

# **REQUEST FOR EXPRESSIONS OF INTEREST (CONSULTING SERVICES – INDIVIDUAL CONSULTANT SELECTION)**

**REPUBLIC OF LEBANON, LITANI RIVER AUTHORITY (LRA)**  
**Lebanon Renewable Energy and System Reinforcement Project (P180501)**  
Loan No.: IBRD-LB-9731

**Assignment Title: Geotechnical Engineering Expert (DSPOE)**  
Reference No. (as per Procurement Plan): LB-LRA-513069-CS-INDV

## **1. BACKGROUND**

The Ministry of Energy and Water (MOEW), through the Electricité du Liban (EDL) and the Litani River Authority (LRA), is implementing the Lebanon Renewable Energy and System Reinforcement Project (P180501), funded by the International Bank for Reconstruction and Development (IBRD).

The project aims to strengthen Lebanon's electricity infrastructure through grid modernization, hydropower rehabilitation, and improved sector governance. Within this framework, the LRA is responsible for **Component 2.2: Rehabilitation of the three Hydropower Plants (ABDELAL, AWALI & JOUN) and works to improve QARAOUN Dam Safety.**

## **2. OBJECTIVE OF THE ASSIGNMENT**

The Client (LRA) intends to appoint a **Dam Safety Panel of Experts (DSPOE)** for the Project to **advise on dam safety assessment for Qaraoun dam**, and other technical issues. who will be directly contracted by the LRA on a needs-driven basis.

The general task of the panel is to review all relevant design, engineering, construction and dam safety aspects. The members of DSPOE will be selected by the Client based on the required skill-mix. The members will constitute a group of high-level, internationally-recognized professionals.

**These Terms of Reference (TOR) address the specific scope of work for the Geotechnical Engineering Expert**

## **3- Scope of Work of the Geotechnical Engineering Expert**

The primary tasks of the **Geotechnical Engineering Expert** on the DSPOE will include, but not necessarily be limited to, the following:

- (i) Review the geological and geotechnical aspects of design reports for the rehabilitation works on Qaraoun Dam, as relevant.
- (ii) Review the geological and geotechnical data of the Qaraoun Dam, as relevant.
- (iii) Assess the nature and potential risks associated with the presence of the “fault” in the Dam area.

- (iv) Review the seismological aspects of the dam site and areas as required and review the previous seismic hazard assessment studies “seismic deformation analysis of Qaraoun dam” 2012 February prepared by AMEC under subcontract with IRG, the main contractor for the Litani River Basin Management Support (LRBMS)
- (v) Perform the dam site inspection, along with the results of site investigation, survey and test results, and check their adequacy.
- (vi) Recommend follow up actions related to geotechnical aspects of the work (if any) to ensure the safety of the dam’s rehabilitation works, considering potential risks and required safety level.
- (vii) Review the adequacy of the instrumentation plan, such as piezometers, seepage measuring devices, settlement survey, slope inclinometers, and extensometers, including their numbers, locations, monitoring frequency, etc.
- (viii) Review design criteria, risk assessment and safety plans for significant temporary works (e.g., cofferdams, diversions, dewatering systems), including flood and geotechnical stability under construction conditions.
- (ix) Review the technical specification and drawings of the bidding documents and provide technical support for the geotechnical aspects of bidding process, including pre-qualification, bid evaluation (with particular attention to the adequacy of the Contractor’s proposal for the downstream cofferdam) and contract negotiations.
- (x) During periodic site visits, review the implementation and effectiveness of the construction supervision and QA/QC plans for geotechnical works (including materials, foundations, abutments, grouting, and embankment zones), and advise on corrective actions as needed.
- (xi) Review any major change in site design occurring due to the changes of geological conditions at the site.
- (xii) Coordinate with the DSPOE Chair and other panelists to fulfill assignments in the field and his/her home offices. All formal technical advice and reporting to the Client shall be channeled through the DSPOE Chairperson to ensure a single, consolidated panel report.
- (xiii) Attend meetings with the Client, its consultants (Designer, Owner’s Engineer), and the World Bank to provide independent technical advice as a DSPOE member.

## 4- Experience and Qualifications Requirements

The **Geotechnical Engineering Expert** should meet the following minimum requirements:

- An advanced degree in Geotechnical Engineering or Geology.,
- Minimum 25 years of experience in relevant professional works.
- Having worked as a geotechnical expert in the design and construction of complex large dam projects, including CFRD dams.
- Intensive geotechnical experience in dam safety planning, instrumentation and monitoring.
- Extensive experience in blasting and excavation operations and in dewatering operations will be an advantage.

## 5. DURATION OF ASSIGNMENT

The assignment is expected to cover the entire project implementation period, estimated at three years. The **Geotechnical Engineering Expert** (DSPOE) will provide services on a needs-driven basis, in accordance with the Terms of Reference (TOR).

The attention of interested Consultants is drawn to Section III, paragraphs **3.13, 3.15, and 3.16** of the World Bank's **Procurement Regulations for IPF Borrowers** (Feb. 2025), which set forth the World Bank's policy on conflict of interest.

A Consultant will be selected in accordance with the **Individual Consultant Selection** method set out in the Procurement Regulations (World Bank's **Procurement Regulations for IPF Borrowers** (Feb. 2025)).

## 6- **SUBMISSION OF EXPRESSION OF INTEREST**

Interested individual consultants should submit their **Expression of Interest (EOI)** **including:**

- **Updated CV** demonstrating relevant experience and qualifications.
- **Cover letter** outlining suitability for the assignment.
- **At least three references** with contact details.

**Expressions of interest** must be delivered in a written form to the address below (in person, or by E-mail) no later than Mars 26, 2026, at 10:00 a.m. (Beirut Time).

**Litani River Authority**

Ghannageh Building, 4<sup>th</sup> floor, Bechara El Khoury Street, Beirut , Lebanon

**Attn:** Mrs. Grace Ammourey – Head of Procurement Dept.

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