

EXPRESSION OF INTEREST (EOI)

EOI NO. BHEL/NR/SCT/EOI/1166

FOR

INVITING EXPRESSION OF INTEREST (EOI) FROM CIVIL
PARTIES TO ASSOCIATE WITH BHEL FOR EXECUTION
CIVIL WORKS OF EPC HYDROELECTRIC PROJECTS IN
J & K AND OTHER PARTS OF INDIA.

NOTICE INVITING EXPRESSION OF INTEREST

AND

TECHNICAL CONDITIONS OF EOI



BHARAT HEAVY ELECTRICALS LIMITED
(A Govt. of India Undertaking)
Power Sector-Northern Region, NOIDA

NOTICE INVITING EXPRESSION OF INTEREST

EOI NO. BHEL/NR/SCT/EOI/1166

Bharat Heavy Electricals Limited



NOTICE INVITING EXPRESSION OF INTEREST

Ref: BHEL/NR/SCT/EOI/1166

Date: 17/07/2019

EXPRESSION OF INTEREST (EOI)

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Note: Applicant may download the Documents from web sites (www.bhel.com → Tender Notification)

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To,

Dear Sir / Madam,

Invitation Expression of Interest (EOI) for execution of complete civil works of the Hydroelectric Project on turnkey basis mainly comprises of overall planning, design engineering, supply and construction of Diversion Arrangements with cofferdams, Barrage, Intake, Desilting Basin, HRT, Adits, Adit cum Water Supply Tunnel, Surge shaft and Pressure Shaft cum Penstock including Valve House, Power House with flood protection works, Transformer yard, Tail Race pool and outlet, Switchyard along with Permanent & temporary road infrastructures, Regulator for Irrigation Duct, etc.

This Expression of Interest (EOI) seeks response from qualified Applicants, who are willing to associate with BHEL for executing civil works of EPC Hydroelectric Projects in J&K and other parts of India.

Sealed offers are invited from reputed & experienced Applicants (meeting Pre-Qualification Criteria mentioned in ANNEXURE - 1) for the subject job by the undersigned on the behalf of BHARAT HEAVY ELECTRICALS LIMITED as per the specification. Following relevant points may please be noted and complied with.

Background of EOI

BHEL is currently executing design, manufacturing, supply, erection, testing and commissioning of E & M package in Hydroelectric Projects either through direct order from customer or consortium lead partner for EPC projects. Seeing the future hydro business, there is requirement for BHEL to take up in EPC Hydroelectric Projects with association of technically and financially sound party for civil works.

To meet the above, EOI (Expression of Interest) is invited to shortlist the eligible Civil partner for execution of civil works of EPC Hydroelectric Projects in J & K and future EPC Hydroelectric Projects in India.

NOTICE INVITING EXPRESSION OF INTEREST

1.0 Salient Features of Notice inviting EOI:

Sl. No	ISSUE	DESCRIPTION
i)	EOI Number	BHEL/NR/SCT/EOI/1166
ii)	Broad Scope of job	Expression of Interest from civil parties to associate with BHEL for execution of complete civil works mainly comprises of overall planning, design engineering, supply and construction of Diversion Arrangements with cofferdams, Barrage, Intake, Desilting Basin, HRT, Adits, Adit cum Water Supply Tunnel, Surge shaft and Pressure Shaft cum Penstock including Valve House, Power House with flood protection works, Transformer yard, Tail Race pool and outlet, Switchyard along with Permanent & temporary road infrastructures, Regulator for Irrigation Duct, etc. of EPC Hydroelectric Projects in J & K and other parts of India.
iii)	Issue of Documents	Start date : 17/07/2019 Applicant may download the Documents from BHEL website (www.bhel.com → Tender Notification) EOI documents can be downloaded from website till due date of submission
iv)	Due Date & Time of Offer Submission	Date : 01/08/2019, Time :15.00 Hrs Place : <u>BHEL – PSNR, Noida</u> Offers can be submitted through Post/ Courier / representative / in person at following address Manager/ Sub - Contracting Deptt., BHEL- PSNR, Plot No. 25, Sector – 16A, Noida – 201301 Ph. No. 0120 – 2416500/ 9999 316863 (BHEL will not be responsible for any delay or loss of document sent by post)
v)	Opening of EOI	Date: 01/08/2019, Time :15.30 Hrs Notes: (1) In case the due date of opening of EOI offers becomes a non-working day, the same shall be opened on next working day at the same time. (2) Applicant may depute representative to witness the opening of offers

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vi)	EOI Document Cost	NIL	Not Applicable
vii)	Last Date For Seeking Clarification	<p>At least 5 days before the due date of offer submission, along with soft version also, addressing to undersigned & to others as per contact address given below;</p> <p>1) Name: G.V. RAJA SEKHAR <i>Designation: Sr. MANAGER</i> <i>Deptt: SCT</i> <i>Address: BHEL-PSNR, PLOT NO. 25, SECTOR – 16A, NOIDA - 201301</i> <i>Phone: (Landline) 0120-2416232</i> <i>Email : gvr@bhel.in</i></p> <p>2) Name: CHITTARANJAN SWAIN <i>Designation: MANAGER</i> <i>Deptt: SCT</i> <i>Address: BHEL-PSNR, PLOT NO. 25, SECTOR – 16A, NOIDA - 201301</i> <i>Phone: (Landline) 0120 - 2416500</i> <i>Email : cs@bhel.in</i></p>	Applicable
viii)	Latest updates	<p>Latest updates on the important dates, Amendments, Correspondences, Corrigenda, Clarifications, Changes, Errata, Modifications, Revisions, etc to EOI Specifications will be hosted in BHEL webpage only (www.bhel.com → Tender Notification) and not in the newspapers. Applicants to keep themselves updated with all such information. This also form part of EOI hence the same shall be enclosed with their offer.</p>	

2.0 The offer shall be submitted as per the instructions of EOI document and as detailed in this Notice. Applicants to note specifically that all pages of EOI document, including these Notice pages of this particular EOI documents together with subsequent correspondences shall be submitted by them, **duly signed & stamped on each page, as part of offer.**

3.0 Procedure for Submission of EOI: Interested parties must submit their offer to the Officer inviting EOI, as detailed below:

Manager/ Sub - Contracting Deptt.,
BHEL- PSNR, Plot No. 25,
Sector – 16A, Noida – 201301
Ph. No. 0120 – 2416500/ 9999 316863

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- Envelope consisting of 'EOI offer' in sealed and superscribed envelopes.
- One set of each document shall be retained by the Applicant for their reference.

4.0 The contents for ENVELOPES and the superscription for sealed cover / Envelope are as given below. **(All pages to be signed and stamped)**

Sl no	Description
	<p><u>ENVELOPE – superscribed as :</u></p> <p>EOI No. NAME OF WORK: OFFER REF. NO.: DUE DATE OF SUBMISSION:</p> <p>CONTAINING THE FOLLOWING:-</p>
i.	Covering letter / Offer forwarding letter of the party.
ii.	<p>Duly filled-in 'No Deviation Certificate' as per prescribed format to be placed after document under sl no (i) above.</p> <p><u>Note:</u></p> <p>a. In case of any deviation, the same should be submitted separately indicating respective clauses of EOI against which deviation is taken by bidder. The list of such deviation shall be placed after document under sl no (i) above. It shall be specifically noted that deviation recorded elsewhere shall not be entertained.</p> <p>b. BHEL reserves the right to accept / reject the deviations without assigning any reasons, and BHEL decision is final and binding.</p>
iii.	<p>Supporting documents / annexure / schedules / drawing etc as required in line with Pre-Qualification Requirements.</p> <p>It shall be specifically noted that all documents as per above shall be indexed properly and credential certificates issued by clients shall distinctly bear the name of organization, contact phone no, FAX no, etc.</p>
iv.	All Amendments / Correspondences / Corrigenda / Clarifications / Changes / Errata etc. pertinent to this Notice Inviting EOI.
v.	Duly filled-in annexures, formats etc. as required under this EOI Specification / Notice
vi.	Notice Inviting EOI
vii.	EOI documents
viii.	Any other details preferred by Applicant with proper indexing.

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SPECIAL NOTE:

- i. All documents / annexures submitted with the offer shall be properly attached / entered / uploaded in the respective sections. BHEL shall not be responsible for any missing documents.
 - ii. Your offer & documents submitted along with offer shall be signed & stamped in each page by your authorized representative. No overwriting/ correction in EOI documents by Applicants shall be allowed. However, if correction is unavoidable, the same may be signed by authorized signatory.
- 5.0** BHEL reserves the right to accept or reject any or all Offers without assigning any reasons thereof. BHEL also reserves the right to cancel the EOI wholly or partly without assigning any reason thereof. Also BHEL shall not entertain any correspondence from Applicants in this matter.
- 6.0** For any clarification on the EOI document, the Applicant may seek the same in writing or through e-mail, as per specified format, within the scheduled date for seeking clarification, from the office of the undersigned. BHEL shall not be responsible for receipt of queries after due date of seeking clarification due to postal delay or any other delays. Any clarification / query received after last date for seeking clarification may not be normally entertained by BHEL and no time extension will be given.
- 7.0** In the event of any conflict between requirement of any clause of this specification / documents etc. or requirements of different codes / standards specified, the same to be brought to the knowledge of BHEL in writing for clarification before due date of seeking clarification (whichever is applicable), otherwise, interpretation by BHEL shall prevail. Any typing error / missing pages / other clerical errors in the EOI documents, noticed must be pointed out before pre-bid meeting / submission of offer, else BHEL's interpretation shall prevail.
- 8.0** BHEL reserves the right to verify all statements, information and documents submitted by the Applicant in response to the EOI. Any such verification or lack of such verification by BHEL shall not relieve the Applicant of this obligations or liabilities hereunder nor will it affect any rights of BHEL.
- 9.0** The EOI Process shall be governed by, and construed in accordance with, the laws of India and Courts at New Delhi shall have exclusive jurisdiction over all disputes arising under, pursuant to and/or in connection with the EOI process.
- 10.0** All cost incurred for participation in the EOI shall be borne by the Applicant(s).
- 11.0** The Applicant has to satisfy the **Pre-Qualifying Requirements** (PQR) stipulated for this EOI. BHEL reserves the right NOT to consider offers of parties under HOLD.
- 12.0** On submission of offer, further consideration will be subject to compliance to EOI & PQR and customer's acceptance, as applicable.

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- 13.0** The interested parties shall not enter into any undisclosed M.O.U. or any understanding amongst themselves with respect to the EOI.
- 14.0** The parties shall submit documents in support of possession of 'Pre- Qualifying Requirements' duly self-certified and stamped by the authorized signatory, indexed and properly linked in the format for PQR. In case BHEL requires any other documents / proofs, these shall be submitted immediately.
- 15.0** The interested party may have to produce original document for verification if so decided by BHEL.
- 16.0** It may be noted that guidelines / rules in respect of 'Suspension of Business dealings' available on BHEL web site "<http://www.bhel.com> → Supplier Registration", 'Vendor evaluation format', Quality, Safety & HSE guidelines', etc. may undergo change from time to time and the latest one shall be followed.
- 17.0** The party along with its associate / collaborators / sub-contractors / sub-vendors / consultants / service providers shall strictly adhere to BHEL Fraud Prevention Policy displayed on BHEL website <http://www.bhel.com> and shall immediately bring to the notice of BHEL Management about any fraud or suspected fraud as soon as it comes to their notice.
- 18.0** The offers of the Applicants who are on the banned/ hold list as also the offer of the Applicants, who engage the services of the banned/ hold firms, shall be rejected. The list of **banned/ hold firms** is available on BHEL web site www.bhel.com
- 19.0 Order of Precedence:**
- In the event of any ambiguity or conflict between the EOI Documents, the order of precedence shall be in the order below:**
- Amendments / Clarifications / Corrigenda / Errata etc. issued in respect of the EOI documents by BHEL
 - Notice Inviting EOI
 - Technical Conditions of EOI

For and on behalf of
BHARAT HEAVY ELECTRICALS LTD.
POWER SECTOR NORTHERN REGION

Enclosure:-

- Annexure-1: Pre Qualifying Criteria (PQR).
- Annexure-2: Check List.
- Annexure-3: Offer Forwarding Letter
- Annexure-4: Declaration by authorised signatory of Applicant
- Annexure-5: Declaration by authorised signatory of Applicant, regarding authenticity of submitted documents
- Annexure-6: No deviation certificate
- Annexure-7: Power of Attorney for submission of EOI
- Technical Conditions of EOI

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ANNEXURE - 1

PRE QUALIFYING CRITERIA (PQR)

JOB	Expression of Interest from civil parties to associate with BHEL for execution of complete civil works mainly comprises of overall planning, design engineering, supply and construction of Diversion Arrangements with cofferdams, Barrage, Intake, Desilting Basin, HRT, Adits, Adit cum Water Supply Tunnel, Surge shaft and Pressure Shaft cum Penstock including Valve House, Power House with flood protection works, Transformer yard, Tail Race pool and outlet, Switchyard along with Permanent & temporary road infrastructures, Regulator for Irrigation Duct, etc. of EPC Hydroelectric Projects in J & K and other parts of India.
EOI No.	BHEL/NR/SCT/EOI/1166

Sl. No.	PRE-QUALIFICATION CRITERIA	Applicable/ Not Applicable	Applicants claim in respect fulfilling the PQR Criteria (Page no of supporting document. Applicant must fill up this column as per applicability)
A	Technical Criteria		
A-1	<p>Experience of executing from start to completion in the last 15 years, the following components in ongoing/completed project(s):</p> <ul style="list-style-type: none"> i. A concrete dam or a gated barrage of 8m high having minimum flood discharging capacity of 2000 cumecs and having achieved cumulative progress of concreting of not less than 50000 cum over a continuous period of 12 months concurrently in civil works of a project ii. Completion of a surface/underground Power house of not less than 75 MW capacity <p style="text-align: center;">OR</p> <p>Two Hydroelectric Projects of capacity not less than 48 MW each</p>	Applicable	

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	OR		
	<p>Three Hydroelectric Projects of capacity not less than 38 MW each.</p> <p>iii. Completion of 6 km of total tunnelling by Drill Blast method or by using tunnel boring machines and concrete lined tunnels of at least 4m dia.</p>		
B	Financial Criteria		
B-1	<p>Turnover Applicant (Civil Party) must have achieved average annual financial turnover (audited) of Rs. 200 Crore or more during last five financial years (1st April to 31st March) i.e. (2013-14, 2014-15, 2015-16, 2016-17 & 2017-18).</p>	Applicable	
B-2	<p>Profitability Applicant should have earned net profit (before taxes) for at least 3 (three) years out of preceding 5 (five) financial years. However, if losses are reported in 2 years, it should not be in the two consecutive years prior to the date of opening of Applications.</p>	Applicable	
B-3	<p>Net worth The Net Worth of Applicant should be positive and not less than the amount of its Equity capital including Share premium in three (3) out of preceding 5 (five) financial years.</p>	Applicable	
B-4	<p>Working Capital The Applicant's Working Capital should be minimum Rs. 120 crore as per latest audited financial statements.</p>	Applicable	
	<p><u>Explanatory Notes for the PQR (unless otherwise specified in the PQR):</u></p> <ol style="list-style-type: none"> Applicant to submit Audited Balance Sheet and Profit & Loss Account for the respective years as indicated against B-1 along with annexures. In case audited financial statements have not been submitted for all the five years as indicated against B-1 above, then the applicable audited statements 		

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	submitted by the Applicants against the requisite five years, will be averaged for five years i.e total divided by five.
	3. Certificate of Chartered accountant certifying Working Capital as per latest Audited Financial Statements.

Note to parties submitting offer:

APPLICANT SHALL SUBMIT ABOVE PRE-QUALIFICATION CRITERIA FORMAT, DULY FILLED-IN, SPECIFYING RESPECTIVE ANNEXURE NUMBER AGAINST EACH CRITERIA AND FURNISH RELEVANT DOCUMENT INCLUSIVE OF WORK ORDER AND WORK COMPLETION CERTIFICATE ETC. IN THE RESPECTIVE ANNEXURES IN THEIR OFFER.

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ANNEXURE - 2

CHECK LIST

NOTE: -Parties submitting offer are required to either fill in or submit separately the following details. No column should be left blank.

1	Name and Address of the Parties/ Applicant		
2	Details about type of the Firm/ Company		
3a	Details of Contact person for this offer: Name : Mr. / Ms. Designation: Telephone No: Mobile No: Fax No: E-mail ID:		
3b	Details of alternate Contact person for this offer: Name: Mr. / Ms. Designation: Telephone No: Mobile No: Fax No: E-mail ID:		
4	Validity of offer	To be valid for Six Months from due date	
		Applicability (By BHEL)	Enclosed by Applicant
5	Whether all pages of the EOI documents including annexures, appendices etc. are read and understood.	Applicable	Yes / No
6	Whether the format for compliance with PRE QUALIFICATION CRITERIA (ANNEXURE-1) is understood and filled with proper supporting documents referenced in the specified format	Applicable	Yes / No
7	Submission of Copy of Balance sheet and Audited profit and Loss Account for the last five years	Applicable	Yes / No
8	Submission of Copy of PAN Card	Applicable	Yes / No
9	Copy of GST registration	Applicable	Yes / No

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10	Whether all pages of the offer documents are signed by the person authorized to sign this offer	Applicable	Yes / No
11	Offer forwarding letter / EOI submission letter (ANNEXURE-3)	Applicable	Yes / No
12	Submission of Declaration by Authorized Signatory (ANNEXURE-4)	Applicable	Yes / No
13	Declaration by Authorised Signatory regarding Authenticity of submitted documents (ANNEXURE-5)	Applicable	Yes / No
14	Submission of No Deviation Certificate (ANNEXURE-6)	Applicable	Yes / No
15	Submission of Power of Attorney for Submission of offer (ANNEXURE-7)	Applicable	Yes / No
16	Copy of Organization Chart of the Applicant's organization, including the names, addresses and contact information of the Directors/Partners shall be furnished along with the offer.	Applicable	Yes / No
17	Copy of Registration / Incorporation certificate, Partnership Deed (Certified by Notary Public) as applicable for firm	Applicable	Yes / No
18	Details of similar ongoing/completed projects in last 15 years as per ANNEXURE-A of Technical Conditions of EOI.	Applicable	Yes / No

NOTE:

1. STRIKE OFF 'YES' OR 'NO', AS APPLICABLE.
2. OFFERS NOT ACCOMPANIED BY THE ABOVE PRESCRIBED APPLICABLE DOCUMENTS, ARE LIABLE TO BE SUMMARILY REJECTED.
3. For above, the formats are available in "ANNEXURES-1 to ANNEXURE-7 of this Notice.

DATE:

AUTHORISED SIGNATORY
(With Name, Designation and Company seal)

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ANNEXURE - 3

OFFER FORWARDING LETTER / EOI SUBMISSION LETTER

(To be typed and submitted in the Letter Head of the Company/Firm of Applicant)

Offer Reference No:.....

Date:.....

To,

(Write Name & Address of Officer of BHEL inviting the EOI)

Dear Sir,

Sub: Submission of Offer against EOI No.

I/We hereby offer for EOI Specification issued by Bharat Heavy Electricals Limited, Power Sector-Northern Region, in accordance with the terms and conditions thereof.

I/We have carefully perused the following listed documents connected with the above EOI and agree to abide by the same.

- 1 Amendments / Clarifications / Corrigenda / Errata etc. issued in respect of the EOI documents by BHEL
- 2 Notice Inviting EOI
- 3 Technical Conditions of EOI
- 4 Forms and Procedures

Authorised Representative of Applicant

Signature :

Name :

Address :

Place:

Date:

NOTICE INVITING EXPRESSION OF INTEREST

ANNEXURE-4

DECLARATION BY AUTHORISED SIGNATORY OF APPLICANT

(To be typed and submitted in the Letter Head of the Company / Firm of Applicant)

To,

(Write Name & Address of Officer of BHEL inviting the EOI)

Dear Sir,

Sub : **Declaration by Authorised Signatory**

Ref : 1) EOI No:,
2) All other pertinent issues till date

I/We, hereby certify that all the information and data furnished by me with regard to the above EOI Specification are true and complete to the best of my knowledge. I have gone through the specifications, conditions, stipulations and all other pertinent issues till date, and agree to comply with the requirements and Intent of the specification.

I further certify that I am authorised to represent on behalf of my Company/Firm for the above mentioned EOI and a valid Power of Attorney to this effect is also enclosed.

Yours faithfully,

(Signature, Date & Seal of Authorized
Signatory of the Applicant)

Date:

Enclosed : Power of Attorney (in line with Annexure - 7)

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ANNEXURE-5

DECLARATION BY AUTHORISED SIGNATORY OF APPLICANT

(To be typed and submitted in the Letter Head of the Company/Firm of Applicant)

To,

(Write Name & Address of Officer of BHEL inviting the EOI)

Dear Sir,

Sub : Declaration by Authorised Signatory regarding Authenticity of submitted documents.

Ref : 1) EOI No:,

2) All other pertinent issues till date

I/We, hereby certify that all the documents submitted by us in support of possession of "Pre-Qualifying Requirements" are true copies of the original and are fully compliant required for qualifying / applying in the EOI and shall produce the original of same as and when required by Bharat Heavy Electricals Limited.

I / We hereby further confirm that no tampering is done with documents submitted in support of our qualification as Applicant. I / We understand that at any stage (during EOI process) if it is found that fake / false / forged bid qualifying / supporting documents / certificates were submitted, it would lead to summarily rejection of our EOI. BHEL shall be at liberty to initiate other appropriate actions as per the terms of the EOI and other extant policies of Bharat Heavy Electricals Limited.

Yours faithfully,

(Signature, Date & Seal of Authorized
Signatory of the Applicant)

Date:

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ANNEXURE-6

NO DEVIATION CERTIFICATE

(To be typed and submitted in the Letter Head of the Company / Firm of Applicant)

To,

(Write Name & Address of Officer of BHEL inviting the EOI)

Dear Sir,

Sub : **No Deviation Certificate**

Ref : 1) EOI Specification No:
2) All other pertinent issues till date

We hereby confirm that we have not changed/ modified/ materially altered any of the EOI documents as downloaded from the website/ issued by BHEL and in case of such observance at any stage, it shall be treated as null and void.

We also hereby confirm that we have neither set any Terms and Conditions and nor have we taken any deviation from the EOI conditions together with other references applicable for the above referred EOI Specification.

We further confirm our unqualified acceptance to all Terms and Conditions, unqualified compliance to EOI Conditions, Integrity Pact (if applicable) and acceptance to Reverse Auctioning process.

We confirm to have submitted offer in accordance with EOI instructions and as per aforesaid references.

Thanking you,

Yours faithfully,

(Signature, date & seal of authorized representative of the Applicant)

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ANNEXURE-7

POWER OF ATTORNEY for SUBMISSION OF EOI (To be typed on non-judicial stamp paper of minimum Rs. 100/- and Notarized)

KNOW ALL MEN BY THESE PRESENTS, that I/We do hereby make, nominate, constitute and appoint Mr , whose signature given below herewith to be true and lawful Attorney of M/s..... hereinafter called 'Company', for submitting offer for EOI and inter alia, sign, execute all papers and to do necessary lawful acts on behalf of Company with M/s Bharat Heavy Electricals Ltd, Power Sector _____ Region, _____, in connection with

.....
.....
..... vide EOI No : _____, dated _____ . And the Company do hereby agree to ratify and confirm all acts, deeds, things or proceedings as may be lawfully done by the said attorney and by or on behalf of the company and in the name of the company, by virtue of the powers conferred herein and the same shall be binding on the company and shall have full force and effect. IN WITNESS WHEREOF the common seal of the company has been hereunto affixed in the manner hereinafter appearing on the document.

Dated at _____, this _____ day of _____

Director/CMD/Partner/Proprietor

Signature of Mr.....(Attorney)

Attested by: Director/CMD/Partner/Proprietor

Witness

Notary Public



TECHNICAL CONDITIONS OF EOI (TCE)

BHARAT HEAVY ELECTRICALS LIMITED



1. **About Bharat Heavy Electricals Limited (BHEL):**

Established in 1964, Bharat Heavy Electricals Limited (BHEL) is the largest engineering and manufacturing enterprise in India in the energy and infrastructure sector with the capability to manufacture the entire range of power plant equipment. BHEL caters to core sectors like Power Generation, Transmission, Industry, Transportation, Renewable Energy, Oil & Gas, Water, Defence & Aerospace, and e-Mobility & Energy Storage Solutions, and has references in 83 countries across the globe. BHEL's mammoth size of operations is evident from its widespread network of 17 Manufacturing Units, 2 Repair Units, 4 Regional Offices, 8 Service Centres, 1 Subsidiary, 3 Overseas Offices, 5 Joint Ventures, 15 Regional Marketing Centres and more than 150 project sites across India and abroad. Through its strategic partnerships with global technology leaders, BHEL has been acquiring technologies for the past five decades, which are adopted and indigenised at its in-house Corporate R&D Division and Research and Product Development (RPD) centres at manufacturing units that work together to evolve optimal solutions to suit customer specific needs. While all the manufacturing units and other entities of the company have been accredited to Quality Management Systems (ISO 9001), major manufacturing units have also been accredited to Environmental Management Systems (ISO 14001) and Occupational Health & Safety Management Systems (OHSAS 18001).

In the hydro power sector, BHEL has augmented its capabilities to manufacture hydro sets of up to 400 MW unit size. Developing efficient runner profiles and reducing hydro turbine weight have been instrumental in BHEL's recent successes in the field. BHEL has the capability to deliver complete hydro power plants including design, engineering, supply/ logistics and erection & commissioning. Hydro turbines in the range of 5 MW to 400 MW unit sizes of various impeller types namely Francis, Kaplan and Pelton along with matching generators are designed, engineered, manufactured and tested at BHEL's own manufacturing plants. Significantly, more than 500 hydroelectric generating sets of various ratings have been ordered on BHEL in India & abroad with a cumulative capacity of more than 29000 MW. Of these, equipment for about 5700 MW generating capacity are for projects overseas. BHEL's hydro plants are successfully and efficiently performing in India and across the world, including at Afghanistan, Azerbaijan, Bhutan, Malaysia, Taiwan, Tajikistan, Rwanda, Thailand, New Zealand, Nepal and Vietnam.

2. **Background:**

BHEL is currently executing design, manufacturing, supply, erection, testing and commissioning of E&M package in Hydroelectric Projects either through direct order from customer or consortium lead partner for EPC projects. Seeing the

future hydro business, there is requirement for BHEL to take up in EPC Hydroelectric Projects with association of technically and financially sound party for civil works.

To meet the above, EOI (Expression Of Interest) is invited for short listing the eligible Civil partner for execution of civil works of EPC Hydro Project in J&K and future EPC Hydroelectric Projects in India.

3. Broad Scope of Civil Works:

Completion of all civil works of the project on turnkey basis mainly comprises of overall planning, design engineering, supply and construction of Diversion Arrangements with cofferdams, Barrage, Intake, Desilting Basin, HRT, Adits, Adit cum Water Supply Tunnel, Surge shaft and Pressure Shaft cum Penstock including Valve House, Power House with flood protection works, Transformer yard, Tail Race pool and outlet, Switchyard along with Permanent & temporary road infrastructures, Regulator for Irrigation Duct, etc.

Works shall be executed by the civil Contractor as per the conditions of contract and technical specification and as directed by the Customer. Works will include:

Procurement and transportation of all the required materials, machinery & equipment required for the civil works.

Providing trained manpower, labour, tools and plant, equipment and establish fully equipped laboratory for sampling & testing of construction material for supervision & quality control at different work sites and required temporary works etc. all complete.

Providing temporary and permanent fences, barricades, gates & guards, lights and protective work necessary for protection of workmen, supervisors, engineers, general public and any other persons permitted access to the site. Contractor shall provide proper signage as required.

Providing all equipment, instruments, labour and materials required by the Employer for checking alignment, levels, slopes and evenness of surfaces and quality etc.

Preparation of a quality assurance programme, getting it approved from the Employer and maintaining it.

Carrying out inspection and maintenance under defect liabilities for one year from the date of handing over to Employer.

Safeguarding the environment.

Providing necessary security arrangements at different work site.

Carryout general works such as setting out, site clearance, dewatering (wherever required) before and progressively till completion of works.

3.1. Project Features for Civil Works:

The project as conceived in this report envisages construction of the following major components and allied project specific civil works:

Barrage on Permeable Foundations:

A barrage is across the River/Nallah. The barrage will have suitable nos. of spillway bays with vertical gates as per project specifications operated by Hydraulic Hoists providing a total waterway between abutments.

River Diversion:

River diversion works are to be undertaken through a diversion channel, located on the bank. The channel shall be capable of carrying a diversion flood with upstream and downstream cofferdams.

Desilting Chambers:

A surface desilting basin will be for abutting the barrage. This desilting basin will be parallel to the barrage. The power intake is located D/s of collection chamber of basin.

Power Intakes:

The intake structure is at the end of the collection chamber provided at the termination of the Desilting basin. The Power Intake is designed for a designed discharge. The intake to be provided with a service gate and a stop log gate. These gates shall be operated by rope drum hoist mounted on trestle frame structure.

Head Race Tunnel:

One number horse shoe shaped tunnel, concrete lined with rock support system consisting of shotcrete (of varying thickness), rock bolts and steel ribs as dictated by tunneling media to suit rock classification. The adits in the form D shaped tunnel having suitable length at suitable RD are to be constructed.

Surge Shaft:

One number Underground circular Surge Shaft at the end of HRT is proposed. The surge shaft is provided with RCC lining of varying thickness and has a restricted orifice of suitable diameter.

Pressure Shaft:

One pressure shaft of suitable diameter circular shaped is envisaged from the Surge shaft leading to the Valve House encasing the circular steel lined penstock. The shaft is concrete lined with a minimum thickness as per specifications around the steel lined penstock and continues for a suitable length.

Penstock:

Three numbers of penstocks is proposed to connect from valve house to power house.

Valve House:

Surface Valve house is proposed to house 3 nos. Butterfly Valves with BFV Controls and assembly area.

Power House Complex:

Surface Powerhouse is proposed, to house 3 Francis units with MIV control on the upstream and also include a service bay.

Tail Race Pool & Channel:

A tail pool is proposed, downstream of draft tube deck and having a wide width near the powerhouse and tapering down further in another length at the tail end followed by cut & cover box type tailrace channel. This short box type tailrace changes into a trapezoidal channel for discharging the powerhouse releases into the River/Nallah downstream.

Any other civil components:

Any other project specific civil components shall be constructed by Civil Party.

4. Scope of EOI:

BHEL seeks Expressions of Interest from Applicants who, have requisite experience as per Pre-Qualification Requirements (PQR) as mentioned in ANNEXURE-1 to Notice Inviting EOI, and interested to associate with BHEL for complete civil works of EPC Hydroelectric Projects:

The purpose of the EOI is to:

- Shortlist interested parties to associate with BHEL for Civil works of EPC Hydroelectric Projects, and
- At the end of this process, BHEL intends to invite price offer from short-listed parties on limited tender basis against detailed tender specification for further deliberations.

However, it may be noted that BHEL is under no obligation to go ahead with the proposed assignment and may terminate this exercise at any time, without assigning any reasons. Applicants are also hereby informed that they participate in this EOI at their own risk and cost and no compensation, whatsoever, shall be admissible by BHEL.

Depending on need, post submission of the EOI by the Applicant, further engagement with the Applicant may include providing clarifications to BHEL by mail or phone, presentations and across the table discussions at BHEL's office in Noida, if required.

ANNEXURE-A