15	₹ -	₹ -	0.0329126400
CM-1.4.2	Floor mounted Hydraulic door closers	NOS.	2	₹ -	₹ -	0.0096210300
CM-1.5	Providing and fixing in position Mechanically operated rolling shutter of hot rolled double dipped galvanised steel lath section of 18 SWG tested mild steel strips at 75mm rolling centres interlocked together through their entire length and jointed together at the end by end locks mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation including wire springs, top cover, primer & shop coats of approved enamel paint etc, all complete as per IS 6248 and specification of approved make. The bottom lath shall be coupled to a lock plate fabricated from 3mm thick galvanised steel plate and securely rivetted with stiffening angles. (partly coiled and lath/full lath).	SQM	285	₹ -	₹ -	1.4151135400
CM-1.6	Providing and fixing PVC doors (25 thk double skin) of sintex or equivalent make including all fitting & fixtures as per specification, drawing and instructions of engineer in charge.	SQM	14	₹ -	₹ -	0.0444940300
CM-1.7	Providing, fixing and fitting of glazing of first grade class in steel/aluminium/wooden frames, where ever required, cleaning after fixing including hardware, gaskets, clips, beadings etc. all complete.					
CM-1.7.1	5.5 mm thick clear float glass	SQM	80	₹ -	₹ -	0.1547505600
CM-1.8	Providing and fixing 1 mm thk. MS sheet sliding shutters with frame and diagonal braces of 50X50X6 angle iron, 3 mm MS gusset plates at junction and corners, 25 mm dia pulley, 50X50X6 angle and T-iron guide at the top and bottom respectively including painting etc. all complete.	SQM	40	₹ -	₹ -	0.2358495500

# PROJECT: 1X800 MW DCRTPP YAMUNA NAGAR PACKAGE B- BOQ CUM RATE SCHEDULE (MOVABLE MATERIAL) BOQ CUM RATE SCHEDULE (PRICE BID)

	BOQ CUM RATE SCHI	EDULE (PI	RICE BID)			
ITEM NO.	DESCRIPTION OF ITEM	UNIT	QTY	RATES (INR)= TOTAL QUOTED PRICE * WEIGHTAGE /( QUANTITY*100)	AMOUNT (INR)= RATE * QUANTITY	WEIGHTAGE (IN PERCENTAGE)
CM-1.9	Providing and fixing 12 mm thick BWP particle board, decorative veneer (prelaminated) on both sides, as panels in aluminium framed door shutter, fixed with necessary snap-on-beading etc. all complete (excluding aluminium works).	SQM	110	₹ -	₹ -	0.1839665500
CM-2	ROOFING / SIDE CLADDING/MAIN STRUCTURAL WALL: Roofing / side cladding/ main structural wall work including all labour, material (unless otherwise specified in BOQ/contract specification), equipment, transportation, handling, scaffolding, laps, hooks, washers, corner pieces etc. at all level as per specification, drawings and as directed by engineer - in - charge.					
CM-2.1	Supply and Fixing of external sheet of Permanent colour coated metal cladding with troughed M.S. sheets manufactured out of 0.55 mm TCT(Total coated thickness) permanently colour coated zincalume sheet (150 gsm zinc-aluminium alloy coating total of both sides as per AS 1397:1993) having 300 Mpa yield strength. The colour coating shall comprise of 20 microns finish coat over a 5-micron primer coat on the exposed side and a back coat of 5 microns over a primer coat of 5 micron on the reverse side. The metal cladding shall have 500 mm cover width, 47 mm high crests at 250 mm centers with special male/female side laps and anti siphoning feature to prevent leakage . The sheet shall be fixed with the help of concealed compatiable interlocking clips and wafer head zinc coated self drilling fastner/screws 4.2X25 mm long on to the sub-girts. The clips shall be concealed and no fastner are to penetrate the external sheeting all complete as per specification. Measurement of cladding shall be of the elevation/plan area of side covered by cladding as per approved drawing. No overlap shall be considered in measurement for the purpose of payment. Final painting with Silicon Modified Polyester (SMP).	SQM	6686	₹ -	₹ .	8.0263040100
CM-2.2	Main structural walls shall be made out of Insulated Sandwitch Panels 60 mm thick, of desired height, suitable width panels with colour coated GI sheet of of 0.5 mm thickness on inner and outer side using precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 MPA steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation. insulation shall be done using 60 mm thick PUF of 38 kg /m3 (min.) sandwiched between the sheets. Insulated sandwitch panels shall be pre-fabricated and supplied at site for installation.  The Sandwitch Panels shall be joined together by tongue and groove method, joints shall be sealed with silicon sealant or other suitable sealant to ensure 100% leak proof. The outer framing structure shall be fabricated with ISMC 75x40x3mm or as per approved design, MS "T" welded for securing panels. the above columns will be grouted to the plinth beam / floor by means of expansion fasteners. The entrance will be provided with 1no-portico made up of puf panels should have an aesthetic look of size min. 4m x 3m.  Note: Structural steel work for outer frame shall be paid extra under the relevant item.	SQM	734	₹ -	₹ -	1.0143090200
CM-2.3	Providing and fixing precoated galvanised steel sheet roofing accessories 0.47mm (+ 0.05 %) total coated thickness, zinc coating 120 grams per sqm as per IS: 277, in 240 MPA steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete					
CM-2.3.1	Ridges Plain (500 - 600mm)	RM	636	₹ -	₹ -	0.2392032700
CM-2.3.2	Flashings/ Aprons ( upto 600 mm)	RM	323	₹ -	₹ -	0.1114335300
CM-2.3.3	North Light Curves	RM	150	₹ -	`	0.0581581100
CM-2.3.4	Barge Board (upto 300 mm)	RM	304	₹ -	-	0.0975403100
CM-2.3.5	Gutter (600 mm over all girth)	RM	1569	₹ -	₹ -	1.4560222600

	BOQ COM RATE SCHI			RATES (INR) = TOTAL QUOTED PRICE *	AMOUNT (INR)=	WEIGHTAGE (IN
ITEM NO.	DESCRIPTION OF ITEM	UNIT	QTY	WEIGHTAGE /( QUANTITY*100)	RATE * QUANTITY	PERCENTAGE)
CM-2.4	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineerin-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	SQM	9455	₹ -	₹ .	6.5030874700
CM-2.5	Supply & fixing FRP (fibre reinforced plastic) sheets 2 mm thick including GI hooks/ J or L bolts, Screw, nuts, washers, bitumen washers etc. complete. Measurement of FRP sheet shall be of the elevation covered by sheet as per approved drawing. No overlap shall be considered in measurement for the purpose of payment.	SQM	930	₹ -	₹ -	2.2389037200
CM-3	FALSE CEILING: False ceiling including all labour, material (unless otherwise specified in BOQ/contract specification), equipment, transportation, handling, suspension system etc. at all level as per specification, drawings and as directed by engineer-in-charge.					
CM-3.1	Providing and fixing of False ceiling of 12.5 mm thick tapered edge PVC coated gypsum plain board confirming to IS:2095 Part-I with panels of approved quality and design of size 600x600 mm with square edges supported by anodised aluminium frames of tees 35x23.5x1.5 mm thick as main member and 19x23.5x1.5 mm tees as cross supporting members and wall angles of 23.5x23.5x1.5 mm. The main runners shall be suspended from roof at 1200 mm centre to centre by means of ms rods with GI 'J' threaded hook for adjustments. The cross runners shall be fixed to main runner to form 'A' grid pattern of 600x600mm and providing 25 mm wide aluminium strip tees or moulded sections at all joints. The rate shall be inclusive of two coats of approved OBD on gypsum board, supply & fixing of aluminium frame and scafolding etc. complete.	SQM	1036	₹ -	₹ -	1.2845541200
CM-4	RAIN WATER DOWN TAKE PIPES: Rain water down take pipes at all level including all labour, material (unless otherwise specified in BOQ/contract specification), transportation, 2 coats of approved paint over one primary coat, fixtures, accessories etc. as per specification, drawings and as directed by engineer-in-charge.					
CM-4.1	Providing and fixing UPVC rainwater down take pipes of 110mm diameter- Class 3 as per IS:4985 including all complete.	RM	529	₹ -	₹ -	0.5491512400
CM-5	MISCELLANEOUS WORKS: Miscellaneous works including all labour, material, equipment etc. at any level unless otherwise specified as per specification, drawings and as directed by engineer - in - charge.					
CM-5.1	Supply & fixing of Turbo Vent 600 mm Dia. all complete as per specification	NOS.	47	₹ -	₹ -	0.1311082300
CM-5.2	Supply and installation of electrical submersible pump (minimum 3 HP) of standard make (Crompton Greaves/CRI pumps or equivalent) as per approval of BHEL with all accessories, console panel, pvc coated sling wire, submersible cable of required length & 1/4" dia HDPE suction pipe 120 ft. length.		3	₹ -	₹ -	0.0326983100
CM-5.2.1 CM-6	Extra over initial length of HDPE suction pipe beyond 120 ft.  FENCING AND GATES: Fencing and gates including all labour, material, equipment etc. at any level as per specification, drawings and as directed by engineer - in - charge.	PER FEET	75	₹ -	₹ -	0.0065598000

	BOQ COM RATE SCHE	וו) שנוטענ	tice bib;			
ITEM NO.	DESCRIPTION OF ITEM	UNIT	QTY	RATES (INR)= TOTAL QUOTED PRICE * WEIGHTAGE /( QUANTITY*100)	AMOUNT (INR)= RATE * QUANTITY	WEIGHTAGE (IN PERCENTAGE)
CM-6.1	Supplying and erecting in position 2.4 m high PVC coated gavanised chain linked fencing of minimum 8 gauge (including PVC coating) of mesh size 75mm x 75mm. The diameter of the hot dip galvanised steel wire for chain link fencing excluding PVC coating shall not be less than 12 gauge. GI barbed wire fencing of height of 600 mm confirming to IS 298 at top of chain link fencing shall be provided with 4 strands of barbed wire hot dip galvanised wire of 12G comprising of 2 ply of wires with barbs of 16G spaced at 100mm. Cost to include for GI hook bolts, rings & washers, hot dip galvanised tension wires, 25X6 mm GI flat stretcher bar at end posts, accessories etc. all complete. (Structural post, Civil Works such as excavation, formwork, concreting etc. for foundation works shall be paid separately, under relevant BOQ Items.)	RM	330	₹ -	₹ -	0.9716291400
CM-6.2	Supply, fabrication and fixing of mild steel posts for fencing including painting etc all complete.	MT	2	₹ -	₹ -	0.2422752500
CM-6.3	Supply, fabrication and installing in position and testing MS Gates out of channels, joists, angles, flats, plates, pipes, welded steel wire mesh & sheets including stiffners, bracings, fabricated hinges, MS Aldrops with locking arrangement, tempered steel pivot, guide track of MS Tee, bronze aluminium ball bearing arrangements, castor wheels, paintings etc. all complete.	MT	1	₹ -	₹ -	0.0687355100
CM-7	WATER SUPPLY: Water supply work including men, material (unless otherwise specified in BOQ/contract specification), equipment etc. at all level as per specification, drawings and as directed by engineer - in - charge.					
CM-7.1	Providing and fixing 610mmx453mmx6mm thk mirror from reputed mirror manufacturer. Mirror shall be mounted with glass adjustable revolving CP brackets with CP screws etc all complete.	NOS	10	₹ -	₹ -	0.0160964000
CM-7.2	Providing and fixing 25 mm diameter stainless steel towel rails (600mm X 25mm) with C.P. mounting brackets all complete.	NOS.	10	₹ -	₹ -	0.0145701100
CM-7.4	Providing and fixing stainless steel / C.P. liquid soap dispenser. Dispenser shall be round and easily revolving with removable threaded nozzle and mounted on C.P. brackets etc all complete.	NOS.	10	₹ -	₹ -	0.0074799000
CM-7.5	Providing & fixing in position P.V.C. water tank of Syntex or approved equivalent including making all necessary inlet & outlet pipes, fixture, ball cocks, valves etc all complete for following capacities. GI pipes and Supporting steel structure for fixing the tank shall be paid in the relavent item.					
CM-7.5.1	2000 Litre	NOS.	1	₹ -	₹ -	0.0362098600
CM-7.5.2	1000 litre	NOS.	1	₹ -	₹ -	0.0181054700
CM-7.6	Providing and fixing of RO water purifier (15 litre) , along with all fittings. Rate to include all necessary fittings & fixtures, labour etc. as approved & directed by BHEL engineer.	NOS.	4	₹ -	₹ -	0.0455110800
CM-8	SANITARY: Sanitary work including all labour, material (unless otherwise specified in BOQ/contract specification), equipment etc. at all level as per specification, drawings and as directed by engineer - in - charge.					
CM-8.1	Supply and fixing white glazed vitreous china Wash Basin of approved make conforming to IS:2556 part 4 of oval shape with R.S. or C.I. brackets painted white, 15mm chromium plated brass hot & cold faucets with nylon washers, chromium plated brass chain with rubber plug, 32mm chromium plated brass bottle trap and waste of standard pattern, 32mm dia chromium plated brass trap unions, plastic connection pipe with chromium plated nuts, fittings, cutting and making good the walls where required etc all complete.	NOS.	14	₹ -	₹ -	0.2317145000

	BUQ CUM RATE SCHE	DULE (FI	LIGE DID			
ITEM NO.	DESCRIPTION OF ITEM	UNIT	QTY	RATES (INR)= TOTAL QUOTED PRICE * WEIGHTAGE /( QUANTITY*100)	AMOUNT (INR)= RATE * QUANTITY	WEIGHTAGE (IN PERCENTAGE)
CM-8.2	Providing and fixing of stainless steel a ISI 304 (18/8) kitchen sink as per IS: 13983 with C.I. brackets and stainless steel plug 40 mm, all fittings like drain pipe, stop valve etc., cutting and making good the walls. Rate to include all necessary fitting & fixture, labour etc. as approved & directed by BHEL engineer.					
CM-8.2.1	Kitchen sink with drain board, size: 510x1040 mm, bowl depth 250 mm	NOS.	3	₹ -	₹ -	0.0295970200
STM	STRUCTURAL WORKS					
STM-1	Supply and fabrication of structural steel of grade E250 in Rolled/built up section/combination of both at BHEL site conforming to IS:2062, in columns, beams, struts, ladders, brackets, stiffeners, stub columns, truss, bracings, cleats, base plates, splice plates, gussets, end plates, stairs, stringers, treads, landings, etc. providing & applying primer and providing & applying two coats of synthetic enamel paint with minimum 50 micron total dry film thickness (DFT) of approved make and shade to achieve an even shade over steel sections already having primer coats and keeping overall DFT with primer not less than 110 microns. Connection design & preparation of fabrication drgs, straightening, cutting, bending, grinding, machining, drilling, welding, electrodes and other consumables, alignment, assembly, edge preparation, inspection of welds, visual inspection, rectification and correction of defective welding works, production test plate, inspection and testing, protection against damage in transit, stability of structures,temporary structures (weight of temporary structures not payable), etc all complete as per specification and drawing.	МТ	218	₹ -	₹ -	25.4045270000
STM-2	Providing and fixing in positing of high strength structural bolts (of property class 8.8 and product grade 'C' as per IS: 1367) and conforming to IS: 3757 and high strength structural hardened and tempered nuts (of property class '8' as per IS:1367) conforming to IS:6623 with hardened and tempered washers as per IS:6649 etc. up to and inclusive of 39 mm diameter and upto 300 mm long for structural steel work etc all complete.	KG	4364	₹ -	₹ -	0.6802443100
FM	FURNITURE AND FURNISHING: Modular Furnishing: Providing and fixing mastro type table for site incharge, conference hall table, modular office type cubicle including cabins, tables, racks, chairs of approved make required as per schematic drawings/ sepcifications and as directed by Engineer-In-charge etc. all complete.					
FM-1	Mastro type table for site incharge including fixed side written table, mobile pedestal etc.	NOS.	2	₹ -	₹ -	0.1101526100
FM-2	Conference hall table of seating capacity minimum 22nos.	NOS.	1	₹ -	₹ -	0.1925505700
FM-3	Conference hall table of seating capacity minimum 10nos.  Modular office type cubicle including part cabins 1800mmx750mm with supporting pedestal, keyboard tray, CPU trolley etc. as per finalised furniture layout drawing. Partition shall be made of 45mm thick Aluminium Panel fully powder coated with double raceway, 25mm thick prelaminated partical board, 2mm edge banding. Lowest section size (from floor) - 2'6" partical board and top section size - 1'6" pin ub board duly upholstered.	NOS.	1	₹ -	₹ -	0.0336433100
FM-4.1	4 seater cubicle	NOS.	18	₹ -	₹ -	2.9530771200
FM-4.2	2 seater cubicle	NOS.	6	₹ -	₹ -	0.6333775000
FM-4.3	1 seater cubicle	NOS.	4	₹ -	₹ -	0.2480165600
FM-5	Site Incharge chair	NOS.	2	₹ -	₹ -	0.0316948500
FM-6	Chair for senior executive	NOS.	15	₹ -	,	0.1458093200
T3 4 77	Chairs for executive and conference hall	NOS.	100	₹ -	₹ -	0.8941239600
FM-7		NOS.	30	- ₹	₹ -	0.1890000500
FM-8	Chairs for visitors					
FM-8 FM-9	Three seater sofa	NOS.	2	₹ -	₹ -	0.0584536200
FM-8 FM-9 FM-10	Three seater sofa Teapoy table	NOS.	2 2	₹ -	₹ -	0.0584536200 0.0406144400
FM-8 FM-9	Three seater sofa	NOS.	2	₹ -	₹ -	0.0584536200

# PROJECT: 1X800 MW DCRTPP YAMUNA NAGAR PACKAGE B- BOQ CUM RATE SCHEDULE (MOVABLE MATERIAL) BOO CUM RATE SCHEDULE (PRICE RID)

	BOQ CUM RATE SCHEDULE (PRICE BID)							
ITEM NO.	DESCRIPTION OF ITEM	UNIT	QTY	RATES (INR)= TOTAL QUOTED PRICE * WEIGHTAGE /( QUANTITY*100)	AMOUNT (INR)= RATE * QUANTITY	WEIGHTAGE (IN PERCENTAGE)		
FM-14	Vertical blinds of approved shade, make and profile	SQM	60	₹ -	₹ -	0.0091135700		
FM-15	PLAIN CUPBOARDS- 1800 MM	NOS.	6	₹ -	₹ -	0.1311959100		
FM-16	VERTICAL FILING CABINETS- 4 DRAWERS	NOS.	6	₹ -	₹ -	0.1261299300		
FM-17	1200 MM HIGH GLASS HINGED DOOR UNITS	NOS.	4	₹ -	₹ -	0.0985484800		
Е	ELECTRICALS AND ILLUMINATION WORK: Supply, fixing and commissioning of electrical works required for modular office, closed sheds and safety park all complete as per specification & approved drawings. Bidder to supply & install electrical items like Main Switch with earth leakage protection (30A TPN) suitable sockets/switch units for A/C points, wires, conduits, tees, bends, clamps, JBs, 5amps socket, Modular switch boards & points for computers & telephone for each table/desk, earthing wires etc. complete as per specifications / site requirement. Lighting system shall be designed to meet minimum 300Lux of modular type suitable for false ceilings (for office areas). Also, the bidder should take care of aesthetics and energy conservation. A detailed schematic with BOM (brands/ makes) of the electrical fittings shall be submitted for approval from BHEL.							
EM-1	Supply 3 phase metering and power distribution board complete with:  (1) Incoming ACB 1000 Amps- 1no, (2) Outgoing SFU TPN 200 Amps -2 no. (3) Outgoing SFU TPN 100 amps -4nos. (4) Outgoing SFU TPN 50 amps -8 nos. 3 phase electronic energy meter. Ammeter, voltmeter and selector switches for both. Phase indication lamps, HRC fuses for IC and OG feeders, cable glands, power terminals for cables termination, cable lugs and provision for doubly earthing the panel enclosure. Panel enclosure shall be made of sheet metal thichnness not less than 1.6 mm and suitable for out door installation, modular construction, hinged door with locking arrangement, base frame, should have slopped canopy, duly painted with first coat of primer and two coats of synthetic enamel paint (interior with white paint and exterior with light grey as per shade 5, IS 630) internal power distribution to devices shall be with Al busbars or copper flexible single core PVC cables of 1.1 kV grade, control wiring with 1.5 sqmm, suitable stool made out of MS structure of 1.2 meter high for mounting of panel with anchoring arragement at foundation, suitable for bottom entry of cables.  Note: Suitable foundations to be prepared for mounting the Distribution Board. Civil Works related to construction of foundations shall be paid separately under relevant BOQ Items.	NOS.	1	₹ -	₹ -	0.3579984000		
EM-2	Supply, Installation and Commissioning of 415 volt AC , 3 phase /four wire power feeder pillar board , board shall be comprises of three number and one number aluminium bus bar for phase & neutral respectively. Bus bar rating shall be 200 Amps and shall be mounted on epoxy insulator of 1.1 kV grade, each bus bar shall have drilled hole for connecting incoming / out going cables, provision for earthing the panel enclosure. Panel enclosure shall be made of sheet metal thichnness not less than 1.6 mm and suitable for out door installation, hinged door with locking arragement, base frame, should have slopped canopy, duly painted with first coat with primer and two coats of synthetic enamel paint ( interior with white paint and exterior with smoke grey as per IS), suitable stool made out of MS structure of 1.2 meter high for mounting of panel with anchoring arragement at foundation.  Note: Suitable foundations to be prepared for mounting the Distribution Board. Civil Works related to construction of foundations shall be paid separately under relevant BOQ Items	NOS.	13	₹ -	₹ -	0.1519386100		

# PROJECT: 1X800 MW DCRTPP YAMUNA NAGAR PACKAGE B- BOQ CUM RATE SCHEDULE (MOVABLE MATERIAL) BOQ CUM RATE SCHEDULE (PRICE BID)

	BOQ COM RATE SCHEDULE (PRICE BID)							
ITEM NO.	DESCRIPTION OF ITEM	UNIT	QТҮ	RATES (INR)= TOTAL QUOTED PRICE * WEIGHTAGE /( QUANTITY*100)	AMOUNT (INR)= RATE * QUANTITY	WEIGHTAGE (IN PERCENTAGE)		
EM-3	Supplying & installing power distribution board complete with:  1) Incoming MCB TPH 100 amps 1 no.  2) Outgoing MCB TPH 32 amps3nos.  3) RCCB DP 25/20 amps 2nos.  4) Outgoing MCB SP 6 amps - 6nos.  Distribution boards shall with internal busbars, internal wiring, 2 nos. earthing terminals, earth connections, including glands, lugs.	SET	12	₹ -	₹ -	0.2797663200		
EM-4	Supplying & fixing wall mounting type lighting panels, each with:  (1) Incoming MCB TPN -32 amps - 1no.  (2) RCCB DP 32 amps - 2nos  (3) MCB SP 6amps - 30 nos  Lighting panel shall be with internal busbars, 2 nos. earthing terminals, earth connections, including glands, lugs & wiring from main DB.		14	₹ -	₹ .	0.1843641200		
EM-5	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.							
EM-5.1	$2 \times 2.5$ sq. mm + $1 \times 2.5$ sq. mm earth wire through PVC conduit of required size with accessories and fixtures. Wiring shall be concealed type for computer room, office shed & for rest of sheds open and whreever required in PVC conduit of required size.		2208	₹ -	₹ -	0.2350667100		
EM-5.2	$2 \times 4$ sq. mm + $1 \times 4$ sq. mm earth wire through PVC conduit of required size with accessories and fixtures. Wiring shall be concealed type for computer room, office shed & for rest of sheds open and whrerver required in PVC conduit of required size.		1104	₹ -	₹ -	0.1406934600		
EM-6	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.	PER POINT	305	₹ -	₹ -	0.1392757700		
EM-7	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6A modular switch, connections etc. as required.	NOS.	160	₹ -	₹ -	0.0408413300		
EM-8	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6A & 15/16A modular socket outlet and 15/16 A modular switch, connections etc. as required.	NOS.	185	₹ -	₹ -	0.0583230800		
EM-9	Providing and fixing LED tubelight (22W) with frame of standard manufacturer as approved by BHEL. This includes tube light fittings etc. complete.	NOS.	145	₹ -	₹ -	0.0423396400		
EM-10	Providing and fixing modular LED light fixture of powder coated alumminum frame along with lights (32W or above rating) of standard manufacturer as approved by BHEL. This includes light fittings etc. complete.	NOS.	95	₹ -	₹ -	0.0973519100		
EM-11	Providing and fixing wall mounted fan 12" diameter of approved company as directed by BHEL. This includes fittings, fixtures etc. complete.	NOS.	45	₹ -	₹ -	0.0706524100		
EM-12	Providing and fixing exhaust fans 12" diameter with frame of standard manufacturer as approved by BHEL.	NOS.	18	₹ -	₹ -	0.0226833200		
EM-13	100 watt LED light with hanging arrangement all complete.	NOS.	183	₹ -	₹ -	0.3623613300		
EM-14	Wiring for 100 watt LED lights with 2.5 sqmm ISI mark copper wire for above in PVC conduit along with GI earth wire inclusive of all material, labour etc. complete	PER POINT	183	₹ -	₹ -	0.1069364600		

PROJECT: 1X800 MW DCRTPP YAMUNA NAGAR
PACKAGE B- BOQ CUM RATE SCHEDULE (MOVABLE MATERIAL)
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BOQ COM RATE SCHEDULE (PRICE BID)						
ITEM NO.	DESCRIPTION OF ITEM	UNIT	QTY	RATES (INR)= TOTAL QUOTED PRICE * WEIGHTAGE /( QUANTITY*100)	AMOUNT (INR)= RATE * QUANTITY	WEIGHTAGE (IN PERCENTAGE)
EM-15	Supply of cables $3$ -1/2 core $x$ 95 sqmm aluminium armoured PVC insulated cable (three and half core) confirming to IS 1554 ( part -I) the make of the cable shall be of approved company as directed by BHEL		490	₹ -	₹ -	0.1452428600
EM-16	Supply of cables $3 - 1/2$ core $35$ sqmm aluminium armoured PVC insulated cable (three and half core) confirming to IS 1554 ( part -I) the make of the cable shall be of approved company as directed by BHEL		700	₹ -	₹ -	0.0759096100
EM-17	Supply of cables 2 core x 10 sqmm aluminium armoured pvc insulated cable of approved make confirming to is 1554 ( Part -I)	RM	700	₹ -	₹ -	0.0384624900
EM-18	Providing and installing split type air conditioner of capacity 2T	NOS.	16	₹ -	₹ -	0.5493935800
EM-19	Providing and installing split type air conditioner of capacity 1.5T	NOS.	30	₹ -	₹ -	0.7311213800
EM-20	Providing and installing window type air conditioner of capacity 1.5T	NOS.	24	₹ -	₹ -	0.4639118534
	TOTAL AMOUNT (PACKAGE-B)				-	64.2601518334