



SCHEDULE-A :: BILL OF QUANTITIES

भारत हेवी इलेक्ट्रिकल्स लिमिटेड | Bharat Heavy Electricals Limited
 एच पी ई पी, रामचंद्रपुरम, हैदराबाद | HPEP, RAMACHANDRAPURAM, HYDERABAD - 502032
 फ़ैक्टरी सिविल विभाग | FACTORY CIVIL DEPARTMENT
 संपर्क दूरभाष सं | Telephone No: 040 – 2318 4180, ई मेल // email: ldv@bhel.in

निविदा सूचना सं | TENDER NOTICE No: HY/FCD/OT-18/2022-23, date: 29.12.2022

Name of work: "Civil works for Establishment of Test Facility for testing Boiler Feed Pumps for Nuclear Power Projects"

Item No.	Description of the item	Unit	Quantity	Unit Rate including GST	Amount including GST
Part-A: CIVIL WORKS					
1	Dismantling reinforced cement concrete / plain cement concrete and disposing of debris upto to a lead of 2 km including loading, unloading and spreading as directed by Engineer-In-Charge. etc., complete. All as directed by Engineer-In-Charge.	Cu.m	196.93	Rs. 2,654.24	Rs. 5,22,699.48
2	Earth work in excavation in all soils by mechanical means (Hydraulic Excavators) / manual means in foundations trenches or drains (not exceeding 1.5m in width or 10 Sq.m on plan) including dressing of sides and ramming of bottoms, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50m. All as directed by Engineer-In-Charge.	Cu.m	819.37	Rs. 252.30	Rs. 2,06,727.05
3	Earth work in excavation by mechanical means (Hydraulic Excavators) / manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 Sq.m on plan) including disposal of excavated earth, lead upto 50 m and lift upto 1.5 m, disposing earth to be levelled and neatly dressed for Hard Rock (Blasting prohibited). All as directed by Engineer-In-Charge.	Cu.m	89.90	Rs. 1,016.20	Rs. 91,356.38
4	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering including consolidation by vibrations for all works up to plinth level with 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate of 20 mm nominal size). Only cement will be issued by BHEL on free of cost at BHEL store.	Cu.m	52.75	Rs. 4,645.00	Rs. 2,45,023.75
5.a	Providing and laying in position specified grade, of Reinforced cement concrete excluding the cost of centring, shuttering, finishing and reinforcement - all work up to plinth level with 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate of 20 mm nominal size). Only cement will be issued by BHEL on FREE of cost at BHEL stores.	Cu.m	217.27	Rs. 5,025.00	Rs. 10,91,756.63
5.b	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using cement content as per approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work, including pumping of R.M.C from transit mixer to site of laying, excluding the cost of centring, shuttering finishing and reinforcement, including cost of admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer-In-Charge.. (Cement content considered as 330 kg/Cu.m. Excess / less cement used as per design mix is payable / recoverable separately). All works upto floor V level. Only OPC 43 grade / OPC 53 grade cement is permitted.	Cu.m	207.27	Rs. 8,398.65	Rs. 17,40,746.19
6	Reinforcement for RCC. work including straightening, cutting, bending, placing in position and binding grills with binding wire all complete by cold twisted bars. (Only reinforcement steel will be issued by BHEL on FREE of cost at BHEL stores)	MT	55.92	Rs. 18,885.00	Rs. 10,56,049.20
7	Centring and shuttering including scaffolding, strutting, propping etc.; and removal of form work, for foundations, footings, bases of columns etc. for mass concrete- up to plinth level. All as directed by Engineer-In-Charge.	Sq.m	2353.26	Rs. 284.85	Rs. 6,70,326.11



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Item No.	Description of the item	Unit	Quantity	Unit Rate including GST	Amount including GST
8	Fabrication of structural steel work including all materials going into the process of fabrication and forming an integral part of steel work together with all shop and site rivets and electrodes for site welding as necessary and all site connections comprising sag rods, floor beams, girders, bracings, trusses and frame work for fixed false ceiling and for movable false ceiling, purlins with channel / angles, MS flat supports including all connections as per detailed drawings connected steel works etc., cleats, gusset plates, all bolts, nuts, washers, base plates, anchor bolts as per detailed drawings, cutting, welding and painting 2 coats of red-oxide primer before erection etc., complete. The rate shall include painting 2 coat of Red-oxide primer as per IS specifications and all charges for handling, leading and loading at the fabrication yard. (The raw structural steel sections, electrodes, gasses only will be issued by BHEL on FREE of cost at BHEL stores).	MT	82.96	Rs. 24,633.00	Rs. 20,43,553.68
9	Erection of Steel work out lined in item above including the charges for handling, leading and stacking at site at approved locations prior to erection including all site riveting, bolting, jointing and site welding where ever required. (upto 15.00m)	MT	82.96	Rs. 10,557.00	Rs. 8,75,808.72
10	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade: Two or more coats on new work. (Only synthetic enamel paint will be supplied by BHEL on FREE of cost at BHEL stores)	MT	82.96	Rs. 3,863.00	Rs. 3,20,474.48
11	Filling with available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidation each deposited layer by ramming and watering, lead upto 50.00 m and lift upto 1.50 m.	Cu.m	149.90	Rs. 219.65	Rs. 32,925.54
12	Conveyance of excavated spoil up to a lead of 2 km, including loading, unloading and spreading etc. complete as directed by Engineer-In-Charge.	Cu.m	595.42	Rs. 149.43	Rs. 88,973.61
13	Brick work with Ground moulded clay FPS brick in super structure above plinth level upto floor five level in cement mortar 1:6 (1 cement : 6 Coarse sand). Only cement will be issued by BHEL on FREE of cost at BHEL stores.	Cu.m	19.87	Rs. 7,575.99	Rs. 1,50,534.99
14	Plastering in CM 1:6, 20 mm thick to internal and external surfaces of walls including the cost of all materials , labour , curing etc., complete -Upto 10.00 m level. Only cement will be issued by BHEL on free of cost at BHEL stores.	Sq.m	419.10	Rs. 343.97	Rs. 1,44,155.95
15	Supply and Applying two or more coats of distemper with oil bound washable distemper of approved brand and manufacture to given an even shade including preparation of the surface, cost of all labour, material and other incidentals including priming coat with cement primer.	Sq.m	1549.40	Rs. 153.45	Rs. 2,37,755.43



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Item No.	Description of the item	Unit	Quantity	Unit Rate including GST	Amount including GST
16	Providing and fixing in true horizontal level 600 mm x 600 mm false ceiling system using DUNE SUPREME RH 99 MICROLOOK EDGE WITH SILHOUETTE GRID, using hot dipped galvanized steel section, rotary stitched main tee of size 15mm x 42 mm web height, having 0.36 mm gauge at every 600 mm centre to centre maximum and rotary stitched cross tee of size 15 mm x 42 mm, having 0.33 mm gauge at every 600 mm. c/c. and wall angle of size 19 x 19 mm., having 0.35 mm gauge fixed to the periphery of the wall. The above grid is suspended at every 600mm c/c. in both directions using 2.0 mm. thick pre-straightened GI wire, and laying Dune Supreme Microlook Edge ceiling tiles of size 600mmx600mmx15mm having NRC 0.50, Light reflectance of >85% (WT), thermal conductivity k = 0.052-0.057 W/mOK, Humidity Resistance of 99% (having LIFETIME GUARANTEE against SAG), having Fire Performance CLASS 0 / CLASS 1 (BS 476), surface having 3 coats of white paint - crisp finely granulated with micro perforations, back of the tile duly sanded with a coat of protective paint over the formed grid and complete in all respect ,Boards where light fixtures to be fixed shall be handed over to Department. Vendor shall complete all as directed by Engineer-In-Charge.	Sq.m	60.00	Rs. 1,185.74	Rs. 71,144.62
17	Vitrified flooring : Supply and laying of vitrified tiles/ nano technology of brighter shades and required design of premium quality (1st quality), in required texture and colour for floors/skirting/cladding using vitrified tiles of size 600 X 600 mm(± 5 mm), inclusive of cost of cutting , chamfering of tiles to required size, laid on 20mm thick or more as per site requirement to get proper slope with cement based high polymer modified quick-set tile adhesive (Water based) conforming to IS: 15477, in average 3 mm thickness. The rate quoted shall include cost of all materials, labour, colour tint material, leads and lifts etc. complete. Amount will be paid on the basis of measurement of the area of finished work only. It also includes surface preparation of floor giving necessary slopes, cleaning joints and grouting joints with pigmented additives to match shade of the tile. This includes making pockets for electrical, communication, network cables, junction boxes etc. complete in all respects.	Sq.m	60.00	Rs. 1,477.00	Rs. 88,620.00
18	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber/neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer-In-Charge. . 5.5mm Thick Make: Modi float/Saint Gobain	Sq.m	20.00	Rs. 944.80	Rs. 18,896.03
19	Supplying and fixing aluminium partitions with new anodised aluminium box section of size 101.60x 44.45x 2.00mm for verticals, and with 63.50x 38.10x 2.00mm for horizontals spacing suitable to the site requirements and as approved by Engineer-In-Charge. Wherever door are coming wooden runners are to be provided in the box section. The rate shall include grouting of frame to the floor properly fixed at ends to walls, supply and fixing of 12 mm thick toughened glass in required sizes, cost of aluminium sections, frosted film on glass in specific design and sizes, labour etc. complete.(The door opening shall be deducted for payment).	Sq.m	130.00	Rs. 4,967.75	Rs. 6,45,807.50
20	Supply and fixing of 12 mm thick toughened glass glazed single door shutter with door hardwares "Dorma / Ozone" make like floor springs, pivot patch fittings, bottom locks, 'D' Handles and providing with "3M" frosted film in required design etc. complete as directed by Engineer-In-Charge. The above door shutter shall be fixed to the aluminium / wooden / glazed door frames of the cabins. The rate shall include cost of all materials, glass, door hardwares, frosted film, labour charges etc., complete.	Sq.m	7.00	Rs. 4,967.75	Rs. 34,774.25



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Item No.	Description of the item	Unit	Quantity	Unit Rate including GST	Amount including GST
21	Providing and fixing stainless steel tubular railings (1.2 mm thick) 0.90 m height as per design and drawings using top rail(2") , vertical pipe(1.5"), Horizontal pipe (0.63") along with 12 mm thick glass with glossy finish etc., all as directed by Engineer-In-Charge.	RM	147.00	Rs. 3,398.47	Rs. 4,99,575.09
22	Providing and fixing 18 mm thick gang saw cut mirror polished machine cut for kitchen platforms , vanity counters, window sills, fascia and similar locations of required size of approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement: 4 coarse sand) with joints treated with white cement, mixed with matching pigment, epoxy touch-ups, including rubbing, curing moulding and polishing to edge to give high gloss finish etc. complete at all levels, Granite of any colour and shade. Only cement will be issued by BHEL on free of cost at BHEL stores.	Sq.m	124.80	Rs. 4,007.65	Rs. 5,00,154.72
23	Providing and fixing pre-coated 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 Engineer-In-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	Sq.m	280.10	Rs. 627.55	Rs. 1,75,776.76
24	Providing and fixing pre-coated galvanised steel sheet roofing accessories 0.50 mm (+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 : Ridges plain (500 - 600mm)	m	30.00	Rs. 416.30	Rs. 12,489.00
25	Design Optimisation - Structural Design and Drawings (i) Soil investigation, if required, Structural Design, Analysis, Report & Recommendations and vetting of the same with JNTU-H / IIT-H / OU and submission of the same; (ii) Submission of THREE sets of all 2d and 3D drawings in colour prints in at least A1 size sheets (iii) Structural Design & Analysis for all Foundations involved in the work, all Columns, Pedestals, Beams, Roof trusses, Roof slabs etc., as per relevant IS codes including the loads as per IS 875, Report & Recommendations and vetting of the same with JNTU-H / IIT-H / OU and submission of the same. 10% of the billed value of works executed under items 5.a, 5.b, 6 and 8 shall be kept on hold and shall be released only after submission of design & drawings as per above, as directed & acknowledgement of receipt by Engineer-In-Charge.	-	-	-	-
Sub-Total: Part-A: CIVIL WORKS					Rs. 1,15,66,105



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Item No.	Description of the item	Unit	Quantity	Unit Rate including GST	Amount including GST
Part-B: MISCELLANEOUS ELECTRICAL WORKS IN CONTROL ROOM					
1	Shifting, Installing, Testing and commissioning of BHEL free issued LED False Ceiling Lights of capacity 31W. Including supply of 3C x 1.5 sq.mm cable for connection from ceiling rose to the fitting	Nos	10.00	Rs. 162.17	Rs. 1,621.70
2	Supply, Shifting, Installing, Testing and commissioning of LED Double Tube Lights fittings along with lamps of capacity 22W each. Supply of downrods and 3C X 1.5 sq.mm cable is in the scope of the contractor. Make: Havells/Philips/Crompton Greaves/Bajaj/GE Model: reGalBaTTenT8uPTo2X22WDsBsWH/equivalent model of other makes mentioned above. The job also includes supplying and fixing ball and socket arrangement, 2 Nos. down rods of 20 mm dia X 1.6 mm thick steel conduit upto 90 cm length, painting and wiring the down rods and connections with 3CX 1.5 sq. mm FRLS PVC insulated, copper conductor and earthing etc. as required.	Nos	36.00	Rs. 1,089.87	Rs. 39,235.32
3	Supply of 1400mm sweep ceiling fans of make: Havells/Crompton Greaves/Bajaj/Orient along with electronic regulator and down rods of 600mm length and 3C X 1.5 sq.mm cable for connection from ceiling rose to the fan. Model: Topaz Gold of Orient / equivalent model of other makes mentioned as above	Nos	4.00	Rs. 3,634.52	Rs. 14,538.08
4	Shifting, installation, testing and commissioning of BHEL free issued LED street light. The light is to be mounted on a GI pipe of suitable size free issued by BHEL. The GI pipe should be neatly bent and the pipe and light assembly should be rigidly fixed on a wall. The light should be controlled by a SP switch.	Nos	5.00	Rs. 386.26	Rs. 1,931.30
5	Supply and installation of wall mounted fan of make: Orient/Bajaj/Crompton Greaves/Havells Model: Sameera of Havells / equivalent model of other makes mentioned above.	Nos	2.00	Rs. 4,294.46	Rs. 8,588.92
6	Supply and fixing of 10 Amps 250 V. SP switches for control of light fitting and fans with Roma Type code : 21011 of Anchor or North West make . Fixed on a suitable modular type concealed box with suitable top cover. Rate including Testing & commissioning.	Nos	55.00	Rs. 261.06	Rs. 14,358.30
7	Supply and fixing of 3pin, 250 V, 5/10 Amps power socket cum switch with indication Roma type code 21113 and 21077 of Anchor make or North West. Fixed on suitable modular type concealed box top cover. Rate includes Testing & commissioning.	Nos	12.00	Rs. 500.78	Rs. 6,009.36
8	Supply and fixing of 25A, 250V box type, flush mounting double pole MCB and heavy duty plug & socket of Anchor ROMA make Ref. No. Item code: 98488. The job includes fixing on suitable modular type concealed box with suitable top cover for Air Conditioner.	Nos	5.00	Rs. 917.12	Rs. 4,585.60
9	Supply and fixing of 3pin, 250 V, 10/25 Amps power socket cum switch with indication Roma type code 34374 and 22014 of Anchor make. Fixed on suitable modular type concealed box top cover. Testing & commissioning.	Nos	3.00	Rs. 699.73	Rs. 2,099.19
10	Supply and installation of wiring with 1.5 sq. mm 660 / 1100V. Grad PVC insulated copper wire multi strand of make Finolex/Rediant/Finocab/Havells/L&T. In PVC pipe of suitable dia (As per IS:732 for wiring points) with 14 G/1.5sq.mm green colour copper wire for earth continuity. Each light / fan point should be connected to three plate ceiling rose code 39072 of Roma modular type of Anchor or North West make / connector suspended duly with conduit / PVC pipe etc. Each circuit should not have more than 7 points 700 watts.	Points	67.00	Rs. 1,002.52	Rs. 67,168.84



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Item No.	Description of the item	Unit	Quantity	Unit Rate including GST	Amount including GST
11	Supply and installation of wiring with 2.5 sq. mm PVC insulated copper wire multistrand of make Finolex / Rediant / Finocab / Havells / L&T. The wiring point for 20/16 A. power socket including 2.5 sq.mm green colour copper wire for earth continuity. Independent circuit for each socket from power MCB distribution board (As per IS:732 for wiring point) Testing and commissioning. The wiring should not be mixed with lighting pipe wiring and it should be run separately in the room / shed at a height of 2 feet from ground level or as per the Engineer-In-Charge instruction.	Points	8.00	Rs. 2,270.97	Rs. 18,167.76
12	Supply and fixing of PVC Piping for Electrical wiring, Telephone wiring and LAN wiring. The job includes supply of adequate number of Pipe Bends, Four-way/Three-way/Two-way Junction Boxes with End Cover etc. (i) 25mm (1") dia PVC pipes 1.5mm thick, Make: Sudhakar Pipes/Anchor/Precision	m	165.00	Rs. 260.09	Rs. 42,914.85
13.a	Supply and fixing of: Telephone jacks along with suitable PVC/Metal modular box along with cover frame and cover plate, make: Anchor Roma Classic, color: Solid white, item code for telephone jack: 20857	Nos	3	Rs. 528.92	Rs. 1,586.76
13.b	Supply and fixing of: LAN Sockets along with suitable PVC/Metal modular box along with cover frame and cover plate. Make: Anchor Roma Classic, color: Solid white, item code for telephone jack: 35763	Nos	6.00	Rs. 905.48	Rs. 5,432.88
14	Supply and Installation of MCB DB with TPN 415V, 8way (for lighting & Power circuits) consisting of 10 to 20A -- 8nos MCBs on each phase with double door metallic cover having transparent window, sheet enclosed, dust & vermin proof. Ref No: 8GB0408HRC of SIEMENS/equivalent of other makes mentioned below make along with controlling 63A I/C MCB. It is to be concealed in the wall or as per the Engineer-In-Charge instructions. The job includes labelling / writing the connection chart inside the door with WHITE duco paint as required, double earthing, testing & commissioning. Make of all the items in the MCBDB: SIEMENS / ABB / L&T / HAGER / LEGRAND / HAVELLS	Nos	1.00	Rs. 23,477.33	Rs. 23,477.33
15.a	Supply and laying of 5Pair telephone cable	m	180.00	Rs. 71.82	Rs. 12,927.60
15.b	Supply and laying of CAT6A LAN Cable	m	100.00	Rs. 55.32	Rs. 5,532.00
16.a	Termination of the following cables. The connectors suitable for the cables mentioned are in the scope of contractor - Telephone cable 5 pair	Nos	6.00	Rs. 582.30	Rs. 3,493.80
16.b	Termination of the following cables. The connectors suitable for the cables mentioned are in the scope of contractor - CAT6A LAN Cable	Nos	12.00	Rs. 485.25	Rs. 5,823.00
17	Supply and installation of 17 U Floor Mount Rack with Fans and Power PDU (Indian type) with Accessories. Make: Netfox / Netrack / APC / President / Valrack	Nos	1.00	Rs. 20,592.04	Rs. 20,592.04
18	Supply and installation of 24 LIU Fully Loaded Single Mode LC-LC with LC adapter. (For outdoor Fiber cable termination). This is including splicing(all cores needs to be spliced). Make: Commscope / Amp / Molex / Systemax / Legrand / Panduit	Nos	2.00	Rs. 27,989.18	Rs. 55,978.36
19	Supply and fixing of 2 Meters LC- LC Single Mode Patch Cords Make: Commscope / Amp / Molex / Systemax / Legrand / Panduit	Nos	2.00	Rs. 1,599.38	Rs. 3,198.76
20	Supply and Structured laying of 6 Core Single Mode Armoured Out Side OFC Cable with clamps and fixtures. Make: Commscope / Amp / Molex / Systemax / Legrand / Panduit	m	100.00	Rs. 113.29	Rs. 11,329.00
21	Supply, installation 24 Port fully Loaded Patch Panel. Panel should have label holders and designation labels as a part of standard device. Make: Commscope / Amp / Molex / Systemax / Legrand / Panduit / CISCO	Nos	1.00	Rs. 14,021.24	Rs. 14,021.24



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Item No.	Description of the item	Unit	Quantity	Unit Rate including GST	Amount including GST
22	Supply, installation and dressing of Cat 6A Gigaspeed patch cord 3 m length for Patch Panel end Connectivity, Both end shall be RJ 45 with snag less boots. Make: Commscope / Amp / Molex / Systemax / Legrand / Panduit	Nos	10.00	Rs. 533.13	Rs. 5,331.30
23	Supply, installation and dressing of Cat 6A Gigaspeed patch cord 1 m length for Patch Panel end Connectivity, Both end shall be RJ 45 with snag less boots. Make: Commscope / Amp / Molex / Systemax / Legrand / Panduit	Nos	10.00	Rs. 466.48	Rs. 4,664.80
24	2U Cable Manager	Nos	2.00	Rs. 739.72	Rs. 1,479.44
25	Shifting & Earthing of Equipment from nearest Earth riser with 50x6mm/25x3mm GI flat	m	50	Rs. 41.08	Rs. 2,054.00
26.a	Supply and fixing of the following: - Telephone jacks along with suitable PVC/Metal modular box along with cover frame and cover plate, make: Anchor Roma Classic, color: Solid white, item code for telephone jack: 20857	Nos	3.00	Rs. 528.92	Rs. 1,586.76
26.b	Supply and fixing of the following: - LAN Sockets along with suitable PVC/Metal modular box along with cover frame and cover plate. Make: Anchor Roma Classic, color: Solid white, item code for telephone jack: 35763	Nos	12.00	Rs. 905.48	Rs. 10,865.76
Sub-Total: Part-B: MISCELLANEOUS ELECTRICAL WORKS IN CONTROL ROOM					Rs. 4,10,594
Total PART-A + PART-B, including GST					Rs. 1,19,76,699



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Notes:

1	Risk Purchase : In case the contractor fails to execute the work within the scheduled time or due to any other reasons, BHEL reserves the right to get the same completed through some other party at the risk & cost of the contractor and any additional expenditure incurred due to the same shall be charged to the contractor.
2	Unit Rates and Amount are including GST. Applicable GST shall be paid to the Contractor only after submission of necessary documents.
3	Maintenance and Defect Liability Period: Refer Clause 3.13 of NIT (i) The Maintenance & Defect Liability Period for the contract shall be <u>TWELVE (12) MONTHS</u> commencing from the next calendar day of actual date of completion of contract / work whichever is later. (ii) Expenditure going to be incurred during Maintenance & Defect Liability Period shall be borne completely by the Contractor at no cost to BHEL. (iii) Cement, Reinforcement Steel, Structural Steel, Electricity, Water supply, if required during Maintenance & Defect Liability Period, shall be issued to the Contractor on recoverable basis at punitive rates as stipulated in respective Schedules of NIT. (iv) The Security Deposit shall be released after satisfactory completion of the work including Maintenance & Defect Liability Period and after getting I.R clearance and payment of final bill.
4	Penalty Clause: Refer Clause 2.1.3 of NIT The following Penalties are envisaged in the contract and shall be assessed and recovered independently: 1. DELAY IN COMPLETION OF WORK: In the event of delay in completion of the awarded work beyond the contractual delivery date, a <u>penalty of 0.5% of the Contract value per week delay or part thereof subject to a maximum of 10% of the Contract value</u> shall be levied and recovered from any of his bills lying with BHEL along with GST, as applicable. Refer Clause 3.6 of NIT for Period of Contract. 2. DELAY IN DEPOSITION OF SECURITY DEPOSIT: If the Contractor fails to deposit the required Security Deposit within TWO (02) WEEKS period from the date of issue of LoI [or] as requested by BHEL, EMD shall be forfeited and the Contractor / Tenderer may be suspended from being eligible for bidding in any contract with BHEL for a period of TWO years from the date of notification, in case of continuous defaulter. 3. DELAY IN COMMENCEMENT OF WORK: If the Contractor fails to commence the work within THREE (03) weeks period from the date of issue of LoI or as requested by BHEL, a <u>penalty of 0.5% of the Contract value per week delay in commencement or part thereof subject to a maximum of 10% of the Contract value</u> shall be levied and recovered from any of his bills lying with BHEL along with GST, as applicable. 4. VIOLATION OF SAFETY NORMS: Violation of applicable safety, health and environment related norms, a penalty of Rs. 5,000/- (Rupees Five thousand) per occasion shall be imposed. 5. USAGE OF AGGREGATES: Coarse Aggregates shall be conforming to IS 383. Further, unless otherwise specified, <u>only Natural Sand / River Sand conforming to IS 383 should be used in all Cement related works.</u> However, if Crushed stone sand (also locally called as robo sand, stone dust etc.) conforming to IS 383 is used in Masonry / Concrete / Plastering / RMC or any other cement related work(s) or filling works, <u>amount payable</u> for such item/s to the extent of quantity executed using Crushed stone sand <u>shall be reduced by 20% (TWENTY PERCENT).</u> 6. DEPLOYMENT OF SITE ENGINEER: The Contractor shall engage one Site Engineer with minimum post qualification experience of TWO (02) years for Graduate Civil Engineer [or] THREE (03) years for Diploma Civil Engineer, from the date of commencement of work till completion of the work or as directed by the Engineer-In-Charge to ensure SAFETY, EXECUTION, QUALITY, WORKMANSHIP, PROGRESS etc; In case of non-deployment of Site Engineer for more than TEN (10) days in a calendar month excluding authorised holidays, leaves and authorised absence, penalty equal to Skilled Worker wage for each day beyond the above TEN (10) non-deployed days shall be imposed and recovered from any of his bills lying with BHEL along with GST, as applicable.



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5	<p>SPECIAL NOTES:</p> <p>(i) For the items which are under Contractor scope, payment shall be released only after submission of Factory Entry Gate passes of the required material.</p> <p>(ii) Quantities mentioned in the Schedule-A above or in Price Bid are tentative & indicative only. Quantities finalised by BHEL during course of execution shall be as per actual site requirement and shall be final.</p> <p>(iii) No separate payment for item-24 of Part-A, Civil works. However, 10% of the billed value of works executed under items 5.a, 5.b, 6 and 8 shall be kept on hold and shall be released only after submission of design & drawings as directed & acknowledged by Engineer-In-Charge.</p>
6	<p>Taxes: Bidders shall quote their Basic price exclusive of taxes. The applicable taxes on supply of material or services, as the case may be viz. GST shall be quoted separately, clearly showing the Service Code/Tariff Head, Rate of Tax and Amount of Tax in the Bid. The reimbursement of taxes to the contractor is contingent upon fulfilment by the contractor of all statutory provisions as stipulated in the relevant taxation statute enabling BHEL to avail the eligible input tax credits.</p>
7	<p>The tender % age quoted by the contractor shall be inclusive of all taxes including GST, as applicable from time to time.</p>
8	<p>All the bills of the contractors will be cleared subject to the production of clearance certificate by the contractors in respect of compliance of all statutory requirement, issued by IR section of HR department BHEL.</p>
9	<p>The agency shall submit the I.R. clearance certificate for the above work and arrange to get the final bill sent to Finance within one month from the actual date of completion of work.</p>
10	<p>The agency has to pay the minimum wages to the workers with statutory payments like ESI, PF etc., as per BHEL Notification. For wages, refer Clause-10.11 of NIT. Payments and increase in statutory payments like ESI, PF, PPE's etc., and increase in future DA shall be borne by the Contractor.</p>
11	<p>The agency has to bring police clearance certificate for the work force.</p>
12	<p>All the terms and conditions of the contract with respect to taxes & duties are subject to the new taxation laws introduced from time to time (e.g. GST). The terms and conditions will be modified in accordance with the provisions of new laws (e.g. GST).</p>
13	<p>Payment shall be made stage wise on approval from Engineer-In-Charge</p>
14	<p>Vendor shall raise GST invoice on BHEL Hyd GSTIN.</p>
15	<p>If BHEL is unable to avail the input tax credit, the same amount shall be recovered from the vendor bills.</p>
16	<p>Quantities mentioned in the Schedule-A above are tentative & indicative only. Quantities finalised by BHEL during course of execution shall be as per actual site requirement and shall be final.</p>
17	<p>In case of sanctioning of additional budget within the provisions of BHEL Policies during Contract period or extended Contract period, Contract shall execute the work for the additional budget also. Quantities of the individual items shall be as finalised by the Engineer-In-</p>

GST CLAUSES

Following points to be complied with :

(A) Taxes & Duties- GST Clauses	
1	Only valid GST registered bidders will be considered for the tender. The GSTIN of the bidder should be clearly mentioned in the offer.
2	If bidder is exempted from GST registration under any provision of the GST Law, a declaration with due supporting documents should be furnished for considering the offer.
3	<p>Bidder to quote the applicable taxes in the following manner:</p> <ul style="list-style-type: none"> • Harmonized System of Nomenclature (HSN) of Goods • Services Accounting Code (SAC) of Services. • IGST/CGST/SGST/UTGST: Rate of Tax to be quoted as extra in % against the space provided
4	Bidders to ensure correct applicability of IGST/CGST/SGST/UTGST based on the Inter / Intra state movement of goods/services.
5	In case Bidder has opted for GST Composition Scheme, the same may be stated explicitly both in their technical and price bids. An undertaking to the effect that any change in the status of the bidder will be intimated.
6	Any other taxes & duties not covered anywhere above may be indicated separately.
(B) Taxes deducted at source:	
1	TDS as per the extant statutes shall be deducted.
2	In case bidder does not provide PAN details, higher rate of tax shall be deducted as per the Act.
3	Concessional certificates, if any, should be provided well in time for lower deduction of tax.

निविदाकर्ता के हस्ताक्षर और मुहर

Signature and Seal of the Contractor



SCHEDULE-A :: BILL OF QUANTITIES

Name of work: "Civil works for Establishment of Test Facility for testing Boiler Feed Pumps for Nuclear Power Projects"

(C) Terms & Conditions to be complied in GST	
1	All invoices (incl. Credit Notes, Debit Notes) to contain BHEL HPEP GSTIN ie 36AAACB4146PIZG. Invoices submitted should be in the format as specified under GST Law. All details as mentioned in Invoice Rules including Dealer GST registration number (GSTIN), invoice number with date of issue, quantity, rate, value, taxes with nomenclature – CGST, SGST, UGST, IGST mentioned separately, HSN Code / SAC Code etc.
2	Reimbursement of GST amount will be made only upon completion of the following: <ul style="list-style-type: none"> • Bidder declaring such invoice in their GSTR-1 Return/ IFF • Receipt of Goods or Services and Submission of Tax invoice by BHEL • The tax invoice is reflected in the GSTR2B of BHEL, HPEP (buyer). Payment of GST will be made only if it is matching with data uploaded by the Bidder in GST portal.
3	In case of discrepancy in the data uploaded by the bidder in the GSTN portal vis-a-vis the tax invoice or in case of any shortages or rejection in the supply, then BHEL will not be able to avail the tax credit. The same would be available in PRADAN Portal for the bidder's information. Bidder has to rectify the data discrepancy in the GSTN portal or issue credit note or debit note (details also to be uploaded in GSTN portal) for the shortages or rejections in the supplies or additional claims for processing of such invoices.
4	In cases where invoice details have been uploaded by the bidder but failed to remit the GST amount to GST Department within stipulated time, then GST on the invoices in default will be recovered from the bidder along with the applicable interest.
5	In case GST credit is delayed/denied to BHEL due to non/delayed receipt of goods and/or tax invoice or expiry of timeline prescribed in GST law for availing such ITC, or any other reasons not attributable to BHEL, such GST amount will be recoverable from bidder along with interest levied/leviable on BHEL.
6	Under GST regime, BHEL has to discharge GST liability on LD recovered from bidders. Hence applicable GST shall also be recoverable from bidders on LD amount. For this Tax Invoice digitally signed will be issued by BHEL indicating the respective supply invoice number. The same can be downloaded from PRADAN Portal.
7	GST TDS deducted as per GST Act, is uploaded in GSTN portal along GSTR7. Bidders can directly download the GST TDS Certificate from the GSTN Portal.
8	Bidders to note that Rules & Regulations pertaining to E-way bill & E-Invoicing system are to be strictly adhered to, as and when notified by Govt. authorities

Tender %	% in FIGURES	Percentage in WORDS
EXCESS		
LESS		
At par with BHEL estimate		

Important Notes:

- (1) The bidders are required to quote the tender value on percentage (%) basis at excess or less or at par with estimated value in figures and words. **Bidders are requested to fill only one row;**
- (2) **The quoted rates are including GST.** Applicable GST shall be paid to the Contractor only after submission of necessary documents;
- (3) **Bidders are advised to read and understand Clause 2.1.3 of NIT for Penalties.**