

NTPC Limited
(A Government of India Enterprise)



Enlistment of agencies for conducting Geo-technical Investigation Works for Nuclear Power Projects.

NTPC Enlistment Standard Terms & Condition available on web portal www.vdc.ntpc.co.in shall remain part of this application.

NTPC LIMITED
(A Government of India Enterprise)

- 1.0 NTPC Limited invites online applications from eligible domestic Agencies for the above-mentioned Enlistment. All the interested applicants may refer the Instructions available on NTPC web portal www.vdc.ntpc.co.in including Special terms and conditions available on web portal. All necessary documents along with application shall be submitted at web-portal: www.vdc.ntpcco.in

Applicants shall be required to create login at the Link www.vdc.ntpc.co.in and then selection of above-mentioned package. Details guidelines is mentioned on the web portal.

2.1 Brief scope of Enlistment

- (i) Geo-technical investigation shall be done at Four (4) stages of Project such as Site Selection stage (Preparatory Geo-technical Investigation), Site Evaluation Stage (Preliminary Geo-technical Investigation), Excavation Consent Stage (Detailed Geo- technical Investigation) & First Pour of Concreting stage (Confirmatory Geo-technical Investigation).
- (ii) Geotechnical investigation may be either on land or in water body (i.e. in River / sea). Offshore investigation (in river / sea) is also required to be done for the design of intake well/ arrangement and approach to the intake. Based on the investigation data, termination criteria of intake well/ well foundation is arrived at. The data is also used to estimate depth of scour.
- (iii) Drilling of holes, different test related to soil and rock, preparation of data, Report.
- (iv) Now, NTPC intends to do Enlistment of agencies for conducting Geo-technical Investigation works for Nuclear Power Projects. Subsequent to enlistment, NTPC shall invite tenders from enlisted suppliers for conducting Geo-technical Investigation works for Nuclear Power Projects.

3.0

The Enlistment Documents will be available as per following schedule or schedule as mentioned at the portal for initial enlistment:

Start date for submission of Application	09.05.2025
Last date for submission of Queries*	16.05.2025
Last date for submission of application	30.05.2025
Cost of Enlistment Documents	NIL

* No Queries from applicants, whatsoever, shall be entertained by the Employer beyond the lastdate of receipt of Queries as specified above.

Employer may change Dates and same shall be reflected at the portal shall be applicable for all the applicants.

4.0 Brief Qualifying Requirement for Enlistment

4.1 Technical Criteria

4.1.1 The Applicant should have executed within the preceding seven (7) years reckoned as on the date notified for receipt of application, geotechnical investigation works achieving therein the following progress of work:

4.1.1.1 Boring of at least 1000 RM in soil in any one (1) month in one (1) or more concurrently running contracts.

4.1.1.2 Drilling of at least 450 RM in rock in any one (1) month in one (1) or more concurrently running contracts.

4.1.2 The Applicant should have executed at least one (1) geotechnical investigation work in water body like in river/sea/submergence of dam/reservoir/creek/back waters, etc., within the preceding seven (7) years reckoned as on last date notified for receipt of application.

4.2 Financial Criteria:

4.2.1 Financial Criteria of Applicant

The average annual turnover of the Applicant, in the preceding three (3) financial years as the last date notified for receipt of Application, should not be less than INR 2 Crore (Indian Rupees Two crore only).

5.0 Subsequent to Enlistment, only the Enlisted Agencies will be invited to submit bids in respect of specific enquiry till the time enlistment is valid.

6.0 NTPC reserves the right to reject any or all applications or cancel/withdraw the 'Notice Inviting Applications' without assigning any reasons whatsoever and in such case no Applicant or intending Applicant shall have any claim arising out of such action. NTPC shall also have the right to verify any information/document furnished by the Applicant/Agency/Company/Firm and inspect the works carried out by the Applicant/Agency/Company/Firm, if so required.

7.0 Applicants who respond within due date with application as mentioned above against this NIA will only be considered for Enlistment. Application for enlistment shall be invited through online mode only at the portal at www.vdc.ntpc.co.in. This enlistment shall be valid for a period of Three (03) years from the date of Enlistment.

8.0 Issuance of Enlistment Documents to any Applicant shall not construe that such Applicant is considered to be qualified. The Applicant shall bear all costs incurred in the preparation and submission of the application and other actions implied. NTPC shall not be responsible or liable for such costs, regardless of the outcome of the Enlistment process.

9.0 After the completion of initial vendor enlistment as mentioned above, the enlistment process shall again be re-opened after a period of 6 months and shall be kept open so that all the new vendors who could not participate in the enlistment process can participate and submit their application for enlistment at any time.

10.0 Address for communication:

Sr Manager (CM) / AGM (CM)
NTPC LIMITED.

6th Floor, Engineering Office Complex,
Plot No.A-8A, Sector -24, Noida – 201 301
Distt. Gautam Budh Nagar, State of U.P., INDIA,

Mobile-9800090387/9650998561 Phone No: 0120-4946538/6521

Email: ishteyaqueali@ntpc.co.in vdshah@ntpc.co.in

Website: <https://ntpctender.ntpc.co.in/> or www.ntpc.co.in or www.vdc.ntpc.co.in

Qualifying Requirement for Enlistment of agencies for conducting Geo-technical Investigation works for Nuclear Power Projects.

I.0 Technical Criteria

1.1 The Applicant should have executed within the preceding seven (7) years reckoned as on the date notified for receipt of application, geotechnical investigation works achieving therein the following progress of work:

1.1.1 Boring of at least 1000 RM in soil in any one (1) month in one (1) or more concurrently running contracts.

and

1.1.2 Drilling of at least 450 RM in rock in any one (1) month in one (1) or more concurrently running contracts.

1.2 The Applicant should have executed at least one (1) geotechnical investigation work in water body like in river/sea/submergence of dam/reservoir/creek/back waters, etc., within the preceding seven (7) years reckoned as on last date notified for receipt of application.

1.3 The Applicant should have the following manpower on its regular pay roll for minimum one year period reckoned as on last date notified for receipt of application,

1.3.1 At least two (2) qualified Geotechnical engineers with PhD/M.Tech./M.E./M.S. degree in Geotechnical Engineering and having minimum five (5) years work experience in the area of geotechnical investigation. The experience certificate shall be certified by CEO / CFO / managing partner of the Applicant.

OR

1.3.2 At least one (1) qualified Geotechnical engineer with PhD/ M.Tech/M.E./M.S. degree in Geotechnical Engineering and having minimum five (5) years work experience in the area of geotechnical investigation and one (1) qualified engineering Geologist with M.S. /M.Sc. degree in Geology/Engineering Geology, having minimum five (5) years work experience in the area of geotechnical investigation. The experience certificate shall be certified by CEO / CFO / managing partner of the Applicant.

1.4 The Applicant should own or have on lease the following equipments, test setup, and facilities:

1.4.1 Rotary boring rigs - Five (5) Nos.

1.4.2 Hydraulic feed rotary core drilling rigs - Two (2)Nos.

1.4.3 Seismic Refraction Test setup - One (1) No.

1.4.4 Pressure meter test set up capable to apply pressure up to 80 kg/sq.cm - One (1) No.

1.4.5 Laboratory set up equipped for testing the physical, engineering and chemical properties of soil and rock.

2.1 Financial Criteria

2.2 The average annual turnover of the Applicant in the preceding three (3) financial years as on the last date notified for receipt of application, should not be less than Rs. 2.0 Cr. (Indian Rupees Two crores only).

Notes for clause 1.1 above:

- I. If the qualifying work is completed in the last seven (7) years period specified above, even if it has started earlier, the same will also be considered as meeting the qualifying requirements.
- II. The word "executed" means the Applicant should have achieved the progress specified in the QR even if the contract is not completed / closed.
- III. For concurrent works the same month shall be considered.

Notes for clause 1.4 above:

- a. As specified at clause 1.4.1 & 1.4.2, applicant should own 5 nos, rotary boring rigs and 2 nos. hydraulic feed rotary core drilling rigs. In case Applicant owns less than specified 5 nos. rotary boring rigs but owns additional equivalent nos. of hydraulic feed rotary core drilling rigs (over and above the specified 2 nos.), it would be considered meeting the qualifying requirement. However, it should own not less than 2 nos. hydraulic feed rotary core drilling rigs as specified.
- b. In case the Applicant does not own the test set up mentioned at 1.4.3 and 1.4.4, then tie up with Government laboratories, IITs, IISc or any NABL accredited laboratory shall be permitted. Applicant shall submit the agreement document in the form of joint agreement or MOU along with the application, as per the format enclosed in the bidding documents. This document shall be submitted along with the bid, failing which the applicant shall be disqualified, and its bid shall be rejected.
- c. The Applicant shall submit ownership documents, such as the Purchase Invoice, Registration Document, or Lease Agreement, along with the bid. Failure to do so will result in disqualification and rejection of the bid.

Notes for clause 2.0 above:

- a. Other income shall not be considered for arriving at annual turnover.
- b. In case, where audited results for the last financial year as on the date of bid opening are not available, the financial results certified by a practicing Chartered Accountant shall be considered acceptable. In case, Bidder is not able to submit the certificate from practicing Chartered Accountant certifying its financial parameters, the audited results of three consecutive financial years preceding the last financial year shall be

considered for evaluating the financial parameters. Further, a certificate would be required from the CEO/CFO as per the format enclosed in the bidding documents stating that the financial results of the company are under audit as on the date of bid opening and the certificate from the practicing Chartered Account certifying the financial parameters is not available.

SCOPE OF WORKS

1. Geo-technical investigation shall to be done at Four (4) stages of Project such as Site Selection stage(Preparatory Geo-technical Investigation), Site Evaluation Stage (Preliminary Geo-technical Investigation), Excavation Consent Stage (Detailed Geo-technical Investigation) & First Pour of Concreting stage (Confirmatory Geo-technical Investigation).
2. Geotechnical investigation may be either on land or in water body (i.e. in River / sea). Offshore investigation (in river / sea) is also required to be done for the design of intake well/ arrangement and approach to the intake. Based on the investigation data, termination criteria of intake well/ well foundation is arrived at. The data is also used to estimate depth of scour.
3. The contractor shall conduct a reconnaissance survey prior to commencing actual fieldwork to familiarize their team with the study area and assess logistical requirements.
4. The contractor shall arrange for locating coordinates and positions of boreholes, trial pits, and field tests, determine reduced levels (R.L.s), and protect and maintain established benchmarks as per accepted standards and procedures.
5. The contractor shall mobilize equipment, personnel, labour, and services necessary for conducting field investigations, tests, laboratory analyses, and surveys effectively.
6. The contractor shall perform rotary drilling of vertical holes from natural ground level, using SX size (150mm) for soil and highly weathered rock, NX size (76mm) with diamond bits for rock, and provide casing as required.
7. Identify and locate the various soil and rock strata and structural geology of the foundation strata.
8. Conducting field tests on soil/rock.
9. Preparation of the work / test procedures and quality assurance plan (QAP) and submission to Engineer-In- Charge (EIC) for approval. Tests shall be conducted only after the approval of test procedures and QAP by NTPC.
10. Transporting the identified samples to the testing lab at site and/or to outside approved testing laboratory and remaining samples to storage location identified by the Engineer-in-charge.
11. Conducting Field tests in soil/ rock like Standard Penetration Test (SPT) in boreholes, Plate Load Test (PLT), Seismic Refraction Test (SRT), Cross hole seismic test (CST), Electrical Resistivity Test (ERT), Pressure meter Test (PMT), Static Cone Penetration Test (SCPT), Dynamic Cone Penetration Test (DCPT), Permeability Tests, Percolation test, Trial Pits, Vane Shear Tests etc.
12. Conducting laboratory tests on soil and rock core samples, Ground water Sample as specified in the specifications.
13. All the field data shall be recorded in the pro-forma recommended in Indian Standard Codes. All the field records shall be countersigned by the Authorized representative of Engineer-in-charge. All the investigations are to be carried out by the agency as per the priority requirements of the Owner.

14. All the laboratory test data shall be recorded in the pro-forma recommended in the Indian Standard Codes / ASTM /other applicable codes and a copy of these shall be sent to the Owner every week during the progress of laboratory testing. Whenever desired during the progress of the work the Owner may be present at the laboratory where the Contractor is arranging for execution of the laboratory tests.
15. The Contractor shall interact with the Owner to get acquainted with the different types of structures envisaged and in assessing the load intensities on the foundations for the various structures of the Power project to enable him to calculate the allowable bearing pressure.
16. Preparation of detailed geo-technical investigation report as specified herein, which will include test data, results, data analysis, deriving safe bearing capacities through various methods for each foundations under a group of boreholes, expert interpretation of foundation strata, geology and foundation design parameters like safe bearing capacity, settlement etc evaluated for the proposed structures on the basis of investigations and laboratory and field tests including detailed liquefaction analysis. The preliminary investigation report shall include recommendations on foundation design parameters to be used in design and measures to be taken to mitigate liquefaction potential of the site, if any.
17. The design parameters to be evaluated and to be furnished in the report shall include the requirements as brought out in the para titled "The Report" as described in this Tech. Spec.
18. All the reports shall be in SI units. The report should include the following items.
 - a) Description of geological features and site geology.
 - b) Exploration program and basis thereof.
 - c) Location plans of boreholes, field tests.
 - d) Bore logs.
 - e) Sub-surface profile Sections across the site as directed by Engineer-In-Charge, to cover the entire stratigraphy of the area of interest.
 - f) Results of Filed tests.
 - g) Results of laboratory testing.
 - h) Detailed description of ground water level.
 - i) Recommendations on design basis geotechnical parameters such as Young's modulus (E), Shear modulus (G), Max. Shear modulus (G_{max}), Atterberg limits in all layers, Unit weight, Bulk density including the calculations in arriving at the design foundation parameters/ validation of the same.
 - j) Carrying out detailed liquefaction analysis and recommending measures to mitigate the liquefaction potential of the site, if any.

The report shall be compared also with the format as per relevant standard applicable for each item under scope of the work such as IS: 6926, IS: 4078, IS: 4469, IS: 5313 etc. and included accordingly.
19. The Contractor shall carry out all work as per specifications and requirement of the project even if not explicitly mentioned under the scope. All work shall be executed to the satisfaction of the Engineer-in-charge.
20. All field / Lab test shall be as per detailed technical specifications. Any other work not especially brought out but required for successful completion of the job shall be in the scope of the contractor.

DETAILS FOR QUALIFYING REQUIREMENTS(QR)**Technical Criteria 1.0**

Sl. No.	Particulars	Reference Work #1	Reference Work #2	Reference Work #3	Reference Work #.....	Reference Work #.....
1	Name of Work					-
2	Name, address and email of Client					-
3	LOA/PO Ref. No. and date of award					-
4	Proof of Completion					
5	Documentary evidence for support of above information are enclosed at					-

Applicant may add continuation sheets for additional reference works to meet QR, if required.

We further confirm that no change or substitution in respect of Reference Works (as declared in our Application for Enlistment) by new / additional work for meeting the specified Qualifying Requirements shall be offered by us.

Date:

Name and Signature of Authorized Person

Place:

Designation.....

DETAILS FOR QUALIFYING REQUIREMENTS(QR)**Financial Criteria 2.0**

In order to satisfy the requirements stipulated at Clause 2.1.a of Qualifying Requirements , We confirm that our average annual turnover*, in the preceding three (3) financial years as on the last date notified for receipt of Application, is not less than INR 136 Crore (Indian Rupees One hundred thirty six crore only).

In support of above, we are enclosing audited financial statements.

S. No.	Financial Year	Annual Turnover (INR in Million)
1	FY 1	
2	FY 2	
3	FY 3	
4	Average Annual Turnover for the preceding three (3) Financial Years as on the last date notified for receipt of application	
5	We have enclosed Audited financial statements for the last 3 financial years	** Yes/ No

* Other income is not considered for arriving at annual turnover

Date:

Name and Signature of Authorized Person

Place:

Designation.....

PROFORMA OF CERTIFICATE FROM THE CEO/CFO OF THE COMPANY

Dear Sirs,

1.0 I, Mr. (CEO of the Company / CFO of the Company)* confirm and undertake that the Financial results of the company for the preceding financial year to be submitted are under audit as on the date of application submission and the certificate from the practicing chartered accountant certifying the financial parameters for the preceding financial year is not available.

Yours faithfully

(Signature)

Date : (Name & Designation).....

Place : (Name of the Company)

ADDITIONAL INFORMATION

Attachment-6

Dear Sirs,

We hereby furnish the following additional information:

a.

b.

Date:

Name of Authorized Person.....

Place:

Designation.....