

TERMS OF REFERENCE FOR THE GEO-TECHNICAL SPECIALIST

Job Summary

To plan and conduct detailed geological, geophysical and geotechnical studies; undertake related tests and interpret the results from the field investigations; and apply these results in the design and engineering of primarily the various features of hydropower and solar projects and appurtenant infrastructures, and expandable into other aspects of geotechnical engineering for geothermal and other energy resources. Interpret and advice on the findings of the studies and further course of action “prior to taking up”/ “during the construction stages”/ “at the O&M stages” of all such projects. Advice on suitability of appropriate construction materials and on the development of quarries considering the social and environment sensitivities in the short and long term. Ensure compliance to relevant laws, acts, rules and regulations in the execution of the geological and geotechnical related studies, and the construction of related projects and thereafter during the O&M phase.

Key Responsibilities

- Undertake desk studies and assess sources of site information prior to field investigations;
- Read and interpret geologic maps and documents. Collect and interpret data from borehole studies, soil assessments, and fault/seismic studies. Research information on the identification of geological formations, foundations, slope stabilization, retaining wall plan development and right-of-way development, and prepare their reports and geologic maps based on their findings;
- Plan and conduct geological, geochemical, and geophysical field studies and surveys; collect samples; and undertake drilling and testing activities for use to collect/collaborate data for application and sometimes for research;
- Investigate the composition, structure, and history of the relevant site’s crust through data collection, examination, measurement, interpretation and classification of soils, minerals, rocks, and fossil remains;
- Recommend and put in place state of the art technologically advanced instruments for gathering appropriate geological, geotechnical and seismic data required for design and engineering;
- Use of specialized computer software or calculations to assist in the design of structures to be built;
- Ensure that the geological and geotechnical factors affecting engineering works are identified and provided for to reduce and/or mitigate the risks through detailed technical analysis of the sites and assessment of risks;
- Identify and examine the potential geological and geotechnical risks and hazards and advise the management with solution and/or mitigation measures prior to taking up projects such as dams, tunnels, powerhouses, related appurtenant structures, solar farms, etc.;

- Ensure the required human resources in the geological and geotechnical fields and manage them (including other engineering geologists, geotechnical engineers, consultants and contractors);
- Manage construction site requirements for identification of rock structures, recommendation for support structures and their implementation;
- Provide advice on ways in which potential risks of failures can be mitigated and to ensure the safety of the structures;
- Supervise and participate in fieldwork requiring the application of geological and geotechnical principles and practices related to all phases of geological mapping, systematic geological sampling, planning and location of boreholes, core-logging and sampling, implementation of measures; and actual construction;
- Liaise with relevant agencies for carrying out geological and geotechnical studies at any project sites and comply with relevant laws, rules and regulations for execution of such studies;
- Recruit, train, and build the full-fledged in-house human resource capacity to conduct exhaustive geological and geotechnical and seismic studies for any kind of constructions works; and
- Other responsibilities as might be required by the management from time to time.

Reporting

- Report directly to the Director, Projects & Contract Department.

Key Performance Measures

- Achievement on study and investigation of geological conditions of project sites as agreed upon
- Preparation of geological maps and cross-sectional diagrams for the project sites
- Have strong analytical and reporting skills as well as an ability to work in teams
- Identification of risks of natural disasters of the selected project sites
- Establish adequately required strength of human resources; recruit, train and build capacity to take up geological studies within DGPC
- Any other KPIs as agreed to from time to time

Qualification

- Minimum B. Tech/BE/B.Sc. (Geology) from a recognized university through a regular (full-time) program.

Work Experience

- Minimum 15 years of work experience in a diversified environment of Engineering Geology.
- Should have served minimum P1 level equivalent to DGPC Grade E3.
- Only 18 months of study leave/sabbatical shall be considered as active service.
- Having expertise in Mapping, Geophysical, Geo-chemical, and Geological studies, field and laboratory investigations, with good knowledge and grasp of the use of the latest Geotechnical softwares.
- Conversant with surface and sub-surface mapping. Experienced in Geotechnical Studies.
- Hydrological modeling, hydrogeology, water supply modeling & assistance in regulatory liaison & negotiation.

Work Environment

- The work of a geologist is laborious and field-oriented. Requires walking in the remotest and untouched areas.
- Climbing mountains and walking down hills for days in extreme weather conditions are normal for any geological work. Must therefore be both intellectually and physically fit.
- Dealing with the public during a survey could be difficult.
- Should be able to work independently and as part of a team.
- Should be in a position to work under pressure.

Service Record

Should possess clean service record without any outstanding office memos and cautionary notices, and not have been convicted by any Court of Law on any criminal charges.

Performance Appraisal

Should have a minimum of “Commendable” [with scores of 85% and above] in Employee Appraisal System for the recent 3 consecutive years.

Age

Candidate should not be older than 57 years of age on the last date of receiving the application deadline.

Job Title

Geo-Technical Specialist

The selected candidate will be placed at the Director level post in terms of pay and allowances, and the

service will be on contract basis.

Location

Corporate Office, Thimphu

Employment Type and Tenure

The candidate should be a Bhutanese meeting the minimum qualifications and work experience.

The selected candidate will be on contract for an initial period of 3 (three) years with the possibility of extension based on performance and requirement.

Remuneration and Benefits

Basic Pay	Nu. 76,500
Contract Allowance	80 % of basic pay
Fixed Allowance (on the minimum basic pay)	60%
Other Allowances and Benefits (As per the DGPC Service Rules)	1. Performance Based Variable Pay (PBVP), As per PMS Guidelines 2022. 2. Annual Increment: Nu. 1,915

Documents Required

Documents required at the time application submission:

- Job application form (Download from www.drukgreen.bt).
- Curriculum Vitae indicating clearly the details of applicant with names of at least three professional referees with email address, office address, and mobile number.
- Attested copy of Bachelor's Degree Certificate and Mark Sheet and Master's Degree Certificate and Mark Sheets (as applicable).
- Copy of valid Citizenship ID Card.
- Valid Security Clearance Certificate (approved online).
- Work Experience Certificate/Letter with valid documentary proof/evidence.
- Should submit the valid BIT/CIT/PIT certificate issued by the relevant agencies, as applicable.
- A copy of office order of appointment/promotion to the P1 level equivalent to DGPC Grade E3.
- A copy of Performance Appraisal for recent three years, wherever applicable.

- A copy of Audit Clearance Certificate from Royal Audit Authority with purpose stated as interview.
- Referrals/recommendation letters from at least two referees (issued by superiors).
- Additionally, the selected candidate upon submission of Acceptance must submit a “**Valid Medical Certificate**” and a “**No Objection Certificate**” from the employer, if currently employed.

- ***Partial or incomplete submission of required documents shall lead to disqualification.***