Corrigendum - 1 dated 16/04/2026 to CPC Tender No. BHEL/CPC/AKT /C_CHM/27/009

Name of Work: CONSTRUCTION OF ONE (1) NO. 275 M TALL SINGLE FLUE RCC CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RAFT, CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, STRUCTURAL PLATFORMS ETC, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ELEVATORS ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT (BUT EXCLUDING BOROSILICATE WORKS) FOR AMARKANTAK TPS, UNIT-6 (1X660 MW), CHACHAI, M.P.

A) Some of the Bidders sought clarifications in regard to the published tender specification. The clarifications/ modifications issued by BHEL are as below:

Sl. No.	Reference Tender Document	Reference clause	Existing Provision	Bidder's query	BHEL's Clarification
1	NIT Annexure-1 : PQR	B-2	B-2 B-2.1 B-2.2 **Technical:** Bidder should have executed atleast one complete "RCC Chimney (with RCC Shell and Flue Cans) using Slipform shuttering or NDCT (with Civil and Mechanical) using Jumpform shuttering" of at least 100 Mtr height against a single running/completed contract in the last ten years from latest date of bid submission. **OR** a) Bidder should have executed Reinforced Cement Concrete (RCC) quantities of **at least 6130 cum** within a period of twelve consecutive months against one running/ completed contract in the last ten years from latest date of bid submission. **Executed RCC quantities shall mean laying/pouring of RCC irrespective of scope of supply of RMC in bidder's scope** **AND** b) Bidder should have executed atleast one "RCC Chimney Shell with Slipform shuttering or NDCT Shell (Natural Draft Cooling Tower) with Jumpform" of at least 100 Mtr height against a single running/ completed contract in the last ten years from latest date of bid submission.	As highlighted in Yellow, B2.1 and B2.2 has the same requirement. If 2.2 calls for Slipform of Silo or similar RCC structure using Slipform , then we can look into participation.	Tender Conditions Prevail.
2	TCC	Ch. III, Cl. 3.1.1 & 3.10.1	Open space to be provided by BHEL Location will be finanlised after joint survey with owner	We request you to provide us the tentative location of the area to be allocated by BHEL free of Cost for batching plant ,Fabn yard & its lead / distance from work location/site.	Bidder is requested to visit the site to assess the same.
3	TCC	Ch. IV, Cl. 4.0	Tools and Plants	We presume, the list of T&Ps and corresponding nos.	Tender conditions Prevail.

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			No. of T & Ps to be deployed at site shall be decided w.r.t. monthly plan based on site requirement. Below given nos. are tentative for planning purposes by bidder.	provided are tentative and deployment of the same is not mandatory requirement. Please confirm.	
4	BOQ	BOQ item no.2	Dewatering of ground water Extra over Item No. 1 & 3 for dewatering of ground water by SUMP PUMP method Ground water table shall be lowered up to 1 m below the founding level to make the site workable for foundation construction till backfilling up to ground level. Mode of measurement shall be the quantity of excavation of soil including ash below ground water table to founding level of the footing - 9,150 cum	Kindly provide data regarding level at which water table shall be encountered below existing Ground Level at Chimney location.	Bore log Data sheet is attached along with this Corrigendum.
5	TCC	Ch. IV, Cl. 4.1.8 and BOQ, item no. 14A	Chiller Plant TCC, Ch. IV, Cl. 4.1.8 Chiller plant of adequate capacity for Temperature controlled concrete - As per requirement BOQ, item no. 14A Extra over St. No. 14(i) for controlling of temperature of fresh concrete for raft/pile cap to less than 23 degree centigrade using ice, including all related arrangements for providing, storing and mixing of ice with water, cooling of aggregates etc. All complete as per specification, drawing and as directed by engineer- in-charge. - 1,363 Cum	We presume, installation of chiller plant is not mandatory. Bidder is free to make alternative arrangement for temperature control of fresh concrete. Please confirm	Tender conditions Prevail.
6	TCC	TCC 2.8.4	Mix Design Initially Mix Design for concreting shall be provided by BHEL, based on Mix Design Report, Contractor shall conduct trial mixes. The approved design mix shall be followed by the bidder.	We request you to kindly **share the "Mix Design" containing details such as the minimum cement content for various grades of concrete as per BOQ, etc.,** based on which the Contractor is required to	For Chimney shell concreting with M-35 grade, the minimum cement content of OPC-43 grade may be considered as 425 kg/cum and not more than 450 kg/cum. For Chimney Raft concreting with M-30 grade, the minimum cement content of

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				conduct trial mixes during execution.	OPC-43 grade may be considered as 420 kg/cum and not more than 430 kg/cum. For other concrete grades the cement content shall be as per IS 456 guidelines.

B) Revised BOQ Cum Rate Schedule (R1) is attached herewith.

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
Manager/ SCT- CPC

BOQ_CUM_RATE_SCHEDULE (R1)

TENDER NO. BHEL/CPC/AKT /C_CHM/27/009

CONSTRUCTION OF ONE (1) NO. 275 M TALL SINGLE FLUE RCC CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RAFT, CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, STRUCTURAL PLATFORMS ETC, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ELEVATORS ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT (BUT EXCLUDING BOROSILICATE WORKS) FOR AMARKANTAK TPS, UNIT-6 (1X660 MW), CHACHAI, M.P.

ST NO	Civil Works	Unit	Quantity	Rate(INR)	Amount(INR)	Weightage
1	Earth work in excavation in **all types of soil including ash** which can be excavated by any means including setting out, levelling, removing of surface water accumulated due to rain or any other reason but excluding dewatering to lower the ground water table dressing the sides & bottom, all lifts, ramming/compacting the excavated bottom, stacking, disposal of surplus excavated materials within a lead upto 1Km, spreading/levelling of disposed materials etc. all complete for following depths below ground level, including all labour, equipments etc. complete as per specification, drawing and as directed by engineer- in-charge					
a	Depth from ground level but not exceeding 2 m	cum	4650	₹ -	₹ -	**0.1317557644460 02%**
b	Depth exceeding 2 m but not exceeding 4 m	cum	3950	₹ -	₹ -	**0.1399019541832 54%**
c	Depth exceeding 4 m but not exceeding 6 m	cum	2650	₹ -	₹ -	**0.1175268810486 07%**
2A	Extra over ST No. 1, 3, 4, 4A, 5 & 6 for **dewatering of ground water by sump pump method** as per IS 9759. Ground water table shall be lowered up to 1 m below the founding level to make the site workable for foundation construction till backfilling up to ground level.Mode of measurement shall be the quantity of excavation of soil including ash below ground water table to founding level of the footing.	cum	9150	₹ -	₹ -	**0.6199727766007 51%**
3	Earth work in excavation in **soft rock including weathered rock** which can be excavated by means of crow bar, pick axe, hydraulic excavator, rock breaker or combination of both etc. but does not require chiselling or blasting including setting out, levelling, removing of surface water accumulated due to rain or any other reason but excluding dewatering to lower the ground water table, 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, including all labour, equipments etc complete as per specification, drawing and as directed by engineer- in-charge. **Hardness of rock shall be in the range of 2 to 3 on Mohr's scale of hardness.**					
c	Depth exceeding 4 m but not exceeding 6 m	cum	800	₹ -	₹ -	**0.0482525458795 79%**
d	Depth exceeding 6 m but not exceeding 8 m	cum	1600	₹ -	₹ -	**0.1158061101109 90%**
4A	Earth work in excavation up to any depth below ground level **in hard rock** which can be excavated by mechanical means i.e. hydraulic excavator, rock breaker or combination of both including setting out, levelling, removing of surface water accumulated due to rain or any other reason but excluding dewatering to lower the ground water table, 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, including all labour, equipments etc complete as per specification, drawing and as directed by engineer- in-charge **Note: Hydraulic excavator,rock breaker, hammer of required capacity shall be deployed by agency. Rate should be inclusive of all capacities of excavation equipments.**					
d	Depth exceeding 6 m but not exceeding 8 m	cum	50	₹ -	₹ -	**0.0088391548377 75%**
5	Earth work in excavation in hard rock requiring controlled blasting including wedging, line drilling, pre shearing etc as required, setting out, levelling, removing of surface water accumulated due to rain or any other reason but excluding dewatering to lower the ground water table, dressing the sides & bottom, all lifts, necessary licenses/statuatory clearances for blasting, supply, storage & handling of blasting materials, stacking/disposal of surplus excavated material within a lead upto 1Km, spreading / levelling of disposed materials etc all complete for following depths below ground level, including all labour, equipments etc complete as per specification, drawing and as directed by engineer- in-charge.					
d	Depth exceeding 6 m but not exceeding 8 m	cum	50	₹ -	₹ -	**0.0098863021007 87%**
6	Earth work in excavation in **hard rock requiring chiselling** including setting out, levelling, removing of surface water accumulated due to rain or any other reason (but excluding dewatering to lower the ground water table), dressing the sides & bottom, all lifts, stacking/disposal of surplus excavated material within a lead upto 1Km, spreading / levelling of disposed materials etc all complete for following depths below ground level, including all labour, equipments etc. complete as per specification, drawing and as directed by engineer- in-charge.					
d	Depth exceeding 6 m but not exceeding 8 m	cum	50	₹ -	₹ -	**0.0098863021007 87%**
7	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 300mm compacted thickness using/with selected materials from compulsorily excavated earth available within a lead upto 1 Km and compacted as specified including re-excavation of stacked earth, watering, ramming/compaction by manual/mechanical means, dressing etc all complete for the following, including all labour, equipments etc complete as per specification, drawing and as directed by engineer- in-charge.					
b	at least 90% maximum dry density as per IS-2720 (Part-VII)	cum	7400	₹ -	₹ -	**0.2142340106326 29%**
8	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 300 mm thickness using/with selected earth 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, including all labour, equipments etc complete as per specification, drawing and as directed by engineer- in-charge.					
b	at least 90% maximum dry density as per IS-2720 (Part-VII)	cum	800	₹ -	₹ -	**0.0123193795648 44%**

BOQ_CUM_RATE_SCHEDULE (R1)

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ST NO	Civil Works	Unit	Quantity	Rate(INR)	Amount(INR)	Weightage
9	Extra over ST No. 1 and 3 to 8 for carriage of material/earth for every 500m or part thereof beyond an initial lead of 1km, including all labour, equipments etc complete as per specification, drawing and as directed by engineer- in-charge.					
a	Carriage for stacking/ backfilling of serviceable material/ earth	cum	100	₹ -	₹ -	**0.000369581386945%**
b	Carriage for disposal of serviceable/unserviceable material/ earth	cum	5700	₹ -	₹ -	**0.021066139055882%**
A11	Supplying and filling natural sand / sand manufactured from other than natural sources upto any depth below grade slab, under floors, around foundations, plinths etc. in layers not exceeding 300mm compacted thickness and compacted so as to achieve at least 80% relative density as per IS-2720 (Part-XIV) including spreading, watering, ramming/compaction by manual / mechanical means, dressing, royalty (if any), labour, equipments etc. all complete as per specification, drawing and as directed by engineer- in-charge.	cum	10	₹ -	₹ -	**0.006701742483275%**
12	Providing and Filling in grade slab, area paving, trenches, plinths and other underground structures with graded stone aggregate of size range 63 mm to 45 mm in layers not exceeding 200 mm in thickness including breaking of stone boulders to required sizes, filling the interstices with selected natural sand/sand manufactured from other than natural sources/moorum and compacting to 85 % of original volume of stone stack for all lifts etc. all complete as per specifications, drawings and instructions of the Engineer. Payment shall be made for the measurement of the volume of the compacted fill.	cum	200	₹ -	₹ -	**0.139763361163150%**
13	Providing and laying **Nominal Mix plain cement concrete (M7.5)** with graded aggregate (with maximum size of coarse aggregate not exceeding 40 mm) at all levels for all kinds of work like mass concrete, lean concrete, mudmat, filling etc. including labour, materials, equipment, handling, transporting, batching, curing, testing etc. all complete as per specifications, drawings and instructions of the Engineer.	cum	205	₹ -	₹ -	**0.294343856097915%**
14	Providing and laying design mix cement concrete with graded aggregate (maximum size of coarse aggregate not exceeding 20 mm) for reinforced concrete work at all levels for all kinds of work, including labour, materials, equipment, handling, transporting, batching, mixing, placing, levelling, compacting, curing, testing etc. and rendering or cleaning and finishing the exposed surface with cement mortar (1:3) to give smooth and even surface, all complete as per specifications, drawings and instructions of the Engineer, but excluding all formwork and reinforcing steel:					
i	**For all works below ground level (excluding chimney shell)**					
b	Grade M-30 (foundations, etc) **(Cement supply in contractor's scope as per TCC)**	cum	5450	₹ -	₹ -	**10.388332217278800%**
ii	**For all other works**					
a	Grade M-25 grade level slab, pit, trenches,drain etc.**(Cement supply in contractor's scope as per TCC)**	cum	125	₹ -	₹ -	**0.232605285408702%**
b	Grade M-30 for chimney shell, external platforms, roof slab and any other components.**(Cement supply in contractor's scope as per TCC)**	cum	50	₹ -	₹ -	**0.120052353859400%**
c	Grade M-35 for chimney shell, external platforms, roof slab and any other components.**(Cement supply in contractor's scope as per TCC)**	cum	9700	₹ -	₹ -	**23.466416171847600%**
14A	Extra over St. No. 14(i) for controlling of temperature of fresh concrete for raft/pilecap to less than 23 degree centigrade using ice, including all related arrangements for providing, storing and mixing of ice with water, cooling of aggregates etc. All complete as per specification, drawing and instruction of engineer in charge.	cum	1363	₹ -	₹ -	**0.607845579357119%**
16	Providing and placing steel reinforcements of High yield strength deformed TMT steel bars of grade Fe-500/Fe-500D/Fe-550/Fe-550D conforming to IS:1786 and IS 13920 (minimum elongation shall be 14.5%) , for reinforced concrete work, at all levels, for all kinds of work, including transportation, cleaning, derusting, straightening, cutting, bending, binding in position with annealed wire and/or welding, providing concrete cover blocks, pins, separators, chairs, supports for reinforcement, etc. with all materials, labour, equipment, handling, testing, transportation to & from stores etc., preparation of bar bending schedules, all complete as per specification, drawing and as directed by engineer- in-charge.					
i	**For works below ground level (excluding shell)**					
a	High strength deformed bars **(TMT steel will be provided by BHEL free of cost as per TCC)**	Mt	654	₹ -	₹ -	**2.177579112415170%**
ii	**For works other than those under Sl. No. 16(i)**					
a	Mild steel reinforcement bars **(Mild steel supply in contractor's scope)**	Mt	4	₹ -	₹ -	**0.089782925990944%**
b	High strength deformed bars **(TMT steel will be provided by BHEL free of cost as per TCC)**	Mt	1185	₹ -	₹ -	**5.548396229420960%**
17	Providing and fixing formwork of approved quality for cast-in-situ, plain or reinforced concrete works of any type and section (including curved surfaces and chimney shell) for all elevations, including labour, materials, equipment, waste of forms, shoring, strutting, scaffolding, staging, tieing, nailing, caulking, bolting etc. and removal of form work and staging etc. all complete as per specifications, drawings and instructions of the Engineer.					
i	For works below ground level (excluding shell)	Sqm	1350	₹ -	₹ -	**0.263619601909367%**

BOQ_CUM_RATE_SCHEDULE (R1)

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ST NO	Civil Works	Unit	Quantity	Rate(INR)	Amount(INR)	Weightage
a	**Inner and outer faces of wind shield with slip form shuttering:** Providing and fixing formwork using slipform (inner and outer faces) for concreting in chimney for cast in situ, reinforced concrete works of any type and section for all elevations, including labour, materials, equipment, waste of forms, scaffolding, staging, tieing, nailing, caulking, bolting, mantainence, dismantling etc. all complete as per specifications, drawings and instructions of Engineer in charge. (Area of inner face and outer face shall be measured seperately.) **Note:- To prevent surface problem in RCC Chimney Shell, 0.47 mm thick colour coated GI sheet should be used along with Slipform shutter plate as per direction of BHEL In-Charge.** **Mode of Measurement:- Total formwork quantity in chimney applicable to Slipform work as per specifications & drawings shall be jointly measured and certified. Certified quantity (SQM) to be paid in line to the unit rate of 17a) i), 17a) ii) & 17a) iii). (The slipform arrangement material shall be the property of contractor)**.					
a i)	For Mobilisation & Installation (One Time Payment of the total certified quantity shall be made for mobilisation of slipform only after start of successful slipping as certified by Engineer in charge.)	Sqm	32000	₹ -	₹ -	**5.719686722824920%**
a ii)	For Dismantling of the Slipform System (One Time Payment of the total certified quantity shall be made only after complete dismantling of slipform as certified by Engineer in charge.)	Sqm	32000	₹ -	₹ -	**1.434666987851290%**
a iii)	Slipping/Providing formwork at inner and outer faces of wind shield with slip form shuttering with slipform arrangement. (Cost for design, mobilisation, installation & dismantling of slipform shall be paid seperately in Item No 17 a i) & 17 a ii) and cost for slipping/providing & mantainence of slipform work to be paid in this item). Measurement for payment to be done progressively as per actual slipping executed at site.	Sqm	32000	₹ -	₹ -	**7.154219595019790%**
b	All other components of the superstructure including slabs, beams, columns, walls, enclosures, mini shells, external platforms, corbels, other shell attachments, chases/recesses in shell etc.	Sqm	250	₹ -	₹ -	**0.101388680303307%**
18	Providing and fixing formwork in shell openings and pockets (above 0.1 sq.m surface area) including cutting, formation of shapes and all other operations required for making the required shape and size, removal of formwork, all complete as per specifications, drawings and instructions of the Engineer.	Sqm	500	₹ -	₹ -	**0.202777356756807%**
19	Providing and placing in position at all levels, building paper (kraft paper), as per IS:1397, between concrete surfaces incluing the cost of labour, material, etc. complete as per drawings and instruction of the Engineer.	Sqm	50	₹ -	₹ -	**0.000283600445811%**
20	Providing and installing, at all levels, bitumen impregnated fibre boards, 12 mm thick, conforming to IS:1838, as joint filler at joints in concrete, including nailing, coating of both faces with coal tar pitch/bitumen, including the cost of all labour, material and equipments etc., complete as per drawings, specifications and instructions of the Engineer.	Sqm	50	₹ -	₹ -	**0.008789547806115%**
21	Providing and filling, at all levels, bitumen sealing compound (hot applied type) conforming to IS:1834, for sealing gaps and joints in concrete, including cleaning, mixing, heating, pouring or injecting, appllication of primer, cost of all labour, material and equipments etc., complete as per drawings, specifications and instructions of the Engineer.	Kg	500	₹ -	₹ -	**0.017548944664501%**
22	Supplying, fabricating, erecting and installing miscellaneous steel parts to be embedded/cast in concrete (like staircase embedments, corbel face plates, etc) at all positions and levels including preparation of fabrication drawings, galvanization as per IS:4736 (The minimum weight for galvanizing shall be 610 g/sq.m and shall comply with relevant IS Codes), including the cost of all labour, materials and equipments for setting materials in concrete, grouting, welding, bolts & bolting, expansion anchors, drilling, cutting, etc. complete as per drawings and specification.	Mt	4	₹ -	₹ -	**0.116104655140321%**
B23	Fabrication **(site fabricated as per specification)** and erection of structural steel of grade E 250 in rolled/ built up section (Rolled sections shall be of grade designation E250, Quality A/BR, Semi-killed/ killed conforming to IS 2062. All steel plates shall be of Grade designation E250, Quality BR (fully killed), conforming to IS 2062 and shall be tested for impact resistance at room temperature. Plates beyond 12mm thickness and up to 40mm thickness shall be normalized rolled. Plates beyond 40mm thickness shall be vacuum degassed & furnace normalised and shall also be 100% ultrasonically tested as per ASTM –A578 level B-S2.) in chimney platform, staircase, columns, beams, struts, monorails, stays, safety chains, ladders, MS gratings, gantry girders, roof trusses, portals, laced purlins, space frames, hangers, wall beams, sheeting runners, brackets, stiffeners, stub columns, bracings, cleats, base plates, splice plates,gussets, end plates, steel frame grid over false ceiling, walkway platforms, ladders, stairs,stringers, treads, landings, decking and seal plates, galleries etc. including blast cleaning, providing & applying primer, providing and applying intermediate, final and final finish coat of paint (blast cleaning,primer and paint shall be paid separately as per item no C23, D23 & E23), connection design, preparation of fabrication drgs and appointment of a seperate agency for review and approval of fabrication drgs in consultation with BHEL, straightening, cutting, bending, rolling, grinding, machining, drilling, welding, electrodes and other consumables, alignment, true to line, level, plumb & dimension, erection bolts & nuts (weight of erection bolts and nuts not payable), assembly, edge preparation, preheating / post heating if required, testing of welders, inspection of welds, visual inspection, 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, setting column bases, surface preparation by means of manual or mechanical power tools as per IS:1477 part 1, touch-up painting, rectification, dismantling and removal of all temporary structures (weight of temporary structures not payable), etc all complete as per drawing and specifications. **Payment Breakup:-** **1) On Completion of Fabrication-60%** **2) On completion of erection, alignment, bolt tightening/welding etc.-40%** **(Structural steel will be provided by BHEL free of cost as per TCC)**	Mt	550	₹ -	₹ -	**5.648019751420450%**

BOQ_CUM_RATE_SCHEDULE (R1)

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ST NO	Civil Works	Unit	Quantity	Rate(INR)	Amount(INR)	Weightage
C23	Extra over ST NO. A23, B23, A24 & 27 for blast cleaning of steel structures to near white metal surface conforming to Sa 2 ½ finish of ISO 8501-1 with surface profile 40-60 Micron and providing and applying two component moisture curing zinc (ethyl) silicate primer coat (having minimum 80% of metallic Zinc content in dry film, solid by volume minimum 60% ±2%) of minimum 70 micron DFT including the cost of all labour, material, equipments, protection of surface and cleaning, scoffolding, touch-up painting etc., complete as per drawings, specifications and instructions of the Engineer. Zinc dust composition and properties shall be Type-II as perASTM D520-00. Primer coat shall be applied in Shop immediately after blast cleaning by airless spray technique.	Mt (of steel)	730	₹ -	₹ -	**0.681769837215447%**
D23	Extra over ST NO. A23, B23, A24 & 27 for providing and applying (by airless spray technique) intermediate coat of two component polyamide cured epoxy with MIO Content (containing lamellar MIO minimum 30% on pigment, solid by volume minimum 80% ±2%) of minimum 100 micron DFT after an interval of minimum 24 hours (from the application of primer coat) and of approved make including the cost of all labour, material, equipment, protection and cleaning, scoffolding, touch-up painting etc. all complete as per drawing and specifications.	Mt (of steel)	730	₹ -	₹ -	**0.652889146459118%**
E23	Extra over ST NO. A23, B23, A24 & 27 for providing and applying Finish coat of two-pack aliphatic Isocyanate cured acrylic finish paint (solid by volume minimum 55% ±2%) with Gloss retention (SSPC Paint Spec No 36, ASTM D 4587, D 2244, D 523) of Level 2 (after minimum 1000 hours exposure, Gloss loss less than 30 and colour change less than 2.0 ΔE) and minimum 70 micron DFT over steel sections already having intermediate coats, including the cost of all labour, material, equipments, protection and cleaning, scoffolding etc. all complete as per drawing and specifications. This coat shall be applied after an interval of minimum 24 hours (from the application of sealer coat) and within six (6) months (from the completion of Intermediate coat). Colour and shade of the coat shall be as approved by the Employer.	Mt (of steel)	730	₹ -	₹ -	**0.538473522363428%**
A24	Supplying, fabrication, erection and alignment of factory made chequered plate conforming to IS 3502 (minimum 6 mm o/p) in platforms, staircases with edge binding strips and anti-skid nosing in treads etc. including fixing clamps, fittings, fixtures, grinding, drilling, welding, edge preparation, connection design, preparation of fabrication drgs and appointment of a seperate agency for review and approval of fabrication drgs in consultation with BHEL etc. all complete as per drawing and specification.	Mt	150	₹ -	₹ -	**4.303285952252210%**
25	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, up to and inclusive of 39 mm diameter and upto 1200 mm long for structural steel work including the cost of all labour, material and equipment, transporting, lifting to all heights, setting in place, cutting, grinding, drillings, testing, etc. complete as per drawings and specifications.	Quintal	110	₹ -	₹ -	**0.544934854278930%**
A25	Providing and fixing in positing of high strength structural bolts (of property class 10.9 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, up to and inclusive of 39 mm diameter and upto 1200 mm long for structural steel work including the cost of all labour, material and equipment, transporting, lifting to all heights, setting in place, cutting, grinding, drillings, testing, etc. complete as per drawings and specifications.	Quintal	25	₹ -	₹ -	**0.136542139023242%**
B25	Providing and fixing in position (for liner supporting hangers) of precision bolts of property class 8.8 conforming to is:1367 with yield strength not less than 700 mpa. and nuts of property class 8s conforming to is:6623 with hardened and tempered washers as per IS:6649 etc. up to and inclusive of 36 mm diameter and upto 300 mm long for structural steel work including the cost of all labour, material and equipment, transporting, lifting to all heights, setting in place, cutting, grinding, drillings, testing, etc. complete as per drawings and specifications. (The material specifications for nuts and bolts shall be 40 cr4mo3 conforming to is:4367. bolts shall be fixed in close tolerance holes with an overall diameter equal to the nominal bolt diameter +0.15mm. - 0.00mm.)	Quintal	15	₹ -	₹ -	**0.074477529906836%**
A26	Providing, fabricating and erecting at all levels, flues complete with all bends, flanges, stiffeners, all other internal and external flue attachments, support system, staying system, collars, minishell, cap, access manholes and gas sampling ports alongwith gaskets, cover plates, pipes, bends, fittings, condensate collection and withdrawal arrangement in line with gas-flow-model study report and any other appurtenances like seal pot etc. as required including material, equipment, transporting, lifting to all heights, setting in place, cutting, grinding, rolling, edge preparation, drilling, bending, electrodes and other consumables, alignment, erection bolts and bolting, welding, preheating and post-heating for welding, inspection, required testing, rectification and correction of defective works etc. and other required accessories, connection design & preparation of fabrication drgs and appointment of a seperate agency for review and approval of fabrication drgs in consultation with BHEL, all complete as per specifications and drawings.					
i)	Components made of structural steel of grade E250 conforming to IS:2062 **[Structural steel of grade E250 conforming to IS:2062 will be provided by BHEL free of cost]** **Payment breakup as follows:-** **a) On Completion of Fabrication-60%** **b) On Completion of Erection-30%** **c) On Completion of Welding, alignment etc -10%**	MT	660	₹ -	₹ -	**8.479263020788520%**
ix)	Components made of SS of grade A316L. **(All material in Contractor's Scope)** **Payment Breakup - a) On Supply & Receipt of Material - 60%, b)On Completion of Erection, Alignment, all complete-40%**	MT	34	₹ -	₹ -	**4.706590196082870%**

BOQ_CUM_RATE_SCHEDULE (R1)

TENDER NO. BHEL/CPC/AKT /C_CHM/27/009

CONSTRUCTION OF ONE (1) NO. 275 M TALL SINGLE FLUE RCC CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RAFT, CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, STRUCTURAL PLATFORMS ETC, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ELEVATORS ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT (BUT EXCLUDING BOROSILICATE WORKS) FOR AMARKANTAK TPS, UNIT-6 (1X660 MW), CHACHAI, M.P.

ST NO	Civil Works	Unit	Quantity	Rate(INR)	Amount(INR)	Weightage
27	Supply, fabrication and installation at various locations and elevations of the chimney system the following miscellaneous mild steel items complete with the cost of all labour, material and equipment, transporting, lifting, setting in place, cutting, grinding, drilling, welding, bolts and bolting, anchor fasteners and anchoring, priming, painting, grouting, connection design, preparation of fabrication drgs and appointment of a seperate agency for review and approval of fabrication drgs in consultation with BHEL etc. complete as per drawings and specifications:					
a	Mild steel ladders with cage, hood access hatch, louvers, bird screens, hood drain basin covers and other miscellaneous mild steel items not specifically mentioned.	MT	4	₹ -	₹ -	**0.119038315651425%**
b	32/40 mm nominal bore medium class tubular hand railing for stair case and internal and external platforms.	MT	**30.0**	₹ -	₹ -	**1.005420996445970%**
A27	Extra over item no. 27 for Providing Hot dipped galvanisation on mild steel parts as per specification.					
b	Providing minimum 610 gsm Hot dipped galvanisation	MT	4	₹ -	₹ -	**0.0454722426619111%**
31	Supply, fabrication and installation at all levels, stainless plates (including stainless steel screws and fasteners) of grade AISI 316Land lead sheets beams and over the mild steel in the platform beam bearing, flue supports bearings, flue restraints brackets/ buffers etc. including the cost of all labour material & equipment, transporting, lifting to all heights, setting in place, cutting, grinding, drilling, welding of stainless steel using compatible & approved stainless steel electrodes, testing & machining flat and polishing the contact surfaces of stainless steel, coating the polished surfaces with silicone grease, etc., complete as per drawings and specifications.					
a	Stainless steel components.	kg	300	₹ -	₹ -	**0.0462804781362l5%**
b	Lead Sheets.	Kg	100	₹ -	₹ -	**0.0080218763219l56%**
32	Pproviding, fabricating and installing expansion compensator joints including bolster in the flue liner including all labour, material and equipment transporting, hoisting, fixing in position, drilling, cutting, bolts and bolting, etc. along with the user handbooks (giving details of installation, dismantling and maintainance procedures for the expansion joints), testing, approval form BHEL/customer etc complete as per drawings and specifications.	Sqm	75	₹ -	₹ -	**0.600569753786122%**
33A	Supplying ,Fabricated Ready to Install, spare expansion compensators as specified in item no. 32 including the cost of all labour, material and equipment, accessories, transporting, proper packaging (for several years of storage), and delivery to site store complete in all respects as per drawings and specification.	Sqm	15	₹ -	₹ -	**0.106254648746775%**
34	Providing, laying and packing, at all levels, asbestos ropes at expansion joints including the cost of all labour material, etc. complete as per drawing and specifications.					
a	25 mm (diameter) at expansion joints between linig segments.	Rm	100	₹ -	₹ -	**0.013908923799290%**
b	12 mm (diameter) at expansion joints between linig segments.	Rm	400	₹ -	₹ -	**0.024459982535702%**
35	Providing and installing, at all levels, resin bonded rock wool insulation slabs of density not less than 100 kg/cu.m with an installed thickness of not less than 100 mm, on the outside surface of clad steel/titanium flue liners and wherever as directed by the Engineer, in two layers (each 50 mm thick) including the cost of all labour, material and equipment, transporting, lifting to all heights, etc., inclusive of plated or galvanised accessories such as pins/studs/anchors/wire netting, speed washers, tying wires, etc. welding of pins/studs to steel surfaces or embedding of pins/studs/anchors in concrete surfaces, fixing, cutting, cutting, lapping, binding, testing, etc. complete as per drawings and specifications.	Sqm	6000	₹ -	₹ -	**1.939317009854010%**
36	Providing and packing, at all levels, loose rock wool insulation to a density not less than 100 kg/cu.m between the insulated minishells and brick liners at expanjoints between the lining segments and wherever as directed by the Engneer including the cost of all labour, material and equipment, filling, ramming, testing, etc. complete as per drawings and specifications.	Cum	10	₹ -	₹ -	**0.028941276500530%**
40	Providing and painting, with epoxy phenolic coating system in three coats having 220 microns DFT over the external surfaces of chimney shell and wherever as required at all elevation in alternate bands of 'signal red' and 'bright white' colours including surface preparation, primer etc so as to give a good finish all complete as per drawing and specification. The epoxy phenolic coating system shall be as follows:- All concrete surfaces shall be provided with two component transparent polyamide cured epoxy sealer coating (having solid by volume minimum 40% ±2%) of minimum 50 micron DFT to be applied over cleaned surface in multiple coats. Surface to be coated shall be absolutely dry, clean and dust free. Sealer coat shall be followed with the application of Intermediate coat of epoxy phenolic coating (solid by volume minimum 63%) of minimum 100 micron DFT. This coat shall be applied after an interval of minimum 24 hours (from the application of primer coat) by airless spray technique. Intermediate coat shall be followed with the application of finish coat of two-pack aliphatic Isocyanate cured acrylic finish paint (solid by volume minimum 55% ±2%) with Gloss retention (SSPC Paint Spec No 36, ASTM D 4587, D 2244, D 523) of Level 2 (after minimum 1000 hours exposure, Gloss loss less than 30 and colour change less than 2.0 ΔE) and minimum 70 micron DFT. This coat shall be applied after an interval of minimum 10 hours and within six (6) months (from the completion of Intermediate coat), Colour and shade of the coat shall be as approved by the Engineer-in charge.	Sqm	16000	₹ -	₹ -	**2.895306770303400%**

BOQ_CUM_RATE_SCHEDULE (R1)

TENDER NO. BHEL/CPC/AKT /C_CHM/27/009

CONSTRUCTION OF ONE (1) NO. 275 M TALL SINGLE FLUE RCC CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RAFT, CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, STRUCTURAL PLATFORMS ETC, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ELEVATORS ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT (BUT EXCLUDING BOROSILICATE WORKS) FOR AMARKANTAK TPS, UNIT-6 (1X660 MW), CHACHAI, M.P.

ST NO	Civil Works	Unit	Quantity	Rate(INR)	Amount(INR)	Weightage
41	Providing and painting, with epoxy phenolic coating system in three coats having 220 microns DFT over the inside surface of chimney shell above roof/ horizontal surface of shell at top/underside of concrete roof slab and wherever as required at all elevation including surface preparation, primer etc so as to give a good finish all complete as per drawing and specification. The epoxy phenolic coating system shall be as follows:- All concrete surfaces shall be provided with two component transparent polyamide cured epoxy sealer coating (having solid by volume minimum 40% ±2%) of minimum 50 micron DFT to be applied over cleaned surface in multiple coats. Surface to be coated shall be absolutely dry, clean and dust free. Sealer coat shall be followed with the application of Intermediate coat of epoxy phenolic coating (solid by volume minimum 63%) of minimum 100 micron DFT. This coat shall be applied after an interval of minimum 24 hours (from the application of primer coat) by airless spray technique. Intermediate coat shall be followed with the application of finish coat of two-pack aliphatic Isocyanate cured acrylic finish paint (solid by volume minimum 55% ±2%) with Gloss retention (SSPC Paint Spec No 36, ASTM D 4587, D 2244, D 523) of Level 2 (after minimum 1000 hours exposure, Gloss loss less than 30 and colour change less than 2.0 ΔE) and minimum 70 micron DFT. This coat shall be applied after an interval of minimum 10 hours and within six (6) months (from the completion of Intermediate coat), Colour and shade of the coat shall be as approved by the Engineer-in charge.	Sqm	250	₹ -	₹ -	**0.048003131525893%**
43	Proving and laying over the chimney roof, a composite acid and heat protection treatment including providing of slopes for roof drainage including the cost of all labour, material and equipment, etc., complete as required for preparing the roof concrete, laying under bed of plain cement concrete screed to slopes, preparation of screed surface for painting, painting the screed surface with black bituminous paint, applying bitumenmastic in layers, laying acid resisting(A/R) mortar bed and laying 75 mm thick acid resisting(A/R) bricks with A/R mortar, curing, pointing(with phenolic based A/R cement), protection and cleaning, finishing, etc., complete as per drawing and specifications.	Sqm	150	₹ -	₹ -	**0.141973320484780%**
44	Providing, fitting& fixing, outlet and overflow, cast iron roof drain heads (with gratings) in chimney roof including sockets, adapters, brackets, hangers, supports, etc., casting-in and jointing to 150 mm nominal bore rainwater pipes, grouting, etc. including the cost of all labour material and equipement, transporting, lifting, setting in place, painting, etc. complete as per drawing and specifications.	Each	8	₹ -	₹ -	**0.022645083343563%**
45	Providing, fitting and fixing rainwater pipes at all levels internally from the chimney roof to ground level upto the hood drain basin including shoes, bends, junctions, flanges,hoppers, sockets, adaptors, brackets, hangers, supports, anchor fasteners, spacers, pipe sleeve through shell, silicon or vulcanised butyl sealant, foam backing material, jointing, socketing, grouting, caulking, primer and finish painting etc. complete including the cost of all labour, material and equipment, complete as per drawing and specifications:					
a	150 mm nominal bore cast iron pipes.	Rm	24	₹ -	₹ -	**0.023919025184353%**
b	150 mm nominal bore medium class galvanised mild steel pipes.	Rm	550	₹ -	₹ -	**0.301732096381230%**
46	Providing and laying 50 mm thick cement concrete flooring (comprising of 12 mm thick mettallic concrete hardener topping over 38 mm thick under bed of concrete) over the grade level slab inside the chimney, including the cost of all labour, material and equipment, etc. complete as required for preparation of base, laying underbed and topping, finishing, rounding of edges, corners and junctions, curing, testing, etc. complete as per drawing and specifications.	Sqm	600	₹ -	₹ -	**0.127415734921317%**
A47	Supplying, fabricating and installing electrically operated steel roll-up door and grilled ventilation at chimney base (rolling shutter size will be approx. 5X5 m and remaining area covered with grill for ventilation), with all hardware and mechanisms, fittings and fixtures, locking arrangements, frames, fasteners, gear handle arrangement for standby manual operation, all electrical accessories such as motors, control systems, cables, etc. including connection design, preparation of fabrication drgs and appointment of a seperate agency for review and approval of fabrication drgs in consultation with BHEL, cost of all labour, material and equipment, fixing in position, grouting primer and finish painting, testing, etc., complete as per drawing and specifications.	Sqm	68	₹ -	₹ -	**0.089406386165321%**
48	Supplying, fabricating and installing at any level and location, mild steel, double plate, personnel access doors, in shell openings of approx. size 1.2m by 2.1m, complete with all fittings and fixtures, locking arrangements, frames, fasteners including connection design, preparation of fabrication drgs and appointment of a seperate agency for review and approval of fabrication drgs in consultation with BHEL, cost all labour, material and equipment, lifting to all heights, setting in place, grouting primer and finish painting, etc., complete as per drawing and specifications.	Each	1	₹ -	₹ -	**0.007773281507664%**
A49	Supplying, fabricating and installing SS 316L grade access hatch for approx opening size of 750mmx750mm in roof slab of chimney complete with locking arrangements, frames, fittings,fixtures and all mechanisms & accessories required for proper operation including connection design, preparation of fabrication drgs and appointment of a seperate agency for review and approval of fabrication drgs in consultation with BHEL, all labour, painting etc. complete as per drawings and specifications.	Each	1	₹ -	₹ -	**0.070123513271675%**
50	Conducting load testing on girders for 1.25 times the full load, on ground , including provision of test bed and jacks, dial gauges and other supplies complete as per specification and drawings and approval of engineer in-charge.	Pair	1	₹ -	₹ -	**0.088897696034651%**

BOQ_CUM_RATE_SCHEDULE (R1)

TENDER NO. BHEL/CPC/AKT /C_CHM/27/009

CONSTRUCTION OF ONE (1) NO. 275 M TALL SINGLE FLUE RCC CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RAFT, CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, STRUCTURAL PLATFORMS ETC, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ELEVATORS ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT (BUT EXCLUDING BOROSILICATE WORKS) FOR AMARKANTAK TPS, UNIT-6 (1X660 MW), CHACHAI, M.P.

ST NO	Civil Works	Unit	Quantity	Rate(INR)	Amount(INR)	Weightage
51	Providing & grouting of pocket holes, pipe sleeves and under base plates of structural steel work/ machinery/ pipe supporting structures including roughening of surface, cleaning, ramming, curing etc. all complete with Conbextra GP-1 or equivalent. (Cost of all material and cleaning of the pockets by compressed air shall be in the scope of the contractor).	Cum	1	₹ -	₹ -	**0.012896970614154%**
52	Providing & grouting of pocket holes, pipe sleeves and under base plate of structural steel work/ machinery/ pipe supporting structures including roughening of surface, cleaning, ramming, curing etc. all complete with mix 1:1:2 (1 cement : 1 coarse sand : 2 aggregate of 6 mm down graded stonechips) using non shrink admixture. (Cost of all material and cleaning the pocket by compressed air shall be in the scope of the contractor).	Cum	1	₹ -	₹ -	**0.006563602874567%**
53	Supplying and erecting after approval by Engineer a rack and pinion type Elevator of min 400 kg load carrying capacity, from ground upto top of chimney with landing at various platform level, including all fixtures, mandatory spares and accessories complete as per specification, drawings and as directed by engineer- in-charge.	Lumpsum	1	₹ -	₹ -	**1.613428169648750%**
54	Designing, providing and fixing permanently color coated galvanised MS troughed metal sheet decking plate of approved colour over roof beam for cast-in-situ roof slab as per relevant IS code and Grade as per specification. Bare metal thickness(BMT) of deck plate shall be minimum 0.8mm with minimum trough depth of 44 mm of grade G250 as per AS1397/grade SS255 as per ASTM A653M/ grade S250GD as per EN 10326 with zinc coating to class Z275 and shall serve as permanent shuttering to the floor slab 175 mm thick measured over crest of metal decking & shall have adequate strength to support weight of green concrete and imposed loads of min 100 kg/sqm (for two span condition) during construction between beams as per manufacturer's recommendations/ calculations/ test certificates for approval including connection design & preparation of fabrication drgs and appointment of a seperate agency for review and approval of fabrication drgs in consultation with BHEL, fixing of plates to beams, side lapping, end lapping 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 all complete. The sheet shall be permanently coated with silicon modified polyster(SMP silicon content 30%-50%) paint or super polyster paint of minimum 20 micron DFT on exposed surface over primer coat of minimum 5 micron(nominal) and minum 10 micron (nominal) SMP or super polyester paint over primer coat of minimum 5 micron (nominal) on other face. SMP and polyster paint system shall be of industrial finish of product type 4 of AS/NZ2728, including fixing of sheet to top flange of beam with drawn arc welding of headed shear anchor studs @ 260mm c/c in the trough and stich screws between two adjacent sheets and sealing with epoxy sealant.The shear anchor studs shall confirm to type B studs specified in AWS D1.1/D1.1M or equivalent as shear connector of 16 mm dia & 75 mm length manufactured from cold drawn round steel bars confirming to ASTM A 29 of grade designation 1010 through 1020 of standard quality with either semi killed or killed welded by drawn arc stud welding through metal deck sheet. Measurement of profile sheeting shall be of the plan area of roof covered by MS trough metal decking. (Supply and fixing of shear connectors shall be paid separately as per BOQ item no-55)	SQM	150	₹ -	₹ -	**0.086810120660114%**
55	Providing and fixing shear anchor studs for fixing metal deck sheet to roof structural beams conforming to Type-B studs specified in AWS D1.1/D1.1M or equivalent as shear connector of 16mm diameter and 75mm length manufactured from cold drawn round steel bars conforming to the requirement of ASTM A 29, of grade designation 1010 through 1020, of standard quality with either semi-killed or killed, welded by Drawn Arc Stud Welding through metal deck sheet etc all complete 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.	Quintal	1	₹ -	₹ -	**0.009165536983855%**
E	**ELECTRICAL WORKS (Design, Engineering, Supply, Installation, testing & commissioning of following items as per specification)**					
E1	415V, 200A, 50 KA for 1 sec, 3 ph 4 wire main power AC Distribution Board with 2 No. incomer (TPN MCCB on both side of transformer) alongwith 2x100 KVA lighting transformers (415/433) V in Incomer, Dyn11, Z=4%, ±2x2.5% off ckt. Tap) & 12 nos. of 100A MCCB (TPN) outgoing complete in all respects. In case load requirement of chimney can not be met by 100 kVA lighting transformer, higher rating transformer shall be provided alongwith suitably rated components without any commercial implications to the purchaser.	no.	1	₹ -	₹ -	**0.143404510764780%**
E2	415V, 100A, 3 ph 4 wire AC Emergency Lighting distribution board alongwith 50KVA lighting transformer (415/433 V, Dyn11, Z=4%, ±2x2.5% off ckt. Tap) with 2 nos. of MCCB (TPN) incomers (TPN MCCB ON BOTH SIDE OF TRANSFORMER) with auto changeover facility using contactors and 8 nos. 100A MCCB (TPN) outgoings complete in all respects. In case load requirement of chimney can not be met by 50 kVA lighting transformer after considering loading, 100 kVA lighting transformer shall be provided alongwith suitably rated components without any commercial implications to the purchaser.	no.	1	₹ -	₹ -	**0.232913956141138%**
E3	Normal AC lighting panel outdoor type with degree of protection IP 55 with one no. 100A MCB (TPN)+ ELCB (30 mA senstivity) Incomer, 20 outgoing (20A SP MCBs).	no.	4	₹ -	₹ -	**0.197822174300644%**
E4	Emergency lighting panel outdoor type with degree of protection IP 55 with One no. of 100A MCB(TPN)+ ELCB (30 mA senstivity) incomer and 12 outgoings (20A, SP MCBs)	no.	3	₹ -	₹ -	**0.122970437563669%**

BOQ_CUM_RATE_SCHEDULE (R1)

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CONSTRUCTION OF ONE (1) NO. 275 M TALL SINGLE FLUE RCC CHIMNEY COMPLETE IN ALL RESPECT INCLUDING CHIMNEY RAFT, CHIMNEY RCC WIND SHIELD, FABRICATION & ERECTION OF STEEL FLUE CANS, STRUCTURAL PLATFORMS ETC, INSTALLATION OF ELECTRICAL ITEMS IN CONFORMITY WITH THE APPROVED LAYOUT ELEVATORS ETC TO COMPLETE THE CHIMNEY IN ALL RESPECT (BUT EXCLUDING BOROSILICATE WORKS) FOR AMARKANTAK TPS, UNIT-6 (1X660 MW), CHACHAI, M.P.

ST NO	Civil Works	Unit	Quantity	Rate(INR)	Amount(INR)	Weightage
E5	Aviation lighting panel outdoor type with degree of protection IP 55 with one no. 100A MCB (TPN)+ ELCB (30 mA senstivity) Incomer , 8 outgoing 32A MCB (TPN), photodetetector and timer circuit along with 100A contactor to control Aviation lighting systems.	no.	**1**	₹ -	₹ -	**0.052800691170959%**
E6	Aviation obstruction lights (mounted on door panel openable from interior) :					
a	High intensity flashing white light Type-A (LED type)as per ICAO and NAA/DARA standard having intensity of 4000 to 200,000 candles depending upon background illuminance (refer Clause 3.09.00 of technical specification) & flashing frequency 40-60/min with all accessories, photocell, timer etc.	no.	12	₹ -	₹ -	**1.033481808461060%**
b	Temporary obstruction light of medium intensity 2000 cd and with flashing red light as per ICAO regulation located at diametrically opposite points at the top of chimney during period of construction with four fixture each .	no.	4	₹ -	₹ -	**0.104458618719396%**
E7	Aviation Distribution Board (ADB) with one 32A MCB (TPN) incomer and 8 nos. SP 20A MCB. Construction is same as Lighting Panel.	no.	3	₹ -	₹ -	**0.1552755891529 15%**
E8	Flood light with 120W LED luminaries (with integral driver) with all controlgears & accessories.	no.	8	₹ -	₹ -	**0.0755637054700 91%**
E9	Well glass type 30W LED luminaries (with integral driver) with all controlgears & accessories.	no.	100	₹ -	₹ -	**0.1865590032350 68%**
E10	Well glass type 70W LED luminaries (with integral driver) with all controlgears & accessories.	no.	70	₹ -	₹ -	**0.2536615674414 75%**
E11	63Amp welding switch socket with plug & other Mounting accessories.	no.	10	₹ -	₹ -	**0.0478996204085 13%**
E12	3 pin, 1 Ph, 240V, 20Amp. Industrial Power sockets complete with plug Switches etc.	no.	10	₹ -	₹ -	**0.0159653259293 92%**
E13	Al/Cu conductor, PVC/XLPE insulated, Armoured, PVC inner sheath, PVC outer sheath, FRLS type 1100V grade conforming to IS-1554 Part I/ IS-7098 Part-I.					
a	3½ C x95mm^2 Al for connection between ACDB/ELDB/ welding sockets	Mtrs.	1500	₹ -	₹ -	**0.3928707129047 32%**
b	3½ Cx35mm^2 Al for Lighting panel incoming supply	Mtrs.	1200	₹ -	₹ -	**0.1596263170246 88%**
c	4C x16mm^2 Al for connection between ALP/ADB/Aviation Lights	Mtrs.	1000	₹ -	₹ -	**0.1120335157083 99%**
d	4C x 2.5mm^2 Cu Control cable for Aviation lighting system	Mtrs.	700	₹ -	₹ -	**0.0695785834474 20%**
E14	PVC insulated 650/1100V grade stranded Cu Conductor lighting wires conforming to IS-694.					
a	1.5 mm^2	Mtrs.	10000	₹ -	₹ -	**0.2139148686873 28%**
b	4.0 mm^2	Mtrs.	3000	₹ -	₹ -	**0.1114908983184 11%**
E15	GI pipe conduit with minimum 25 mm dia with GI junction boxes, GI pull boxes (Size 200x200x100mm of 16 SWG sheet steel for junction & pull boxes) & accessories etc. complete in all respects.	Mtrs.	5000	₹ -	₹ -	**0.3244384751620 93%**
E16	PVC coated Flexible steel conduit 25mm dia with accessories	Mtrs.	400	₹ -	₹ -	**0.0074327223986 68%**
E17	Lightning protection Air terminal : 2mm Lead coated copper material rod of 20 mm dia & 3 metre long.	no.	6	₹ -	₹ -	**0.0276940211182 56%**
E18	50x6 GS Strip/conductor for coronal band and horizontal air termination as per specification.	Mtrs.	500	₹ -	₹ -	**0.0230063838465 90%**
E19	Electrical equipment earthing materials including down conductors 50x6 GS Strip	Mtrs.	2000	₹ -	₹ -	**0.3185413479521 87%**
E21	Electrical equipment earthing materials 25x3 GS Strip	Mtrs.	300	₹ -	₹ -	**0.0268517755165 77%**
E22	14 SWG GI wire for equipment earthing	Mtrs.	5000	₹ -	₹ -	**0.0663703659728 14%**
E23	Test links for 50x6 down conductors enclosed in 200mm X 200mm X 100mm GI box of 16SWG sheet steel.	no.	6	₹ -	₹ -	**0.0214382297294 96%**
E24	40mm dia MS rod for below groung earthing	Mtrs.	300	₹ -	₹ -	**0.0838832116264 41%**
E25	Earthpit with earthing electrode including brick chamber with cover, accessories etc. complete in all respect.	no.	6	₹ -	₹ -	**0.0132266881913 59%**
E26	Telephone socket with junction box etc. complete	no.	7	₹ -	₹ -	**0.0116631219747 09%**
E27	Telephone handsets complete	no.	7	₹ -	₹ -	**0.0028017847259 44%**
E28	Telephone cable of minimum 0.6 mm dia annealed high conductivity electro copper conductor, PVC insulated, twisted, PVC tape wrapped, screened, rip corded, PVC sheathed, confirming to relevant ITD (Indian Telephones department) specifications.					
a)	20 pairs	Mtrs.	300	₹ -	₹ -	**0.0537933844622 48%**
b)	2 pairs	Mtrs.	100	₹ -	₹ -	**0.0012683307557 74%**
E29	GS cable trays. Cable trays shall be of ladder type constructed of minimum 2 mm thick mild steel hot dip galvanise including cover, cabling material, accessories etc.					
a	600 mm wide	Mtrs.	150	₹ -	₹ -	**0.0679599802294 07%**
b	300 mm wide	Mtrs.	300	₹ -	₹ -	**0.0753892847154 74%**
c	150 mm wide	Mtrs.	450	₹ -	₹ -	**0.0950331373915 17%**
29	**Mandatory Spares**					
a)	Power supply card	NOS.	6	₹ -	₹ -	**0.0973661687241 94%**
b)	Electronic flasher card	NOS.	3	₹ -	₹ -	**0.0425418007373 85%**
c)	Photocell control unit	NOS.	3	₹ -	₹ -	**0.0224688405288 73%**
d)	Spare lamp / tube with holder for Aviation Obstruction Lighting Fixture	NOS.	12	₹ -	₹ -	**0.1438257152595 67%**
				TOTAL AMOUNT (Excluding GST)=	**0.0**	**100.000000000000000%**

ANNEXURE-C

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Boiler	*Westing :*318 m	*Southing :*518 m
Reduced Level (m):(+)477.123	BH. No. :BH-26	*BH Depth (m):*22.5
*Proposed/Existing Structure :*Boiler	*Water Table (m):*1.02	*Inclination :* Vertical
*Boring type :*Hydraulic	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*15.00
*Date of Start :*14-08-2023	*Date of Completion :*17-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
0.0		DS		Yellowish Brown Silty Sand Filledup Material	SC	1.02m				
1.5	1.5	SPT-1	6							
2.5	2.5	UDS-1		Medium,Greyish Brown, Clayey SAND	SC					
3.0	3	SPT-2	11							
4.5	4.5 4.58	SPT-3 RC-1	>100	Completely Weathered,Greyish Brown, Coarse Grained SANDSTONE recovered as residual soil	GRADE-V			5		
6.0	6 6.04	SPT-4 RC-2	>100							
7.5	7.5 7.53	SPT-5 RC-3	>100	Highly Weathered, Greyish Brown,Brownish Yellow Yellowish Brown, Medium to Coarse grained SANDSTONE	GRADE-IV			13		
9.0	9 9.04	SPT-6 RC-4	>100					17		
10.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client* :MPPGCL
BH Location/Chainage :Boiler	*Westing* :318 m	*Southing* :518 m
Reduced Level (m):(+)477.123	BH. No. :BH-26	*BH Depth (m)*:22.5
Proposed/Existing Structure :Boiler	*Water Table (m)*:1.02	*Inclination* : Vertical
Boring type :Hydraulic	*Dia. of Boring* :150/76 mm	*Depth of Casing (m)* :15.00
Date of Start :14-08-2023	*Date of Completion* :17-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
10.5	10.5 10.53	SPT-7 RC-5	>100					17		
11.0										
11.5										
12.0	12	RC-6						20		
12.5										
13.0				Highly Weathered, Greyish Brown,Brownish Yellow Yellowish Brown, Medium to Coarse grained SANDSTONE	GRADE-IV					
13.5	13.5	RC-7						21		
14.0										
14.5										
15.0	15	RC-8						21		
15.5										
16.0										
16.5	16.5	RC-9						30		
17.0				Slightly Weathered,Greyish Brown, medium to coarse grained SANDSTONE	GRADE-II					
17.5										
18.0	18	RC-10						77		
18.5				Moderately Weathered,Brownish Yellow, medium to coarse grained SANDSTONE	GRADE-III					
19.0										
19.5	19.5	RC-11						67		
20.0					GRADE-II					

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client* :MPPGCL
BH Location/Chainage :Boiler	*Westing* :318 m	*Southing* :518 m
Reduced Level (m):(+)477.123	BH. No. :BH-26	*BH Depth (m)*:22.5
Proposed/Existing Structure :Boiler	*Water Table (m)*:1.02	*Inclination* : Vertical
Boring type :Hydraulic	*Dia. of Boring* :150/76 mm	*Depth of Casing (m)* :15.00
Date of Start :14-08-2023	*Date of Completion* :17-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%) 0 25 50 75 100	RQD (%) 0 25 50 75 100	(Depth v/s SPT N Value) 0 10 20 30 40 50 60 70 80 90 100	Special Observations
20.0										
20.5				Slightly Weathered,Brownish Yellow, medium to coarse grained SANDSTONE	GRADE-II					
21.0	21	RC-12						88		
21.5				Slightly Weathered, Greyish Yellow, medium to coarse grained SANDSTONE, LIGNITE COAL	GRADE-II					
22.0										
22.5	22.5							73		

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Boiler	*Westing :*306 m	*Southing :*541 m
Reduced Level (m):(+)477.473	BH. No. :BH-28	*BH Depth (m):*21
*Proposed/Existing Structure :*Boiler	*Water Table (m):*1.20	*Inclination :* Vertical
*Boring type :*Hydraulic	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*15.00
*Date of Start :*14-08-2023	*Date of Completion :*16-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
0.0		DS		Filled up Material (Yellowish Grey Medium to Coarse Grained Sand)	FILL	1.20m	0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
1.5	1.5	SPT-1	6							
2.0				Loose, Yellowish Grey, Clayey SAND	SC					
2.5	2.5	UDS-1								
3.0	3	SPT-2	13							
3.5				Medium, Yellowish Brown, Fine to medium Sand	SM					
4.0										
4.5	4.5	SPT-3	14							
5.0										
5.5	5.5	UDS*								
6.0	6	SPT-4	>100							
	6.06	RC-1								
6.5										
7.0										
7.5	7.5	SPT-5	>100					0		
	7.55	RC-2		Completely Weathered, Brownish Grey, Coarse Grained SANDSTONE recovered as residual soil	GRADE-V					
8.0										
8.5										
9.0	9	SPT-6	>100					0		
	9.04	RC-3								
9.5										
10.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client* :MPPGCL
BH Location/Chainage :Boiler	*Westing* :306 m	*Southing* :541 m
Reduced Level (m):(+)477.473	BH. No. :BH-28	*BH Depth (m)*:21
Proposed/Existing Structure :Boiler	*Water Table (m)*:1.20	*Inclination* : Vertical
Boring type :Hydraulic	*Dia. of Boring* :150/76 mm	*Depth of Casing (m)* :15.00
Date of Start :14-08-2023	*Date of Completion* :16-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
10.5	10.5 10.53	SPT-7 RC-4	>100	Completely Weathered, Brownish Grey, Coarse Grained SANDSTONE recovered as residual soil	GRADE-V			10		
11.0										
11.5										
12.0	12 12.02	SPT-8 RC-5	>100					10		
12.5										
13.0										
13.5	13.5 13.52	SPT-9 RC-6	>100					9		
14.0				Highly Weathered, Yellowish Light Brown, Medium to Coarse grained SANDSTONE	GRADE-IV					
14.5										
15.0	15	RC-7						29		
15.5										
16.0										
16.5	16.5	RC-8						29		
17.0										
17.5										
18.0	18	RC-9						39		
18.5				Slightly Weathered, Yellowish Light Brown, medium to coarse grained SANDSTONE	GRADE-II					
19.0										
19.5	19.5	RC-10		Highly Weathered, Yellowish Light Brown, Medium to Coarse	GRADE-IV			77		
20.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client* :MPPGCL
BH Location/Chainage :Boiler	*Westing* :306 m	*Southing* :541 m
Reduced Level (m):(+)477.473	BH. No. :BH-28	*BH Depth (m)*:21
Proposed/Existing Structure :Boiler	*Water Table (m)*:1.20	*Inclination* : Vertical
Boring type :Hydraulic	*Dia. of Boring* :150/76 mm	*Depth of Casing (m)* :15.00
Date of Start :14-08-2023	*Date of Completion* :16-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
20.0				grained SANDSTONE			0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
20.5				Highly Weathered, Yellowish Light Brown, Medium to Coarse grained SANDSTONE	GRADE-IV					
21.0	21							39		

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :* MPPGCL
BH Location/Chainage : Auxiliary Boiler	*Westing :* 463.00m	*Southing :* 370.00m
Reduced Level (m): (+)481.788	BH. No. :BH-166	*BH Depth (m):* 25
Proposed/Existing Structure : Auxiliary Boiler	*Water Table (m):* 1.06	*Inclination :* Vertical
Boring type : Rotary	*Dia. of Boring :* 150/76 mm	*Depth of Casing (m) :* 9.00
Date of Start : 26-08-2023	*Date of Completion :* 26-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
0.0		DS		Filled Up Materials (Silty Clay with Fine Gravels)	FILL	1.06m				
1.5	1.5	SPT-1	6							
2.5	2.5	UDS-1		Stiff, Yellowish Grey, Silty Clay of Low Plasticity	CL					
3.0	3	SPT-2	13							
4.5	4.5	SPT-3	25	Medium Dense, Yellowish, Clayey Sand With Gravels	SC					
6.0	6	SPT-4	>100							
6.11		RC-1								
7.5	7.5	RC-2		Highly Weathered, Brownish Yellow/ Greyish Brown, Medium to Coarse Grained, SANDSTONE	GRADE-IV			32		
9.0	9	RC-3						21		
10.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Auxiliary Boiler	*Westing :* 463.00m	*Southing :* 370.00m
Reduced Level (m):(+)481.788	BH. No. :BH-166	*BH Depth (m):*25
*Proposed/Existing Structure :*Auxiliary Boiler	*Water Table (m):*1.06	*Inclination :* Vertical
*Boring type :*Rotary	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*9.00
*Date of Start :*26-08-2023	*Date of Completion :*26-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
10.5	10.5 10.53	SPT-5 RC-4	>100					17		
11.0										
11.5										
12.0	12	RC-5						21		
12.5										
13.0				Highly Weathered, Brownish Yellow/ Greyish Brown, Medium to Coarse Grained, SANDSTONE	GRADE-IV					
13.5	13.5	RC-6						23		
14.0										
14.5										
15.0	15	RC-7						40		
15.5										
16.0										
16.5	16.5	RC-8						33		
17.0				Moderately Weathered, Greyish Brown, Medium to Coarse Grained, SANDSTONE	GRADE-III					
17.5										
18.0	18	RC-9						59		
18.5				Highly Weathered, Yellowish Brown, Medium to Coarse Grained, SANDSTONE	GRADE-IV					
19.0										
19.5	19.5	RC-10						46		
20.0					GRADE-III					

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Auxiliary Boiler	*Westing :* 463.00m	*Southing :* 370.00m
Reduced Level (m):(+)481.788	BH. No. :BH-166	*BH Depth (m):*25
*Proposed/Existing Structure :*Auxiliary Boiler	*Water Table (m):*1.06	*Inclination :* Vertical
*Boring type :*Rotary	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*9.00
*Date of Start :*26-08-2023	*Date of Completion :*26-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%) 0 25 50 75 100	RQD (%) 0 25 50 75 100	(Depth v/s SPT N Value) 0 10 20 30 40 50 60 70 80 90 100	Special Observations
20.0										
20.5										
21.0	21	RC-11		Moderately Weathered, Reddish / Greyish Brown, Medium to Coarse Grained, SANDSTONE	GRADE-III			70		
21.5										
22.0										
22.5	22.5	RC-12						65		
23.0				Slightly Weathered, Greyish Brown, Medium to Coarse Grained, SANDSTONE	GRADE-II					
23.5										
24.0	24	RC-13						75		
24.5				Moderately Weathered, Greyish Brown, Medium to Coarse Grained, SANDSTONE	GRADE-III					
25.0	25							56		

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client* :MPPGCL
BH Location/Chainage :Near Chimney	*Westing* :232 m	*Southing* :268 m
Reduced Level (m):(+)477.542	BH. No. :BH-04	*BH Depth (m)*:25
Proposed/Existing Structure :Chimney	*Water Table (m)*:1.00	*Inclination* : Vertical
Boring type :Rotary	*Dia. of Boring* :150/76 mm	*Depth of Casing (m)* :8.00
Date of Start :31-07-2023	*Date of Completion* :02-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
0.0		DS		Filled up Material	FILL	1.00m				
1.5	1.5	SPT-1	24							
2.5	2.5	UDS-1		Medium Dense, Yellowish, Clayey Sand	SC					
3.0	3	SPT-2	32							
4.5	4.5 4.63	SPT-3 RC-1	>100	Completely Weathered, Yellowish brown, Very Poor SANDSTONE Recovrered as Residual Soil	GRADE-V		8	0		
6.0	6 6.05	SPT-4 RC-2	>100				9.33	0		
7.5	7.5 7.54	SPT-5 RC-3	>100	Highly Weathered, Brownish yellow, Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-IV		21.33	0		
9.0	9	RC-4								
10.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client* :MPPGCL
BH Location/Chainage :Near Chimney	*Westing* :232 m	*Southing* :268 m
Reduced Level (m):(+)477.542	BH. No. :BH-04	*BH Depth (m)*:25
Proposed/Existing Structure :Chimney	*Water Table (m)*:1.00	*Inclination* : Vertical
Boring type :Rotary	*Dia. of Boring* :150/76 mm	*Depth of Casing (m)* :8.00
Date of Start :31-07-2023	*Date of Completion* :02-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
10.5	10.5 10.54	SPT-6 RC-5	>100				18.66	0		
11.0										
11.5										
12.0	12 12.03	SPT-7 RC-6	>100				13.33	0		
12.5				Highly Weathered, Brownish yellow, Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-IV					
13.0										
13.5	13.5	RC-7					20	0		
14.0										
14.5										
15.0	15 15.04	SPT-8 RC-8	>100				13	0		
15.5				Completely Weathered, Yellowish brown, Very Poor SANDSTONE Recovrered as Residual Soil	GRADE-V					
16.0										
16.5	16.5 16.53	SPT-9 RC-9	>100				17	0		
17.0										
17.5										
18.0	18	RC-10		Highly Weathered, Brownish yellow, Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-IV		22	0		
18.5										
19.0										
19.5	19.5	RC-11					25	0		
20.0				Highly Weathered, Blackish, Fine Grained, LIGNITE COAL	GRADE-IV					

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client* :MPPGCL
BH Location/Chainage :Near Chimney	*Westing* :232 m	*Southing* :268 m
Reduced Level (m):(+)477.542	BH. No. :BH-04	*BH Depth (m)*:25
Proposed/Existing Structure :Chimney	*Water Table (m)*:1.00	*Inclination* : Vertical
Boring type :Rotary	*Dia. of Boring* :150/76 mm	*Depth of Casing (m)* :8.00
Date of Start :31-07-2023	*Date of Completion* :02-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
20.5										
21.0	21	RC-12					22	0		
21.5										
22.0										
22.5	22.5	RC-13		Highly Weathered, Blackish, Fine Grained, LIGNITE COAL	GRADE-IV		21	0		
23.0										
23.5										
24.0	24	RC-14					33	0		
24.5										
25.0	25						33	0		

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client* :MPPGCL
BH Location/Chainage :Near Chimney	*Westing* :300 m	*Southing* :269 m
Reduced Level (m):(+)477.509	BH. No. :BH-05	*BH Depth (m)*:25
Proposed/Existing Structure :Chimney	*Water Table (m)*:1.15	*Inclination* : Vertical
Boring type :Rotary	*Dia. of Boring* :150/76 mm	*Depth of Casing (m)* :9.00
Date of Start :22-08-2023	*Date of Completion* :23-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
0.0		DS		Filled up material (concrete)	FILL	1.15m	14	0		
0.5	0.5	RC-1								
1.0										
1.5	1.5	SPT-1	>100							
	1.53	RC-2								
2.0										
2.5										
3.0	3	SPT-2	>100				17	0		
	3.02	RC-3								
3.5										
4.0										
4.5	4.5	SPT-3	>100				18	0		
	4.52	RC-4								
5.0										
5.5										
6.0	6	SPT-4	>100				15	0		
	6.03	RC-5								
6.5										
7.0				Highly Weathered, Brownish/Reddish yellow, Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-IV					
7.5	7.5	SPT-5	>100				13	0		
	7.53	RC-6								
8.0										
8.5										
9.0	9	SPT-6	>100				17	0		
	9.02	RC-7								
9.5										
10.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Near Chimney	*Westing :*300 m	*Southing :*269 m
Reduced Level (m):(+)477.509	BH. No. :BH-05	*BH Depth (m):*25
*Proposed/Existing Structure :*Chimney	*Water Table (m):*1.15	*Inclination :* Vertical
*Boring type :*Rotary	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*9.00
*Date of Start :*22-08-2023	*Date of Completion :*23-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
10.5	10.5 10.53	SPT-7 RC-8	>100				13	0		
11.0										
11.5										
12.0	12	RC-9					23	0		
12.5										
13.0										
13.5	13.5 13.52	SPT-8 RC-10	>100				16	8		
14.0				Highly Weathered, Brownish/Reddish yellow, Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-IV					
14.5										
15.0	15	RC-11					25	11		
15.5										
16.0										
16.5	16.5	RC-12					26	15		
17.0										
17.5										
18.0	18	RC-13					35	0		
18.5				Highly Weathered, Greyish/Blackish, Medium to Coarse Grained, Very Poor SANDSTONE with LIGNITE COAL	GRADE-IV					
19.0										
19.5	19.5	RC-14					29	0		
20.0				Highly Weathered, Greyish/Blackish, Medium Grained, Very	GRADE-IV					

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client* :MPPGCL
BH Location/Chainage :Near Chimney	*Westing* :300 m	*Southing* :269 m
Reduced Level (m):(+)477.509	BH. No. :BH-05	*BH Depth (m)*:25
Proposed/Existing Structure :Chimney	*Water Table (m)*:1.15	*Inclination* : Vertical
Boring type :Rotary	*Dia. of Boring* :150/76 mm	*Depth of Casing (m)* :9.00
Date of Start :22-08-2023	*Date of Completion* :23-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
20.0				Poor LIGNITE COAL						
20.5										
21.0	21	RC-15		Highly Weathered, Greyish/Blackish, Medium Grained, Very Poor LIGNITE COAL	GRADE-IV		23	0		
21.5										
22.0										
22.5	22.5	RC-16					20	0		
23.0				Highly Weathered, Greyish/Blackish yellow, Medium to Coarse Grained, Very Poor LIGNITE COAL with SANDSTONE	GRADE-IV					
23.5										
24.0	24	RC-17					35	0		
24.5				Highly Weathered, Greyish, Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-IV					
25.0	25						20	0		

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client* :MPPGCL
BH Location/Chainage :Near Chimney	*Westing* :289 m	*Southing* :290 m
Reduced Level (m):(+)477.339	BH. No. :BH-10	*BH Depth (m)*:25
Proposed/Existing Structure :Chimney	*Water Table (m)*:0.95	*Inclination* : Vertical
Boring type :Rotary	*Dia. of Boring* :150/76 mm	*Depth of Casing (m)* :6.00
Date of Start :06-08-2023	*Date of Completion* :06-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
0.0		DS		Filled up Material (Silty Clay with Gravels)	FILL	0.95m				
1.5	1.5 1.59	SPT-1 WS-1	>100							
3.0	3 3.07	SPT-2 WS-2	>100	Completely Weathered, Brownish/Greyish yellow, Medium Grained, SANDSTONE Recovered as Residual Soil	GRADE-V					
4.5	4.5 4.56	SPT-3 WS-3	>100							
5.0	5 5.05	SPT-4 RC-1	>100	Highly Weathered, Brownish/ Greyish/ Light Reddish yellow, Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-IV		22	0		
6.0	6	RC-2								
7.5	7.5	RC-3					25	0		
9.0	9	RC-4					27	0		
10.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client* :MPPGCL
BH Location/Chainage :Near Chimney	*Westing* :289 m	*Southing* :290 m
Reduced Level (m):(+)477.339	BH. No. :BH-10	*BH Depth (m)*:25
Proposed/Existing Structure :Chimney	*Water Table (m)*:0.95	*Inclination* : Vertical
Boring type :Rotary	*Dia. of Boring* :150/76 mm	*Depth of Casing (m)* :6.00
Date of Start :06-08-2023	*Date of Completion* :06-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
10.5	10.5	RC-5					21	8		
11.0										
11.5										
12.0	12 12.03	SPT-5 RC-6	>100				17	10		
12.5										
13.0										
13.5	13.5	RC-7					21	13		
14.0										
14.5										
15.0	15	RC-8		Highly Weathered, Brownish/ Greyish/ Light Reddish yellow, Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-IV		20	0		
15.5										
16.0										
16.5	16.5	RC-9					31	11		
17.0										
17.5										
18.0	18	RC-10					23	8		
18.5										
19.0										
19.5	19.5	RC-11					21	0		
20.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client* :MPPGCL
BH Location/Chainage :Near Chimney	*Westing* :289 m	*Southing* :290 m
Reduced Level (m):(+)477.339	BH. No. :BH-10	*BH Depth (m)*:25
Proposed/Existing Structure :Chimney	*Water Table (m)*:0.95	*Inclination* : Vertical
Boring type :Rotary	*Dia. of Boring* :150/76 mm	*Depth of Casing (m)* :6.00
Date of Start :06-08-2023	*Date of Completion* :06-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
20.5										
21.0	21	RC-12		Highly Weathered, Brownish/ Greyish/ Light Reddish yellow, Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-IV		29	19		
21.5										
22.0										
22.5	22.5	RC-13					33	13		
23.0										
23.5										
24.0	24	RC-14					37	15		
24.5										
25.0	25						50	12		

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*348 m	*Southing :*560 m
Reduced Level (m):(+)477.480	BH. No. :BH-32	*BH Depth (m):*25
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.10	*Inclination :* Vertical
*Boring type :*Rotary	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*9.00
*Date of Start :*13-08-2023	*Date of Completion :*15-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
0.0		DS		Filled Up Materials (Sandy Silt with Fine Gravels)	FILL	1.10m				
1.5	1.5	SPT-1	26							
2.5	2.5	UDS-1		Medium, Brownish Grey, Sandy Silt of low plasticity	ML-CL					
3.0	3	SPT-2	32							
4.5	4.5	SPT-3	50	Dense , Brownish Grey, Silty Sand with Fine Gravels	SM					
5.5	5.5	UDS*								
6.0	6 6.08	SPT-4 RC-1	>100							
7.5	7.5 7.56	SPT-5 RC-2	>100	Completely Weathered, Yellow, Very Poor SANDSTONE Recovrered as Residual Soil	GRADE-V		0	0		
9.0	9 9.05	SPT-6 RC-3	>100				0	0		
10.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*348 m	*Southing :*560 m
Reduced Level (m):(+)477.480	BH. No. :BH-32	*BH Depth (m):*25
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.10	*Inclination :* Vertical
*Boring type :*Rotary	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*9.00
*Date of Start :*13-08-2023	*Date of Completion :*15-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
10.0					GRADE-V		8	0		
10.5	10.5 10.56	SPT-7 RC-4	>100							
11.0										
11.5										
12.0	12	RC-5		Highly Weathered,Yellow Brown, Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-IV		29	0		
12.5										
13.0										
13.5	13.5	RC-6					43	13		
14.0				Moderately Weathered,Yellow Brown,Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-III					
14.5										
15.0	15	RC-7					53	35		
15.5										
16.0										
16.5	16.5	RC-8		Slightly Weathered,Brown Yellow, Medium to Coarse Grained, SANDSTONE	GRADE-II		73	7		
17.0										
17.5										
18.0	18	RC-9					71	7		
18.5				Highly Weathered, Brown Yellow , Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-IV					
19.0										
19.5	19.5	RC-10					42	0		
20.0				Moderately Weathered, Yellow Brown,Medium to Coarse Grained, Very	GRADE-III					

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*348 m	*Southing :*560 m
Reduced Level (m):(+)477.480	BH. No. :BH-32	*BH Depth (m):*25
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.10	*Inclination :* Vertical
*Boring type :*Rotary	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*9.00
*Date of Start :*13-08-2023	*Date of Completion :*15-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
20.0				Poor SANDSTONE			0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
20.5										
21.0	21	RC-11		Moderately Weathered, Yellow Brown,Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-III		56	11		
21.5										
22.0										
22.5	22.5	RC-12					69	52		
23.0				Slightly Weathered,Yellow Brown, Medium to Coarse Grained, SANDSTONE	GRADE-II					
23.5										
24.0	24	RC-13					81	15		
24.5				Highly Weathered, Grey Black , Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-IV					
25.0	25						28	28		

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*400 m	*Southing :*580 m
Reduced Level (m):(+)477.501	BH. No. :BH-34	*BH Depth (m):*25
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.02	*Inclination :* Vertical
*Boring type :*Rotary	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*10.50
*Date of Start :*18-08-2023	*Date of Completion :*19-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
0.0		DS		Dark Brownish Grey Silty Clay With Fine Sand	CL	1.02m				
1.5	1.5	SPT-1	18							
2.5	2.5	UDS-1		Medium Dense, Brownish Grey/Greyish Brown, Clayey Sand with gravels	SC					
3.0	3	SPT-2	23							
4.5	4.5	SPT-3	33							
5.5	5.5	UDS*								
6.0	6 6.07	SPT-4 RC-1	>100							
7.5	7.5 7.54	SPT-5 RC-2	>100	Highy weathered , Yellowish Brown , very poor , medium to coarse grained , SANDSTONE	GRADE-IV		19	0		
9.0	9 9.04	SPT-6 RC-3	>100				17	0		
10.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*400 m	*Southing :*580 m
Reduced Level (m):(+)477.501	BH. No. :BH-34	*BH Depth (m):*25
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.02	*Inclination :* Vertical
*Boring type :*Rotary	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*10.50
*Date of Start :*18-08-2023	*Date of Completion :*19-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
10.0					GRADE-IV		11	0		
10.5	10.5 10.53	SPT-7 RC-4	>100	Completely Weathered, Brownish Yellow, Coarse Grained SANDSTONE recovered as Residual Soil	GRADE-V					
11.0										
11.5										
12.0	12 12.04	SPT-8 RC-5	>100				7	0		
12.5										
13.0										
13.5	13.5 13.53	SPT-9 RC-6	>100				18	0		
14.0				Highy weathered , Brownish Yellow,very poor, medium to coarse grained , SANDSTONE	GRADE-IV					
14.5										
15.0	15	RC-7					20	0		
15.5										
16.0										
16.5	16.5 16.53	SPT-10 RC-8	>100				13	0		
17.0				Completely Weathered, Brownish Yellow, Coarse Grained SANDSTONE recovered as Residual Soil	GRADE-V					
17.5										
18.0	18 18.02	SPT-11 RC-9	>100				9	0		
18.5										
19.0				Highy weathered , Greyish Brown,very poor , medium to coarse grained , SANDSTONE	GRADE-IV					
19.5	19.5 19.52	SPT-12 RC-10	>100				16	0		
20.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*400 m	*Southing :*580 m
Reduced Level (m):(+)477.501	BH. No. :BH-34	*BH Depth (m):*25
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.02	*Inclination :* Vertical
*Boring type :*Rotary	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*10.50
*Date of Start :*18-08-2023	*Date of Completion :*19-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
20.5				Highy weathered , Greyish Brown,very poor , medium to coarse grained , SANDSTONE	GRADE-IV					
21.0	21	RC-11					36	0		
21.5										
22.0										
22.5	22.5	RC-12		Slightly weathered , Greyish Brown /Greyish Black , very poor , medium to coarse grained , SANDSTONE	GRADE-III		65	0		
23.0										
23.5										
24.0	24	RC-13					57	0		
24.5										
25.0	25						58	0		

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*343 m	*Southing :*582 m
Reduced Level (m):(+)477.563	BH. No. :BH-35	*BH Depth (m):*25
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.00	*Inclination :* Vertical
*Boring type :*Rotary	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*16.00
*Date of Start :*13-08-2023	*Date of Completion :*14-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
0.0		DS		Filledup Starta (Brownish Grey Silty Clay With Sand Particales)	FILL	1.00m	0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
1.5	1.5	SPT-1	6							
2.5	2.5	UDS-1		Medium to Dense, Brownish Grey,Brownish Yellow , Clayey Sand	SC					
3.0	3	SPT-2	28							
4.5	4.5	SPT-3	45							
5.5	5.5	UDS-2								
6.0	6	SPT-4	29							
7.5	7.5	SPT-5	86							
9.0	9	SPT-6	>100	Hard Brownish Yellow Completely Weathered SANDSTONE recovered as Residual Soil	GRADE-VI					
9.1		RC-1		Completely Weathered,Greyish brown, Coarse Grained SANDSTONE recovered as Residual Soil	GRADE-V					
10.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*343 m	*Southing :*582 m
Reduced Level (m):(+)477.563	BH. No. :BH-35	*BH Depth (m):*25
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.00	*Inclination :* Vertical
*Boring type :*Rotary	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*16.00
*Date of Start :*13-08-2023	*Date of Completion :*14-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
10.0					GRADE-V		0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
10.5	10.5 10.56	SPT-7 RC-2	>100				0	0		
11.0										
11.5										
12.0	12 12.04	SPT-8 RC-3	>100	Highy weathered , Yellowish Brown , very poor , medium to coarse grained , SANDSTONE	GRADE-IV		11	0		
12.5										
13.0										
13.5	13.5 13.53	SPT-9 RC-4	>100				17	0		
14.0				Completely Weathered,Greyish Light Brown, Coarse Grained SANDSTONE recovered as Residual Soil	GRADE-V					
14.5										
15.0	15 15.04	SPT-10 RC-5	>100				9	0		
15.5										
16.0										
16.5	16.5	RC-6					21	0		
17.0										
17.5				Highy weathered ,Greyish Brown/Yellowish Light Grey , very poor , medium to coarse grained , SANDSTONE	GRADE-IV					
18.0	18	RC-7					29	0		
18.5										
19.0										
19.5	19.5	RC-8					36	0		
20.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*343 m	*Southing :*582 m
Reduced Level (m):(+)477.563	BH. No. :BH-35	*BH Depth (m):*25
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.00	*Inclination :* Vertical
*Boring type :*Rotary	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*16.00
*Date of Start :*13-08-2023	*Date of Completion :*14-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
20.5										
21.0	21	RC-9		Highy weathered ,Greyish Brown/Yellowish Light Grey , very poor , medium to coarse grained , SANDSTONE	GRADE-IV		40	0		
21.5										
22.0										
22.5	22.5	SPT-11	>100				14	0		
	22.52	RC-10								
23.0										
23.5				Highy weathered,Blackish , very poor , medium to coarse grained, LIGNITE COAL	GRADE-IV					
24.0	24	RC-11					27	11		
24.5										
25.0	25						25	0		

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client* :MPPGCL
BH Location/Chainage :Main Power House	*Westing* :300 m	*Southing* :586 m
Reduced Level (m):(+)477.495	BH. No. :BH-36	*BH Depth (m)*:25
Proposed/Existing Structure :Main Power House	*Water Table (m)*:1.02	*Inclination* : Vertical
Boring type :Rotary	*Dia. of Boring* :150/76 mm	*Depth of Casing (m)* :15.00
Date of Start :20-08-2023	*Date of Completion* :21-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
0.0		DS		Filled up Material (Greyish Brown, Fine to Medium Sand)	FILL	1.02m				
1.5	1.5	SPT-1	11							
2.5	2.5	UDS*		Medium, Greyish Brown Grey, Silty Sand	SM					
3.0	3	SPT-2	10							
4.5	4.5 4.58	SPT-3 RC-1	>100							
6.0	6 6.04	SPT-4 RC-2	>100	Completely Weathered,Greyish brown, Yellowish Brown, Coarse Grained SANDSTONE recovered as Residual Soil	GRADE-V		0	0		
7.5	7.5 7.55	SPT-5 RC-3	>100				0	0		
9.0	9 9.04	SPT-6 RC-4	>100				0	0		
10.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client* :MPPGCL
BH Location/Chainage :Main Power House	*Westing* :300 m	*Southing* :586 m
Reduced Level (m):(+)477.495	BH. No. :BH-36	*BH Depth (m)*:25
Proposed/Existing Structure :Main Power House	*Water Table (m)*:1.02	*Inclination* : Vertical
Boring type :Rotary	*Dia. of Boring* :150/76 mm	*Depth of Casing (m)* :15.00
Date of Start :20-08-2023	*Date of Completion* :21-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
10.5	10.5 10.54	SPT-7 RC-5	>100	Completely Weathered,Greyish brown, Yellowish Brown, Coarse Grained SANDSTONE recovered as Residual Soil	GRADE-V		0	0		
11.0										
11.5										
12.0	12 12.03	SPT-8 RC-6	>100				0	0		
12.5										
13.0										
13.5	13.5 13.52	SPT-9 RC-7	>100				10	0		
14.0										
14.5										
15.0	15	RC-8					24	8		
15.5										
16.0										
16.5	16.5	RC-9		Highy weathered, Brownish Yellow,Greyish Light Brown , very poor , medium to coarse grained , SANDSTONE	GRADE-IV		35	0		
17.0										
17.5										
18.0	18	RC-10					28	0		
18.5										
19.0										
19.5	19.5	RC-11					20	0		
20.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*300 m	*Southing :*586 m
Reduced Level (m):(+)477.495	BH. No. :BH-36	*BH Depth (m):*25
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.02	*Inclination :* Vertical
*Boring type :*Rotary	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*15.00
*Date of Start :*20-08-2023	*Date of Completion :*21-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
20.5				Highy weathered, Brownish Yellow,Greyish Light Brown , very poor , medium to coarse grained , SANDSTONE	GRADE-IV					
21.0	21	RC-12					22	0		
21.5				Moderately weathered,Brownish Yellow,very poor,medium to coarse grained , SANDSTONE	GRADE-III					
22.0										
22.5	22.5	RC-13					51	0		
23.0				Moderately weathered,Greyish Black,very poor,medium to coarse grained,Lignite Coal	GRADE-III					
23.5										
24.0	24	RC-14					55	7		
24.5				Slightly weathered,Greyish Black,very poor,medium to coarse grained,Lignite Coal,SANDSTONE	GRADE-II					
25.0	25						90	0		

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :* MPPGCL
BH Location/Chainage : Main Power House	*Westing :* 381 m	*Southing :* 558 m
Reduced Level (m): (+)477.639	BH. No. : BH-129	*BH Depth (m):* 24
Proposed/Existing Structure : Main Power House	*Water Table (m):* 1.05	*Inclination :* Vertical
Boring type : Rotary	*Dia. of Boring :* 150/76 mm	*Depth of Casing (m) :* 12.00
Date of Start : 17-08-2023	*Date of Completion :* 18-08-2023	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
0.0		DS		Filled up Material (Silty Sand With Gravels)	FILL	1.05m				
1.5	1.5	SPT-1	10							
2.5	2.5	UDS-1		Medium to Dense, Brownish Grey , Clayey Sand with Fine Gravels	SC					
3.0	3	SPT-2	49							
4.5	4.5 4.58	SPT-3 RC-1	>100							
6.0	6 6.06	SPT-4 RC-2	>100	Completely Weathered,Greyish brown / Yellowish Brown, Coarse Grained SANDSTONE recovered as Residual Soil	GRADE-V		0	0		
7.5	7.5 7.55	SPT-5 RC-3	>100				0	0		
9.0	9 9.04	SPT-6 RC-4	>100				0	0		
10.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*381 m	*Southing :*558 m
Reduced Level (m):(+)477.639	BH. No. :BH-129	*BH Depth (m):*24
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.05	*Inclination :* Vertical
*Boring type :*Rotary	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*12.00
*Date of Start :*17-08-2023	*Date of Completion :*18-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
10.0					GRADE-V					
10.5	10.5 10.54	SPT-7 RC-5	>100				10	0		
11.0				Highy weathered,Greyish Yellow, very poor, medium to coarse grained , SANDSTONE	GRADE-IV					
11.5										
12.0	12 12.04	SPT-8 RC-6	>100				13	0		
12.5				Completely Weathered,Brownish Yellow, Coarse Grained SANDSTONE recovered as Residual Soil	GRADE-V					
13.0										
13.5	13.5 13.53	SPT-9 RC-7	>100				7	0		
14.0										
14.5										
15.0	15	RC-8					34	0		
15.5										
16.0										
16.5	16.5	RC-9		Highly weathered,Brownish Yellow / Greyish Brown very poor, medium to coarse grained , SANDSTONE	GRADE-IV		27	20		
17.0										
17.5										
18.0	18 18.03	SPT-10 RC-10	>100				17	0		
18.5										
19.0										
19.5	19.5 19.52	SPT-11 RC-11	>100				19	0		
20.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client* :MPPGCL
BH Location/Chainage :Main Power House	*Westing* :381 m	*Southing* :558 m
Reduced Level (m):(+)477.639	BH. No. :BH-129	*BH Depth (m)*:24
Proposed/Existing Structure :Main Power House	*Water Table (m)*:1.05	*Inclination* : Vertical
Boring type :Rotary	*Dia. of Boring* :150/76 mm	*Depth of Casing (m)* :12.00
Date of Start :17-08-2023	*Date of Completion* :18-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
20.5										
21.0	21	RC-12		Highly weathered,Brownish Yellow / Greyish Brown very poor, medium to coarse grained , SANDSTONE	GRADE-IV		23	9		
21.5										
22.0										
22.5	22.5	RC-13					31	21		
23.0				Moderately weathered,Brownish Grey,very poor, medium to coarse grained , SANDSTONE	GRADE-III					
23.5										
24.0	24						57	0		

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*311 m	*Southing :*558 m
Reduced Level (m):(+)477.427	BH. No. :BH-130	*BH Depth (m):*25
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.10	*Inclination :* Vertical
*Boring type :*Rotary	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*9.00
*Date of Start :*15-08-2023	*Date of Completion :*18-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
0.0		DS		Filled up Material (Greyish Aggregate)	FILL	1.10m				
1.5	1.5	SPT-1	8							
2.5	2.5	UDS-1		Medium, Brownish Grey, Clayey Sand	SC					
3.0	3	SPT-2	22							
4.0	3.8 3.86	SPT-3 RC-1	>100							
4.5	4.5 4.55	SPT-4 RC-2	>100	Completely Weathered,Greyish, Coarse Grained SANDSTONE recovered as Residual Soil	GRADE-V		0	0		
6.0	6 6.04	SPT-5 RC-3	>100				0	0		
7.5	7.5 7.56	SPT-6 RC-4	>100	Highy weathered ,Brownish Grey,Yellowish Brown , very poor , medium to coarse grained , SANDSTONE	GRADE-IV		14	0		
9.0	9 9.05	SPT-7 RC-5	>100				11	0		
10.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*311 m	*Southing :*558 m
Reduced Level (m):(+)477.427	BH. No. :BH-130	*BH Depth (m):*25
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.10	*Inclination :* Vertical
*Boring type :*Rotary	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*9.00
*Date of Start :*15-08-2023	*Date of Completion :*18-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
10.5	10.5	RC-6					11	0		
11.0										
11.5										
12.0	12 12.04	SPT-8 RC-7	>100				11	0		
12.5										
13.0										
13.5	13.5 13.56	SPT-9 RC-8	>100				15	13		
14.0										
14.5										
15.0	15 15.06	SPT-10 RC-9	>100	Highy weathered ,Brownish Grey,Yellowish Brown , very poor , medium to coarse grained , SANDSTONE	GRADE-IV		21	0		
15.5										
16.0										
16.5	16.5 16.56	SPT-11 RC-10	>100				15	0		
17.0										
17.5										
18.0	18 18.06	SPT-12 RC-11	>100				15	7		
18.5										
19.0										
19.5	19.5	RC-12					28	7		
20.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*311 m	*Southing :*558 m
Reduced Level (m):(+)477.427	BH. No. :BH-130	*BH Depth (m):*25
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.10	*Inclination :* Vertical
*Boring type :*Rotary	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*9.00
*Date of Start :*15-08-2023	*Date of Completion :*18-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
20.5										
21.0	21	RC-13		Highy weathered ,Brownish Grey,Yellowish Brown , very poor , medium to coarse grained , SANDSTONE	GRADE-IV		21	0		
21.5										
22.0										
22.5	22.5	RC-14					33	14		
23.0										
23.5										
24.0	24	RC-15					23	21		
24.5				Highy weathered ,Black Grey, very poor , medium to coarse grained ,Lignite Coal With SANDSTONE	GRADE-IV					
25.0	25						36	7		

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*274 m	*Southing :*560 m
Reduced Level (m):(+)477.676	BH. No. :BH-131	*BH Depth (m):*25
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.20	*Inclination :* Vertical
*Boring type :*Hydraulic	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*Not used
*Date of Start :*14-08-2023	*Date of Completion :*15-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
0.0		DS		Brownish, Clayey Sand with Gravels	FILL	1.20m				
1.5	1.5	SPT-1	>100							
2.0	2 2.1	SPT-2 RC-1	>100							
3.0	3 3.08	SPT-3 RC-2	>100				0	0		
4.5	4.5 4.56	SPT-4 RC-3	>100				0	0		
5.5				Completely Weathered, Brownish Grey, Very Poor SANDSTONE Recovrered as Residual Soil	GRADE-V					
6.0	6 6.05	SPT-5 RC-4	>100				0	0		
7.5	7.5 7.6	SPT-6 RC-5	>100				0	0		
9.0	9 9.04	SPT-7 RC-6	>100				0	0		
10.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*274 m	*Southing :*560 m
Reduced Level (m):(+)477.676	BH. No. :BH-131	*BH Depth (m):*25
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.20	*Inclination :* Vertical
*Boring type :*Hydraulic	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*Not used
*Date of Start :*14-08-2023	*Date of Completion :*15-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
10.5	10.5 10.52	SPT-8 RC-7	>100		GRADE-V		0	0		
11.0										
11.5										
12.0	12 12.03	SPT-9 RC-8	>100				15	0		
12.5										
13.0										
13.5	13.5	RC-9					20	10		
14.0										
14.5										
15.0	15 15.01	SPT-10 RC-10	>100	Highly Weathered, Yellowish Grey, Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-IV		16	0		
15.5										
16.0										
16.5	16.5	RC-11					20	0		
17.0										
17.5										
18.0	18	RC-12					28	0		
18.5										
19.0										
19.5	19.5	RC-13					22	0		
20.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*274 m	*Southing :*560 m
Reduced Level (m):(+)477.676	BH. No. :BH-131	*BH Depth (m):*25
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.20	*Inclination :* Vertical
*Boring type :*Hydraulic	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*Not used
*Date of Start :*14-08-2023	*Date of Completion :*15-08-2023	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
20.5										
21.0	21	RC-14		Highly Weathered, Yellowish Grey, Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-IV		20	0		
21.5										
22.0										
22.5	22.5	RC-15					23	0		
23.0				Moderately Weathered, Greyish Black, Medium to Coarse Grained, Very Poor LIGNITE COAL	GRADE-III					
23.5										
24.0	24	RC-16					51	0		
24.5				Highly Weathered, Greyish Black, Medium to Coarse Grained, Very Poor SANDSTONE with LIGNITE COAL	GRADE-IV					
25.0	25						38	0		

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*369 m	*Southing :*579 m
Reduced Level (m):(+)477.513	BH. No. :BH-132	*BH Depth (m):*23
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.00	*Inclination :* Vertical
*Boring type :*Hydraulic	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*Not used
*Date of Start :*17-08-2023	*Date of Completion :*18-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
0.0		DS		Filledup material	FILL	1.00m	0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
1.5	1.5	SPT-1	26							
2.5	2.5	UDS-1								
3.0	3	SPT-2	30							
4.5	4.5	SPT-3	37							
5.5	5.5	UDS-2		Very Stiff to Hard , Brownish, Silty Clay of Low plasticity with Gravels	CL					
6.0	6	SPT-4	41							
7.5	7.5	SPT-5	37							
9.0	9 9.07	SPT-6 RC-1	>100	Completely Weathered, Brownish Grey, Very Poor SANDSTONE Recovrered as Residual Soil	GRADE-V					
10.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*369 m	*Southing :*579 m
Reduced Level (m):(+)477.513	BH. No. :BH-132	*BH Depth (m):*23
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.00	*Inclination :* Vertical
*Boring type :*Hydraulic	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*Not used
*Date of Start :*17-08-2023	*Date of Completion :*18-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
10.5	10.5 10.54	SPT-7 RC-2	>100	Completely Weathered, Brownish Grey, Very Poor SANDSTONE Recovrered as Residual Soil	GRADE-V		0	0		
11.0										
11.5										
12.0	12 12.03	SPT-8 RC-3	>100				8	0		
12.5										
13.0										
13.5	13.5	RC-4					30	0		
14.0										
14.5										
15.0	15	RC-5					26	0		
15.5										
16.0				Highly Weathered, Brownish Yelllow to Greyish Brown, Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-IV					
16.5	16.5	RC-6					28	0		
17.0										
17.5										
18.0	18	RC-7					26	0		
18.5										
19.0										
19.5	19.5	RC-8					33	0		
20.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*369 m	*Southing :*579 m
Reduced Level (m):(+)477.513	BH. No. :BH-132	*BH Depth (m):*23
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.00	*Inclination :* Vertical
*Boring type :*Hydraulic	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*Not used
*Date of Start :*17-08-2023	*Date of Completion :*18-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
20.5										
21.0	21	RC-9		Highly Weathered, Brownish Yelllow to Greyish Brown, Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-IV		47	0		
21.5										
22.0										
22.5	22.5	RC-10		Moderately Weathered, Greyish Black, Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-III		38	0		
23.0	23						58	0		

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*276 m	*Southing :*579 m
Reduced Level (m):(+)477.502	BH. No. :BH-133	*BH Depth (m):*25
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.05	*Inclination :* Vertical
*Boring type :*Hydraulic	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*Not used
*Date of Start :*15-08-2023	*Date of Completion :*15-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
0.0		DS		Greyish,Silty Clay with Sand Particals	FILL	1.05m				
1.5	1.5	SPT-1	20							
2.5	2.5	UDS*		Medium Dense , Greyish, Clayey Sand	SC					
3.0	3	SPT-2	14							
4.5	4.5 4.55	SPT-3 RC-1	>100							
6.0	6 6.04	SPT-4 RC-2	>100	Completely Weathered, Greyish Brown, Very Poor SANDSTONE Recovrered as Residual Soil	GRADE-V		0	0		
7.5	7.5 7.54	SPT-5 RC-3	>100				0	0		
9.0	9 9.03	SPT-6 RC-4	>100				0	0		
10.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*276 m	*Southing :*579 m
Reduced Level (m):(+)477.502	BH. No. :BH-133	*BH Depth (m):*25
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.05	*Inclination :* Vertical
*Boring type :*Hydraulic	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*Not used
*Date of Start :*15-08-2023	*Date of Completion :*15-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
10.5	10.5 10.52	SPT-7 RC-5	>100		GRADE-V		0	0		
11.0										
11.5										
12.0	12 12.02	SPT-8 RC-6	>100				12	0		
12.5										
13.0										
13.5	13.5	RC-7					26	0		
14.0										
14.5										
15.0	15	RC-8		Highly Weathered, Yelllow Brown, Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-IV					
15.5										
16.0										
16.5	16.5	RC-9					23	0		
17.0										
17.5										
18.0	18	RC-10					25	0		
18.5										
19.0										
19.5	19.5	RC-11					21	0		
20.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*276 m	*Southing :*579 m
Reduced Level (m):(+)477.502	BH. No. :BH-133	*BH Depth (m):*25
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.05	*Inclination :* Vertical
*Boring type :*Hydraulic	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*Not used
*Date of Start :*15-08-2023	*Date of Completion :*15-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
20.5				Highly Weathered, Yelllow Brown, Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-IV					
21.0	21	RC-12					29	0		
21.5				Highly Weathered, Brownish Yelllow to Greyish Brown, Medium to Coarse Grained, Very Poor SANDSTONE with Lignite coal	GRADE-III					
22.0										
22.5	22.5	RC-13					51	15		
23.0				Highly Weathered, Brownish Yelllow to Greyish Brown, Medium to Coarse Grained, Very Poor SANDSTONE with Lignite coal	GRADE-IV					
23.5										
24.0	24	RC-14					45	0		
24.5				Highly Weathered, Brownish Yelllow to Greyish Brown, Medium to Coarse Grained, Very Poor SANDSTONE with Lignite coal	GRADE-II					
25.0	25						77	0		

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client* :MPPGCL
BH Location/Chainage :Main Power House	*Westing* :355 m	*Southing* :602 m
Reduced Level (m):(+)477.641	BH. No. :BH-135	*BH Depth (m)*:24
Proposed/Existing Structure :Main Power House	*Water Table (m)*:1.25	*Inclination* : Vertical
Boring type :Rotary	*Dia. of Boring* :150/76 mm	*Depth of Casing (m)* :12.00
Date of Start :21-08-2023	*Date of Completion* :23-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
0.0		DS		Filled up Material (Greyish Brown Silty Clay)	FILL	1.25m				
1.5	1.5	SPT-1	13							
2.5	2.5	UDS-1		Medium Dense, Greyish Brown, Clayey SAND with Fine Gravels	SC					
3.0	3	SPT-2	16							
4.5	4.5	SPT-3	21							
6.0	6	SPT-4	>100							
6.05		RC-1		Completely Weathered, Greyish Brown, Coarse Grained, Very Poor, SANDSTONE Recovered as Residual Soil	GRADE-V					
7.5	7.5	SPT-5	>100				0	0		
7.56		RC-2		Highly Weathered, Greyish / Reddish Yellow, Medium to Coarse Grained, Very Poor, SANDSTONE	GRADE-IV					
9.0	9	SPT-6	>100				13	0		
9.04		RC-3								
10.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*355 m	*Southing :*602 m
Reduced Level (m):(+)477.641	BH. No. :BH-135	*BH Depth (m):*24
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.25	*Inclination :* Vertical
*Boring type :*Rotary	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*12.00
*Date of Start :*21-08-2023	*Date of Completion :*23-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
10.0										
10.5	10.5 10.53	SPT-7 RC-4	>100				14	0		
11.0										
11.5										
12.0	12 12.04	SPT-8 RC-5	>100				17	0		
12.5										
13.0				Highly Weathered, Greyish / Reddish Yellow, Medium to Coarse Grained, Very Poor, SANDSTONE	GRADE-IV					
13.5	13.5	RC-6					23	0		
14.0										
14.5										
15.0	15	RC-7					49	0		
15.5										
16.0										
16.5	16.5	RC-8					50	40		
17.0										
17.5										
18.0	18	RC-9		Moderately Weathered, Yellowish Brown, Medium to Coarse Grained, Very Poor, SANDSTONE	GRADE-III		61	0		
18.5										
19.0										
19.5	19.5	RC-10					68	29		
20.0				Highly Weathered, Greyish Yellow, Medium to Coarse Grained, Very	GRADE-IV					

Core Recovery (%) scale: 0 25 50 75 100

RQD (%) scale: 0 25 50 75 100

(Depth v/s SPT N Value) scale: 0 10 20 30 40 50 60 70 80 90 100

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*355 m	*Southing :*602 m
Reduced Level (m):(+)477.641	BH. No. :BH-135	*BH Depth (m):*24
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.25	*Inclination :* Vertical
*Boring type :*Rotary	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*12.00
*Date of Start :*21-08-2023	*Date of Completion :*23-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
20.0				Poor, SANDSTONE			0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
20.5				Highly Weathered, Greyish Yellow, Medium to Coarse Grained, Very Poor, SANDSTONE	GRADE-IV					
21.0	21	RC-11					50	26		
21.5				Moderately Weathered, Greyish Yellow, Medium to Coarse Grained, Very Poor, SANDSTONE	GRADE-III					
22.0										
22.5	22.5	RC-12					56	0		
23.0				Moderately Weathered, Greyish Black, Fine to Medium Grained, Very Poor, LIGNITE COAL	GRADE-III					
23.5										
24.0	24						55	0		

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*315 m	*Southing :*601 m
Reduced Level (m):(+)477.581	BH. No. :BH-136	*BH Depth (m):*25
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.25	*Inclination :* Vertical
*Boring type :*Hydraulic	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*Not used
*Date of Start :*21-08-2023	*Date of Completion :*22-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
0.0		DS		Brownish, Silty Clay with Gravels	FILL		0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
1.5	1.5	SPT-1	13			1.25m				
2.5	2.5	UDS-1		Stiff to Very Stiff, Brownish, Silty Clay of Low Plasticity with Fine Gravels	CL					
3.0	3	SPT-2	15							
4.5	4.5	SPT-3	21							
5.5	5.5	UDS-2								
6.0	6	SPT-4	24							
7.5	7.5	SPT-5	33	Medium to Dense, Brownish, Clayey Sand with Fine Gravels	SC					
9.0	9 9.07	SPT-6 RC-1	>100	Completely Weathered, Yellowish Brown, Very Poor SANDSTONE Recovrered as Residual Soil	GRADE-V					
10.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*315 m	*Southing :*601 m
Reduced Level (m):(+)477.581	BH. No. :BH-136	*BH Depth (m):*25
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.25	*Inclination :* Vertical
*Boring type :*Hydraulic	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*Not used
*Date of Start :*21-08-2023	*Date of Completion :*22-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
10.5	10.5 10.56	SPT-7 RC-2	>100	Completely Weathered, Yellowish Brown, Very Poor SANDSTONE Recovrered as Residual Soil	GRADE-V		0	0		
11.0										
11.5										
12.0	12 12.03	SPT-8 RC-3	>100				8	0		
12.5										
13.0										
13.5	13.5	RC-4		Highly Weathered,Yellowish Brown, Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-IV		21	0		
14.0										
14.5										
15.0	15	RC-5					39	0		
15.5										
16.0										
16.5	16.5	RC-6					35	8		
17.0				Moderately Weathered, Yellowish Brown, Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-III					
17.5										
18.0	18	RC-7					59	13		
18.5				Highly Weathered, Yellowish Brown, Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-IV					
19.0										
19.5	19.5	RC-8					45	17		
20.0					GRADE-I					

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*315 m	*Southing :*601 m
Reduced Level (m):(+)477.581	BH. No. :BH-136	*BH Depth (m):*25
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.25	*Inclination :* Vertical
*Boring type :*Hydraulic	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*Not used
*Date of Start :*21-08-2023	*Date of Completion :*22-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
20.5				Fresh, Greyish Yellow, Medium to Coarse Grained, Very Poor SANDSTONE With Lignite Coal	GRADE-I					
21.0	21	RC-9					92	67		
21.5				Slightly Weathered, Greyish Black, Medium to Coarse Grained, Very Poor SANDSTONE With Lignite Coal	GRADE-II					
22.0										
22.5	22.5	RC-10					81	65		
23.0										
23.5										
24.0	24	RC-11					72	45		
24.5				Highly Weathered, Greyish Black, Medium to Coarse Grained, Very Poor LIGNITE COAL	GRADE-IV					
25.0	25						45	0		

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*276 m	*Southing :*602 m
Reduced Level (m):(+)477.656	BH. No. :BH-137	*BH Depth (m):*22.5
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.00	*Inclination :* Vertical
*Boring type :*Rotary	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*12.00
*Date of Start :*20-08-2023	*Date of Completion :*21-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
0.0		DS		Filled Up Materials (Brownish Clayey Silt)	FILL	1.00m				
1.5	1.5	SPT-1	12							
2.5	2.5	UDS-1		Medium Dense, Yellowish Brown, Clayey Sand with Fine Gravels	SC					
3.0	3	SPT-2	15							
4.5	4.5	SPT-3	22							
5.5	5.5	UDS*		Medium Dense, Greyish Brown, Yellowish Brown, Silty Sand	SM					
6.0	6	SPT-4	25							
7.5	7.5	SPT-5	30							
8.5	8.5	UDS*								
9.0	9	SPT-6	>100							
9.08		RC-1		Highly Weathered,Greyish Yellow / Yellow,Yellowish Light Grey, Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-IV					
10.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*276 m	*Southing :*602 m
Reduced Level (m):(+)477.656	BH. No. :BH-137	*BH Depth (m):*22.5
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.00	*Inclination :* Vertical
*Boring type :*Rotary	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*12.00
*Date of Start :*20-08-2023	*Date of Completion :*21-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
10.5	10.5 10.53	SPT-7 RC-2	>100				15	0		
11.0										
11.5										
12.0	12 12.03	SPT-8 RC-3	>100				13	0		
12.5										
13.0										
13.5	13.5	RC-4					21	0		
14.0										
14.5				Highly Weathered,Greyish Yellow / Yellow,Yellowish Light Grey, Medium to Coarse Grained, Very Poor SANDSTONE						
15.0	15	RC-5			GRADE-IV		31	0		
15.5										
16.0										
16.5	16.5	RC-6					29	0		
17.0										
17.5										
18.0	18	RC-7					29	0		
18.5										
19.0										
19.5	19.5	RC-8					32	9		
20.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*Main Power House	*Westing :*276 m	*Southing :*602 m
Reduced Level (m):(+)477.656	BH. No. :BH-137	*BH Depth (m):*22.5
*Proposed/Existing Structure :*Main Power House	*Water Table (m):*1.00	*Inclination :* Vertical
*Boring type :*Rotary	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*12.00
*Date of Start :*20-08-2023	*Date of Completion :*21-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
20.5										
21.0	21	RC-9		Highly Weathered,Greyish Yellow / Yellow,Yellowish Light Grey, Medium to Coarse Grained, Very Poor SANDSTONE	GRADE-IV		20	0		
21.5										
22.0										
22.5	22.5						29	0		

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client* :MPPGCL
BH Location/Chainage :CHP-PH CSSP & Work Shop	*Westing* :41 m	*Southing* :521 m
Reduced Level (m):(+) 482.705	BH. No. :BH-86	*BH Depth (m)*:20
Proposed/Existing Structure :CHP-PH CSSP & Work Shop	*Water Table (m)*:1.00	*Inclination* : Vertical
Boring type :Rotary	*Dia. of Boring* :150/76 mm	*Depth of Casing (m)* :6.00
Date of Start :09-08-2023	*Date of Completion* :10-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
0.0		DS		Filled up Materials (Coarse Grained SAND)	FILL	1.00m				
1.5	1.5	SPT-1	14							
2.5	2.5	UDS-1		Dense, Yellowish Grey, Clayey Sand With Gravels	SC					
3.0	3	SPT-2	30							
4.0	4	SPT-3	>100							
	4.05	RC-1		Highly Weathered, Brownish Yellow / Pinkish Brown, Medium to Coarse Grained, Very Poor, SANDSTONE	GRADE-IV					
5.0	5	RC-2					29	0		
6.0	6	RC-3					37	14		
7.5	7.5	RC-4					38	8		
9.0	9	RC-5					41	15		
10.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*CHP-PH CSSP & Work Shop	*Westing :*41 m	*Southing :*521 m
Reduced Level (m):(+) 482.705	BH. No. :BH-86	*BH Depth (m):*20
*Proposed/Existing Structure :*CHP-PH CSSP & Work Shop	*Water Table (m):*1.00	*Inclination :* Vertical
*Boring type :*Rotary	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*6.00
*Date of Start :*09-08-2023	*Date of Completion :*10-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100	
10.5	10.5	RC-6					39	8		
11.0										
11.5										
12.0	12	RC-7					48	19		
12.5										
13.0										
13.5	13.5	RC-8					43	0		
14.0										
14.5										
15.0	15	RC-9		Highly Weathered, Brownish Yellow / Pinkish Brown, Medium to Coarse Grained, Very Poor, SANDSTONE	GRADE-IV		44	17		
15.5										
16.0										
16.5	16.5	RC-10					32	21		
17.0										
17.5										
18.0	18	RC-11					35	11		
18.5										
19.0										
19.5	19.5	RC-12					35	28		
20.0	20						44	0		

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client* :MPPGCL
BH Location/Chainage :CHP-PH CSSP & Work Shop	*Westing* :38 m	*Southing* :463 m
Reduced Level (m):(+) 482.061	BH. No. :BH-87	*BH Depth (m)*:20
Proposed/Existing Structure :CHP-PH CSSP & Work Shop	*Water Table (m)*:0.50	*Inclination* : Vertical
Boring type :Rotary	*Dia. of Boring* :150/76 mm	*Depth of Casing (m)* :7.50
Date of Start :12-08-2023	*Date of Completion* :13-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
0.0		DS		Filled up Materials (RCC Concrete)	FILL	0.50m				
1.5	1.5	SPT-1	7							
2.5	2.5	UDS-1		Medium, Yellowish Brown, Clayey SAND with Fine Gravels	SC					
3.0	3	SPT-2	16							
3.5	3.5	SPT-3	>100							
	3.56	RC-1		Completely Weathered, Yellowish Brown, Coarse Grained SANDSTONE Recovered as Residual Soil	GRADE-V		0	0		
4.5	4.5	SPT-4	>100							
	4.54	RC-2		Highly Weathered, Yellowish/Greyish Brown, Medium to Coarse Grained, very Poor, SANDSTONE	GRADE-IV					
6.0	6	RC-3					41	0		
7.5	7.5	RC-4					47	0		
9.0	9	RC-5					43	0		
9.5				Moderately Weathered, Reddish Brown, Medium to Coarse Grained, very Poor, SANDSTONE	GRADE-III					
10.0										

UDS*-UDS not recovered

FIELD BOREHOLE LOG

*Project Name :*GI Work for proposed 1X660MW supercritical unit at ATPS Chachai		*Client :*MPPGCL
*BH Location/Chainage :*CHP-PH CSSP & Work Shop	*Westing :*38 m	*Southing :*463 m
Reduced Level (m):(+) 482.061	BH. No. :BH-87	*BH Depth (m):*20
*Proposed/Existing Structure :*CHP-PH CSSP & Work Shop	*Water Table (m):*0.50	*Inclination :* Vertical
*Boring type :*Rotary	*Dia. of Boring :*150/76 mm	*Depth of Casing (m) :*7.50
*Date of Start :*12-08-2023	*Date of Completion :*13-08-2023	

Depth (m)	Sample & In-SituTest Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	Special Observations
10.0										
10.5	10.5	RC-6			GRADE-III		51	24		
11.0				Highly Weathered, Yellowish Brown, Medium to Coarse Grained, very Poor, SANDSTONE	GRADE-IV					
11.5										
12.0	12	RC-7					39	9		
12.5										
13.0										
13.5	13.5	RC-8					45	30		
14.0				Slightly Weathered, Yellowish Brown, Medium to Coarse Grained, very Poor, SANDSTONE	GRADE-II					
14.5										
15.0										
15.5										
16.0										
16.5	16.5	RC-9					73	58		
17.0				Highly Weathered, Greyish Brown, Medium to Coarse Grained, very Poor, SANDSTONE with LIGNITE COAL	GRADE-IV					
17.5										
18.0	18	RC-10					47	14		
18.5				Highly Weathered, Blackish Grey, Medium to Coarse Grained, very Poor, SANDSTONE	GRADE-IV					
19.0										
19.5	19.5	RC-11					23	7		
20.0	20						42	0		

UDS*-UDS not recovered