



**Uttarakhand Project Development And Construction Corporation Ltd.**

उत्तराखण्ड परियोजना विकास एवं निर्माण निगम लिमिटेड

Dehradun, Uttarakhand - INDIA

देहरादून, उत्तराखण्ड – भारत

## **Request for Proposal**

### **Consultancy Services for Dynamic Analysis of overflow and non-overflow blocks of Song Dam Drinking Water Project, Dehradun (Uttarakhand)**

***Deputy General Manager,  
Song Dam Drinking Water Project PIU (UPDCC),  
Ground Floor, Lakhwad Field Hostel, Yamuna Colony, Dehradun (UK) – 248001***

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## **Section1: Invitation for Proposal**

**Deputy General Manager**  
**Song Dam Drinking Water Project P.I.U.**  
**Uttarakhand Project Development & Construction Corporation Ltd.**  
*Email:songproject.gm@gmail.com*

**RFP Notice No. – 02/RFP/DGM/Song PIU/ 2023-24 Dated- 19.07.2023 (Job2)**

### **Request For Proposal (RFP)**

#### **Consultancy Services for Dynamic Analysis of overflow and non-overflow blocks of Song Dam Drinking Water Project, Dehradun (Uttarakhand)**

Government of Uttarakhand has proposed a storage type 130.60 m high dam on river Song in district Dehradun to supply 150 MLD drinking water via gravity. In this regard, General Manager, Song Dam Drinking Water Project PIU, UPDCC on behalf of ‘Governor of Uttarakhand’ invites Request for Proposal (RFP) through e-tender in two bid system (Quality and Cost Based Selection) for *Consultancy Services for Dynamic Analysis of overflow and non-overflow blocks of Song Dam Drinking Water Project, Dehradun (Uttarakhand)*.

Note: The bid documents and TOR (Terms of Reference) are available online on [www.updcc.org](http://www.updcc.org)  
The bid documents shall be submitted in offline mode.

#### **Key Dates**

Date of calling	19.07.23	
Date of online publication	20.07.23	10.00 AM
Pre-bid meeting date	24.07.23	10.00 AM
Bid submission start date	24.07.23	11.00 AM
Bid submission end date	26.07.23	03.00 PM
Date of Technical bid opening	26.07.23	03.30 PM
Date of Financial bid opening	To be declared later	

For further details following may be contacted-

1. Deputy General Manager, Song Dam PIU,  
Phone no. 8192927212, Email: [songproject.gm@gmail.com](mailto:songproject.gm@gmail.com)
2. Manager, Song Dam PIU,  
Phone no. 9760369377, Email: [songproject.gm@gmail.com](mailto:songproject.gm@gmail.com)

**Deputy General Manager**  
**Song PIU, UPDCC**  
**Dehradun**

## **1.0. Submission of Application**

- a) Date of release of Request for Proposal through e-tender is 19.07.2023.
- b) Availability of Bid Documents and mode of Submission- The bid documents and TOR (Terms of Reference) are available online on [www.updcc.org](http://www.updcc.org). The bid documents are to be submitted in sealed envelopes as explained in under mentioned sections.
- c) The bidders are required to submit the necessary information in the given format to assess their technical proposal.
- d) Since, the work is highly technical in nature, a pre bid meeting shall be held on 24.07.2023 at Dehradun in which the project authority shall discuss the TOR including the scope of work. Interested consultant(s)/ firm(s) may also present their ppt to discuss the methodology and other issues related to the task. It will also be helpful in technical evaluation as well as finalizing the methodology to achieve the said objective.
- e) The evaluation of the consultant/firm shall be done on QCBS (Quality & Cost Based Selection) method, where 80% weightage shall be given to technical proposal and 20% for financial proposal.
- f) Technical bid shall be opened on due date by the prescribed committee, in presence of tenderers or their representatives, who wish to be present, in the office of Deputy General Manager, Song Dam PIU, UPDCC Ltd.
- g) The list of the successful tenderers qualifying in the technical bid shall be displayed by Deputy General Manager, Song Dam PIU, UPDCC Ltd. on the website and the price bids of these qualified tenderers only shall be opened on the day & time specified in the tender document by the Deputy General Manager, Song Dam PIU, UPDCC Ltd.
- h) Bids shall remain valid for a period not less than 120 days from the last date of receipt of bid.
- i) Certification regarding the validity of the tendered rates and acceptance of conditions of the tender, shall be given by the tenderer on Non-Judicial Stamp Paper of Rs.100.00 duly signed with a INR1.00 revenue ticket.
- j) Deputy General Manager, Song Dam PIU, UPDCC Ltd. has the right to accept or reject any or all the proposals without assigning any reasons thereof.
- k) The technical as well as financial proposal shall be submitted in hard copy at the office of undersigned before the closing date.
- l) The bidder shall submit the bid offline on or before the last date of submission with all required documents.
- m) For any queries and clarification, bidders may contact the following officers in office hours or via email as given below-
  1. Deputy General Manager, Song Dam PIU,  
Phone no. 8192927212, Email: [songproject.gm@gmail.com](mailto:songproject.gm@gmail.com)
  2. Manager, Song Dam PIU,  
Phone no. 9760369377, Email: [songproject.gm@gmail.com](mailto:songproject.gm@gmail.com)

## **2.0. Qualification Requirements / Eligibility & Pre-Qualification Criteria**

- a) The Consultancy organization/firm should have a sufficient number of lead Engineers/ Scientists/ Geologists with preferably a post-graduation degree in desired fields from a reputed institute.
- b) The organization/firm should have a requisite experience in providing consultancy services for Dynamic Analysis of overflow and non-overflow blocks of a high dam.

- c) The bidder shall be an Independent Engineering Consulting firm having presence in India as a Company established under Companies Act 1956/ Companies Act 2013. The bidder must have a GST registration certificate.
- d) The bidder shall have an established design office in India for a minimum period of 03 (Three) years. Such design establishment shall also, as on date, have sufficient number of qualified engineers.
- e) The bidder should not have been blacklisted /debarred/ terminated except for reasons of convenience to client by any Government/ Government Board/ Corporation/ Company /Statutory Body/ PSU company/ Non- Government/ Multilateral and Bilateral Funding Agencies in the last 5 years. An affidavit for the same must be submitted by the bidder.
- f) The firm should have consulted in at least one project of similar nature (Dynamic Analysis of overflow and non-overflow blocks for a dam-based project) costing not less than 20 lacs during the last 5 years. Documentary proof of completed projects have to be submitted which shall include.
  - A certificate from the Client for whom the work has been satisfactorily completed indicating brief details of the project, date of completion of the project.
  - A copy of the letter of award/ agreement indicating the scope of the project.

OR

The bidder shall, in the last 15 years have experience in Dynamic Analysis covering the following:

- The firm must have consulted in 5 number Dynamic Analysis consultancy services.
- g) Extra weightage will be given for Consultancy service for a Water resource/ Hydropower project in the state of Uttarakhand.
- h) The average annual turnover of the bidder for consultancy services in the preceding 3 (three) financial years ending 31<sup>st</sup> March, 2023 shall not be less than Rs. 1 (One) Crores. (*Attach copy of annual reports and audited financial statements for the aforesaid three years*)
- i) In case of a company in multiple businesses the said turnover should be from the business of Consultancy Services only.
- j) If above conditions are not fulfilled, bid shall be rejected.

### **3.0. Completion Time**

The entire work under the Contract shall have to be completed in all respects within 2 months from the date of issue of Letter of Acceptance of the Work.

### **4.0. Clarifications required by the Consultants**

The Consultants requiring any clarification on the RFP documents may notify the Employer in writing, which will be clarified in the Pre-Bid Meeting. The Employer shall only respond to such requests for clarification, which are received before Pre-Bid Meeting.

### **5.0. Pre-Bid/Proposal Meeting**

A Pre-Bid/ Proposal meeting open to all Consultants, who have purchased/ downloaded RFP documents from the website of Client and paid the cost of proposal document as per clause 6 below, will be held on prescribed date & time in Dehradun, wherein the Consultants shall be given an opportunity to obtain clarifications, if any, regarding the Consultancy Services and conditions of RFP.

A maximum of two participants from each consultant shall be allowed in the Pre-Proposal Meeting.

#### **6.0. Procurement of the RFP Document**

The RFP document can also be downloaded from the website [www.updcc.org](http://www.updcc.org). A Demand Draft towards the cost of RFP document should be submitted.

#### **7.0. Cost of Proposal Document**

The cost of RFP document is Rs 2000.00 (+ 18 % GST) which is non-refundable and the payment against the cost of RFP document will be done in the form of Demand Draft from any Nationalized/ Scheduled Bank in India drawn in favor of General Manager, Song Dam PIU, UPDCC Ltd.

#### **8.0. Submission of Proposals**

Sealed Proposals super scribed Consultancy Services for Consultancy Services for Dynamic Analysis of overflow and non-overflow blocks of Song Dam Drinking Water Project, Dehradun (Uttarakhand) shall be submitted in two separate sealed envelopes.

Proposals received late on account of any reason whatsoever and telegraphic/ fax or Proposals sent by E-mail & incomplete Proposals shall not be entertained.

#### **9.0. Opening of Proposal**

Techno-Commercial Bid shall be opened by the officer inviting tender on 26.07.23 at 1530 Hrs. in the presence of authorized representative(s) of the Bidders who choose to remain present. If the due date of opening as aforesaid is declared holiday/ strike/ bundh/ on any account, bid would be opened on the next working day at the same time.

The date of opening of Financial Proposals shall be notified separately to all the Consultants whose offers are found technically suitable for the subject work.

#### **10.0. Proposal Validity Period**

Proposal shall be valid for a period of 120 days from the date of opening of Techno-Commercial Proposal.

**11.0. The client shall have the right to reject all or any of the Proposals and shall not be bound to accept the lowest or any other Proposal or to give any reason for such decision.**

**12.0. Client has no responsibility regarding failure of communication/ internet problem and consequent upon problems encountered by bidders.**

## **Section 2. Instructions to Consultants and Data Sheet**

### **A. General Provisions**

<b>1. Definitions</b>	(a) “Applicable Law” means the laws and any other instruments having the force of law in India or, as they may be issued and in force from time to time.
	(b) “Client” means the [implementing/ executing agency] that signs the Contract for the Services with the selected Consultant.
	(c) “Consultant” means a legally-established professional consulting firm or an entity that may provide or provides the Services to the Client under the Contract.
	(d) “Contract” means a legally binding written agreement signed between the Client and the Consultant and includes all the attached documents listed in its Clause 1 (the General Conditions of Contract (GCC), the Special Conditions of Contract (SCC), and the Appendices).
	(e) “Data Sheet” means an integral part of the Instructions to Consultants (ITC) Section 2 that is used to reflect specific site and assignment conditions to supplement, but not to over-write, the provisions of the ITC.
	(f) “Day” means a calendar day.
	(g) “Experts” means, collectively, Key Experts, Non-Key Experts, or any other personnel of the Consultant,
	(h) “Government” means the government of Uttarakhand.
	(i) “Key Expert(s)” means an individual professional whose skills, qualifications, knowledge and experience are critical to the performance of the Services under the Contract and whose CV is taken into account in the technical evaluation of the Consultant’s proposal
	(o) “ITC” (this Section 2 of the RFP) means the Instructions to Consultants that provides Consultants with all information needed to prepare their Proposals.
	(p)“LOI” (this Section 1 of the RFP) means the Letter of Invitation being sent by the Client to the consultants.
	(q)“Non-Key Expert(s)” means an individual professional provided by the Consultant or its Sub-consultant and who is assigned to perform the Services or any part thereof under the Contract and whose CVs are not evaluated individually.
	(r)“Proposal” means the Technical Proposal and the Financial Proposal of the Consultant.
	(s)“RFP” means the Request for Proposals to be prepared by the Client for the selection of Consultants.
	(u)“Services” means the work to be performed by the Consultant pursuant to the Contract.

	(v) “Sub-consultant” means an entity to whom the Consultant intends to subcontract any part of the Services while remaining responsible to the Client during the performance of the Contract.
	(w) “TORs” (this Section 5 of the RFP) means the Terms of Reference that explain the objectives, scope of work, activities, and tasks to be performed, respective responsibilities of the Client and the Consultant, and expected results and deliverables of the assignment.
<b>2. Introduction</b>	<p>The Client named in the <b>Data Sheet</b> intends to select a Consultant in accordance with the method of selection specified in the <b>Data Sheet</b>.</p> <p>The Consultants are invited to submit a Technical Proposal and a Financial Proposal, , as specified in the <b>Data Sheet</b>, for consulting services required for the assignment named in the <b>Data Sheet</b>. The Proposal will be the basis for negotiating and ultimately signing the Contract with the selected Consultant.</p> <p>The Consultants should familiarize themselves with the local conditions and take them into account in preparing their Proposals, including attending a pre-proposal conference. Attending any such pre-proposal conference is optional and is at the Consultants’ expense.</p>
<b>3. Conflict of Interests</b>	<p><b>Consultants Not to Benefit from Commissions Discounts, etc.</b></p> <p>The remuneration of the Consultants pursuant to liabilities shall constitute the Consultant’s sole remuneration in connection with this Contract or the Services, and the Consultants shall not accept for their own benefit any trade commission, discount or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations under the Contract, and the Consultants shall use their best efforts to ensure that the Personnel, any Sub consultants and agents of either of them, similarly shall not receive any such additional remuneration.</p>
	<p><b>Consultants and Affiliates Not to Engage in Certain Activities</b></p> <p>The Consultants agree that, during the term of this Contract and after its termination, the Consultants and their affiliates, as well as any Sub-consultant and any of its affiliates, shall be disqualified from providing goods, works or services (other than the Services and any continuation thereof) for any project resulting from or closely related to the Services.</p>
	<p><b>Prohibition of Conflicting Activities</b></p> <p>Neither the Consultants nor their Sub-consultants nor the Personnel shall engage, either directly or indirectly, in any of the following activities:</p> <p>(a) during the term of this Contract, any business or professional activities in the Government’s country which would conflict with the activities assigned to them under this Contract; and</p> <p>(b) After the termination of this Contract, such other activities as may be specified in the Particular Conditions.</p>



<b>4. Corruption &amp; Fraud</b>	In the performance of obligation under this Agreement, the Consultant and his agents and employees shall comply with all applicable laws, rules, regulations and orders of any applicable jurisdiction. The Consultant hereby represents, warrants and covenants that he will neither receive nor offer, pay or promise to pay either directly or indirectly, anything of value to a “public official” (as defined below) in connection with any business opportunities which are the subject of this Agreement.
	A public official is: (a) any official or employee of any government agency or government owned or controlled enterprise; (b) any person performing a public function;
<b>B. Preparation of Proposals</b>	
<b>5. General Considerations</b>	5.1 In preparing the Proposal, the Consultant is expected to examine the RFP in detail. Material deficiencies in providing the information requested in the RFP may result in rejection of the Proposal.
<b>6. Cost of Preparation of Proposal</b>	6.1 The Consultant shall bear all costs associated with the preparation and submission of its Proposal, and the Client shall not be responsible or liable for those costs, regardless of the conduct or outcome of the selection process. The Client is not bound to accept any proposal, and reserves the right to annul the selection process at any time prior to Contract award, without thereby incurring any liability to the Consultant.
<b>7. Language</b>	7.1 The Proposal, as well as all correspondence and documents relating to the Proposal exchanged between the Consultant and the Client, shall be written in the English
<b>8. Documents Comprising the Proposal</b>	8.1 The Proposal shall comprise the documents and forms listed in the <b>Data Sheet</b> .  8.2 The Consultant shall furnish information on commissions, gratuities and fees, if any, paid or to be paid to agents or any other party relating to this Proposal and, if awarded, Contract execution, as requested in the Financial Proposal submission form.
<b>9. Proposal Validity</b>	9.1 The <b>Data Sheet</b> indicates the period during which the Consultant’s Proposal must remain valid after the Proposal submission deadline.  9.2 During this period, the Consultant shall maintain its original Proposal without any change, including the availability of the Experts, the proposed rates and the total price.  9.3 If it is established that any Expert nominated in the Consultant’s Proposal was not available at the time of Proposal submission or was included in the Proposal without his/her confirmation, such Proposal shall be disqualified and rejected for further evaluation.
<b>a. Extension of Validity Period</b>	9.4 The Client will make its best effort to complete the negotiations within the proposal’s validity period. However, should the need arise, the Client may

	<p>request, in writing, all Consultants who submitted Proposals prior to the submission deadline to extend the Proposals' validity.</p> <p>9.5 If the Consultant agrees to extend the validity of its Proposal, it shall be done without any change in the original Proposal and with the confirmation of the availability of the Experts.</p> <p>9.6 The Consultant has the right to refuse to extend the validity of its Proposal in which case such Proposal will not be further evaluated.</p>
<b>b. Substitution of Key Experts at Validity Extension</b>	<p>9.7 If any of the Experts become unavailable for the extended validity period, the Consultant shall provide a written adequate justification and evidence satisfactory to the Client together with the substitution request. In such case, a replacement Expert shall have equal or better qualifications and experience than those of the originally proposed Expert. The technical evaluation score, however, will remain to be based on the evaluation of the CV of the original Expert.</p> <p>9.8 If the Consultant fails to provide a replacement Expert with equal or better qualifications, or if the provided reasons for the replacement or justification are unacceptable to the Client, such Proposal will be rejected.</p>
<b>c. Sub-Contracting</b>	<p>9.9 The Consultant shall not subcontract the whole of the Services unless otherwise indicated in the <b>Data Sheet</b>.</p>
<b>10. Clarification and Amendment of RFP</b>	<p>10.1 The Consultant may request a clarification of any part of the RFP during the period indicated in the <b>Data Sheet</b> before the Proposals' submission deadline. Any request for clarification must be sent in writing, or by standard electronic means, to the Client's address indicated in the <b>Data Sheet</b>. The Client will respond in writing, or by standard electronic means, and will publish it on website:</p> <p>10.2 At any time before the proposal submission deadline, the Client may amend the RFP by issuing an amendment in writing or by standard electronic means. The amendment shall be published on website</p> <p>10.3 If the amendment is substantial, the Client may extend the proposal submission deadline to give the shortlisted Consultants reasonable time to take an amendment into account in their Proposals.</p> <p>10.4 The Consultant may submit a modified Proposal or a modification to any part of it at any time prior to the proposal submission deadline. No modifications to the Technical or Financial Proposal shall be accepted after the deadline.</p>
<b>11. Technical Proposal Format and Content</b>	<p>11.1 The Technical Proposal shall not include any financial information. A Technical Proposal containing material financial information shall be declared non-responsive.</p>
<b>12. Financial Proposal</b>	<p>12.1 The Financial Proposal shall be prepared using the Standard Forms provided in Section 4 of the RFP. It shall list all costs associated with the assignment, including (a) remuneration for Key Experts and Non-Key Experts, (b) other expenses, (c) provisional sums when applicable and (d) contingency indicated in the <b>Data Sheet</b>.</p>

<b>a. Taxes</b>	12.2 The Consultant and its Sub-consultants and Experts are responsible for meeting all tax liabilities arising out of the Contract unless stated otherwise in the <b>Data Sheet</b> . Information on taxes in the Client’s country is provided in the <b>Data Sheet</b> .
<b>b. Currency of Proposal</b>	12.3 The Consultant may express the price for its Services in the Indian currency.
<b>c. Currency of Payment</b>	12.4 Payment under the Contract shall be made in Indian currency

### C. Submission, Opening and Evaluation

<b>13. Submission, Sealing, and Marking of Proposals</b>	<p>13.1 The Consultant shall submit a signed and complete Proposal comprising the documents and forms in accordance with Clause 10 (Documents Comprising Proposal). If specified in the <b>Data Sheet</b>, the Consultant has the option of submitting its Proposals electronically.</p> <p>13.2 An authorized representative of the Consultant shall sign the original submission letters in the required format for both the Technical Proposal and, if applicable, the Financial Proposals and shall initial all pages of both. The authorization shall be in the form of a written power of attorney attached to the Technical Proposal.</p> <p>13.3 Any modifications, revisions, interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Proposal.</p> <p>13.4 The signed Proposal shall be marked “ORIGINAL”, and its copies marked “COPY” as appropriate. The number of copies is indicated in the <b>Data Sheet</b>. All copies shall be made from the signed original. If there are discrepancies between the original and the copies, the original shall prevail.</p> <p>13.5 The original and all the copies of the Technical Proposal shall be placed inside of a sealed envelope clearly marked “<b>TECHNICAL PROPOSAL</b>”, “[Name of the Assignment]”, reference number, name and address of the Consultant, and with a warning “<b>DO NOT OPEN UNTIL [INSERT THE DATE AND THE TIME OF THE TECHNICAL PROPOSAL SUBMISSION DEADLINE].</b>”</p> <p>13.6 The financial Proposal shall be submitted in online mode as well as in hard copy in sealed envelopes, the original Financial Proposal shall be placed inside of a sealed envelope clearly marked “<b>FINANCIAL PROPOSAL</b>” followed by the name of the assignment, reference number, name and address of the Consultant, and with a warning “<b>DO NOT OPEN WITH THE TECHNICAL PROPOSAL.</b>”</p> <p>13.7 The sealed envelopes containing the Technical and Financial Proposals shall be placed into one outer envelope and sealed. This outer envelope shall bear the submission address, RFP reference number, the name of the assignment, Consultant’s name and the address, and shall be clearly marked “<b>DO NOT OPEN BEFORE [insert the time and date of the submission deadline indicated in the Data Sheet]</b>”.</p>
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	<p>13.8 If the envelopes and packages with the Proposal are not sealed and marked as required, the Client will assume no responsibility for the misplacement, loss, or premature opening of the Proposal.</p> <p>13.9 The Proposal or its modifications must be sent to the address indicated in the Data Sheet and received by the Client no later than the deadline indicated in the Data Sheet, or any extension to this deadline. Any Proposal or its modification received by the Client after the deadline shall be declared late and rejected, and promptly returned unopened.</p>
<b>14. Confidentiality</b>	<p>14.1 From the time the Proposals are opened to the time the Contract is awarded, the Consultant should not contact the Client on any matter related to its Technical and/or Financial Proposal. Information relating to the evaluation of Proposals and award recommendations shall not be disclosed to the Consultants who submitted the Proposals or to any other party not officially concerned with the process, until the publication of the Contract award information.</p> <p>14.2 Any attempt by consultants or anyone on behalf of the Consultant to influence improperly the Client in the evaluation of the Proposals or Contract award decisions may result in the rejection of its Proposal</p> <p>Notwithstanding the above provisions, from the time of the Proposals' opening to the time of Contract award publication, if a consultant wishes to contact the Client on any matter related to the selection process, it should do so only in writing.</p>
<b>15. Opening of Technical Proposals</b>	<p>15.1 The Client's evaluation committee shall conduct the opening of the Technical Proposals in the presence of the Consultants' authorized representatives who choose to attend in person. The opening date, time and the address are stated in the <b>Data Sheet</b>. The envelopes with the Financial Proposal shall remain sealed and shall be opened in accordance with Clause 18 of the ITC.</p> <p>15.2 At the opening of the Technical Proposals the following shall be read out: (i) the name of the Consultant; (ii) the presence or absence of a duly sealed envelope with the Financial Proposal; (iii) any modifications to the Proposal submitted prior to proposal submission deadline; and (iv) any other information deemed appropriate or as indicated in the <b>Data Sheet</b>.</p>
<b>16. Proposals Evaluation</b>	<p>16.1 Subject to provision of Clause 11.1 of the ITC, the evaluators of the Technical Proposals shall have no access to the Financial Proposals until the technical evaluation is concluded.</p> <p>16.2 The Consultant is not permitted to alter or modify its Proposal in any way after the proposal submission deadline except as permitted under Clause 9.7 of this ITC. While evaluating the Proposals, the Client will conduct the evaluation solely on the basis of the submitted Technical and Financial Proposals.</p> <p>From the time the proposals are received by the Client to the time that the Contract is awarded, the Client shall not request the Consultant to provide clarification on any matter related to the Consultant's Technical or Financial Proposal. The Client may, however, request clarification on an expert's eligibility, specifically items (ii) to (vi) of Form TECH-6. Any request for clarification must be sent and responded to in writing.</p>

<b>17. Evaluation of Technical Proposals</b>	17.1 The Client's evaluation committee shall evaluate the Technical Proposals on the basis of their responsiveness to the Terms of Reference and the RFP, applying the evaluation criteria, sub-criteria, and point system specified in the Summary and Personnel Evaluation Sheet attached to the <b>Data Sheet</b> . Each responsive Proposal will be given a technical score. A Proposal shall be rejected at this stage if it does not respond to important aspects of the RFP or if it fails to achieve the minimum technical score indicated in the <b>Data Sheet</b> .
<b>18. Public Opening of Financial Proposals</b>	<p>18.1 After the technical evaluation is completed, the Client shall notify those Consultants whose Proposals were considered non-responsive to the RFP and TOR or did not meet the minimum qualifying technical score (and shall provide information relating to the Consultant's overall technical score, as well as scores obtained for each criterion and sub-criterion) that their Financial Proposals will be returned unopened after completing the selection process and Contract signing. The Client shall simultaneously notify in writing those Consultants that have achieved the minimum overall technical score and inform them of the date, time and location for the opening of the Financial Proposals. The opening date should allow the Consultants sufficient time to make arrangements for attending the opening. The Consultant's attendance at the opening of the Financial Proposals (in person,) is optional and is at the Consultant's choice.</p> <p>18.2 The Financial Proposals shall be opened by the Client's evaluation committee in the presence of the representatives of those Consultants whose proposals have passed the minimum technical score. At the opening, the names of the Consultants, and the overall technical scores, including the break-down by criterion, shall be read aloud. The Financial Proposals will then be inspected to confirm that they have remained sealed and unopened. These Financial Proposals shall be then opened, and the total prices read aloud and recorded. Copies of the record shall be sent to all Consultants who submitted Proposals.</p>
<b>19. Correction of Errors</b>	19.1 Activities and items described in the Technical Proposal but not priced in the Financial Proposal, shall be assumed to be included in the prices of other activities or items, and no corrections are made to the Financial Proposal.
<b>a. Lump-Sum Contracts</b>	19.2 If a Lump-Sum contract form is included in the RFP, the Consultant is deemed to have included all prices in the Financial Proposal, so neither arithmetical corrections nor price adjustments shall be made. The total price, net of taxes understood as per Clause ITC 20 below, specified in the Financial Proposal shall be considered as the offered price.
<b>20. Taxes</b>	20.1 All taxes other than GST are deemed included in the Consultant's Financial proposal, and, therefore, included in the evaluation.
<b>21. Combined Quality and Cost Evaluation</b>	
<b>Quality- and Cost-Based Selection (QCBS)</b>	21.1 In QCBS, the total score is calculated by weighting the technical and financial scores and adding them as per the formula and instructions in the <b>Data</b>

	<b>Sheet.</b> The Consultant achieving the highest combined technical and financial score will be invited for negotiations.
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#### **D. Negotiations and Award**

<b>1. Negotiations</b>	<p>22.1 The negotiations will be held at the date communicated after opening of proposals with the Consultant's representative(s) who must have written power of attorney to negotiate and sign a Contract on behalf of the Consultant.</p> <p>22.2 The Client shall prepare minutes of negotiations that are signed by the Client and the Consultant's authorized representative.</p>
<b>a. Availability of Key Experts</b>	<p>22.3 The invited Consultant shall confirm the availability of all Key Experts included in the Proposal as a pre-requisite to the negotiations, or, if applicable, a replacement in accordance with Clause 12 of the ITC. Failure to confirm the Key Experts' availability may result in the rejection of the Consultant's Proposal and the Client proceeding to negotiate the Contract with the next-ranked Consultant.</p> <p>22.4 Notwithstanding the above, the substitution of Key Experts at the negotiations may be considered if due solely to circumstances outside the reasonable control of and not foreseeable by the Consultant, including but not limited to death or medical incapacity. In such case, the Consultant shall offer a substitute Key Expert within the period of time specified in the letter of invitation to negotiate the Contract, who shall have equivalent or better qualifications and experience than the original candidate.</p>
<b>b. Technical negotiations</b>	<p>22.5 The negotiations include discussions of the Terms of Reference (TORs), the proposed methodology, the Client's inputs, the special conditions of the Contract, and finalizing the "Description of Services" part of the Contract. These discussions shall not substantially alter the original scope of services under the TOR or the terms of the contract, lest the quality of the final product, its price, or the relevance of the initial evaluation be affected.</p>
<b>c. Financial negotiations</b>	<p>22.6 The negotiations include the clarification of the Consultant's tax liability in the Client's country and how it should be reflected in the Contract.</p> <p>22.7 If the selection method included cost as a factor in the evaluation, the total price stated in the Financial Proposal for a Lump-Sum contract shall not be negotiated.</p>
<b>23. Conclusion of Negotiations</b>	<p>23.1 The negotiations are concluded with a review of the finalized draft Contract, which then shall be initialed by the Client and the Consultant's authorized representative.</p> <p>23.2 If the negotiations fail, the Client shall inform the Consultant in writing of all pending issues and disagreements and provide a final opportunity to the Consultant to respond. If disagreement persists, the Client shall terminate the negotiations informing the Consultant of the reasons for doing so. The Client will invite the next-ranked Consultant to negotiate a Contract. Once the Client commences negotiations with the next-ranked Consultant, the Client shall not reopen the earlier negotiations.</p>
<b>24. Award of Contract</b>	<p>24.1 After completing the negotiations the Client shall issue negotiated draft Contract,</p>

	24.2 The Consultant is expected to commence the assignment on the date and place fixed by the department.
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### E. Data Sheet

A. General	
ITC Clause Reference	
1 (a)	INDIA
2	<p><b>Name of the Client: Deputy General Manager, Song Dam PIU, UPDCC</b>  <b>Method of selection: Quality and Cost - Based Selection Method (QCBS)</b>  <b>Financial Proposal to be submitted together with Technical Proposal:</b>  Yes  <b>The name of the assignment is:</b>  Consultancy Services for Dynamic Analysis of overflow and non-overflow blocks of Song Dam Drinking Water Project, Dehradun (Uttarakhand)</p>
B. Preparation of Proposals	
3	<p>This RFP has been issued in the <b>English</b> language.  Proposals shall be submitted in <b>English</b> language.  All correspondence exchange shall be in <b>English</b> language.</p>
4	<p><b>The Proposal shall comprise the following:</b>  <b>1<sup>st</sup> Inner Envelope with the Technical Proposal:</b>  (1) Power of Attorney to sign the Proposal  (2) Proof of Legal Status and Eligibility  (3) TECH-1  (4) TECH-2  (5) TECH-3 Removed.  (6) TECH-4  (7) TECH-5  (8) TECH-6  <p style="text-align: center;">AND</p> <b>2<sup>nd</sup> Inner Envelope with the Financial Proposal:</b>  (1) FIN-1  (2) FIN -II</p>
5	Proposals must remain valid for 120 calendar days after the proposal submission deadline
6	Outsourcing of the whole Services is not allowed. Main bidder should work for at least 70% of the original work

7	The request for the clarification and amendment on RFP can be made on Pre-BID/ proposal Meeting and also during the period till the end date of submission but <i>no later than 7 days prior to the submission deadline</i> .
8	<b>“Information on the Consultant’s tax obligations in the Client’s country can be found at</b> appropriate website of different tax departments of Government of India.
<b>C. Submission, Opening and Evaluation</b>	
9	The Consultants shall submit their Proposals in sealed envelopes as well as electronically.
10	<b>The Consultant must submit:</b> (a) <b>Technical Proposal:</b> one (1) original and 1 copy to the client, (b) <b>Financial Proposal:</b> one (1) original.
11	The Proposals must be received at the address below no later than: Date: 26.07.2023 Time: 1500 Hrs.  <b>The Proposal submission address is –</b> Office of Deputy General Manager, Song Dam PIU, UPDCC Ltd., Ground Floor, Lakhwad Field Hostel, Yamuna Colony, Dehradun, Uttarakhand-248001
12	<b>An online option of the opening of the Technical Proposals is offered:</b> Yes <b>The opening shall take place at:</b> Same as the Proposal submission address  <b>Date:</b> 26.07.2023 <b>Time:</b> 1530 Hrs.
13	<b>In addition, the following information will be read aloud at the opening of The Technical Proposals:</b>  Confirmation that invitation to submit proposal was not transferred to another party.
14	The Client will read aloud only overall scores. YES
15 [a. QCBS only]	<b>The lowest evaluated Financial Proposal (Fm) is given the maximum financial score (Sf) of 100.</b>  <b>The formula for determining the financial scores (Sf) of all other Proposals is calculated as following:</b>  $Sf = 100 \times Fm / F$ in which “Sf” is the financial score, “Fm” is the lowest ETP [Evaluated Total Price (ETP) which is equal to the Adjusted Total Price (ATP)]



	<p>less Non-competitive Component, i.e., provisional sums and contingency], and “F” is the ETP of the proposal under consideration.</p> <p><b>The weights given to the Technical (T) and Financial (P) Proposals are:</b>  <b>T = 80 and</b>  <b>P = 20</b></p> <p>Proposals are ranked according to their combined technical (St) and financial (Sf) scores using the weights (T = the weight given to the Technical Proposal; P = the weight given to the Financial Proposal; T + P = 1) as following: <math>S = St \times T\% + Sf \times P\%</math>.</p>
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## **EVALUATION CRITERIA**

### **BASIS OF EVALUATION**

The bidders shall be evaluated on a point system. The points assigned for different requirements as given below and price part for arriving at the overall score of the bidders would be as under. A two-stage procedure will be adopted in evaluating the proposals, with the technical evaluation being completed prior to any financial proposals being opened, and compared. Technical proposals will be evaluated using the following criteria:

<b>No.</b>	<b>Criteria</b>	<b>Score</b>
<b>1.</b>	<b>Indian Set Up of the Bidder</b>	<b>05</b>
a	The bidder shall be an Independent Engineering Consulting firm having presence in India as a Company established under Companies Act 1956 / Companies act 2013 and must have valid GST certificate.	2.5
b	The bidder shall have an established design office in India for a minimum period of 03 (three) years. Such design establishment shall as on date have sufficient number of qualified engineers.	2.5
<b>2.</b>	<b>Experience Details</b>	<b>30</b>
a	At least one project of similar nature (dam-based project) costing not less than 20 lacs during the last five years.  Or Must have consulted in 5 number dynamic analysis projects in last fifteen years.	15
b	Water Resources / Hydro Power projects in the state of Uttarakhand	15
<b>3.</b>	<b>Approach and Methodology, covering:</b> <ul style="list-style-type: none"> <li>• Project Appreciation</li> <li>• Understanding Terms of Reference</li> <li>• Technical approach and methodology</li> <li>• Adequacy of Work Plan and its quality</li> </ul>	<b>30</b>
<b>4.</b>	<b>Key Professional Staff for the Assignment.</b>	<b>35</b>
a	Project Manager / Team Leader	5
b	Resident Engineer	4
c	Structural Design Engineer/ Dam Engineer	4
d	Experts in Hydrology & Hydraulics	4

e	Hydro mechanical Engineer	3
f	Geo-technical Expert	3
g	Contract Engineer/Procurement Specialist	3
h	Material and Quality Control Engineer	3
i	Project Scheduler	3
j	Geologist & geophysicist	3
	<b>Total</b>	<b>100</b>

Curriculum Vitae of above experts should be included with the proposal.

For all the above positions in No. 4 Qualifications and competency, the following sub criteria shall be followed:

- Educational Qualifications - 30%
- Adequacy of the assignment - 70 %

### **Section 3: Introduction to Project**

#### **Song Dam Drinking Water Project**

Dehradun is the capital city in the State of Uttarakhand and is on the tourist map of the Country. The population of the city is about 5.70 lacs (as per Census 2011) within the Municipal Corporation boundaries and it is continuously increasing. The tourists who visit Mussoorie and the pilgrims who visit the Shrines of Badrinath, Kedarnath, Gangotri and Yamunotri - halt at Dehradun. This has put a tremendous pressure for necessary amenities to be provided to the Public. Dehradun is already facing shortage of water supply and the situation becomes graver during summers when the discharge at the sources of water supply reduces. There is a demand for Song storage reservoir to meet the drinking water requirement and ground/subsurface water source augmentation in the vicinity of Dehradun.

#### **1. Population and Water Demand**

As per Census of India, population of 60 wards of Dehradun city in 2011 was 5,69,578. After delimitation (*parisiman*) of Nagar Nigam Dehradun in 2018, wards of town have been increased to 100 comprising population of 8,00,826 as per census 2011. Current population of city is expected to be around 14.64 lacs. Projected population of town and water demand is tabulated below.

<b>Population</b>	<b>Year 2025</b>	<b>Year 2031</b>	<b>Year 2041</b>	<b>Year 2051</b>
<b>Permanent Population (Lacs)</b>	12.00	13.19	15.43	17.99
<b>Equivalent Floating @ 10% of city population (Lacs)</b>	0.89	0.98	1.16	1.38
<b>Total (Lacs)</b>	12.89	14.17	16.6	19.38
<b>Water Demand @ 135 lpcd including 15%-line losses (MLD)</b>	<b>213.00</b>	<b>236.00</b>	<b>279.00</b>	<b>335.00</b>

#### **2. Existing Water Supply Arrangement**

As stated earlier, in 2018 Nagar Nigam Dehradun extent of 60 wards was increased to 100 wards, therefore only 60 wards are presently being served at the rate of 135 lpcd water supply. Rest 40 wards previously declared rural, are being fed at the rate of 70-135 lpcd depending upon availability of water in respective sources.

At present, a total of 208.96 MLD treated water is being supplied to 5 zones of Dehradun city. Main sources of water supply are gravity and deep tube wells. There are four gravity sources namely- Bandal, Massi Fall, Galogi & Bijapur Canal yielding 54 MLD raw water- being served to three Water Treatment Plants and from there, treated water being fed to 30 nos. different CWRs/ OHTs, having total capacity of 20.36 MLD. Approximately 75% water production is from deep TWs & rest 25% demand is fulfilled from Gravity source of water. From 291 tube well sources, after chlorination, 154.96 MLD water is being fed to respective 107 nos. different CWRs/ OHTs having total capacity of 88.39 MLD.

### **3. Necessity of the project**

The Dehradun city has been growing both in size and population. After formation of Uttarakhand State in year 2000, Dehradun was declared Capital city and urbanization in town gathered pace. Since, all the perennial surface and gravity water sources have been tapped, ever growing size of town has necessitated development of new tube-wells to meet future water requirements. However, it has been observed that the ground water level is depleting day by day. Replenishing of ground water has become difficult due to ever increasing infrastructure works like road widening, building constructions etc. resulting in less percolation area available within town. Many tube-wells in the areas like NIVH water works compound, Survey of India, Tagore Villa have dried up. Water scarcity is a major issue during the summer months because of decrease in the availability of water due to depletion of water sources and lowering of ground water table. The present arrangement of water supply is, thus, likely to pose serious water shortage in nearby future. Also, according to Ground Water Year Book 2019-20 published by Central Ground Water Board (CGWB), about 50 percent of the areas in Dehradun have ground water level already below 15 m.

Above scenario has compelled authorities to explore major gravity sources in vicinity of town to cater the future water demand. After due discussions, Uttarakhand Government has decided to utilize Song River as an additional source of water. Song is a perennial river flowing in East side of town and carries a minimum discharge of about 1 cumecs.

The Project envisages construction of a 130.60-meter-high dam. The drinking water shall be supplied through 14.70 km long 1.50 m diameter M.S. Pipe to Water Treatment Plant (WTP) near Khalanga War Memorial and thereafter it will be catered to consumers through distribution system. The proposed site is located at the boundary of district Dehradun and Tehri Garhwal near village Sondhana at a distance of about 25 km from Dehradun Railway Station.

Construction of Song dam shall ensure the draft supply of 150 MLD drinking water till year 2055 without any additional need of tube well. Further, reduced dependency on tube wells shall also result in financial savings, reduced green-house gases emission, replenished ground water levels in and around the city.

## **Section 4: Terms of Reference**

### **Terms of Reference for Consultancy Services for Dynamic Analysis of overflow and non-overflow blocks of Song Dam Drinking Water Project, Dehradun (Uttarakhand)**

#### **1. Introduction**

Dehradun is the capital city in the State of Uttarakhand and is on the tourist map of the country. The population of the city is 5,74,840 (year 2011) within the Municipal Corporation boundaries and it is continuously increasing. The tourists who visit Mussoorie and the pilgrims visiting the shrines of Badrinath, Kedarnath, Gangotri and Yamunotri - halt at Dehradun. This has put a tremendous pressure for necessary amenities to be provided to the Public. Dehradun is already facing shortage of water supply and the situation becomes graver during summers when the discharge at the sources of water supply reduces. There is a demand for Song storage reservoir to meet the drinking water requirement and ground/subsurface water source augmentation in the vicinity of Dehradun.

It is anticipated that this shortfall will go up continuously over the coming years. Keeping this in view, it is proposed to store surplus water during monsoon by constructing a dam across river Song to solve the problem of domestic water requirement for the city of Dehradun and adjoining suburban areas.

Irrigation department, Uttarakhand has proposed a dam on river Song, to cater the domestic water demand of Dehradun city and its suburban areas. The project envisages construction of a dam 130.60 meters height. The share for drinking water shall be released to proposed treatment plant near Khalanga War Memorial, thereafter to the distribution system. The project will be helpful in supplying the water through gravity and so the huge expenditure involved in pumping the water will be saved. By construction of the dam, some of the water will seep into the ground and will supplement the ground water table which, in turn, will enhance the output of tube wells in the vicinity. Further, storage of water will also help in recharging the ground water and augmentation of natural water sources downstream. Rivers like Rispana, Bindal and other small streams will also be recharged and ground water level in vicinity of Dehradun will also be increased. Tourism and Fisheries may also be developed.

#### **2. Salient Features of the Project**

<b>Location</b>	
State	Uttarakhand
District	Dehradun
River	Song
Location of Dam	Near village Sondhana, 10 km. u/s of Maldeota
Nearest Airport & Railhead	Dehradun
Latitude	30°18'08"N
Longitude	78°11'30"E
<b>Hydrology</b>	
Catchment area	85 sq.km
Snow catchment	0.00 sq.km

Annual average rainfall in the catchment	1942 - 2247 mm
<b>Reservoir</b>	
Reservoir Level (FRL/MWL)	EL. 980.0 m
Minimum Draw Down Level (MDDL)	EL. 923.0 m
Gross Storage at FRL/MWL	2640 Ha. m
Dead Storage	400 Ha. m
Live Storage	2240.0 Ha. m
<b>River Diversion Pipe</b>	
Number of Pipe	1 no.
Pipe size	2.0 m diameter steel pipe
Length of pipe	350 m (Approx.)
Inlet Invert Elevation	EL. 878.00 M
Proposed Longitudinal Slope	1:75
Outlet Invert EL	873.33
<b>Coffer Dam</b>	
Type of Material	Colcrete
Average Side Slopes, u/s & d/s	0.1H:1V & 0.5H:1V
Height	12.00 m
Length	75.45 m
Top Elevation	887.0 M
Base Width	12.2 m
<b>Song Dam (Roller Compacted Concrete)</b>	
Length at top	225 m
Length at foundation (Deepest block)	30 m
Height (From deepest foundation level)	130.60 m
Width at Bottom	134.06 m
Width at Top	12.5m
Slope U/s	0.3 H: 1 V
Slope D/s	0.8 H: 1 V
Bottom of Deepest Block of Dam	EL. 851.40 m
River Bed Level	EL. 874.75 m
New zero elevation after 100 years	EL. 910.366 m
Minimum Draw down Level	EL. 923.0 m
Top Level of Dam	982.0 m
<b>Spillways - Main Orifice Spillway</b>	
Gates	Radial and Stoplog Type
Sill elevation [m a.m.s.l.]	912.00
Stoplog gate size	7.0(w) x 7.525(h)
Number of openings	2
Width of opening (each) [m]	7.0
Height of opening (each) [m]	7.5

Energy dissipater	Trajectory Bucket
Invert Level of bucket [m a.s.l.]	890.00
Radius of Bucket [m]	25
<b>Spillways - High Level Spillway</b>	
Gates	Service and Stoplog Type
Crest Elevation	975.00
Sill elevation [m a.m.s.l.]	974.5 & 974.88
Stoplog gate size	5.0(w)x 5.12(h)
Service Gate Size	5,0(w) x 5.5 (h)
Number of openings	1
Width of opening (each) [m]	5.0
Height of opening (each) [m]	5.0
<b>Intake</b>	
Number of Intake	1 no.
Intake Trash rack Size	1.5 m (w) x 2.2 m (h)
Intake Gate size	1.5 m (w) x 1.5 m (h)
Intake Invert Elevation	EL. 918.00 M
<b>Water Conductor System</b>	
Total Length	14.7 km
Start Location	Dam Block No. 03
End Location	WTP Near Khalanga War Memorial
Diameter of the Pipeline	1.5m
Length along Song River	10.5 km
Length Along Baldi River	4.2 km
<b>Water Demand</b>	<b>150 MLD</b>
<b>Project Cost</b>	
Estimated Project Cost	1580.23 Crores

### 3. Terms of Reference

#### 3.1. Objectives of the Assignment

The objective of this Consultancy is to carry out the **Dynamic Analysis for Overflow and Non- Overflow Blocks for Song Dam** as per the nationally and internationally accepted practices.

**3.1.1.** At the DPR stage, static stability analysis of the Overflow and Non-overflow blocks of the Song Dam has been carried out.

##### 3.1.1.1. References

The stability analysis of dam sections has been done as per the following references:

- IS 6512 – 1984: Criteria for the Design of Solid Gravity Dams
- IS 1893 – 1984: Criteria for Earthquake Resistant Design of Structures

- IS 1893 (Part I) – 2002: Criteria for Earthquake Resistant Design of Structures and Buildings
- Site Specific Earthquake design parameters as recommended by IIT Roorkee and Approved by NCSDP
- US Army Corps of Engineers, EP 1110-2-12 and EM-2200

#### **3.1.1.2.**      *Methodology & Assumptions*

Following steps states the method adopted and assumption for stability analysis.

- The forces acting on the structure are determined by the gravity method based on the rigid body equilibrium.
- Stresses are computed considering the beam theory.



- The stress distribution over a horizontal section is therefore assumed linearly.
- The resultant of all horizontal and vertical forces including uplift under any load combination is balanced by an equal and opposite reaction at the foundation consisting of total vertical reaction and the total horizontal shear and friction at the base. For the dam to be in equilibrium the location of this force has to be such that the summation of moments is equal to zero.
- Stability analysis has been done for all load combinations as specified below.
- To take the effect of shape of entire monolith or NOF block has been divided in strips of 2.0m and inertial forces are calculated for each strip.
- The stability analysis would be done for all loads and load combination which is defined in IS -6512.

#### **3.1.1.3.        *Design Loads***

- a) Dead load
- b) Hydrostatic loads (reservoir and tail water loads)
- c) Uplift pressure
- d) Earthquake loads
- e) Earth and silt pressure
- f) Equipment loads
- g) Silt load

#### **3.1.1.4.        Load Combinations:**

##### **A.        *Static Conditions:***

The static part of the structural analysis considers the following load conditions:

1. Load Condition A: Construction Condition
2. Load Condition B: Normal Operating Condition
3. Load Condition C: Flood discharge Condition
4. Load Condition F: Combination C with extreme uplift (drains inoperative)

The analysis considers the effects of unusual and extreme load conditions during earthquakes. The Dam Structure has been designed using seismic coefficient calculated as per

recommendation. The seismic forces considered are for Design Basis Earthquake (DBE) and Maximum Considered Earthquake (MCE).

*B. Earthquake Conditions:*

The structural analysis considers the following loading conditions:

1. Load Condition D: Load Combination A with Earthquake
2. Load Condition E: Load Combination B with Earthquake
3. Load Combination G: Load Combination E with Extreme Uplift (Drains Inoperative)

**3.1.1.5. Safety Criteria:**

The dam has to be safe against failure by overturning about its toe, safe against sliding along the interface of the dam and foundation or along any plane within the dam and safe against development of excessive compressive and tensile stresses.

*A. Safety against Overturning:*

Safety against overturning shall be checked in accordance with Cl. 5.11 of IS 6512: 1984 which lays down as under;

*'Before a gravity dam overturns bodily, other types of failures may occur, such as cracking of upstream material due to tension, increase in uplift, crushing of toe material and sliding. A gravity dam is, therefore, considered safe against overturning if the criteria of no tension on the upstream face, the resistance against sliding as well as the quality and strength of concrete/masonry of the dam and its foundation is satisfied assuming the dam and foundation as a continuous body.'*

*B. Safety against Sliding:*

The factor of safety against sliding is calculated using formulae as specified in IS 6512, Cl. 5.12.2.1 and partial factor of safety as given in IS 6512 and also mentioned in the following table. Factor of Safety should not be less than 1.0 for given partial of safety.

$$F = \frac{\frac{(w - u) \tan \phi}{F\phi} + \frac{CA}{F_c}}{P}$$

Where,

F = Factor of safety against sliding w = Total mass of dam

u = Total uplift force

$\tan \Phi$  = Coefficient of internal friction of the material

C = Cohesion of the material at the plane considered

A = Area under consideration for cohesion

$F\Phi$  = partial safety of factor in respect of friction

$F_c$  = Partial safety of factor in respect of cohesion

P = Total horizontal Force

Partial safety of factor for friction and cohesion are given below as cited from IS: 6512.

Sl No.	LOADING CONDITION	$F\phi$	$F_c$		
			For Dams and the Contact Plane with Foundation	For Foundation	
				Thoroughly Investigated	Others
i)	A, B, C	1.5	3.6	4.0	4.5
ii)	D, E	1.2	2.4	2.7	3.0
iii)	F, G	1.0	1.2	1.35	1.5

### C. Input Data

#### Hydraulic design data

MWL/FRL	980.00 m
Normal TWL	872.5m
Tail water at HFL	879.0m
Minimum draw down level	923.00m

### Material Properties

#### Concrete

The following values have been adopted in the analysis for conventional concrete:

Compressive Strength ( $f_{ck}$ )	20 MPa
Unit mass ( $\gamma$ )	24.0 kN/m <sup>3</sup>

#### Foundation Rock

For stability analysis residual values has been used for Pseudo dynamic analysis:

#### Concrete- Rock Interface (Left bank)

Friction Angle ( $\square$ ) 48°

Cohesion (residual) 0 MPa

**Concrete Rock-Interface (Right Bank)**

Friction Angle ( $\phi$ ) 50°

Cohesion (residual) 0 Mpa

*Seismic Coefficient*

The time period of both the non-overflow and overflow blocks falls on the sloping plateau of the response spectrum. Therefore, maximum spectral acceleration is considered for the corresponding damping. The 5% damping is assumed for the structural analysis for Design Basis Earthquake (DBE) condition.

However, it is to be noted that the 5% damping assumed by the code takes into considerations only the damping of the structure and damping due to structure – foundation interaction and damping due to structure - water interaction has been conservatively ignored when 5% damping is considered. While considering the extreme condition like MCE case, the conservative value of 5% damping can be replaced by 7%. At this stage 5% is considered.

National Committee on Seismic Design Parameters (NCSDP) has cleared the site -specific seismic study of the project. The site-specific design earthquake parameters for MCE and DBE conditions are recommended as 0.495g and 0.278g for horizontal and 0.330g MCE and 0.185g DBE for the vertical ground motions. The design seismic coefficient for dam (primary structure) is evaluated as  $\alpha_h = 0.18$  and  $\alpha_v = 0.12$ .

**3.1.2. Proposed Study to be carried out by the Consultant**

The consultant shall carry out **2D Dynamic analysis for the Overflow and Non-Overflow Blocks of Song Dam for DBE condition using non-linear Time history method based on the field data and laboratory data like site specific time history, rock modulus, RCC properties etc.** The proposed study is to be carried out in conformity with IS Codes IS 1893 and IS 6512 and practices followed by CWC.

The consultant shall be provided with the results of Probabilistic and Deterministic Seismic Hazard Assessment study to be used as the input for the Dynamic analysis.

Duration allowed for the Dynamic Analysis is two months from the date of receiving the results of Probabilistic and Deterministic Seismic Hazard Assessment study by the Project Authority.

#### **4. Deliverables**

The Consultant shall deliver the following deliverables (the “Deliverables”) during the course of this Consultancy. Three hard copies and soft copy of all the final reports, drawings, database, images etc. shall be submitted to the Authority. For draft reports, only soft copy need be submitted to the Authority.

Tasks will be completed as per the time schedule provided by authority,

##### **4.1. Inception Report**

Within a period of 2 weeks of making available the results of Probabilistic and Deterministic Seismic Hazard Assessment study by the Project Authority, the Consultant shall submit an Inception Report covering detailed approach and methodology to complete the assignment.

. The Inception Report shall include -

- Project appreciation;
- Detailed methodology to meet the requirements of the TOR finalized in consultation with the authority; including scheduling of various sub- activities to be carried out for completion of various stages of the work; stating out clearly their approach & methodology for project preparation after due inspection of the entire work area and collection/ collation of necessary information;
- Work programme

**4.2.** Submission of data and results within 1.5 months of the making available the results of Probabilistic and Deterministic Seismic Hazard Assessment study by the Project Authority.

**4.3.** Submission of final report within 2 months of the making available the results of Probabilistic and Deterministic Seismic Hazard Assessment study by the Project Authority.

##### **5.0. Payment Schedule**

The deliverables and payment terms in respect of services shall be made as follows

S.No.	Mile Stone	% of payment
1	Submission of Inception Report	Up to 25%
2	Submission of Data and results	Up to 80%
3	Submission of Final Report	Up to 100%

The payment of fees can also be made on job completed basis of the agreed sum, subject to satisfactory achievement of mutually agreed progress milestone. No advance will be made in any circumstances.

The Consultancy firm/agency shall submit the bill for payment when it is due as per the agreed terms. The payment shall be released as per the work-related milestones achieved and as per the specified percentage.

Once a milestone is achieved, the Consultancy firm/agency shall submit the requisite deliverables. The Authority shall release the requisite payment upon acceptance of the deliverables.

## **Section 5: Conditions of Contract(Lump Sum)**

### **A. General Conditions of Contract**

#### **1. Definitions**

##### **1.1. Definitions**

The following words and expressions shall have the meanings assigned to them where the context otherwise requires

- 1.1.1. **“Agreement”** or **“Contract”** or **“Contract Agreement”** means the Conditions of the Client/Consultant Services Agreement and any letters of offer and acceptance or otherwise as specified in the Particular Conditions. The words Agreement, Contract and Contract Agreement are synonymous
- 1.1.2. **“Project”** means a project named in the particular conditions for which the Services are to be provided.
- 1.1.3. **“Services”** means the services defined in Terms of Reference to be performed by the Consultant in accordance with the Agreement which comprise Normal Services, Additional Services and Exceptional Services.
- 1.1.4. **“Works”** means the permanent works (if any) to be executed (including the goods and equipment to be supplied to the Client) for the achievement of the Project.
- 1.1.5. **“Country”** means the country to which the Project (India) relates.
- 1.1.6. **“Party”** and **“Parties”** means the Client and the Consultant and “third party” means any other person or entity as the context requires.
- 1.1.7. **“Client”** means the Party named in the Agreement, who employs the Consultant, and legal successors to the Client and permitted assignees.
- 1.1.8. **“Consultant”** means the professional firm or individual named in the Agreement, who is employed by the Client to perform the Services, and legal successors to the Consultant and permitted assignees.  
**“Letter of Acceptance”** means the letter of formal acceptance, signed by the Client, including any annexed memoranda comprising agreements between and signed by both Parties. If there is no such letter of acceptance, the expression “Letter of Acceptance” means the Contract Agreement and the date of issuing or receiving the Letter of Acceptance means the date of signing the Contract Agreement.
- 1.1.9. **“Commencement Date”** means the date stated in the Particular Conditions.
- 1.1.10. **“Time for Completion”** means the time period stated for this purpose in the Particular Conditions.
- 1.1.11. **“day”** means a calendar day
- 1.1.12. **“Written”** or **“in-writing”** mean hand-written, type-written, printed or electronically made, and resulting in a permanent un-editable record.
- 1.1.13. **“Local Currency”** (LC) means the Indian Currency (Rs)
- 1.1.14. **“Government”** means the Government of Uttarakhand **“Laws”** means all national (or state) legislation, statutes, ordinances and other laws, regulations and by-laws of any legally constituted public authority.

- 1.1.15. **“Corrupt practice”** means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the selection process or in contract execution.
- 1.1.16. **“fraudulent practice”** means a misrepresentation of facts in order to influence a selection process or the execution of a contract to the detriment of the Client, and includes collusive practice among consultants (prior to or after submission of proposals) designed to establish prices at artificial non-competitive levels and to deprive the Client of the benefits of free and open competition.
- 1.1.17. **“Personnel”** means persons hired by the Consultants or by any Sub-consultant as employees and assigned to the performance of the Services or any part thereof.
- 1.1.18. **“Force Majeure”** means an event which is beyond the reasonable control of a Party, and which makes a Party’s performance of its obligations under the Contract impossible or so impractical to be considered impossible under the circumstances.

## 1.2. Interpretation

- 1.2.1. The marginal words and other headings in the Agreement shall not be taken into consideration in the interpretation of these Conditions.
- 1.2.2. The singular includes the plural and vice-versa where the context requires.
- 1.2.3. The documents forming this Agreement are to be taken as mutually explanatory of one another. If there is a conflict between these documents the last to be agreed shall prevail, unless otherwise specified in Particular Conditions.
- 1.2.4. Words indicating one gender include all genders.
- 1.2.5. Provisions including the work “agree” “agreed” or “agreement” required the agreement to be recorded in writing, and signed by both Parties

## 1.3. Communications

- 1.3.1. Whenever provision is made for the giving or issue of any notice, instruction or other communication by any person, unless otherwise specified such communication shall be written in the language stated in the Particular Conditions and shall not be unreasonably withheld or delayed.

## 1.4. Law and Language

- 1.4.1. The Contract shall be governed by the laws of the country (or other jurisdiction). If there are versions of any part of the Contract which are written in more than one language, the version which is in the English language shall prevail. The language for communications shall be that stated in para 1.3 of section IV. If no language is stated there, the language for communications shall be the language which the Contract (or most of it) is written.

## 1.5. Assignments and Sub- Contracts

- 1.5.1. The Consultant shall not assign the benefits, other than money, from the Agreement without the written consent of the Client.
- 1.5.2. The Consultant shall not initiate or terminate any sub- contract for performance of all or part of the Services without the written consent of the Client.

## 1.6. Copyright

- 1.6.1. The Clients retains the design rights and other intellectual property rights and copyright of all documents prepared by Consultant against the agreement. The Consultant shall be entitled to use them or copy them only



for the Project and the purpose for which they are intended, and need not obtain the Client's permission to copy for such use.

#### 1.7. Notices

1.7.1. Notices to be served under the Agreement shall be in non-electronic written forms and will take effect from receipt at the addresses stated in the Particular Conditions. Delivery can be by hand or facsimile message against a written confirmation of receipt or by registered letter or by telex subsequently confirmed by letter.

#### 1.8. Corruption and Fraud

1.8.1. In the performance of obligation under this Agreement, the Consultant and his agents and employees shall comply with all applicable laws, rules, regulations and orders of any applicable jurisdiction. The Consultant hereby represents, warrants and covenants that he will neither receive nor offer, pay or promise to pay either directly or indirectly, anything of value to a "public official" (as defined below) in connection with any business opportunities which are the subject of this Agreement. Furthermore, the Consultant shall notify the Client immediately in writing with full particulars in the event that the Consultant receives a request from any public official requesting illicit payments.

1.8.2. A public official is-

- (a) any official or employee of any government agency or government owned or controlled enterprise;
- (b) any person performing a public function;
- (c) any official or employee of a public international organization, such a World Bank;
- (d) any candidate for political office; or
- (e) any political party or an official of a political party.

### **1. The Client**

#### 2.1. Information

2.1.1. The client shall provide all the available inputs to the consultant as & when required.

#### 2.2. Decisions

2.2.1. On all matters properly referred to him in writing by the Consultant, the Client shall give his decision in writing within a reasonable time so as not to delay the Services.

#### 2.3. Monitoring by Client's Personnel

2.3.1. Client shall depute its personnel to monitor the work assigned to the Consultant for performance of Services

#### 2.4. Client's Representative

2.4.1. The Client shall designate an official or individual to be his representative for the administration of the Agreement.

#### 2.5. Payment for Services

2.5.1. The Client shall pay the Consultant for the Services in accordance with terms of agreement.

### **3. The Consultant**

#### **3.1. Scope of Services**

3.1.1. The Consultant shall perform the Services as stated in Terms of Reference

3.1.2. Performance Guarantee shall be 5% of the project cost to be submitted at the time of award of work within 28 days of Letter of Acceptance (LoA) by the successful applicant.

#### **3.2. Performance Security**

3.2.1. The consultant shall obtain (at his cost) a Performance Security for the amount as stated in the Particular Conditions for proper performance, in the amount and currencies stated in the Particular Conditions. The Consultant shall deliver the Performance Security to the Client within 15 days after receiving the Letter of Acceptance. The Performance Security shall be issued by an entity and from within a country (or other jurisdiction) approved by the Client, and shall be in the form annexed forms & procedures. The Performance Bank Guarantee for the amounts expressed in Indian Rupees shall be issued by an Indian Nationalized / Scheduled Bank It shall be cashable at Dehradun (Uttarakhand). The Consultant shall ensure that the Bank Guarantee against Performance security shall remain valid for six months beyond the expiry of due date of completion. In case, the validity of the bank guarantee is to expire before the above said period, the validity shall be extended by the Consultant 28 days prior to such expiry; otherwise, the bank guarantee shall be liable for encashment without recourse to Consultant. If the Consultant fails to remedy the defect upon being notified about the same, the bank guarantee shall be liable for encashment without recourse to Consultant.

#### **3.3. Client's Property**

3.3.1. Anything supplied by or paid for by the Client for the use of the Consultant shall be the property of the Client and where practicable shall be so marked.

#### **3.4. Supply of Personnel**

3.4.1. The personnel who are proposed by the Consultant to work for the services shall be subject to acceptance by the Client with regard to their qualifications and experience; such acceptance shall not be unreasonably withheld.

#### **3.5. Representatives**

3.5.1. For the administration of the Agreement the consultant shall designate an official or individual to be his representative.

3.5.2. If required by the Client, the Consultant shall designate an individual to liaise with the Client's representative in the Country.

#### **3.6. Changes in Personnel**

3.6.1. If it is necessary to replace any of the personnel provided by the Consultant, the Consultant shall arrange for replacement by a person of comparable competence as soon as reasonably possible.

3.6.2. The cost of such replacement shall be borne by the Consultant except where the replacement is requested by the Client, and in such case:

(a) The request shall be in writing stating the reasons for it.

### 3.7. Conflict of Interests

#### 3.7.1. Consultants Not to Benefit from Commissions, Discounts, etc.

The remuneration of the Consultants pursuant to Clause 6 shall constitute the Consultant's sole remuneration in connection with this Contract or the Services, and the Consultants shall not accept for their own benefit any trade commission, discount or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations under the Contract, and the Consultants shall use their best efforts to ensure that the Personnel, any Sub consultants and agents of either of them, similarly shall not receive any such additional remuneration.

#### 3.7.2. Consultants and Affiliates Not to Engage in Certain activities

The Consultants agree that, during the term of this Contract and after its termination, the Consultants and their affiliates, as well as any Sub-consultant and any of its affiliates, shall be disqualified from providing goods, works or services (other than the Services and any continuation thereof) for any project resulting from or closely related to the Services.

#### 3.7.3. Prohibition of Conflicting Activities

Neither the Consultants nor their Sub-consultants nor the Personnel shall engage, either directly or indirectly, in any of the following activities:

- (a) during the term of this Contract, any business or professional activities in the Government's country which would conflict with the activities assigned to them under this Contract; and
- (b) After the termination of this Contract, such other activities as may be specified in the Particular Conditions.

### 3.8. Confidentiality

3.8.1. The Consultants, their Sub-consultants, and the Personnel of either of them shall not, either during the term or within two (2) years after the expiration of this Contract, disclose any proprietary or confidential information relating to the Project, the Services, this Contract or the Client's business or operations without the prior written consent of the Client.

### 3.9. Reporting Obligations

3.9.1. The Consultants shall submit to the Client the reports and documents specified as per Engineer-in-Charge.

## **4. Commencement, Completion, Variation and Termination**

### 4.1. Agreement Effective

4.1.1. The Agreement is effective from the date of the signing the Agreement.

### 4.2. Commencement

4.2.1. The Service shall be commenced on the Commencement Date, shall proceed in accordance with the Time Schedule in [Time Schedule for Services], and shall be completed within the Time for Completion, subject to extensions in accordance with the Agreement.

### 4.3. Variations

4.3.1. The Agreement can be varied on application by either Party by written agreement of the Parties.

4.3.2. If requested by the Client in writing, the Consultant shall submit proposals for variation in Services. The preparation and submission of such proposals shall be an Additional Service.

4.3.3. The Consultant shall not be required to commence the varied Services until such time as the Client has given his written approval of the fees associated with the varied Services.

#### 4.4. Delays

4.4.1. If the Services are impeded or delayed by the consultant due to valid reasons as observed by the client, the time for completion of the Services shall be increased accordingly but it shall be done in exceptional conditions only and no claim of consultant due to this increase in completion time shall be entertained.

#### 4.5. Force Majeure

4.5.1. The failure of party to fulfill any of its obligations under the contract shall not be considered breach or default under this contract in so far as such inability arises from an event of Force Majeure, provided that the party affected by such an event:

- (a) Has taken all precautions, due care and reasonable alternative measures in order to carry out the terms and conditions of this contract, and,
- (b) Has informed other party as soon as possible about the occurrence of such an event.

#### 4.5.2. Time Extension

Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure

#### 4.5.3. Payments

During the period of their inability to perform the Services as a result of an event of Force Majeure, the Consultants shall not be entitled to continue to be paid against this contract.

#### 4.6. Abandonment, Suspension or Termination

4.6.1. The Client may suspend all or part of the Services or terminate the Agreement by giving at least 15 days' notice to the Consultant, and the Consultant shall immediately make arrangements to stop the Services and minimize expenditure.

4.6.2. If the Consultant is, without good reason, not discharging his obligations, the Client may inform the consultant by notice stating the grounds for the notice. If a satisfactory response is not received within 15 days the Client may by a further notice terminate the Agreement provided that such further notice is given within 15 days of the Client's former notice.

#### 4.7. Corruption & Fraud

4.7.1. If it is shown that the consultant is in breach of Clause 1.9 and notwithstanding any penalties or other sanctions to which the Consultant may be subject under the law of the Country, or in another jurisdiction, the Client will be entitled to terminate the Agreement in accordance with Clause 4.6.2.

#### 4.8. Rights & liabilities of parties

- 4.8.1. Termination of the Agreement shall not prejudice or affect the accrued rights or claims and liabilities of the Parties.

### 5. Dispute and Arbitration

- 5.1. Every dispute, difference or question which may at any time arising between the parties hereto/or and person claiming under them, touching or arising out or in respect of this deed of the subject matter thereof shall be referred to the arbitration of **General Manager, Song Dam PIU, UPDCC** or any person nominated by him. There will be no objection to any such appointment that the arbitrator so appointed is a Govt. servant, that he had to deal with the matters to which the contract relates and in the course of his duties as Govt. servant he had expressed views on or any of the matter in dispute or difference. In the event of the arbitrator to whom the matter is originally referred being transferred or vacating his office or being unable to act for any reason **General Manager, Song Dam PIU, UPDCC** shall cater upon the reference himself or appoint another person to act as arbitrator. Such person shall be entitled to proceed with the reference from the date left by his predecessor. It was also a term of this contract that no person other than a person appointed as aforesaid should act as arbitrator and if for any reason that is not possible, the matter is not to be referred to arbitration at all. In all cases where the amount of claim in dispute is Rs. 50,000 (Rupees fifty Thousand) and above, the arbitrator shall give reasons for the award.
- 5.2. It is a term of contract that the party invoking the arbitration shall specify the dispute or disputes to be referred to arbitration together with the amount or amounts claimed in respect of each such dispute. Subject aforesaid the provisions of the arbitration Act 1940 or any statutory modification enactment there-of and the rule made there under and for the time being in force, shall apply to the arbitration proceedings. The arbitrator may from time to time with the consent of the parties enlarge the time for making and publishing the award.
- 5.3. The cost of such arbitration shall be borne by the parties or party as decided by the arbitrator.
- 5.4. If work under the contract has not been completed when dispute is referred to arbitration the work shall continue during the arbitration proceeding and no payment due to the contractor withheld on account of arbitration proceeding unless authorized, required by the arbitrator.

## **B Special Conditions of Contract**

### **A Reference from Clauses in the General Conditions**

<b>1.1</b>		<b>Definitions</b>
	1.1.2	Song Dam drinking water Project
	1.1.9	Commencement Date is date of issue of Client's letter for acceptance of Proposal of Consultant or as stipulated in the Acceptance Letter
		The date on which this contract shall come into effect shall be reckoned from the date of issue of the letter for acceptance.
	1.1.10	Time of Completion is 3 Months
<b>1.2</b>		<b>Interpretation</b>
	1.2.3	The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:
		<ul style="list-style-type: none"> <li>i. The Contract Agreement (if any)</li> <li>ii. The letter of Acceptance,</li> <li>iii. The Letter of Invitation,</li> <li>iv. Appendices</li> <li>v. The Particular Conditions,</li> <li>vi. These General Conditions,</li> <li>vii. The drawings, and</li> <li>viii. The Schedules and any other documents forming part of the Contract.</li> </ul>
		If an ambiguity or discrepancy is found in the documents, the Engineer – in - Charge of the contract shall issue necessary clarification or instruction which shall be final and binding on both parties.
<b>1.3</b>		<b>Communication</b>
		Language(s) for Communications is English . Language(s) of the Agreement for English.
<b>3.2</b>		<b>Performance Security</b>
	3.2.1	The consultant shall be required to furnish a Bank Guarantee in the prescribed proforma appended herewith amounting to 5 % of the contract value towards successful performance of the design and engineering. The bank guarantees shall be required to be furnished within 15 days after receiving letter of acceptance by the consultant. Such Bank guarantee against performance security amounting to 5 % of contract value shall be withheld till the expiry of guarantee period of 12 months and also shall be subjected to any deduction which the Client might be authorized to make under provisions of contract.

**Payment terms - Lump Sum**

- Submission of Inception Report — 30%
- Submission of Draft Report — 30%
- Submission of Final Report — 40%

**Deliverables**

1. The consultant/firm shall arrange workshops at Dehradun in regular intervals as sought by the client, regarding the outcomes of the task so that it might be finally vetted by the Irrigation Department, Uttarakhand.
2. Bid evaluation
3. Road map for the bid activities and association in all the activities involved in Award of main contract to the contractor

No	Deliverables	Time required
1	Agreement	7 days
2	Final Report	02 Months from date of start
3	Workshops for the discussion with department and evaluation of the task	Whenever scheduled according to the convenience of client

- The Consultancy firm/agency shall submit the bill for payment when the payment is due as per the agreed terms. The payment shall be released as per the work related milestones achieved .
- Once a milestone is completed, the Consultancy firm/agency shall submit the requisite deliverables. The Authority shall release the requisite payment upon acceptance of the deliverables.
- Contract Performance Guarantee shall be released/returned after Completion of the task

## **Section 6: Technical Proposals-Standard Forms**

### **Technical Proposal Requirements**

#### **Information to be furnished by the applicant for selection of firm**

1	Name and registered office address	
2	Year of establishment of the firm and the registered office.	
3	Whether individual/Partnership/Pvt. Ltd or Ltd firm with full particulars of the other partners including their names, professional qualifications, age experience, etc. (Attach a separate sheet, if required)	
4	Names, qualifications and experience of all technical personnel in the firm details to be furnished in the prescribed Pro-forma (Statement-I)	
5	Details of project(s) of similar nature which have been prepared by the firm together with relevant details such as cost of the work etc. The full address of the clients for whom the works have been executed including name of contact persons and contact nos. Details to be furnished in the prescribed Pro-forma (Statement-II). Please attach completion certificate or any other relevant documents in support of the works completed clearly showing the value, nature of the work executed, duration of the work etc, which should be considered for short listing as per the Criteria	
6	Removed	
7	Details of facilities available with the firm Please attach details in a separate sheet (Statement-IV)	
8	Details of the associates / consultants for the allied works. Attach separate sheet for the details of the associates/consultants.	
9	Income Tax No.(PAN/TAN) Furnish copies of last Income Tax Clearance	
10	Name and address of the Banker/s of firm.	
11	Turnover of the firm from consultancy works fee during last 3 years (year -wise). Please attach necessary documents in support of the same.	
12	National or International Awards received if any.	

**Signature of the applicant with**

**Full address & Office Seal**



**List of technical personnel, project management expert giving their technical qualifications, experience, including that in the present organization.**

<b>Sl. No</b>	<b>Name</b>	<b>Age</b>	<b>Present Designation</b>	<b>Qualification</b>	<b>Experience in the specific field)</b>	<b>Name of the major projects</b>	<b>Date from which Employed in the Present Organization</b>

Mention other points, such as lead person having expertise in technical consultancy work mentioned in scope of work, lead person for executing field activities, if any, to show technical and managerial competency to indicate any important point in your favour.

Signature of the Applicant

**List of important projects handled by the firm during last 5-year costing 20 lacs and above**

Sl. No	Name of Project and Location	Nature of work	Name of client with full address	Name of contact person With Contact number	Project cost 1.Tender 2.Actual	Date of commencement	Date of completion	Litigations if any

**Signature of the Applicant**

### Approach & Methodology specific to the project

Technical approach, methodology and work plan are key components of the Technical Proposal. You are suggested to present your Technical Proposal (maximum of 100 pages, inclusive of charts and diagrams for Full Technical Proposal) covering scope of work in TOR ,divided into the following three chapters:

- a) Technical Approach and Methodology,
  - b) Work Plan, and
  - c) Organization and Personnel,
- a) **Technical Approach and Methodology.** In this chapter you should explain your understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. You should highlight the problems being addressed and their importance, and explain the technical approach you would adopt to address them in an explicit manner. You should also explain the methodologies you propose to adopt and highlight the compatibility of those methodologies with the proposed approach.
- b) **Work Plan.** In this chapter you should propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Client), and delivery dates of the deliverables. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, should be included here.
- c) **Organization and Personnel.** In this chapter you should propose the structure and composition of your team. You should list the main disciplines of the assignment, the key expert responsible, and proposed technical and support personnel. You shall also specify if you will be the lead firm in a joint venture or in an association with Sub-Consultants. For joint ventures, you must attach a copy of the joint venture agreement.
-

**Form Tech V**  
**Team Composition and Task Assignments covering the scope of work**

<i>Professional Staff</i>				
Name of Staff	Firm	Area of Expertise	Position Assigned	Task Assigned

**FORM TECH-VI**  
**Format for Financial Capability of the Consultant**

Consultant*	-----(Name of Consultant)				
FY	2020-21	2021-22	2022-23	Total	Average
Annual Turnover					

Certificate from the Statutory Auditor

This is to certify that .....(name of the Consultant) has received the payments against the respective years.

Name of the audit firm:

Seal of the audit firm:

Date:

(Signature, name and designation of the authorised signatory)

## FORM TECH-VII

### CURRICULUM VITAE (CV)

<b>Position Title and No.</b>	{e.g., K-1, TEAM LEADER}
<b>Name of Firm</b>	<i>Insert name of firm proposing the expert</i>
<b>Name of Expert:</b>	{Insert full name}
<b>Date of Birth:</b>	{day/month/year}
<b>Citizenship</b>	

**Education:** {List college/university or other specialized education, giving names of educational institutions, dates attended, degree(s)/diploma(s) obtained}

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**Employment record relevant to the assignment:** {Starting with present position, list in reverse order. Please provide dates, name of employing organization, titles of positions held, *type of employment (full time, part time, contractual)*, types of activities performed and location of the assignment, and contact information of previous clients and employing organization(s) who can be contacted for references. Past employment that is not relevant to the assignment does not need to be included.}

Period	Employing organization and your title/position. Contact information for references	Country	Summary of activities performed relevant to the Assignment
[e.g., May 2005-present]	[e.g., Ministry of ....., advisor/consultant to...  For references: Tel...../e-mail.....; Mr. Bbbbbb, deputy minister]		

**Membership in Professional Associations and Publications:**

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**Language Skills (indicate only languages in which you can work):** \_\_\_\_\_

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**Adequacy for the Assignment:**

Detailed Tasks Assigned on Consultant's Team of Experts:	Reference to Prior Work/Assignments that Best Illustrates Capability to Handle the Assigned Tasks
{List all deliverables/tasks as in TECH- 5 in which the Expert will be involved}	


**Certification:**

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.

Date:

[Signature of staff member or authorized

Place:

representative of the staff]

[Full name of authorized representative]:

## **Section 7: Financial Proposals-Standard Forms**

**FORM FIN- I**

### **Request for Proposal Submission Form Financial Proposal**

To

Deputy General Manager,  
Song Dam PIU,  
UPDCC Ltd.

I/ We have read and understood the instructions and the terms and conditions contained in the application form. I/We do hereby declare that the information furnished in the application and in the supplementary sheets is correct to the best of my/our knowledge and belief. The undersigned is fully authorized to sign and submit this application form on behalf of the organization, he/she represents. We authorize the officers of UPDCC Ltd. to approach individuals, employers, firms and corporations to verify our competence and general reputation.

I/ We offer to provide the consultancy services along with other tasks as per TOR for Consultancy Services for Dynamic Analysis of overflow and non-overflow blocks of Song Dam Drinking Water Project, Dehradun (Uttarakhand) in accordance with your Request for proposal dated 23.06.23. Our Financial Proposal for providing the services for the entire work and all other required details for the work is given below.

<b>S,N</b>	<b>Task/subactivity</b>	<b>description</b>		<b>Cost of work</b>
	<b>Total Cost</b>			

**Note:-1-** Cost of work should be quoted exclusive of taxes(**rates analysis/break-up for all the subactivities/tasks involved must be annexed here**) Detail of taxes may be written separately.

**2-**The above table must be filled up by quoting the rates of sub activities

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal.

Signature: .....

Name: .....

Designation: .....

Address: .....  
.....

Place: .....

Date: .....

Seal of the applicant



**FINANCIAL PROPOSAL SUBMISSION FORM**

[Location, Date]

To: [Name and address of Bidder]

Dear Sirs:

We, the undersigned, offer to provide the consulting Assignment/job for [Insert title of Assignment/job] in accordance with your Request for Proposal dated [Insert Date] and our Technical Proposal. Our attached Financial Proposal in FIN-I is for the sum of [Insert amount(s) in words and figures]. This amount is inclusive of the Domestic taxes, but excluding Goods and Service Tax (GST). We hereby confirm that the financial proposal is unconditional and we acknowledge that any condition attached to financial proposal shall result in rejection of our financial proposal.

Our Financial Proposal shall be binding upon us, subject to the modifications resulting from Contract negotiations, upto expiration of the validity period of the Proposal, i.e. before the date indicated in Data Sheet.

We understand you are not bound to accept any Proposal you receive.

Yours sincerely,

Authorized Signature [In full and initials]:

Name and Title of Signatory: Name of Firm:

Address: