

Uranium Corporation of India Limited

(A Public Sector Undertaking under Department of Atomic Energy, Government of India)
(CIN : U 12000 JH 1967 GOI 000806)

Registered Office: Jaduguda Mines. District – East Singhbhum. Jharkhand – 832102

Invitation for Expression of Interest (EOI)

Uranium Corporation of India Limited (UCIL) intends enhancing the hoisting capacity of its mine shaft hoisting system, from the existing 60 tons per hour to 90 tons per hour, at its Turamdih Mines.

Expression of Interest is invited only from competent, proven and experienced parties who have executed similar jobs and satisfy the PQC criteria.

The scope of work includes Design, Supply, Installation and Commissioning of the upgraded system and integrating it with the existing system. All details including Pre-Qualification criteria are given in our website www.ucil.gov.in

Interested parties may send in their EOI along with all details within the stipulated deadline to the following address:

General Manager (Open Pit)
Uranium Corporation of India Limited,
Turamdih Mine; P.O.– Sunder Nagar,
District – East Singhbhum
Jharkhand – 832107; India.
Phone—91-657-2318001- 007 EXT—7207
Fax -- 91-657-2318010. Email—prabhas34@yahoo.com

UCIL reserves the right to accept or reject any or all the applications, re-invite EOI without assigning any reasons whatsoever.

Expression of Interest (EOI)

Capacity enhancement
of
Mine shaft hoisting system

from existing 60 tons per hour to 90 tons per hour
at its Turamdih Mines.

Part I:

General Terms

1. Objective of this EOI:

Objective of this EOI is to solicit proposals from the interested bidders for participation in a bid process for selection of a service provider for Design, Engineering, supply, modification, erection & commissioning of Mine shaft drum winder hoisting systems including up-gradation to higher capacities. The service provider will be responsible for total system designing, obtaining approval of the design from the statutory authorities, supply, installation and commissioning of all works related to vertical shaft hoisting system.

2. EOI Issuing authority:

This expression of interest is being issued by Uranium Corporation of India Limited, a Public Sector Undertaking under Department of Atomic Energy, Government of India, intended to short-list potential bidders. Company's decision with regard to short-listing of bidders through this EOI shall be final and company reserves the right to accept or reject any or all the bids, re-invite EOI without assigning any reasons.

Project Title	Capacity enhancement of Mine shaft hoisting system from the existing 60 tons per hour to 90 tons per hour at its Turamdih Mines.
Project Initiator details:	
Department	Turamdih Mines
Contact Person	General Manager (Open Pit), Uranium Corporation of India Limited. Turamdih Mines. Phone—91-657-2318001.
Contact Person (Alternate)	Chief Superintendant (Mechanical), Turamdih Mines. Phone no.- 8986882203.
Contact Details	Phone—91-657-2318001- 007 EXT—7207 Fax -- 91-657-2318010. Email— prabhas34@yahoo.com
Website	www.ucil.gov.in

3. Documents to be submitted along with EOI:

- A Letter of interest.
- Company profile, organisational details and contact details
- Company registration details
- Company financial particulars
- Turnover for last five financial years
- Management structure, employee details and details of experts in the subject area
- Current operational area of work

- Company past experience details showing details of work experience of last five years along with copy of work orders and completion certificates
- Any other information and credentials in the subject area

4. Tentative Calendar of Events:

The following table enlists the important milestones and timelines for the bidding activities.

<u>Sl. no.</u>	<u>Milestone</u>	<u>Date and Time</u>
1	Release of Expression of Interest	31/10/2014
2	Last date of receiving queries and clarifications by email	12/11/2014
3	Pre-Bid conference	19/11/2014 to 21/11/2014
4	Last Date of submission of written questions and clarifications by bidders	28/11/2014
5	Response to the bidders queries	05/12/2014
6	Last date of submission of EOI with all documents	12/12/2014; 03.00 pm
7	Opening of EOI Responses	12/12/2004; 03.30 pm
8	Declaration of shortlisted parties	To be informed later

- 5. Bidders Conference:** Uranium corporation of India limited will host a bidder's conference at its registered office at Jadugoda, East Singhbhum district of Jharkhand on the tentatively scheduled date. The representatives of the bidders (up to a maximum of four persons) may attend this at their own cost. The purpose of the conference is to provide the bidders any clarifications regarding the EOI. It will also provide opportunity to the bidders to understand the project by visiting the project work/site.
- 6. Venue and Deadline for submitting EOI:** Proposals complete in all respects with all the documents must be submitted to UCIL at the address specified above by the last date. UCIL may in exceptional circumstances and at its discretion, extend the last date by issuing an Addendum to be made available at the company website, in which case all rights and obligations of UCIL and the bidders previously subject to the original deadline will thereafter be subject to the deadline as extended.

Part II:

SCOPE OF WORK

About the Company:

Uranium Corporation of India Limited is a public sector undertaking under the department of Atomic energy. The company is engaged in mining and processing of uranium ore and operates various mines and plants in Jharkhand and Andhra Pradesh.

About the Project:

At Present Mine hoisting system capacity of Turamdih Mine is 60 tons per hour with two nos. of skips of 2.4 ton payload. Now, for the enhanced production capacity of the mine, company intends to enhance the hoisting System capacity from 60 tons per hour to 90 tons per hour.

Description of the existing hoisting system is enclosed in Annexure-A.

Bidders after studying the data & drawings shall have to put up their detailed proposal of enhancing the hoisting capacity from the present 60 tons per hour to 90 tons per hour with the same winding system after necessary modifications with minimum shutdown of the existing system.

Scope of Work:

The work includes Design, Supply, Installation and commissioning in the following manner.

1. Design, Drawing & Detail Engineering of for the capacity enhancement of hoisting-capacity.
2. Vetting of Design & Drawing by a Third party (approved by UCIL) and approval of the Designs & Drawings by the statutory authority- DGMS, before commencing the supply/procurement.
3. Procurement, Supply &/ Fabrication of equipments, structures etc.
4. Erection, Modifications and Installation of equipment and structures and Commissioning.
5. Operation of the upgraded system at the rated capacity of 90 Tons per hour for 3 months.

Interested parties should as such have the capability to undertake all parts and after commissioning shall have to operate the system for 3 continuous months of hoisting @ 90 Tons per hour for 12 hours per day.

Due to specialized nature of work of vertical shaft, Head frame and Winder of a mine and also due to highest safety involved in the work only persons who have already worked in vertical-shaft of a mine are expected to carry out this work. It is as such required that parties who have previous specific work experience in similar work of vertical shaft of an underground mine and winders participate in expressing interest.

Schedule for completion:

The work shall be completed within 12 months from the date of commencement. The shut down period of the existing system/shaft available for this work is only three months. **The Bidders should design and plan the work in such a way to execute the work to have minimum shut down period of the existing system.**

GENERAL INFORMATION ABOUT THE WORK

The Shaft winding system is presently designed to hoist 60 tons per hour. It is proposed to increase the hoisting capacity to 90 tons per hour. Description of the existing system is enclosed in Annexure-A.

Bidders after studying the data & drawings furnished in the tender shall have to put up their detailed proposal on enhancing the hoisting capacity from the present 60 tons per hour to 90 tons per hour with the same winding system after necessary modifications with minimum shutdown of the existing system.

A: WINDER & ALL AUXILIARY COMPONENTS

To study the existing winder and its suitability for 90 Tons per hour and propose modifications, in order to cater to the enhanced capacity. The suitability should be ascertained considering all major components with special emphasis on winder drums including brake path, brake shoes & liners; total braking system and complete hydraulics, gearbox, couplings etc, main motor & all electrical including PLC controls. The overall electrical system including in coming power detail, circuit diagram, cable schedule, control desk etc should also be studied.

B: HEADFRAME AND DUMPING ARRANGEMENT

1. To study the design and drawing of the existing top dumping system and suggest modification, if any, for the increased capacity for unhindered dumping.
2. To study & design Jetto or a suitable type bottom discharge skips and top scroll dumping system in order to achieve the enhanced capacity within the existing shaft layout and guide positions.

C: UNDERGROUND LOADING STATION

To study the existing design and suitability of the Underground loading station including all controls and interlocking systems and propose modifications, if any, in order to cater to the enhanced capacity. The existing design of conveyor loading into measuring pocket with load cell arrangement to the twin skip system, with the crushed ore being fed through launders & sector gates should be retained as far as possible. The study & design should cover the following areas to suit the enhanced capacity: Underground Fine ore bin base mounting details with sector gate, Underground Feed conveyors, Underground Y piece launder chute, Underground Tilting type measuring bin including turnbuckle anchoring details. Complete System details Power pack, hydraulic circuit, diagram flow chart, sequence chart. Overall electrical system and circuit diagram etc.

• DESGN & DRAWING:

To study and review the existing Shaft Hoisting system of input data &/ drawing of the existing system and modification/re-designing of the same for enhanced capacity of the upgraded system in respect of following. (Some available drawings may be provided for reference).

- a) Basic layout and General arrangement.
- b) Cycle time and winder motor RMS power calculations
- c) Breaking load and FOS calculations of winding rope
- d) Foundation load analysis and design of Head frame and winder and other equipment
- e) Structural design drawings for head frame and winder and other equipment
- f) Stress analysis of Head frame and back leg with all stability calculation by suitable software

- g) Preparation of Design and Fabrication drawing all for civil and structural work
- h) Line diagram and layout drawings and any other design & drawing for electrical for electrical works

The final design should entail with minimal changes with the existing design so that minimum downtime/shutdown is taken for establishment of the new system.

(Please note that all drawings provided are the sole property of UCIL & shall not be used/copied or given to any other party which may otherwise result in legal action. All drawings provided shall be returned immediately after completion of the job).

Annexure: A. Existing system parameters

	Shaft details	Turamdih Mine Vertical Shaft
	Type	Circular shaft
	Shaft diameter	5 meters
	Depth	260 meters
	Lining	300 mm
	Insets/Plats/Levels	60 ml, 105 ml, 140 ml, 180 ml, 200 ml & 230 ml
	Shaft bottom	260 ml
	Over run Space	9 meters
	Crushing station	200 ml
	Loading station	230 ml
	Pit bottom buffer	At 240 ml
	Guides	Rail guide. 60 lb/yard rail.
	Buntions	ISMB 300x140
	Bunton spacing	5 meters
	Head frame	
	Make	Bharat Gold Mines Limited
	Height of the head frame	23 meters
	Reference point at catch dog	16.92 meters
	Reference point at catch plate	20.4 meters
	Reference point of launder/ dumping level	11.66 ml
	Over run space	16.92 meters
	Winder	400 Kw Double drum winder
	Make	MAMC, Durgapur.
	Type of winder	One drum keyed and other drum clutched
	Type of Drum	Double drum Cylindrical
	Drum diameter	2600 mm
	Drum width	1020 mm
	Drum flange	150 mm
	Drum shaft diameter	200 mm
	Brake	
	Main Service brake	Post Calliper brake on Drums
	Type	Hydraulic Power operated automatic
	Diameter and width of Brake race	2600 mm/ 190 mm
	No. of brake on each drum	2 nos. on each drum
	Secondary Thruster brake	Electro hydraulic on Gearbox Input shaft
	Type	Power operated automatic
	Gear box - type	Helical Gearbox
	Gear ratio	20:1

	Motor
Type	DC Shunt Motor 440 volt 50 Hz
Motor kw & RPM	400 kw, 720 rpm
Over load parameters	965 rpm
	Drive details
Drive parameters	Siemens make Dual Convertor drive
PLC parameters	2000 A, +/- 600 Volt DC
	CPU: 315-2DP, With DI & DO
	Loading station
Capacity of the Measuring Bin	2.6 ton
Hydraulic pusher motor & pump capacity	
	Sheave Pulley
Diameter of the sheave wheel	2600 mm
Sheave center	1651 mm
	Winding Rope
Breaking load	26 mm FLC Full locked coil
Rope speed	575 KN
Capacity of the suspension	3.5 meter/second max.
Suspended load	10 ton
Cycle time	3.250 ton
	150 seconds
	Skip
Capacity of the skip	2.6 Ton
Size of the Skip	1349 mm W x 1800 mm D x 6130 mm H
Self weight of Skip	3 ton
	Cage
Capacity of the cage	Single deck cage
Size of the cage	12 persons
Self weight of cage	2120 mm L x 1150 mm W x 2080 mm D
	2.047 ton

Part III:

Bidding Terms

and

Pre-Qualification Criteria

1. **CONDITIONS UNDER WHICH THIS EOI IS ISSUED**

- This Eoi is not an offer and is issued with no commitment. UCIL reserves the right to withdraw the Eoi and change or vary any part thereof at any stage. UCIL also reserves the right to disqualify any bidder, should it be so necessary at any stage.
- UCIL reserves the right to withdraw this Eoi if UCIL determines that such action is in the best interest of the Government of India.
- Short-listed bidders would be issued formal tender enquiry/Request For Proposal inviting their technical and commercial bids at a later date.
- Timing and sequence of events resulting from Eoi shall ultimately be determined by UCIL.
- No oral conversations or agreements with any official, agent, or employee of UCIL shall affect or modify any terms of this Eoi and any alleged oral agreement or arrangement made by a bidder with any department, agency, official or employee of UCIL shall be superseded by the definitive agreement that results from this Eoi process. Oral communications by UCIL to bidders shall not be considered binding on UCIL, nor shall any written materials provided by any person other than UCIL.
- Neither the bidder nor any of the bidder's representatives shall have any claims whatsoever against UCIL or any of their respective officials, agents, or employees arising out of, or relating to this Eoi or these procedures (other than those arising under a definitive service agreement with the bidder in accordance with the terms thereof).
- Applicants who are found to canvass, influence or attempt to influence in any manner the qualification or selection process, including without limitation, by offering bribes or other illegal gratification, shall be disqualified from the process at any stage.
- Each applicant shall submit only one Pre-qualification requirements proposal.

2. **RIGHTS TO THE CONTENT OF THE PROPOSAL**

For all the bids received before the last date and time of bid submission, the proposals and accompanying documentation of the Pre-Qualification proposal will become the property of UCIL and will not be returned after opening of the pre-qualification proposals. UCIL is not restricted in its rights to use or disclose any or all of the information contained in the proposal and can do so without compensation to the bidders. UCIL shall not be bound by any language in the proposal indicating the confidentiality of the proposal or any other restriction on its use or disclosure.

3. **ACKNOWLEDGEMENT OF UNDERSTANDING OF TERMS**

By submitting a proposal, each bidder shall be deemed to acknowledge that it has carefully read all sections of this Eoi, including all forms, schedules and annexure hereto, and has fully informed itself as to all existing conditions and limitations.

4. EVALUATION OF PRE QUALIFICATION PROPOSAL

The bidders' Pre-Qualification Proposal in the bid document will be evaluated as per the requirements specified in the EoI and adopting the pre-qualification criteria spelt out in this EoI. The Bidders are required to submit all required documentation in support of the pre-qualification criteria specified (e.g. detailed project citations and completion certificates, client contact information for verification, profiles of project resources and all others) as required for evaluation.

5. LANGUAGE OF PROPOSALS

The proposal and all correspondence and documents shall be written in English.

6. PRE-QUALIFICATION CRITERIA:

The bidders should have proven credentials of having executed these similar jobs in India or abroad and satisfy the PQC conditions given under.

- Experience in complete execution and completed at least one winding system for skip hoisting and loading station construction (Designed, manufactured/supplied and installed) for a vertical shaft of operating depth of more than 250 meter in the last 10 years.
- Experience in Design, Manufacturing /Upgradation of winder and at least completed two up-gradations of winders and successfully commissioned in the last 5 years.
- Annual Turnover of minimum Rupees One Crore in similar works in any one financial year during the last five financial years.

7. RESPONSE REQUIREMENTS

- The Response to the Pre-Qualification Requirements shall be prepared in accordance with the requirements specified in this EoI and for each of the above mentioned qualifying criteria as proof of having the minimum requirements.
- Proposals must be direct, concise, and complete. All information not directly relevant to this EoI should be omitted.
- The Pre-Qualification Proposal shall be sealed and super scribed "Response to Pre-Qualification Requirements – "UCIL v2 TMD Project" on the top right hand corner and addressed to UCIL at the address specified in this document.
- The pre-qualification proposal should be submitted with two printed copies of the entire proposal, one marked ORIGINAL and the second one as DUPLICATE and a soft copy on non-rewriteable compact discs (CDs) with all the contents of the pre-qualification proposal. The words "Response to Pre-Qualification Requirements –UCIL v2 TMD Project" shall be written in indelible ink on the CD. The Hard Copy shall be signed by the authorized signatory on all the pages before being put along with the CD in the envelope and sealed.

- In case of discrepancies between the information in the printed version and the contents of the CDs, the printed version of the pre-qualification proposal will prevail and will be considered as the proposal for the purpose of evaluation.
- The proposal should contain the copies of references and other documents as specified in the EoI.
- A board resolution authorizing the Bidder to sign/ execute the proposal as a binding document and also to execute all relevant agreements forming part of EoI shall be included in this envelope.