

EOI No. : THDC/RKSH/CC-422

Domestic Bidding

Detailed Invitation for Expression of Interest (EOI)

For

State of the art technology to harness Hydro Kinetic Energy (HKE) potential available in the D/S discharge in TRC of Koteswar HEP and implementation thereof.



December '2021

1. Background

Koteshwar Hydro Electric Project (400 MW) is an integral part of Tehri Hydro Power Complex (2400 MW) comprising of Tehri Dam &HPP (4x250 MW), Tehri Pumped Storage Plant (4x250 MW) and Koteshwar HEP(4x100 MW), .

Koteshwar Hydro Electric Project on river Bhagirathi is located about 22 Km downstream of the Tehri dam in TehriGarhwalDistt. OfUttarakhand. This project is a run off the river scheme with diurnal storage envisaging an installed capacity of 400 MW (4x100 MW) to generate 1145 Million Units of energy at 90% dependable Year.

The Project comprises of a 97.5 m high Concrete Gravity Dam and a Surface Power House located at the Dam toe on right bank of the river housing four generating units of 100 MW each. The project also regulates water releases from Tehri reservoir for irrigation purpose with the annual avg. discharge of 215 m³/Sec(approx.).

Therefore, as a leading and responsible player of Renewable Energy Sector THDC is willing to tap this hydrokinetic energy generation potential through indigenously invented technologies in a manner so that the untapped hydrokinetic energy can be harnessed.

2. Objective

THDC India Ltd. (THDCIL) is interested to harness the kinetic hydro energy potential available with continuous discharge from Koteshwar Dam through the use of state of art technology developed indigenously from the prospective OEMs, Innovators, and technologists. Accordingly, THDCIL is inviting Expression of Interest (EOI) for conducting market survey to identify the prospective applicants for the scope of work defined in this EOI and to identify the market rate of the required work.

In addition, the response(s) received in the EOI will be utilized by THDCIL for:

- a) Formulation of details for the project including specifications for various systems/stages required for execution of pilot project.
- b) Framing of the cost estimate of the project and formulation of criteria to shortlist the participating applicants.

The interested applicants shall submit EOI in the requisite format. It may be noted that submission of EOI does not, in any way, constitute any kind of commitment on the part of THDCIL to award the intended work to participating applicants. The interested Applicants/ Agencies shall make their own arrangement for site visit of Koteshwar Hydro Electric Project located about 22 Km downstream of the Tehri dam in Tehri Garhwal Distt. of Uttarakhand.

The scope shall cover the preparation of a detailed report on techno-economic feasibility of Hydro Kinetic Energy (HKE) potential, submission of commercial model for the implantation of the scheme. Initially the scheme envisages the supply, erection, testing, commissioning and O&M of the scheme on mutually agreed commercial model for a minimum capacity of 100 kW.

The prospective bidders are requested to submit the details of technology and commercial model in the specific formats.

3. Scope of Work

- (a) Assessment of potential, preparation of DPR and commercial model for tapping Hydrokinetic Energy at D/S of Koteshwar Hydro Power Plant.
- (b) Pilot Installation of 100 kW Project in the downstream of Koteshwar Hydro Power Plant.

4. Site information and data

Sr.no	Site Parameters	Details
1.	Average width of river	25 m
2.	Average Depth of river	1.0 m
3.	Average discharge (Annually)	215 m ³ /Sec
4.	Maximum Discharge (For all machine running)	680 m ³ /Sec
5.	Site Type	Rocky unlined natural shallow stream

5. Evaluation criteria

The prospective agencies shall be evaluated based on the qualification criteria given below. They shall attach proof of documents for each of the qualifying requirements. The EOI without adequate supporting documents shall be treated as non-responsive. The EOI will be considered as responsive only if the lead member of the agencies (in case of Joint Venture /Consortium) satisfies all the conditions mentioned below:

Qualification criteria

Sr. No	Criteria
1.	The agency should have been in the business of providing similar kind of technological Services in India for period of at least two or more years as on 31.03.2021. The agency should be a private/public limited company with proven track record in consultancy/implementation/research for micro/mini/small hydropower or other renewable energy projects
2.	The agency should have an office in India with the facility for assembly of equipment and spare parts required for the scheme.

Note: Similar kind of Technological services means the hydro kinetic turbine working on the principle of velocity of water (Velocity driven turbine with zero head)

6. Submission, Opening and Evaluation of EOI.

EOI shall be submitted through e-tender mode on <http://eprocure.gov.in/eprocure/app> (CPP Portal). No Hard copy of the EOI shall be acceptable. The EOIs will be opened at the time, date and location notified in the EOI, in the presence of the Applicants/ Agencies authorised representatives (not exceeding two per Applicant/ Agency) who choose to attend. All important information and any such other detail, as may be considered

appropriate by the Employer will be read out during the opening. Only those applicants whose credentials are found appropriate shall be considered by THDCIL. In case requisite documents are not submitted before the stipulated EOI submission closing date and time then EOI may be rejected by the EMPLOYER as being non-responsive.

7. Notes:

- i) THDCIL reserves the right to assess the capacity/ capability of the applicant and viability of proposal, based on verification of documents and if required, cross verification for establishment of the capable applicant(s).
- ii) THDCIL reserves the right to accept or reject any or all applications, cancel/withdraw the EOI process without assigning any reason whatsoever, in case situation arises, and in such a case no applicant / intending applicant shall have any claim arising out of such action.
- iii) The Interested Applicant / Agency is advised to visit and examine the site where the work is to be executed and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the EOI and entering into a contract for execution of the facilities. The costs of visiting the site shall be borne by the Applicant / Agency fully.
- iv) The Applicant / Agency and any of its personnel or agents will be granted permission by the Employer to enter upon its premises and lands for the purpose of such inspection, but only upon the express condition that the Applicant / Agency, its personnel and agents will release and indemnify the Employer and its personnel from and against all liability in respect thereof and will be responsible for death or personal injury, loss of or damage to property and any other loss, damage, costs and expenses incurred as a result of the inspection.
- v) Interested Applicants/ Agencies shall have to abide by the guidelines of the Central Government and State Government and ensure compliance, in case of award. All applicable safety norms in general shall be followed by the interested Applicants / Agencies while site visit, handling, transportation and unloading, erection, testing etc at designated point as per the requirement, in case of award.
- vi) The applicants in submission of their applications to this EOI and during execution and performance of the work are required to ensure compliance with the provisions of the public procurement (Preference to Make in India) order 2017 amended on 16 September 2020 issued by Department for Promotion of Industry and Internal trade (Make in India Policy) and Order (No. 11/05/2018 Coord) dated 29 July 2020 as amended by Order (No. 11/05/2018 Coord) dated 17 September 2020 issued by Ministry of Power.
- vii) The applicant should certify their compliance to “Restrictions on Procurement from a bidder of a country which shares land border with India”, as per F No. 6/18/2019-PPD dated 23 July 2020 of Ministry of Finance, Department of Expenditure Order (Public Procurement No.1). Submission of EOI shall be considered as applicant confirmation that he has read and understood the “restrictions on procurement from a bidder of a country which shares a land border with India” and its EOI is in compliance with this clause.
- viii) THDC India Limited invites eligible applicants to indicate their interest in providing

the services as above. Interested applicants must provide information indicating that they are qualified to for the above mentioned scope & conditions in **Schedule-I, II, III & IV** or any other relevant information which they consider important for their qualification.

- ix) Shortlisting of the applicants against this Eoi shall not be construed by the shortlisted applicants as their eligibility for execution of the work as per the scope of work defined in the Eoi. THDCIL intends to invite detailed RFP in this regard with a detailed Prequalification criteria for engaging an eligible agency for the execution of this work, against which other prospective bidders shall also be eligible to submit their proposal.
- x) Applications for EOI with relevant documents as per the detailed documents should be uploaded on the NIC's CPP Portal (<http://eprocure.gov.in/eprocure/app>) by 15:00 hrs on 10.01.2022. The EOI will be opened at 15:00 hrs on 11.01.2022 at Corporate Contract deptt., THDCIL, Rishikesh.
- xi) All future corrigenda / addenda / amendments and clarifications to the invitation of EOI, if any, shall be hosted on above website only. Applicants are therefore advised to keep themselves updated with all such amendments.
- xii) Interested applicants may obtain further information / Clarification in writing from the contact details given below during office hours on working days from 10.00 hrs. to 16.00 hrs.

GM (Contracts)
Corporate Contract Deptt., THDC India Ltd.
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Uttarakhand-249201.
Tel No. 0135-2473229 /2431461
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