



भारत हेवी इलेक्ट्रिकल्स लिमिटेड

(भारत सरकार का उपक्रम)

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

TCN - 02

Ref: PSER:SCT:NAM-C1926:TCN-02

Date: 03-12-2018

Sub	Tender change notice (TCN) 02	
Job	Structural and strengthening works of 1X100MW NRPP, AGPCL Namrup Project, Dibrugarh, Assam.	
Ref	1.0	Tender no PSER:SCT:NAM-C1926:18
	2.0	BHEL's NIT, vide reference no no PSER:SCT:NAM-C1926:7176, Date: 20-11-2018
	3.0	BHEL's TCN-01, vide reference no PSER:SCT:NAM-C1926:TCN-01, Dated 22-11-2018.
	4.0	All other pertinent issues till date.

With reference to above, following points/ documents, relevant to tender, may please be noted and complied with while submitting offer.

- 1.0 The clarification to bidder's queries are attached at Annexure-A.
- 2.0 Revised Price Schedule, VOLUME-III-R-01 attached superseding PRICE SCHEDULE VOLUME-III-R-00 issued earlier along with NIT. Bidder shall quote as per this revised Volume-III, Rev-01 only. Bidders are also requested to submit a declaration in techno - commercial offer that they have submitted their price bid as per **REVISED price schedule** format (**VOLUME-III-PRICE SCHEDULE, REV-01**).
- 3.0 Revised 'No deviation certificate' as per enclosed Annexure-2. Bidder shall submit no deviation certificate as per enclosed format only.
- 4.0 All other terms & conditions shall remain unchanged.

Thanking you,

Yours faithfully,
for BHARAT HEAVY ELECTRICALS LTD

DY MGR (SCT)

Encl : As above.

पावर सेक्टर पूर्वी क्षेत्र (मुख्यालय)

POWER SECTOR EASTERN REGION, DJ-9/1, SECTOR-II, SALT LAKE CITY, KOLKATA - 700 091

फैक्स/Fax : (033) 23211960

फोन/Phone : बोर्ड/EPABX : 23211691, 23211798, 23211796

**VOLUME-III
PRICE SCHEDULE, REV-1**

Structural and strengthening works of 1X100MW NRPP, AGPCL Namrup Project, Dibrugarh, Assam.

Tender No-PSER:SCT:NAM-C1926:18

Sl. No.	PREAMBLE
1	This preamble forms part of tender document and schedule of items. The tenderer should read this preamble carefully before filling in rates for various items. Clauses under this preamble shall be read in conjunction with various volumes of tender and other tender sections as applicable and shall have precedence over any contrary statement mentioned any where in this document.
2	The work shall be carried out strictly as per specifications, description of the items in these schedule and / or engineer's instructions. Drawings enclosed with the tender are only preliminary and for tender purposes and giving some idea of the work involved. The work is to be executed as per drawings & documents, which shall be furnished during execution.
3	Items of work provided in this schedule but not covered in this specification shall be executed strictly as per instruction of the engineer.
4	Unless specifically mentioned otherwise in the tender document, the tenderer shall quote for the finished items and shall provide for the complete cost towards power, fuel, tools, tackles, equipment, constructional plants, temporary works, labour, dismantling of all temporary piping, structures, valves, pumps, tanks & other misc. equipment, strengthening of roads/culverts/bridges etc. including arranging all clearances etc. required for carrying out different activities & tests, materials, levies, transport, layout, repairs, rectification, maintenance till handing over, supervisions, colonies, shops, establishments, overheads, profits and all incidental items not specifically mentioned but reasonably implied and necessary to complete the work according to the complete tender document and this schedule.
5	The quantities of the various items mentioned in this schedule of items are approximate, based on very preliminary information and may vary to any extent or be deleted altogether. The quoted rates of each item will remain firm throughout the period of execution including extension, for reasons whatsoever, as long as variation in the total value of work executed under any part of this contract including extra items, if any but excluding any price variation remains, within plus minus fifteen percent ($\pm 15\%$) of the awarded price as per LOI.
6	Prior written approval of BHEL shall be sought by the contractor in case quantity variation of any item crosses +50% (plus fifty percent) limit during execution, an approval to be obtained before execution of further quantity for this item.
7	In case Sealed /Paper Price Bids are opened for finalisation of the tender, for any Item Rate/BOQ based contract, possibility of variation of quantity/ addition/deletion of items can not be ruled out. Under such circumstances, after execution of work, if it is observed that standing as L-1 is changed based on actual quantity executed, the bidder shall give suitable rebate to maintain your standing as L-1. Since this aspect can be assessed at the end of execution, necessary adjustment will be effected at the end of execution in final bill. This condition shall not be applicable where the tender is finalised through Reverse Auction.
8	BHEL reserve the right to rationalize the rates, quoted by L-1 bidder against unit rate items and/ or other optional items with respect to item-wise lowest rates (amongst the participating bidders), before placement of order.
9	The rates quoted shall be inclusive of cleaning of site of any vegetation, dressing , clearing of old structures and leveling etc. including fixing of grid pillars, benchmarks etc. required for commencement of site activities. No separate payment will be made towards the same. However, if separate rate for such item is available in the rate schedule, the same shall be considered.
10	Rates shall be quoted in figures and in words in clear legible writing. No overwriting is allowed. All scoring and cancellations should be countersigned and in case of illegibility the interpretation of engineer shall be final. All entries shall be in English language.
11	All works item wise shall be measured upon completion and paid for at the rates quoted and accepted as per BHEL approved payment schedule/billing break-up.
12	The tender shall be deemed to have visited site and made himself aware of all the site conditions, studied the specifications and details of work to be done within the time schedule attached and to have acquainted himself of the conditions prevailing at site.
13	No splitting of the job is envisaged. Decision of BHEL in this regard shall be final and binding to the bidders.

**VOLUME-III
PRICE SCHEDULE, REV-1**

Structural and strengthening works of 1X100MW NRPP, AGPCL Namrup Project, Dibrugarh, Assam.

Tender No-PSER:SCT:NAM-C1926:18

SI. No.	PREAMBLE
14	Bidders are not allowed to alter the Price Schedule format including item description, quantity etc. and the offer is liable for rejection if the bidders submit their prices in Price Schedules modified by them. BHEL reserves the right to reject the offers of bidders who submit offers in Price Formats which are modified/ altered by them. Also putting any comments instead of rates/price in the designated column of the rate schedule shall make the offer liable for rejection.
15	Bidders to note that for Civil &/Structural packages, against a particular item against a ST No. appearing in more than one schedule of the BOQ, same rate must be quoted in all schedules for that particular items with same descriptions. If by error, different rates are quoted in different schedules for same ST No. (i.e. item with same description), then the higher of the rates shall be considered for evaluation but awarding shall be done with the lower rate, if the bidder becomes L-1."
16	For Lumpsum Service Contract : The items/components indicated in the tender is indicative and may vary to any extent. No compensation shall be payable in case of any variation in the items/components listed in the bill of quantities if the executed weight remains within the variation limit. However, in case of deletion of any item or addition of new items over and above the items listed or variation of existing quantity beyond variation limit specified, adjustment (i.e. Payment or recovery as the case may be) shall be done on pro-rata basis based on the Rate per MT worked out from the quoted lump-sum Price and the total weight of components listed /indicated in price schedule plus 15% weight variation limit.
17	Engineer's decision shall be final and binding on the contractor regarding clarification of items in the schedule with respect to the other sections/volumes of the contract.
18	In case of tender for Civil and/or Structural works, if the Non-schedule items are not quoted by the bidder, it will be treated at par with rate of corresponding item of CPWD/PWD/DSR schedule as prescribed in the tender/BOQ cum Rate Schedule.
19	No interest, whatsoever, shall be payable by BHEL on the security deposit, any bank guarantee submitted or any amount due to successful bidder/contractor.
20	Size and weights of various items are mentioned in the attached BOQ cum rate/price schedule for reference purpose only & these shall not be taken into consideration for quoting/calculating amount in the rate schedule. These shall be utilised as per relevant sections of tender. Bidders shall quote for each item in the rate column, taking unit as mentioned in the quantity column. Rates shall be filled in both figures and words. Amount shall be calculated based upon these rates multiplied by the mentioned quantity for the respective items.
21	Bidder's Total price shall be considered for evaluation unless stated otherwise.
22	In case of BOP packages, if Bidder does not quote/indicate the price for freight charges against indicated rate schedule, the same shall be considered as 2% of basic price and adjusted with the total quoted price against each item keeping the total quoted price unaltered.

**VOLUME-III
PRICE SCHEDULE, REV-1**

Structural and strengthening works of 1X100MW NRPP, AGPCL Namrup Project, Dibrugarh, Assam.

Tender No-PSER:SCT:NAM-C1926:18

SCH-1 - TOTAL PRICE

SL NO	DESCRIPTION	PRICE SCHEDULE REF	<u>TOTAL PRICE (IN INR)</u>
1.0	Total Price for Structural and strengthening works of 1X100MW NRPP, AGPCL Namrup Project, Dibrugarh, Assam as detailed in the tender specification.	SCH 2 - BREAK UP OF TOTAL PRICE	<u>IN FIGURES:-</u> <u>IN WORDS:-</u>
2.0	NON-SCHEDULE ITEM For items not covered as above of this schedule, quote % above or % below or at par of the CPWD Schedule of rates 2016		
a)	Rate of complete item	_____ % above / _____ % below / at par of CPWD Rate Schedule 2016	
b)	Rate of supply of material at site only	_____ % above / _____ % below / at par of CPWD Rate Schedule 2016	
c)	Rate for execution complete excluding supply of materials.	_____ % above / _____ % below / at par of CPWD Rate Schedule 2016	

NOTE

1.0	Bidder shall quoted total price of SCH-2 at SI. No 1 above, all other amounts / rates of each item of works in respective schedules / parts will be derived based on allocated percentages. As such, any uncalled figure/ amount noted at any other place / schedule of Volume-III will not be reckoned & will stand null & void.
2.0	Bidder to note that total price at SI No. 1 above shall be considered for evaluation & awarding. As such grand total price should be complete in all respect for the full scope defined and considering all terms and conditions.
3.0	Based on the itemwise percentage allocations, the amount for the individual items of the Schedule - 2 shall be arrived at. The rates of individual items shall be derived from the amount against each items after rounded off . However, RA bill payment shall be done after rounding off the gross amount to two decimal points. Any adjustment, if required, due to such methodology, will be effected / adjusted in final bill.
4.0	Bidders to note that this is an item rate contract. Payment shall be made for the actual quantities of work executed at the unit rate arrived at as per SI No.3 above.
5.0	Any item as per scope of work, if not included in the price quoted above and shown separately will not be taken cognizance of and the offer shall be liable for rejection.
6.0	Price format shall not be changed by bidder in any case and it may lead to cancellation of their offer.
7.0	The quoted price shall be excluding GST including freight on FOR site basis.
8.0	The quantity of items may vary during execution mainly due to actual requirement etc. The unit rates work out from the overall amount quoted & accepted by BHEL shall be considered and no separate unit rates shall be allowed.
9.0	For payment of non schedule items, the rate shall be derived from CPWD Schedule - 2016.

VOLUME-III				
PRICE SCHEDULE, REV-1				
Structural and strengthening works of 1X100MW NRPP, AGPCL Namrup Project, Dibrugarh, Assam.				
Tender No-PSER:SCT:NAM-C1926:18				
SCH-2 - TOTAL PRICE BREAK UP				
BOQ ITEM NO	DESCRIPTION	UNIT	QTY	ALLOTTED PERCENTAGE FOR AMOUNT OF EACH ITEM(Nearest to the 6 decimal points) W.R.T THE TOTAL OF QUOTED PRICE IN SCH-1
1	PROVIDING AND PLACING CONCRETE WORK INCLUDING COST OF LABOUR, MATERIALS AND EQUIPMENT FOR HANDLING, TRANSPORTATION, BATCHING, MIXING, ADMIXTURES AS PER REQUIREMENT, PLACING, VIBRATING AND CURING, (EXCLUDING COST OF CENTERING, SHUTTERING AND REINFORCEMENT) COMPLETE AT ALL ELEVATIONS WITH T&Ps, AS PER DRAWING, SPECIFICATIONS UNLESS SPECIFIED OTHERWISE AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING:			
1.1	Supplying and laying in position, compacting and curing as per specification plain cement concrete of the following mix with 20mm down size aggregates below GL, and upto 1.0M above GL, including consolidation of subgrade wherever required.			
a)	1:3:6	CUM	2	0.0291710%
b)	1:2:4	CUM	2	0.0324570%
1.2	Supplying, laying in position, curing as per specifications controlled concrete of the following grades (graded coarse aggregates of 20mm down, 12mm down shall be used wherever applicable)			
a)	for all depths below GL and 1.0m above GL			
i)	Grade M-20 in foundations, pile capes, floors, beams, floors etc.	CUM	5	0.0919980%
ii)	Grade M-25 in foundations, columns, beams, walls, floors etc.	CUM	5	0.0965980%
b)	For all elevations greater than 1m above G.L			
i)	Grade M-25 in slabs, columns, beams, walls, floors etc.	CUM	27	0.5464670%
2	Grouting under equipment bases as required, curing and finishing the exposed surfaces including all materials, form work etc. as per drawings and directions of the Engineer.			
2.1	Using non shrink grout like conbextra GP 1 or approved equivalent, including cost of grout mix form work, etc. All complete as per drawings and manufacturers' specifications. All materials to be supplied by contractor.	CUM	0.5	0.0948780%
2.2	UPV testing for concrete, foundation and structures as directed by engineer in charge, rectification of the defects in concreting observed by ultra-sonic pulse velocity (UPV) testing by cement/epoxy grout etc.	CUM	150	0.6573460%
2.3	Providing Chemical (epoxy) injection grouting with pressure pump confirming to IS:6494, including fixing nozzles, cost of approved chemical, admixture, curing etc. all complete . Payment shall be made as per the consumption of chemical grout.	Kg	20	0.0318530%
3	SUPPLYING, FIXING AND REMOVING FORMWORK AT ANY ELEVATION INCLUDING ALL LABOUR, MATERIAL, SCAFFOLDING COMPLETE INCLUDING POCKETS ETC. AS PER SPECIFICATIONS AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING:			
3.1	Supplying, installing, dismantling and removing of formwork as per drawings and specifications at all levels for foundations, beams, columns and slabs etc. using steel/plywood shuttering.			
a)	For Straight surface shuttering	SQM	180	0.2629380%
3.2	Providing & fixing 3mm thick steel sheet on bottom flages of beam for the area where concrete dismantling of floor slab to be done, tack weld or stitch weld as required and removal of the same after completion of removal of debries.	SQM	200	0.8149790%
4	REINFORCEMENTS			
4.1	Supplying, Bending, Binding, Transporting and Placing in position following types of Reinforcement of all diameters and at all elevation using approved quality binding wires as per specification and drawings HYSD reinforcement conforming to IS:1786.			
a)	HYSD Reinforcement confirming to IS ; 1786 .	MT	2.56	0.4289410%
b)	Restoration, restraightening & making good of old and existing reinforcement, if required welding of new reinforcement with existing reinforcement in old concrete, etc, all complete including chipping of concrete surface & removal of chipped off concrete, cleaning for laying of new RCC over old concrete surface for forming construction joint as per drawings, and as per direction of engineer in charge. Payment will be made on quantity of reinforcement required for restoration, restraightening & making good of old and existing reinforcement. Extra / new reinforcement, if required, shall be paid separately as per relevant items 4.1(a).	MT	0.5	0.0182600%

**VOLUME-III
PRICE SCHEDULE, REV-1**

Structural and strengthening works of 1X100MW NRPP, AGPCL Namrup Project, Dibrugarh, Assam.

Tender No-PSER:SCT:NAM-C1926:18

SCH-2 - TOTAL PRICE BREAK UP

BOQ ITEM NO	DESCRIPTION	UNIT	QTY	ALLOTTED PERCENTAGE FOR AMOUNT OF EACH ITEM(Nearest to the 6 decimal points) W.R.T THE TOTAL OF QUOTED PRICE IN SCH-1
5	STRUCTURAL STEEL WORKS All items for fabrication should include supply consumables including painting with primer, and also inclusive of all necessary quality test to the satisfaction of engineer/customer for the following. Non destructive and special testing, rectification and correction of defective welding works, production test plate, inspection and testing, erection scheme, protection against damage in transit, stability of structures, installation of temporary structures (Scaffolding, Access ladders, Working Platforms etc.), setting column bases, surface preparation by means of manual or mechanical power tools as per IS 1477 Part 1, touch-up painting, dismantling and removal of all temporary structures (weight of temporary structures not payable) complete with all labour, material, electrodes and other consumables, equipment, testing (mechanical and non- destructive), all other activities required for completion of the work including return of surplus/ waste steel materials to store etc. as per specification, drawings and instructions of the Engineer.			
5.1A	Fabricating using approved quality electrodes of low hydrogen 7018 as per drawing and specification. Fabrication of of structural steel made from mild steel conforming to IS:2062, pipes conforming to IS:1161/ IS:1239, chequered plate conforming to IS: 3052 and mild steel rounds, at all elevations involving rolled sections (including mild steel rounds), built up sections fabricated out of plates, rolled sections and combination of plates and rolled sections, in columns, beams, gantry girders, roof trusses, portals, laced purlins, space frames, shear connectors, hangers, struts, monorails, galleries, stiffeners, wall beams, sheeting runners, brackets, stub columns, bracings, cleats, trestles, base plates, splice plates, chequered plate flooring, decking and seal plates, diaphragm, walkway platforms, ladders, stairs, stringers, treads, landings, toeplates, louvers, lacings, gusset plates, etc, & preparation of fabrication drgs, collection of steel from stores, transportation, straightening, making cutting plan, cutting, bending, rolling, grinding, drilling, bolting, erection bolts & nuts (weightof erection bolts & nuts not payable , Supply of permanent bolt of grade C mild steel bolts & nuts to be paid separately under ITEM NO.5.8), assembly, edge preparation, preheating(& use of low hydrogen/ radiogenic electrodes as per specification), post heating, testing of welds, inspection of welds, visual inspection all complete. [structural steel shall be supplied by BHEL free of cost]			
a)	Steel fabrication work as per above item no 5 & 5.1	MT	425	17.0888750%
5.1B	Supplying, fabricating using approved quality electrodes of low hydrogen 7018 as per drawing and specification. Fabrication of of structural steel made from mild steel conforming to IS:2062, pipes conforming to IS:1161/ IS:1239, chequered plate conforming to IS: 3052 and mild steel rounds, at all elevations involving rolled sections (including mild steel rounds), built up sections fabricated out of plates, rolled sections and combination of plates and rolled sections, in columns, beams, gantry girders, roof trusses, portals, laced purlins, space frames, shear connectors, hangers, struts, monorails, galleries, stiffeners, wall beams, sheeting runners, brackets, stub columns, bracings, cleats, trestles, base plates, splice plates, chequered plate flooring, decking and seal plates, diaphragm, walkway platforms, ladders, stairs, stringers, treads, landings, toeplates, louvers, lacings, gusset plates, etc, & preparation of fabrication drgs, collection of steel from stores, transportation, straightening, making cutting plan, cutting, bending, rolling, grinding, drilling, bolting, erection bolts & nuts (weightof erection bolts & nuts not payable , Supply of permanent bolt of grade C mild steel bolts & nuts to be paid separately under ITEM NO.5.8), assembly, edge preparation, preheating(& use of low hydrogen/ radiogenic electrodes as per specification), post heating, testing of welders, inspection of welds, visual inspection all complete. [Vendor has to supply the structural materials]			
a)	Steel fabrication work as per above item no 5 & 5.1	MT	35	6.4767730%
5.2	Erection of structural steel as describe item no. 5 & 5.1a including grouting under base with necessary erection bolts, nuts & washers, welding electrodes, etc. all complete as per drawing and specification. Grouting will be paid under relevant BOQ items 2.1 as per drawing and specification.	MT	460	17.3350600%
5.3	Supply and erection of hot dip galvanised GI floor gratings, staircase steps with abrasive nosing, ladder, etc. as per drawing including fixing to proper level and alignment using contractors own templates protecting till handover of the foundation all complete as per the drawing and specification. Payment terms - a) On receipt of materials at site - 65%; b) On completion of erection & fixing - 35%. Contractor to supply all materials.	MT	0.5	0.1381930%

VOLUME-III				
PRICE SCHEDULE, REV-1				
Structural and strengthening works of 1X100MW NRPP, AGPCL Namrup Project, Dibrugarh, Assam.				
Tender No-PSER:SCT:NAM-C1926:18				
SCH-2 - TOTAL PRICE BREAK UP				
BOQ ITEM NO	DESCRIPTION	UNIT	QTY	ALLOTTED PERCENTAGE FOR AMOUNT OF EACH ITEM(Nearest to the 6 decimal points) W.R.T THE TOTAL OF QUOTED PRICE IN SCH-1
5.4	Supplying, fabricating, fixing in position 32 NB (Medium class), Galvanised Pipe handrails conforming to IS:1161, medium class, Grade YSt-240, galvanising as per IS:2629 with min. coating of 450 gms per sqm at various elevation as per drawing & specification including cost of materials, consumables, labour etc. all complete as specification. Contractor to supply all materials. Payment terms - a) On receipt of materials at site - 65%; b) On completion of erection & fixing - 35%..	RM	675	1.3823900%
5.5	Supply, fabrication and erection as per sl. no. 5 & 5.1 of additional steel members (plates, angles, channels, I sections, cut I sections, builtup sections etc) on existing steel members at any elevation, including scaffolding, staging, tools & tackles, gas cutting, welding, consumables, painting etc complete as per specification, drawings and instructions of the Engineer.	MT	40	8.9094220%
5.6	Dismantling of steel structure at any elevation, lowering of material and carriage of the dismantled material up to field fabrication shop or return to projects storage including temporary dismantling, cutting, re-welding, supporting, and restoring to correct position all temporarily dismantled members, re-alignment of all adjacent connected members to their correct positions, re-erection of dismantled fabricated structural steel members requiring additions, modification, including carriage of modified "Erection Marks" from the field fabrication shop to erection site, lifting to required position, aligning in position, tack welding, final welding and touch up painting including temporary dismantling and re-erection of temporarily dismantled members, cutting, rewelding, supporting and restoring to the correct position of all temporarily dismantled members, re-alignment of adjacent connected members, (weight of such temporarily dismantled members and adjacent members not payable) including scaffolding, staging, tools & tackles, gas cutting, welding, consumables, etc complete as per the specifications, drawings and instructions of the Engineer.	MT	26	0.9197680%
5.7	Completion of welding of left over welding joints mainly fillet joints of erected items in position of different thickness by making all necessary arrangements for welding at ground or at height as per site condition. Welding electrode to be used : 6012 or 7018 as per site requirement. In case of incomplete members, the balance parts yet to be erected, will be paid as per item no. 5.2 for the part member (not for total item).	RM	20	0.0505370%
5.8	Supply and fixing in positioning of high strength structural bolts / HSFG Bolt (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 complete as per specification, drawings and instructions of the Engineer.	Quintal	17.5	2.0667020%
6	PROVIDING AND ERECTING ROOFING/SIDE CLADDING INCLUDING LAPS, SCAFFOLDING HOOKS, WASHERS, CORNER PIECES, ETC. COST OF ALL MATERIAL, LABOUR, EQUIPMENT, CLEATS, SHEETING RUNNER, RAILS MILD STEEL WIND TIES (HORIZONTAL/VERTICAL) AND ANY OTHER STEEL WORKS ETC. AT ALL ELEVATIONS COMPLETE AS PER SPECIFICATION, DRAWING AND AS DIRECTED BY THE ENGINEER FOR THE FOLLOWING:			
6.1	Supplying installing and fixing in position PVF2 pre-coated galvalume metal troughed sheeting of mim. Thickness 0.55 mm TCT with concealed fastening system and any other fixing material and means as required as per manufacturer specifications at all levels as per drawing and specification no. K7205-VOL4 (All materials to be supplied by contractor as per drawing and specification) Payment terms -a) On receipt of materials at site - 70%; b) On completion of erection & fixing - 30%. including fabrication and erection of flashings, rain water gutter , crowns etc with plain sheets and application of sealant for rainwater proofing.	SQM	5850	27.4859110%
6.2	Removal of Pre-coated sheet and refixing of the same after modification in structure including scaffolding, tools & plant, incidentals, self drilling & self tapping screw, flashing etc. all complete as per drawing, specification & instruction of engineer. [measurement shall be paid on surface area excluding end & side lap in sheet]	SQM	200	0.4228570%
6.3	Fixing of Chajja for exhaust fan opening, louvres etc. with metal cladding sheet & structural frame wherever required at a height of not less than 3m & not more than 10m. Sheet & structural items shall be paid under 6.1 or 6.2 and 5.1A or 5.1B.	No.	10	0.0524320%
7	MASONRY AND ALLIED WORKS, CEMENT MORTAR PLASTER WORKS INCLUDING SUPPLY OF MATERIAL, COST OF LABOUR, SCAFFOLDING, MAKING GROOVES, CURING ETC. COMPLETE AS PER SPECIFICATIONS, DRAWING AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING.			
7.1	Supplying and laying in position, minimum 75 kg/cm2 as per IS:1077 brick work in super structure above plinth and at all elevations in cement sand mortar(1:6) including mixing mortar, laying bricks, raking of joints, curing etc ., all complete as per drawings as specifications .	CUM	40	0.5843070%
7.2	Providing 12mm thk cement sand (1:6) plastering with smooth cement finish of the brick walls with side of the wall at various elevations including mixing, laying, finishing, rounding corners, cutting grooves wherever required etc. with all materials complete as per drawing and specification at all levels.	SQM	220	0.1285480%

**VOLUME-III
PRICE SCHEDULE, REV-1**

Structural and strengthening works of 1X100MW NRPP, AGPCL Namrup Project, Dibrugarh, Assam.

Tender No-PSER:SCT:NAM-C1926:18

SCH-2 - TOTAL PRICE BREAK UP

BOQ ITEM NO	DESCRIPTION	UNIT	QTY	ALLOTTED PERCENTAGE FOR AMOUNT OF EACH ITEM(Nearest to the 6 decimal points) W.R.T THE TOTAL OF QUOTED PRICE IN SCH-1
7.3	Providing 18mm thk external cement sand plastering in two layers. Bottom layer of 12mm width 1:5 cement sand mortar with coarse sand and top layer of 6mm thk with 1:6 cement sand mortar with fine sand including mixing, laying, finishing, curing rounding corners cutting grooves wherever required etc. with all materials complete as per drawings and specification at all levels.	SQM	220	0.2140350%
7.4	Supplying and fixing 16BG metal lath (wire mesh) at junction of brick work and concrete work before plastering at various elevations locations as showing drawings and as directed by the engineers at all levels.	SQM	30	0.0215390%
8	FLOORING AND SKIRTING INCLUDING BASE LAYER AND ALL MATERIALS, LABOUR, CURING, POLISHING ETC. COMPLETE IN ALL RESPECTS AS SHOWN ON DRAWINGS, DESCRIBED IN SPECIFICATIONS AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING			
8.1	Laying 20mm thk grey cement skirting including preparation of base laying under bed, finishing with neat cement, rounding corners and junctions curing etc. complete as per drawing and specifications.	SQM	10	0.0086690%
8.2	Providing 50mm thk heavy duty cement flooring comprising 38mm cement concrete base laying under bed in panels bound by 4x40mm aluminium strips followed by 12mm thk wearing top layer of cement, metallic hardener and stone aggregate, finishing, curing etc. all complete with dust protective coating as per specifications.	SQM	50	0.0846290%
8.3	Providing 50mm thk heavy duty cement flooring comprising 38mm cement concrete base laying under bed in panels bound by 4x40mm aluminium strips followed by 12mm thk wearing top layer of cement, non-metallic hardener and stone aggregate, finishing, curing etc. all complete with dust protective coating as per specifications.	SQM	50	0.0911530%
8.4	Supplying laying and fixing 40 mm thk mirror polished kota stone flooring/steps in stair case, skirting and DADO in various elevations comprising min 400X275X20mm thk for flooring, 400X275X20mm thk stone slabs for DADO and 125mm high 20mm thk stone slabs for skirting including preparation of base laying underbed, finishing, polishing etc. complete as per drawing and specification	SQM	720	2.5154870%
9	FINISHES, PAINTING TO CONCRETE, PLASTERED SURFACES, STEEL STRUCTURE SURFACE PREPARATION INCLUDING ALL MATERIALS, LABOUR, SCAFFOLDING ETC. ALL COMPLETE AS PER SPECIFICATION, DRAWING AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING:- (PAINTS OF REPUTED MANUFACTURER LIKE IC/BURGER/ASIAN PAINTS OR EQUIVALENT			
9.1	Providing minimum two coats of water proof cement paint of approved shade & make, made from best quality white cement and lime resistant colours with accelerators, water proofing agents and fungicides. Including preparation of surfaces, scaffolding, cost of paint etc. all complete as per drawings and specifications. The paint shall confirm to IS:5410.	SQM	50	0.0172400%
9.2	Providing complete protective coating system to structural steel works with two coats of synthetic enamel paints(20 micron DFT each, total 40 micron) over a coat of red oxide zinc phosphate primer(30 micron DFT conforming to IS:12744 (primer paint is included under item no 5.1 and no separate payment will be made) and paint conforming to IS: 2932 and IS:2933, consumables and scaffoldings complete as per specifications and drawings.	MT	436	3.8099060%
9.3	Providing and applying to interior surfaces two or three coats of oil bound distemper of approved shade & make confirming to IS: 428 to obtain a even finish and uniform colour over a coat of primer as per Manufacture recommendation including cost of paint, surface preparation, scaffolding etc. all complete as per spec. and drawing.	SQM	50	0.0251300%
9.4	Providing and applying two coats of acrylic plastic emulsion paint (water based with rutile titanium dioxide and other selected pigments and fungicide) confirming to IS: 5411 part-II, including of approved make and shade including cost of paint, cleaning and surface preparation, priming coat materials, scaffoldings etc. all complete as per specification and to the satisfaction of engineer / architect incharge. the paint film shall allow the moisture in wall to escape without peeling and blistering.	SQM	220	0.1609610%
9.5	Providing 2mm thick plaster of paris punning over plaster at various elevations with all materials etc. complete as per specifications and directions of engineer.	SQM	20	0.0080870%
9.6	Providing minimum two coats of water proof exterior grade acrylic emulsion paint approved shade & make Including preparation of surfaces, scaffolding, cost of primer, paint etc. all complete as per drawings and specifications.	SQM	20	0.0116480%
9.7	Acrylic washable distemper of approved brand paints including cost of material, scaffolding, preparation of surface etc.	SQM	20	0.0100520%
9.8	Providing three or more coats of white wash to give a smooth and even shade including cleaning & preparation of surfaces scaffolding etc. complete.	SQM	20	0.0051650%
9.9	Providing high durable epoxy based floor paint over laid RCC / finished / tiled surfaces as per manufacturer recommendations.	SQM	100	0.0393240%
10	DOORS, WINDOWS, VENTILATORS, LOUVERS, ROOF VENTILATORS, ROLLING SHUTTERS, PARTITIONS ETC. COMPLETE INCLUDING FRAMING, KICK PLATES, STOPPERS AS PER SPECIFICATION, DRAWINGS AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING:-			

**VOLUME-III
PRICE SCHEDULE, REV-1**

Structural and strengthening works of 1X100MW NRPP, AGPCL Namrup Project, Dibrugarh, Assam.

Tender No-PSER:SCT:NAM-C1926:18

SCH-2 - TOTAL PRICE BREAK UP

BOQ ITEM NO	DESCRIPTION	UNIT	QTY	ALLOTTED PERCENTAGE FOR AMOUNT OF EACH ITEM(Nearest to the 6 decimal points) W.R.T THE TOTAL OF QUOTED PRICE IN SCH-1
10.1	Providing and fixing of Aluminium casement glazed windows and ventilators including frames and shutters, transoms, mullions, fittings and fixtures, standard approved locking handle,, standrad approved friction stay/adustable folding stay (as applicable) aluminium beading, but excluding glazing. Aluminium sections shall be of INDAL 40 series of 15 micron thk anodizing coating . aluminium alloy shall be of IS designation HE-9-WP of IS 733 of corrosion grade. Frames mullions, transom etc shall be anodized in a bath of sulphuric acid . the anodized material shall be sealed by immersing in boiling water as per drawing & specification (glazing will be paid under item 10.2) Payment terms - a) On receipt of materials at site - 65%; b) On completion of erection & fixing - 35%.			
a)	Fixed Type	SQM	200	3.1511700%
10.2	Supplying fitting and fixing the following glazing of approved manufacturer at various elevations including supplying rubber bending, cost of all materials etc. complete as per specifications to steel/aluminum windows, doors & partitions as per approved drawings & specifications.			
a)	6.0mm thk clear float glass	SQM	200	0.8355580%
10.3	Supplying erecting, assembling, fitting,& fixing rolling steel shutters of 18 gauge sleet sheets with MS rolled channel frameas per IS: 6248 and accessories from approved manufacturesIncluding all fixtures. locking arrangements, electrical wiring forMotor drive etc. including two coats of synlhellc enamel paints over a coat of red oxide zinc chromate primer conforming lo IS 12744 of approved brand and shade all complete as per specification & drawings. (all rolling shutters irrespective of their size should be Electrically & Mechanically operated.	SQM	25	0.4896500%
10.4	Supplying and erection including assembling fitting and fixing best quality 45mm thk hollow steel doors double plated with 18 gauge MS sheets, pressed steel frames at various elevations including frames, shutters, fittings and fixtures, Godrej make Mortice lock with handle on both sides, grouting the frames, including two coats of synthetic enamel paints over a coats of red oxide zinc phosphate primer (30 micron DFT conforming to IS - 12744 complete as per drawing & specifications. Payment terms - a) On receipt of materials at site - 65%; b) On completion of erection & fixing - 35%.			
a)	Single shutter	SQM	2.10	0.0345990%
a)	double shutter	SQM	3.15	0.0583370%
11	RAIN WATER PIPES			
11.1	Supplying, fitting and fixing heavy cast iron "Roof drain" pipes at various elevations including shoe bends junctions, sockets adapter, brackets, hangers, supports etc joints, caulking prime coat of painting with anticorrosive paint including all materials etc complete as per drawings and specifications.			
a)	150mm Dia	RM	250	1.2060710%
12	MISCELLANEOUS ITEMS			
12.1	Preparation of old concrete surface by chipping, removal of loose concrete and making good to receive new concrete as per specification for foundation, column, walls, beams, chajjas, slabs etc. Including cost of all T&Ps, labour, consumables etc, as directed by BHEL. Joint protocol to be maintained.	SQM	20	0.0106690%
12.2	Supplying and fixing anchor fasteners of FISCHER/HILTI make or equivalent of following diameters.			
a)	20 mm, Heavy duty 10 Ton pullout	Nos	64	0.0375820%
12.3	Supplying & fixing lock fix (FOSROC make) for extending new reinforcement from existing structures	Nos	20	0.0515950%
13	DISMANTLING OF STRUCTURE			
13.1	Dismantling and removal before modification of the following items in the existing structures with all labour, tools, transport etc. all complete including delivering as directed by the Engineer.			
a)	Concrete (plain)	CUM	2	0.0104860%
b)	Concrete (reinforced)	CUM	30	0.1966220%
c)	Brickwork	CUM	20	0.0524320%
d)	Door, Wndow, ventilators	Sqm	2	0.0026220%
e)	Metal sheet sheetings/claddings	Sqm	360	0.1014850%
f)	Removal of Kota stone flooring from Operating floor, Cleaning, sweeping up to satisfaction of BHEL Engineer for checking healthiness of Reinforced concrete slab as per direction of customer / BHEL engineer.	Sqm	540	0.5679410%
14	EARTH WORK IN EXCAVATION, AS PER SPECIFICATION, DRAWINGS AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING:-			

**VOLUME-III
PRICE SCHEDULE, REV-1**

Structural and strengthening works of 1X100MW NRPP, AGPCL Namrup Project, Dibrugarh, Assam.

Tender No-PSER:SCT:NAM-C1926:18

SCH-2 - TOTAL PRICE BREAK UP

BOQ ITEM NO	DESCRIPTION	UNIT	QTY	ALLOTTED PERCENTAGE FOR AMOUNT OF EACH ITEM(Nearest to the 6 decimal points) W.R.T THE TOTAL OF QUOTED PRICE IN SCH-1
14.1	Earth work in excavation in all kinds of ordinary and hard soil (including slushy soil) up to a depth of 3.0 m below ground level and stacking within a lead of 500 M with necessary shoring strutting, ramming, trimming, and dressing of sides etc, including bailing / pumping out of surface water /rain water/sub soil water, cutting minor vegetation, if any complete.	CUM	20	0.0178210%
15	EARTH WORK IN BACKFILLING AND DISPOSAL AS PER SPECIFICATION, DRAWINGS AND AS DIRECTED BY ENGINEER FOR THE FOLLOWING.			
15.1	Earthwork in backfilling & compacting in layers not exceeding 200 mm around foundations, trenches, below grade slabs and all other locations, including cost of transporting earth, re-excavation of heaps of earth, loading, unloading, spreading, compacting as per specifications, drawings and as directed by the engineer. Joint protocol to be maintained.			
a)	With earth obtained from stacks, heaped earth re-excavation, excavated from foundations within a lead of 500 mtrs	CUM	10	0.0046740%
	TOTAL			100.0000000%

Structural and strengthening works of 1X100MW NRPP, AGPCL Namrup Project, Dibrugarh, Assam.

Sl no	Reference clause of tender document	Existing provision	Bidder's query	BHEL's clarification
1	VOLUME-III PRICE SCHEDULE, as per SOR item no. 2.2		we have to conduct UPV testing for concrete, and the Unit is CUM, but the test house will conduct the test on point basis. So kindly confirm how many point test has to be done per CUM.	refer VOLUME-III PRICE SCHEDULE, R-01, issued along with this TCN-02.

FORMAT FOR NO DEVIATION CERTIFICATE
(To be submitted in the bidder's letter head)

BHARAT HEAVY ELECTRICALS LIMITED,
Power Sector - Eastern Region,
Plot no 9/1, DJ Block, Sector – II, Salt Lake City,
Kolkata – 700 091

Sub	No Deviation Certificate.	
Job	Structural and strengthening works of 1X100MW NRPP, AGPCL Namrup Project, Dibrugarh, Assam.	
Ref	1.0	Tender no PSER:SCT:NAM-C1926:18
	2.0	BHEL's NIT, vide reference no no PSER:SCT:NAM-C1926:7176, Date: 20-11-2018
	3.0	BHEL's TCN-01, vide reference no PSER:SCT:NAM-C1926:TCN-01, Dated 22-11-2018.
	4.0	BHEL's TCN-02, vide reference no PSER:SCT:NAM-C1926:TCN-02, Dated 03-12-2018.
	5.0	All other pertinent issues till date.

Dear Sirs,

With reference to above, this is to confirm that as per tender conditions, we have visited site before submission of our offer and noted the job content & site conditions etc. We also confirm that we have not changed/ modified the tender documents as appeared in the website/ issued by you and in case of such observance at any stage, it shall be treated as null and void.

We hereby confirm that we have not taken any deviation from tender clauses together with other references as enumerated in the above referred NIT. We hereby confirm our unqualified acceptance to all terms & conditions, unqualified compliance to technical specification, integrity pact (if applicable) and acceptance to reverse auctioning process.

In the event of observance of any deviation in any part of our offer at a later date whether implicit or explicit, the deviations shall stand null & void.

We confirm to have submitted/uploaded offer/documents in accordance with tender instructions with acceptance of the terms & conditions of the tender by us and as per aforesaid references.

Thanking you,

Yours faithfully,

(Signature, date & seal of authorized representative of the bidder)