



न्यूक्लियर पावर कॉर्पोरेशन ऑफ इंडिया लिमिटेड
NUCLEAR POWER CORPORATION OF INDIA LIMITED

(भारत सरकार का उद्यम)

(A Govt. of India Enterprise)

नरौरा परमाणु विद्युत केंद्र

Narora Atomic Power Station

पोस्ट: एन.ए.पी.एस टाउनशिप, नरौरा जिला बुलंदशहर, (उ.प्र.)- 203389

PO: NAPS Township, Narora, Distt. Bulandshahr, (UP) - 203389

दूरभाष Phone: 05734-222167 इंटरकॉम Intercom: 4504

ई-मेल E-Mail : hssingh@npcil.co.in



पंजीकृत कार्यालय Registered Office

16वां तल 16th Floor,

विश्व व्यापार केंद्र World Trade Centre

कफे पारेड Cuffe Parade,

कोलाबा Colaba

मुम्बई Mumbai - 400 005

सी.आई.एन. सं.: U40104MH1987GOI149458

CIN No.: U40104MH1987GOI149458

वेबसाइट Website: www.npcil.nic.in

संदर्भ: एनएपीएस/सीटीसी/2024/सीपीपीपी/पीटी/1110/डब्ल्यूओएस/8103

Ref: NAPS/CTC/2024/CPPP/PT/1110/WOS/8103

दिनांक Date:

सेवा में / To,

नैशनल इंजिनियरिंग कंसलटेंट्स एवं टेस्टिंग

लैबोरेटरी प्लॉट सं 27-28, शिव विहार

मैसर्स

एक्सटेंशन, नाला रोड, बिहाइंड विकास पुरी, उत्तम

नगर, वैस्ट दिल्ली - 110059 जी.एस.टी.आई.एन

सं 07AMQPM8155J2ZC

M/s

National Engineering Consultants & Testing

Laboratory, Plot No. 27-28, Shiv Vihar Extn.

Nala Road, Behind Vikas Puri, Uttam Nagar,

West Delhi - 110059 GSTIN-

07AMQPM8155J2ZC

एमएसएमई MSME	Yes Micro
कार्यादेश संख्या Work Order No.	8103
उपखाता कोड Subledger Code	N0051
लेखा कोड Account Code	78129
लागत केंद्र कोड Cost Centre Code	645

कार्यादेश

WORK ORDER

कार्य का नाम : जियो टेक्निकल इन्वेस्टिगेशंस, फील्ड & लैबोरेटरी टेस्ट्स फॉर ट्रेनिंग सेंटर एंड साइमुलेटर बिल्डिंग ऑफ नरौरा एटॉमिक पावर स्टेशन 1 एवं 2 एट नरौरा डिस्ट्रिक्ट बुलंदशहर, उत्तर प्रदेश |

Name of work: Geo technical investigations, field and laboratory tests for training center and simulator building of Narora Atomic Power Station 1 & 2 at Narora, District Bulandshahr, Uttar Pradesh.

संदर्भ Reference:

निविदा संख्या

एनएपीएस/सीटीसी/2024/सीपीपीपी/पीटी/1110 दिनांक 30/09/2024

Tender No.

NAPS/CTC/2024/CPPP/PT/1110 Dated 30/09/2024

Tender ID:

2024_NPCIL_209403_1

Corrigendum No.

1. NAPS/CTC/2024/S/237 dated 19.10.2024

2. NAPS/CTC/2024/S/238 dated 22.10.2024

प्रिय महोदय / Dear Sir,

कृपया उपर्युक्त कार्य के लिए एनआईटी संख्या एनएपीएस/सीटीसी/2024/सीपीपीपी/पीटी/1110 के पक्ष में अपने ऊपर उद्धृत निविदा का संदर्भ लें जिसका भाग-1 दिनांक 04/11/2024 को खोला गया था और भाग-II दिनांक 01/02/2025 को खोला गया था।

29/10/24
अनुसंधान अधीक्षक Maint. Supdt.
नरौरा परमाणु विजली घर, नरौरा
Narora Atomic Power Station, Narora

Please refer to your above cited tender in response to NIT No., NAPS/CTC/2024/CPPP/PT/1110 for the above work part-I of which was opened on 04/11/2024 and part-II opened on 01/02/2025

- 1) आपको सूचित किया जाता है कि आपके द्वारा प्रस्तुत निविदा को एनपीसीआईएल के लिए एवं की ओर से, निविदा में समाविष्ट दर और मात्रा अनुसूची में दर्शाये गए कार्य की मदों के लिए वस्तु एवं सेवाकर सहित संविदा लागत ₹ 1275300/- (रुपये बारह लाख पचत्तर हजार तीन सौ मात्र) के लिए स्वीकार कर लिया गया है।

This is to inform you that the tender submitted by you has been accepted for and on behalf of NPCIL, for the items of work shown in the schedule of quantities and rates covered by the tender for a contract value of Rs. 1275300/- (Rupees Twelve Lakhs Seventy Five Thousand Three Hundred Only) including Goods and Services tax.

- 2) नम्बर 4 ए.एच.आर (एबनॉर्मली हाई रेटिड) है एवं आईटम नम्बर 1.01, 1.02, 2, 3, 5, 6, 7, 8, 9, 10; 1.12.01, 12.02, 13.01, 13.02, 13.03, 13.09, 13.1, 14.01, 14.02, 15 एवं 16 ए.एल.आर (एबनॉर्मली लो रेटिड) आईटम हैं।

Item No. 4 is AHR (Abnormally High Rated) and Item No. 1.01, 1.02, 2, 3, 5, 6, 7, 8, 9, 10; 1.12.01, 12.02, 13.01, 13.02, 13.03, 13.09, 13.1, 14.01, 14.02, 15 and 16 are ALR (Abnormally Low Rated) items.

- 3) निविदा में निर्दिष्ट शर्तों, निबंधनों, विनिर्देशों और ड्राइंगों के अनुसार कार्य सख्ती से और श्रेष्ठतम कौशल के साथ किया जाएगा। आप हर समय कार्य पर योग्य कर्मचारियों को नियुक्त करेंगे हर समय बनाए रखेंगे। आप कार्य स्थल पर ऐसी मशीनरी, उपकरणों और अन्य सामग्री भी लाएंगे एवं कार्य में प्रयोग करेंगे, जोकि इस कार्य को संतोषजनक ढंग से पूरा करने के लिए आवश्यक हैं।

The work shall be carried out strictly in accordance with the terms, conditions, specifications and drawings stipulated in the tender and also in best workmanlike manner. You shall employ and maintain qualified staff in the job at all times. You shall also bring to the site and employ such machinery and equipments and other materials as are necessary for the satisfactory completion of this work.

- 4) प्रारंभ तिथि से चार (4) कैलेंडर माह के भीतर हर प्रकार से कार्य पूरा किया जाएगा। प्रारंभ होने की तारीख की गणना 21.4.2025 से की जाएगी। समय अनुबंध का सार होगी और कार्य अनुमोदित कार्यक्रम के अनुसार पूरा किया जाएगा।

The work shall be completed in all respects within Four (4) Calendar Months from the date of commencement. The date of commencement will be reckoned from 21.4.2025. The time shall be essence of the contract and the work shall be completed as per approved program of work.

- 5) भुगतान में वृद्धि जैसा कि संविदा में इंगित किया गया है, भी देय होगी (यदि लागू हो)। Escalation of payment as indicated in the Contract shall also be payable (if applicable).
- 6) आपसे अनुरोध है कि इस संविदा के सभी मामलों के पर्यवेक्षण हेतु अपने अधिकृत प्रतिनिधि का नाम सूचित करें और उचित मूल्य के स्टाम्प पेपर पर विधिवत निष्पादित मुख्तारनामा उनके पक्ष में प्रस्तुत करेंगे।

Signature
29/02/2025
Joint. Supdt.
Page 2 of 8

You are requested to inform the name of the authorized representative who will deal with all matters relating to the contract and the Power of Attorney in his favour duly executed on stamped paper of an appropriate value shall be furnished.

- 7) संविदा निष्पादन के दौरान और आपको कार्य समाप्ति प्रमाण पत्र जारी होने तक, आपकी वजह से तृतीय पक्ष को हुई हानि या क्षति सहित किसी भी कार्य, संरचना, संपत्ति आदि की हानि, क्षति या विनाश के लिए सभी संबंधितों को क्षतिपूर्ति करने के लिए आप will be fully liable to compensate all concerned for any loss, damage or destruction of work, structure, property etc. including third party risk arising due पूरी तरह से उत्तरदायी होंगे और इसका निर्णय प्रभारी submitted to Engineer-in-Charge before start of work. अभियंता द्वारा किया जाएगा और इस संदर्भ में उनका निर्णय अंतिम होगा।

During the execution of the contract and until completion certificate is issued you will be fully liable to compensate all concerned for any loss, damage or destruction of work, structure, property etc. including third party risk arising due to causes attributable to you which will be decided by the Engineer-in-Charge whose decision in this regard will be final.

- 8) अनुबंध की शर्तों के अनुसार आपको सभी लागू बीमा (एससीसी के 3.7.7 के अनुसार ईएसआई सहित) पॉलिसियाँ लेनी होंगी, एवं इससे संबंधित दस्तावेजों को कार्य शुरू होने से पहले प्रभारी-अभियंता को जमा किया जाना चाहिए।

You are required to take all applicable insurance (including ESI as per 3.7.7 of SCC) policies as per the conditions of the contract and documents in this required should be submitted to engineer-in-charge before start of work.

- 9) इस कार्य हेतु कार्य संविदा पर केंद्र अथवा राज्य सरकार द्वारा from time to time shall be recovered from your running bills समय-समय पर यथा अधिसूचित आयकर और अन्य सांविधिक कर, यदि कोई हो, तो उसकी वसूली निर्धारित तरीके से आपके अंतरिम बिलों के अलावा अंतिम बिल से भी की जाएगी। आपसे अनुरोध है कि आप अपना intimate your permanent Account number to Engineer-in-Charge. स्थायी खाता संख्या (पैन नंबर) प्रभारी submitted to Engineer-in-Charge before start of work. अभियंता सूचित करे।

Income Tax and statutory Levy, if any, on works contract as notified by Central/ State Govt. from time to time shall be recovered from your running bills as well as final bills for this work in the prescribed manner. You are requested to intimate your permanent Account number to Engineer-in-Charge.

- 10) श्री शशांक अग्रवाल, वैज्ञा. अधि, सिविल, इस कार्य के प्रभारी अभियंता होंगे। आप प्रभारी अभियंता के साथ परामर्श करके तत्काल कार्य शुरू करने के लिए आवश्यक व्यवस्था करें।

Shri Shashank Agarwal, SO/E, Civil, will be the Engineer-in-Charge of this work. You may make necessary arrangements for commencing the work immediately in consultation with Engineer-in-charge.

- 11) कृपया आप ध्यान दें कि प्रतिभूति जमा राशि ₹ 1,27,530/- (@ 10 % (of संविदा मूल्य के 10% की दर से contract value).) होगी। Initially you will have to submit a performance

Handwritten signature
29/03/14
अ. प्रभारी अभियंता, नरौरा परमाणु विद्युत संयंत्र, नरौरा
Atomic Power Station, Narora
Supdt.

work. A copy of the application will have to be furnished to the Engineer-in-charge of the work within a week time from start of work.

- 14) प्रथम अंतरिम बिल का भुगतान केवल श्रम लाइसेंस / श्रम लाइसेंस रसीद (यदि लागू हो) प्रस्तुत करने पर ही किया जाएगा।

The first running account bill will be paid only on production of labour license/ labour license receipt, if applicable.

- 15) आपसे अनुरोध है कि You are requested to attend the office for signing the agreement. समझौते पर हस्ताक्षर करने के लिए आप कार्यालय में उपस्थित हों। Till a formal औपचारिक agreement is executed the original tender together with letters under reference अनुबंध होने तक प्रसंगाधीन पत्रों सहित मूल निविदा और यह कार्यादेश हमारे बीच बाध्यकारी संविदा होगा।

You are requested to attend the office for signing the agreement. Till a formal agreement is executed the original tender together with letters under reference and this work order shall form the binding contract between us.

कृपया इस कार्यादेश की प्राप्ति और स्वीकृति यथाशीघ्र दें।

Kindly acknowledge receipt of this Work Order & acceptance at the earliest.

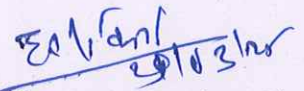
धन्यवाद Thanking you,

टिप्पणी: किसी भी विवाद या निर्वचन की स्थिति में अंग्रेजी पाठ ही मान्य होगा।

Remark: In case of any inconsistency or discrepancy the English version shall prevail.

भवदीय

Yours faithfully



(हरि शंकर सिंह Hari Shankar Singh)

अनुरक्षण अधीक्षक, एनएपीएस
Maintenance Superintendent, NAPS
एनपीसीआईएल के लिए एवं की ओर से

For and on behalf of N.P.C.I.L.
नरौरा परमाणु विजला घर, नरौरा
Narora Atomic Power Station, Narora

संलग्नक i) सामग्री आपूर्ति अनुसूची

Encl.

(निविदा दस्तावेज के खंड-4 की अनुसूची-बी एवं सी तथा खंड-7)

Schedule of supply of material

(Section -VII and Schedule B & C of Section IV of tender document)

ii) मात्रा एवं दर अनुसूची

Schedule of Quantities & Rates

प्रतिलिपि CC:	i) के.नि. SD / मु.अ. CS ii) संबंधित समूह प्रमुख Concerned Group Head iii) उप.म.प्र.(मा.सं.) DGM, HR iv) वरि. कमाण्डेण्ट, के.औ.सु.ब., एनएपीएस स्थल Sr. Commandant, CISF, NAPS Site	सॉफ्ट प्रति का वितरण Distribution of soft copy
	v) कार्यादेश हस्ताक्षर करने वाले प्राधिकारी WO signing authority vi) प्रभारी अभियंता Engineer In Charge vii) वरि. अभियंता, क्यू.ए. Senior Engineer, QA viii) सतर्कता अधिकारी, एनएपीएस Vigilance Officer, NAPS ix) उप सतर्कता अधिकारी, एनएपीएस DVO, NAPS	निविदा दस्तावेज एवं संलग्नकों सहित सॉफ्ट प्रति का वितरण Distribution of soft copy with enclosures & tender document
	x) वरि. प्र. (वि.एवं ले.) Sr. Mgr., F&A xi) प्रभारी, सीटीसी ENC (CTC) xii) फाइल प्रति File Copy	संलग्नकों सहित मुद्रित प्रति का वितरण Distribution of hard copy with enclosures

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अनुसूची 'बी' SCHEDULE 'B'

ठेकेदार को जारी की गई सामग्री
MATERIAL ISSUED TO THE CONTRACTOR

क्रसं S.No.	विवरण Particulars	यूनिट Unit	दर जिसपर सामग्री जारी की जाएगी Rate at which material will be issued	अधिकतम अदृश्य अपशिष्ट (गैर-वापसी योग्य) Max. invisible wastage (Non- Returnable) %	अधिकतम अनुज्ञेय अपशिष्ट (निःशुल्क जारी के स्थिति में लौटाने योग्य) Max. permissible wastage (Returnable in case of free issue) %	जारी की जाने वाली मात्रा (अनुमानित) Qty. to be issued (approx.)
1	2	3	4	5	6	7
-	NIL	-	NIL	-	NIL	-

अनुसूची 'सी' SCHEDULE 'C'

ठेकेदार को किराए पर दिए जाने वाले उपकरण एवं यंत्र
TOOLS AND PLANT TO BE HIRED TO THE CONTRACTOR

क्रसं S.No.	विवरण Particulars	उपलब्ध संख्या Number available	प्रति दिन प्रति यूनिट किराया प्रभार Hire charges per Unit per working day Rs.	अनुरक्षण की आवृत्ति Frequency of Maintenance	प्रति यूनिट मूल्य Value Per Unit	जारी करने का स्थान Place of issue	ठेकेदार को आवश्यक संख्या Number required by the Contractor
1	2	3	4	5	6	7	8
-	NIL	-	NIL	-	NIL	-	NIL

Narora Atomic Power Station, Narora

SECTION-07

SCHEDULE OF MATERIALS TO BE SUPPLIED BY THE
CORPORATION TO THE CONTRACTOR

Material will be issued as per Schedule B of General Conditions of Contract, Section-04

Page 8 of 8

Schedule Of Quantities And Rates

Print Date: 25-Mar-2025

Name of Work: Geo-technical investigations, field and laboratory tests for Training Centre and Simulator Building of Narora Atomic Power Station-1 and 2 (NAPS-1 and 2) at Narora. District Bulandshahr, Uttar Pradesh.

Agency Name : National Eng Con & Testing Lab

WO / SOQR Number : 8103

Item No	Description	Unit	Quantity	Rate in ₹	Rebate in %	Rebated Rate	Amount in ₹
		Rate in Words					
Schedule : CIVIL:NA							
	Note- The quoted rate shall include the following:						
	1. General clearance of site and removal of shrubs, bushes etc required to commence the boring/ drilling operation & in-situ tests in bore holes and clearance of site after completion of work.						
	2. Mobilization and Demobilization of suitable boring and drilling rigs , including necessary drilling rods, pumps, miscellaneous equipments, tools, spares, consumables etc. adequate for each set of plant, survey equipment, etc. Additional rigs and equipment shall be mobilized if needed for timely completion of the work at his own cost.						
	3. Making temporary access roads to the boring/ drilling locations from existing approach roads to site.						
	4. Marking the drill hole locations on ground by actual survey, setting out the location of boreholes and marking on auto-cad drawing as per grid lines using suitable surveying equipment as per the drawing, establishing the RL of the borehole location by taking levels from established points and benchmarks, shifting and setting up of rig at each bore hole location including staging, platform, earthwork, anchoring etc. all complete.						
	5. Deployment of technical, skilled, semi-skilled & unskilled man power required for carrying out the complete work as per specifications & drawings.						
	6. Stabilization of bore holes by bentonite slurry and/or providing suitable temporary steel casing as deemed necessary which can be removed & taken back by contractor after completion of work as required for preventing caving in of soil/ weathered rock.						
	7. Measurement of ground water level as per specifications & drawings.						
	8. Maintenance of drilling records and submission of final geological logs in hardcopy as well as soft copy. Note- The payment of UDS, SPT and PMT shall be made in relevant item.						

Eshwar
29/8/1973
अणुशक्ति अन्वेषण केंद्र, नागरा
Atomic Power Station, Narora

Name of Work: Geo-technical investigations, field and laboratory tests for Training Centre and Simulator Building of Narora Atomic Power Station-1 and 2 (NAPS-1 and 2) at Narora, District Bulandshahr, Uttar Pradesh.

WO / SOQR Number : 8103

Agency Name : National Eng Con & Testing Lab

Item No	Description	Unit	Quantity	Rate in ₹	Rebate in %	Rebated Rate	Amount in ₹
		Rate in Words					
1	Rotary boring/ drilling of "SX" (150mm) size and 'NX'(75 mm) size holes and enlarging to "SX" (150mm) size in progressive manner, by first making "SX" size hole upto the depth of UDS collection, , collecting suitable number of UDS as per drawing and schedule in a 150 mm hole, then making a 75 mm borehole for PMT test, conducting the PMT test , then enlarging it to 150 mm, conducting the SPT test in 150 mm borehole, proceeding with 150 mm borehole upto the depth of UDS collection, and then repeating the above procedure for full depth of borehole as specified in drawing including collection of samples through all kinds of soils vertically with adequate and suitable equipment for depth measurement and carrying out borehole deviation survey all complete as directed by EIC.						
1.01	0 M to 36 M	RM	72	1200	-	-	86,400.00
			Rupees One Thousand Two Hundreds Only				
1.02	Providing and installing permanent new PVC casing of hX size dia in the already drilled SX size holes including filling the annular space by Bentonite / other suitable material as directed by EIC along with necessary coupling, cutting, threading etc. complete, in the above specified drilled holes, wherever asked for by the Engineer.	RM	72	450	-	-	32,400.00
			Rupees Four Hundreds Fifty Only				
2	Conducting Standard Penetration Test (SPT) in the bore holes @ every 3m depth and / or change of strata in all the bore hole., Collecting & Packing SPT samples from split spoon sampler, proper sealing using wax etc. and transport to laboratory for testing suitably as per Technical Specification and IS codes. Note- The scope of the item shall also include safe retrieval, packaging, supply of core boxes, sealing, labelling, preservation of SPT spoon samples in the manner as specified in IS 4078: 1980 and other applicable code. Core Boxes made up of GI sheets (GI sheet of thickness not less than 0.60 mm conforming to IS 277:2003 shall be sturdy)	Nos	26	300	-	-	7,800.00
			Rupees Three Hundreds Only				
	Obtaining Undisturbed tube / piston soil samples, 90 mm diameter & 450 mm long from all depths of the drilled boreholes, necessary sealing and transporting the same to testing laboratory as per specifications and as directed by the engineer. Note: Bidder should study the sample borelogs to understand the soil type expected to be encountered for sampling. Collection of undisturbed samples will require deployment of special samplers viz. Mazier/Denison etc considering the silty sand strata at site. Samples to be collected before conducting SPT in the bore holes. As an alternate acceptance, 2 nos. of Undisturbed samples of size 75mm diameter & 300mm long may be permitted but it will be considered as one no. of sample for payment purpose.	Nos	26	300	-	-	7,800.00
			Rupees Three Hundreds Only				
	Carrying out pressure meter tests (PMT) by volume increment method in soil upto 100 bars or as required in homes at specified depths for estimation of modulus of elasticity of soil etc. as per ASTM 4719 and ISO 22476-4 and other relevant code, technical specification and drawings in selected boreholes as directed by Engineer in charge and establishment of Elastic Modulus and Deformation modulus. Note- 50% payment will be released after conducting the test at site, 30% on submission of draft report along with required data and remaining payment will be released after review and acceptance of final report by NPCIL.	Nos	12	75000	-	-	9,00,000.00
			Rupees Seventy Five Thousand Only				

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4
Atomic Power Station, Narora

Name of Work: Geo-technical investigations, field and laboratory tests for Training Centre and Simulator Building of Narora Atomic Power Station-1 and 2 (NAPS-1 and 2) at Narora, District Bulandshahr, Uttar Pradesh.

Agency Name : National Eng Con & Testing Lab

WO / SOQR Number : 8103

Item No	Description	Unit	Quantity	Rate in ₹	Rebate in %	Rebated Rate	Amount in ₹
							Rate in Words
5	Plugging of bore holes with the cement in-situ soil grout (1:6) of flowing consistency after the completion of all the tests in the bore holes as per the direction and clearance of the Engineer etc all complete. Note The grouting of the hole shall be done using a tremie extending upto bottom of the hole and raising the same as the grouting proceeds.	RM	72	300	-	-	21,600.00
6	LABORATORY TESTS ON SOIL SAMPLES- Conducting Grain size analysis, particle size & percent fines distribution of soil and soil classification (IS 1498), (Sieve analysis & Hydrometer or Pipette analysis) including Grain Size Distribution curve as per drawings, specifications, IS 2720 (part4) and as directed by the Engineer on disturbed soil sample from SPT or undisturbed samples as per specifications, IS 2720 (Part4) and as directed by the Engineer.	Nos	24	300	-	-	7,200.00
7	LABORATORY TESTS ON SOIL SAMPLES- Conducting index properties of soil such as Liquid limit, plastic limit and plasticity index etc as per drawings, specification, IS 2720 (Part 5), IS 9259 on undisturbed soil samples and direction of the Engineer. Three tests of each soil sample will be considered as one set.	Set	8	300	-	-	2,400.00
8	LABORATORY TESTS ON SOIL SAMPLES- Conducting Specific gravity as per specification, drawings, IS 2720 (Part 3) and as directed by the Engineer. Three tests of each soil sample will be considered as one set.	Set	8	300	-	-	2,400.00
9	LABORATORY TESTS ON SOIL SAMPLES- Conducting tests for bulk density and natural moisture content from the undisturbed samples collected from selected bore holes as per drawings, specifications, IS 2720 and as directed by the Engineer. Note - One set will comprise of one test each for bulk density and natural moisture content.	Set	24	300	-	-	7,200.00
10	LABORATORY TESTS ON SOIL SAMPLES- Conducting chemical analysis of undisturbed soil samples or disturbed SPT soil samples coated with wax including total soluble solids, organic matter, Calcium carbonate, cation exchange capacity, silica sesquioxide ratio, sulphates as SO ₄ , Chlorides and PH as per drawing, specification, IS 2720 (Part 21,22,23,24,25,26, & 27) and as directed by the Engineer.	Nos	2	300	-	-	600.00
11	LABORATORY TESTS ON SOIL SAMPLES- Conducting Consolidation test on undisturbed soil samples, giving full test results including e - log p curve, virgin curves, C.e. av, Cc, etc as per drawing and relevant IS code:2720 Part 15.	Nos	6	300	-	-	1,800.00
12	LABORATORY TESTS ON SOIL SAMPLES- Conducting compaction test on re-moulded soil sample as per drawings, specifications and as directed by the Engineer.				-	-	-
12.01	Using light compaction as per IS:2720-Part-VII.	Nos	3	1200	-	-	3,600.00
12.02	Using heavy compaction as per IS:2720 - Part-VIII.	Nos	3	1200	-	-	3,600.00

For Mnt. Supdt.
Atomic Power Station, Narora

Name of Work: Geo-technical investigations, field and laboratory tests for Training Centre and Simulator Building of Narora Atomic Power Station-1 and 2 (NAPS-1 and 2) at Narora, District Bulandshahr, Uttar Pradesh.

WO / SOQR Number : 8103

Agency Name : National Eng Con & Testing Lab

Item No	Description	Unit	Quantity	Rate in ₹	Rebate in %	Rebated Rate	Amount in ₹
		Rate in Words					
13	LABORATORY TESTS ON GROUND WATER SAMPLES-Collecting ground water samples as applicable at specified depths from drill holes (minimum 2 litres) and conducting full chemical analysis of water sample as per relevant IS code in an approved laboratory, complete as per drawing, specifications, including submission of test reports.						
13.01	Determination of turbidity.	Nos	1	150	-	-	150.00
				Rupees One Hundreds Fifty Only			
13.1	Determination of hardness.	Nos	1	150	-	-	150.00
				Rupees One Hundreds Fifty Only			
13.02	PH Value determination.	Nos	1	150	-	-	150.00
				Rupees One Hundreds Fifty Only			
13.03	Alkalinity determination.	Nos	1	150	-	-	150.00
				Rupees One Hundreds Fifty Only			
13.04	Chlorides content determination.	Nos	1	150	-	-	150.00
				Rupees One Hundreds Fifty Only			
13.05	Sulphates content determination.	Nos	1	150	-	-	150.00
				Rupees One Hundreds Fifty Only			
13.06	Nitrites content determination	Nos	1	150	-	-	150.00
				Rupees One Hundreds Fifty Only			
13.07	Nitrates content determination	Nos	1	150	-	-	150.00
				Rupees One Hundreds Fifty Only			
13.08	Flourides content determination	Nos	1	150	-	-	150.00
				Rupees One Hundreds Fifty Only			
13.09	Free & Saline ammonia content determination.	Nos	1	150	-	-	150.00
				Rupees One Hundreds Fifty Only			

For
13/03/22
Supdt.
Narora Atomic Power Station

Name of Work: Geo-technical investigations, field and laboratory tests for Training Centre and Simulator Building of Narora Atomic Power Station-1 and 2 (NAPS-1 and 2) at Narora, District Bulandshahr, Uttar Pradesh.

WO / SOQR Number : 8103

Agency Name : National Eng Con & Testing Lab

Item No	Description	Unit	Quantity	Rate in ₹	Rebate in %	Rebated Rate	Amount in ₹
							Rate in Words
14	COLLECTING BULK SAMPLES- Excavating/drilling/digging soil . Obtaining and collecting samples from soil up to 2 M depth including taking digital colour photographs (100 mm x 150 mm) of samples, packaging, handling and transport to approved laboratory, proper storage and retention of samples, till completion of works under the scope of this contract, complete as per specifications and as directed by the Engineer. The rate also includes submission of the colour photographs in album with proper index, location of sample and date of sampling etc complete.	Nos	3	1500	-	-	4,500.00
14.01	Small disturbed samples (weight of one sample between 8 kg to 10 kg)		Rupees One Thousand Five Hundreds Only				
14.02	Bulk disturbed samples (weight of one sample between 45 kg to 50 kg)	Nos	3	1500	-	-	4,500.00
			Rupees One Thousand Five Hundreds Only				
15	LIQUEFACTION ANALYSIS- Carrying out Detailed Liquefaction analysis using SPT, and laboratory testing data collected by the contractor from geotechnical investigation using BIS code approach and recommending measures to mitigate the liquefaction potential at site, if any. The quoted rate shall include cost of carrying out liquefaction analysis, interpretation of results including cost of preparation and submission of report, incorporating the comments/ clarifications and submission of final report in soft copy and hard copy (three nos.) Note- For above report, 30% payment will be released upon submission of draft report, remaining payment will be released after review and acceptance of the final report. by NPCIL.	Lump Sum	1	30000	-	-	30,000.00
			Rupees Thirty Thousand Only				
16	REPORT SUBMISSION OF THE SURVEYS, TESTS, INVESTIGATIONS AND FOUNDATION PARAMETERS- Preparation and submission of comprehensive draft (3 copies) and final (3 copies) reports of all the tests, field investigations, surveys, laboratory tests etc. in the scope of this tender as detailed in various schedules, technical specifications, drawings inclusive of bore logs, survey of discontinuities, Compilation, interpretation, analysis of the data, and recommendations of the foundation design parameters found out from the tests. Recommendation on selection of foundation type viz. shallow foundation, and RCC bored cast in situ pile foundations based on the geotechnical investigation results obtained from field and laboratory test conducted for this structure. Recommendation should also consist of bearing capacities analysis results, net allowable bearing pressure, pile capacities in shear and compression etc. Final report shall be submitted after the draft copy is approved by NPCIL. Also, submission of draft (3 Copy) interim reports of all the tests / field investigations carried out as detailed in specifications inclusive of bore logs, results of tests including their soft copies as soon as a particular test, investigation, surveys are completed. Report shall be submitted in soft copies as well as hard copies. The report shall be proof checked by a renowned geotechnical expert from IIT/IISc to be approved by the NPCIL. Note- For above report, 30% payment will be released upon submission of draft report, remaining payment will be released after review and acceptance of the final report. by NPCIL.	Lump Sum	1	150000	-	-	1,50,000.00
			Rupees One Lakh Fifty Thousand Only				

Note: All Item Rates are considered to be in Indian Rupees unless otherwise explicitly specified and in which case shall be always converted appropriately to arrive at the amount in Indian Rupees.

Work Order Total

₹ 12,75,300.00

Overall Rebate (%)

0

Work Order Value After Overall Rebate in Figure

₹ 12,75,300.00

Work Order Value After Overall Rebate in Words

Rupees Twelve Lakh Seventy Five Thousand Three Hundreds Only

Signature
Date