

Expression of Interest (EOI)
seeking
interested Organizations/ Companies
to
tie-up with BHEL
as
Licensor and Engineering Sub-Contractor (LESC) or Licensor (L)
for
upcoming IOCL Vadodara SRU package on Licensing, Engineering,
Procurement, Construction and Commissioning (LEPCC) basis

Ref No: BHEL-IS-CPPP-EOI-02/2021-22

Issued by:

Bharat Heavy Electricals Limited,
CPPP Group, 1st Floor, BHEL,
Industry Sector, Lodhi Road
New Delhi-110 003, INDIA

having registered office at
BHEL House, Siri Fort, New Delhi-110 049, INDIA

(hereinafter referred to as 'BHEL')

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1.0 DISCLAIMER

All information contained in this EOI provided / clarified are in good interest and faith. The information contained in this Expression of Interest document or subsequently provided to Applicant(s), whether verbally or in documentary or any other form, by or on behalf of BHEL, is provided on the terms and conditions set out in this EOI and such other terms and conditions subject to which such information is provided.

The purpose of this EOI is to provide interested parties with information that may be useful to them in the formulation of their application for qualification and subsequent selection pursuant to this EOI. This EOI is not an offer by BHEL to the prospective Applicant(s) or any other person. This EOI is neither intended nor shall it be construed as creating or requiring any ongoing or continuing relationship or commitment with any party or person. This is not an offer or invitation to enter into an agreement of any kind with any party.

Though adequate care has been taken in the preparation of this EOI document, the interested firms shall satisfy itself that the document is complete in all respects. The information is not intended to be exhaustive. Interested Agencies are required to make their own enquiries and assumptions wherever required. Intimation of discrepancy, if any, should be given to the specified office immediately. If no intimation is received by this office by the date mentioned in the document, it shall be deemed that the EOI document is complete in all respects and firms submitting their interest are satisfied with the EOI Document in all respects.

The issue of this EOI does not imply that BHEL is bound to select and shortlist Applicant(s) for next stage or to enter into any agreement(s) with any Applicant(s). No queries shall be entertained after the deadline. BHEL reserves all right to reject any applications submitted in response to this EOI document at any stage without assigning any reasons thereof. BHEL also reserves the right to withhold or withdraw the process at any stage. Neither BHEL nor its employees and associates will have any liability any loss, expense or damage which may arise from or be incurred or suffered in connection with anything contained in this EOI document or any matter deemed to form part of this EOI document, the information and any other information supplied by or on behalf of BHEL. BHEL accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance/use of any statements/information contained in this EOI by the Applicant. BHEL is not making any representation or warranty, express or implied, as to the accuracy or completeness of any information/statements made in this EOI.

The Applicant shall bear all its costs associated with or relating to the preparation and submission of its Application including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by BHEL or any other costs incurred in connection with or relating to its Application. All such costs and expenses will remain with the Applicant and BHEL shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by an Applicant in preparation or submission of the Application, regardless of the conduct or outcome of the EOI.

Canvassing in any form by the respondent or by any other agency on their behalf may lead to disqualification of their EOI.

2.0 Schedule of EOI Process and Contact details

2.1 Schedule of EOI Process

The schedule of activities of the EOI Process shall be as follows -

Sl. No.	Description	Date
a.	Issue of invitation to EOI document	25.05.2021
b.	Last date of receipt of Queries, if any	01.06.2021
c.	Last date of Submission of EOI response	03.06.2021

2.2 Contact details:

Interested parties may send their queries on Expressions of Interest (EOIs) to the following addresses:

To :: Mr Kunal Aggarwal
Manager/ CPPP
BHEL Industry Sector
Phone No. 011-41793472
E-mail: kunala@bhel.in

Mr Ashish Gupta
Dy. Manager/ CPPP
BHEL Industry Sector
Phone No.011-41793187
E-mail: ashishgupta@bhel.in

CC :: Mr J. Gulati
Additional General Manager/ CPPP
BHEL Industry Sector
Phone No. 011-41793150
E-mail: jgulati@bhel.in

2.3 Other relevant information:

Sl. No.	Description	Remarks
a.	Availability of EOI document	https://www.bhel.com
b.	Submission of Response to EOI, and queries(if any)	Licensor and Engineering Sub-Contractor (LESC) or Licensor(L) (hereinafter referred to as "PARTNER"/ "BIDDER") to submit their responses through e-mail at following address: kunala@bhel.in , ashishgupta@bhel.in

3.0 Objective of EOI

India being one of the fastest growing economies in the world, offering a wide range of opportunities. Government of India envisions India as a key engine of global growth, and is putting in place various supporting initiatives to make India a US\$ 5 trillion economy. Downstream Oil & Gas Sector opportunities presents a lucrative business proposition for India in Refinery & Petrochemical Sectors. BHEL, which is one of the largest engineering and manufacturing enterprises in the country, would like to enter into this EPC business with their vast experience in engineering, manufacturing, procurement and construction of power plants in India and in abroad.

IOCL is likely to float a tender for IOCL, Vadodara for 1x400TPD Sulfur Recovery Unit for (SRU) package, 1x330 TPH Sour Water Stripper (SWS), 1x350 TPH Amine Recovery Unit (ARU) & Tail Gas Treatment Unit (TGTU) on LEPCC basis. BHEL is aggressively pursuing expansion in the EPCC/LSTK Business for Oil & Gas segment and BHEL would like to tie-up with leading Licensor and Engineering Sub-Contractors for addressing this upcoming opportunity.

BHEL through its different manufacturing units have been already supplying different equipment and packages in Oil and Gas industries. BHEL's Visakhapatnam manufacturing unit is already an established supplier of refinery products like Pressure vessels, columns, Fired heaters etc. to various refinery customers like ONGC, IOCL, HPCL, HRRL & BPCL either directly or through EPCC contractors like M/s Petrofac, L&T etc. BHEL is also enlisted with M/s EIL for products like columns & Pressure vessels heat exchangers, fin fan coolers and fired heaters. BHEL's other manufacturing units at Hyderabad and Bhopal are also supplying process gas compressors, heat exchangers, air coolers. As on date for some of the packages like compressors and fired heaters, BHEL is undertaking complete design, procurement, manufacturing, erection and commissioning of various equipment and systems.

BHEL is one of the foremost EPC player in Power Sector in India and have executed more than 65+ EPC Power projects in India and Abroad with cumulative value of more than value \$15 Billion (INR 1 Lakh Crores) with customers including State Govt. Utilities, Central PSUs, Private Sector. BHEL is executed Captive Power Plants on EPCC basis in almost all the Refineries in India (both Private as well as Public Sector Refineries). With BHEL's vast refinery experience and competitive product supply capabilities and its huge resources in Supply Value Chain, Construction management etc.

BHEL has also secured a breakthrough order of one SRU package Refinery sector in India. Going forward we intend to participate in forthcoming enquiries for Sulphur Recovery Packages in downstream Oil & Gas sector. For addressing an upcoming SRU package on LEPCC basic for IOCL Refinery on LEPCC basis, we are looking forward for a suitable tie-up with Licensor and Engineering Sub-Contractor or Licensor.

The objective of this EOI is to invite competent "Licensor and Engineering Sub-Contractor (LESC)" OR "Licensor (L)" and tie-up with BHEL as sub-contractor for the upcoming IOCL Vadodara SRU package on LEPCC basis. Vide this EOI we are seeking willingness of interested parties who intend to work with BHEL as under:

- a) Single party meeting both Licensing and Engineering Sub Contractor requirement for SRU package:** Sub Contractor for Licensor engagement for providing License, FEED Support, Preparation of BEDP including residual Process Design Engineering, pre-bid and detailed engineering for the upcoming IOCL Vadodara SRU package on LEPCC basis.
- b) Party opting only for Licensing requirement of SRU package-** Sub-contractor for providing License and FEED support.

4.0 About Bharat Heavy Electricals Limited

Bharat Heavy Electricals Limited (BHEL) (www.bhel.com) is a Government of India Undertaking and a Maharatna Company, Established in 1964. BHEL is an integrated power plant equipment manufacturer and one of the largest Engineering and Manufacturing Company of its kind in India. The company is engaged in the Design, Engineering, Manufacturing, Construction, Testing, Commissioning and servicing of a wide range of products and services for core sectors of the economy, viz. Power, Transmission, Industry, Transportation (Railways), Renewable Energy, Oil & Gas, Water and Defence with over 180 products offerings to meet the needs of these sectors. BHEL has been the bedrock of India's Heavy Electrical Equipment industry.

BHEL has a widespread network of 16 Manufacturing Divisions, 2 Repair Units, 4 Regional Offices, 8 Service Centres, 6 Overseas Offices, 3 Joint Ventures, 15 Regional Marketing Centres and current project execution at more than 150 project sites across India and abroad corroborates the humungous scale and size of its operations. BHEL has commissioned 65+ EPC jobs (worth \$14 Billion) for Government/Public Sector Enterprises and private sector companies.

Adding to its achievements, BHEL has joined the elite club of select global giants having an installed base of over 170 GW of power generating equipment globally. BHEL also has a widespread overseas footprint in 78 countries with cumulative overseas installed capacity of BHEL manufactured power plants nearing 10,000 MW.

BHEL has technology tie-ups with leading companies in the world including General Electric Company, Alstom SA, Siemens AG and Mitsubishi Heavy Industries Ltd., supported by technology developments in its own R&D centres. The quality & reliability of BHEL products at par with other Global players and adheres to international standards.

5.0 About BHEL, Industry Sector

BHEL, Industry Sector offers a broad range of industrial systems and products for the major sectors of the Indian economy. With focus on growth of non-coal based business of the company, Industry Sector comprising of market-focused groups, offers comprehensive solutions for Transportation, Transmission, Renewables, Energy Storage Systems and e-mobility, Water Management, Defence & Aerospace, Captive Power & Process Plant and Mechanical & Electrical Industrial Products.

Captive Power and Process Plant group caters to the requirement of Captive Power Plant in various Industries viz. Refineries, Petrochemicals, Mining, Process etc. as well as the opportunities in downstream EPC business in Oil & Gas segment.

6.0 Process of Selection of "BIDDER/ PARTNER" as Licensor and Engineering Sub-Contractor (LESC) or Licensor(L)

- 6.1 Response regarding willingness of prospective "BIDDER"/ "PARTNER" to support BHEL as Licensor and Engineering Sub-Contractor (LESC) or Licensor(L) is being solicited through this EOI. The Technical and Financial Criteria detailed in this EOI is based on qualification requirement of similar tender issued earlier. The Technical and Financial Criteria detailed in this EOI is for indicative purpose only.

Response is solicited from BIDDER, who are broadly meeting the indicative Technical and Financial Pre-Qualification Criteria (PQC) as per **Sl. No 8.0** of this EOI. The PQC is tentative only and any tie-up with prospective BIDDER shall be subject to meeting the end Customer NIT requirement w.r.t PQC.

- 6.2 BIDDER shall furnish all the filled in formats/ information/ documents/ credentials etc. as per Sl. No. 8.0 & 9.0 of this EOI. Also, the prospective Bidder shall submit the complete EOI document duly signed and stamped on all pages of EOI.
- 6.3 All the documents shall be submitted in English Language only. If, the reference documents are in other language, the English translated copy shall be furnished along with the copy of original document. Regarding documentation following is solicited with this EOI to assess Bidder's capability.
- a. BIDDER to submit summarized information of the projects that they find would be able to qualify the technical requirement w.r.t Pre-Qualification Criteria(PQC).
 - b. BIDDER to submit summarized information w.r.t Financial capability as per enclosed format attached with the EOI.
- However, prospective BIDDER to note that all documents/ certificates as required shall have to be submitted against Bid Qualification requirement w.r.t end Customer notice inviting tender (NIT).
- 6.4 BIDDER shall furnish an undertaking/declaration that the documents submitted against the EOI are true, authentic, genuine and exact copy of its original.
- 6.5 In case separate proposals are received from different Divisions of the same Organisation, BHEL reserves the right to consider proposal of any one of these Divisions for selection. BHEL decision on this shall be final.
- 6.6 BHEL may intimate the "BIDDER"/ "PARTNER" for further discussions, presentations, etc. on their proposals.
- 6.7 BIDDER may submit their queries within specified due date. BHEL's responses to queries / clarifications raised will be furnished as expeditiously as possible. Any modification of the EOI Documents which may become necessary as a result of the Bidder's queries shall be sent to all Applicants shall be issued as addendum to this EOI.
- 6.8 The BIDDER will be shortlisted as a prospective "Licensor and Engineering Sub-Contractor (LESC)" or "Licensor (L)" for SRU Package. A draft MOU and Consortium agreement shall be finalised in consultation of selected BIDDER thereafter.

7.0 Brief Scope of Supply and Services

Scope of Work for supply of license, basic design engineering package and other related services for Sulphur Recovery Unit (SRU) package (1x400 TPD) shall include supply of License, Supply of BDEP, identification and design of special equipment, review and approval of engineering documents, related services, supply of proprietary items/ catalysts, chemicals, if any, etc.

The roles, responsibilities and scope of work of "Licensor and Engineering Sub-Contractor (LESC)" or "Licensor (L)" shall include the following, for the proposal stage engineering:

- i. Detailed study of Owner's tender documents. Preparation of Pre-Bid Queries/ Questionnaire for seeking clarifications from Owner/PMC on tender documents.
- ii. Preparation of offer for Process, indicating the License details, Process efficiency etc.
- iii. Preparation of detailed technical Specifications for the Package, in case the Tender requires, which shall be used for further work during Pre-Tender – Offer preparation stage and Post Order Execution stage
- iv. Residual Process Design of the Process Package depending on the requirement.
- v. Proposal Engineering for the project including preparation of all the necessary documentation required for submission of Technical Offer.
 - Typically includes: Residual Process Design, Process PFDs/ Schemes/ P&IDs, Layouts, System Write-ups, Datasheets, Sizing of all Electrical/ Mechanical/ C&I Equipment & Systems, Bill of Materials for all Equipment & Systems, Schedule of Quantities (SOQ) of Civil/Structural/Architectural Works, Utility Consumptions, Electrical Load List, Bidding forms and any other documents that are required to be submitted as part of the Bid Documentation.
- vi. Preparation of comprehensive consolidated Technical Offer inclusive of Scope of Supply & Services/ Terminal Points/ Exclusions, Technical Deviations & Clarifications on tender specifications, Filled-up Technical Schedules etc. as required.
- vii. Finalising the optimised Performance Guarantees of the project considering bid evaluation criteria of tender specification.
- viii. Provide broad specifications/ technical data sheets of applicable equipment / systems etc. and suggest suitable/ probable sub-vendors/ agencies for obtaining the budgetary quotations during proposal stage.
- ix. Provide support in evaluating budgetary quotes from probable sub-vendors.
- x. Furnish the required MOU / Letter of Undertaking etc., as required by customer's Tender for enabling BHEL's offer submission as EPC Bidder
- xi. Support during proposal stage activities for technical closure and acceptance of the bid including providing technical clarifications to Owner's queries, participation in pre-bid/ post bid-meetings as required.
- xii. Detailed requirements of such visits/ no. of days etc. shall be indicated in project specific Purchase Enquiry.
- xiii. Re-Engineering in case of change in specifications or amendments issued by customer shall be carried out by "Licensor and Engineering Sub-Contractor (LESC)" or "Licensor (L)" on mutually agreed terms at any stage during execution of pre-bid or Post order activities.

Scope of Work during (Post Order) Detailed Engineering Stage (Phase-II)

The roles, responsibilities and scope of work of "Licensor and Engineering Sub-Contractor (LESC)" shall include the following, as a minimum, for the Detailed Engineering Stage.

- a) Comprehensive study of Owner's tender documents and Preparation of Detailed Scope of Supply, including scheduling/ planning of the design activities, identifying and defining the detailed engineering deliverables during contract stage execution.
- b) Carry out the detailed residual process design including process design calculations, sizing of various equipment and systems, finalising process flow diagrams, detailed P&IDs/Process Schematics, control and operation write-ups, process and electrical utility requirements, chemicals consumption requirements, O&M consumable requirements etc.

- c) Preparation of Mechanical and Electrical layouts (Plant/ Buildings/ Equipment/ Area/ Piping etc.)
- d) Detailed Electrical and C&I engineering.
- e) Detailed Civil, Architectural and Structural engineering.
- f) Procurement engineering including identifying all the bought outs, identifying probable suppliers in the market, preparation of suitable technical specifications for RFQs, evaluation of technical offers from the vendors in all sub-systems (Electrical/ Mechanical/ C&I).
- g) Provide Quality support in getting the Quality documentation approved by Owner/PMC, including Participation in technical/Quality discussions with them as required.
- h) Provide engineering support in getting the engineering documentation approved by Owner/ PMC, including participating in technical discussions with them as required.
- i) Assisting BHEL in review and approvals of engineering/technical, Quality related documentation of Sub-vendors/Suppliers, as applicable.
- j) Assistance in Preparation of Plant Performance Guarantee Test Procedure and in conducting the Plant Performance Guarantee Tests.
- k) Finalize the requirements of O&M consumables & chemicals along with the BOM and technical specifications.
- l) Preparation of Plant Operations and Maintenance Manuals, Plant operation procedures for effective and efficient operation of plant.
- m) Deputation of Engineering Experts to project site for resolving engineering and technical issues, as required during execution of the project.

The above is a typical minimum activity to be carried out by "Licensor and Engineering Sub-Contractor (LESC)" as part of Post Order Detailed Engineering. However, the exact scope of LESC shall be as per Project Specific Tender Requirements and shall be governed by Owner's Tender Specification. In case of only "Licensor" selection, the above scope shall be modified accordingly prior to Pre-bid tie-up in terms of end customer tender condition.

Identifying the vendors/suppliers, floating of enquiries, receipt of offers, Techno-commercial evaluation, placement of PO, expediting, change orders, closure of PO/order, etc. shall be in scope of BHEL.

Wherever the term CONTRACTOR is mentioned for / in the context of the Residual Process Engineering and Detailed Engineering related activities and responsibilities in the Owner's Bidding Document, same shall be the scope and responsibilities of Licensor cum Engineering Sub Contractor (LESC). Accordingly, the bidder shall interpret their scope as per the Owner's Bid Document while submitting their offer against Project Specific Tender for finalization of LESC.

8.0 Pre-Qualification Criteria (PQC) for BIDDER Selection

The Prospective Bidder shall meet project specific qualification criteria as per the Tender document as and when issued by the end Client. We have envisaged following indicative conditions based on the prevalent practice being followed by Clients in Oil & Gas business as on the date of submission of EOI based on which BHEL shall evaluate the prospective BIDDER. However, before formalization of the order these shall be reviewed in terms of the end Customer notice inviting tender specific requirement for qualification:

8.1 Technical Criteria:

Following pre-qualification criteria will be adopted for short-listing of "Licensor and Engineering Sub-Contractor (LESC)" or "Licensor (L)":

8.1.1 Minimum Qualification requirement of Licensor for SRU including TGTU

The below qualification criteria is indicative only. Licensor meeting the qualification criteria as per end customer NIT requirement shall only be considered.

Licensor engaged by Bidder shall be a qualified Licensor themselves for SRU including TGTU at the time of Bid submission. Name of Licensor shall have to be disclosed while submission of Bid and in in case of award of order the project has to be executed with same disclosed licensor and cannot be changed afterwards. The Licensor shall furnish a reference of Sulphur Recovery Unit including Tail Gas Treating Unit meeting the Minimum Qualification criteria as defined below:

- i. Minimum Capacity of Reference Unit: 180 TPD
- ii. Overall Sulphur Recovery: 99.9% wt% minimum
- iii. Feed Quality: Acid / Sour gases emanating from Amine Regeneration and or/ Sour water Stripper Units
- iv. The reference Unit should have been licensed within the last fifteen (15) years and should have completed operation of at least one (01) year operation. The fifteen (15) Years and one (01) year shall be reckoned from the ending of last day of July'2021.
- v. The reference Unit should have been for a client other than Licensor himself (i.e. unit should be non-Captive)
- vi. The reference unit shall be a grass root unit (i.e revamp or debottlenecking reference is not acceptable)
- vii. The reference Unit should be a commercial unit i.e. not a Demo / Pilot plant.
- viii. The Claus catalyst employed in the reference unit for Sulphur recovery unit should have completed minimum one year of operation reckoned as detailed at sl. No.(iv) above.
- ix. The catalyst employed in the reference unit for Tail Gas Treating Unit should have completed minimum one year of operation reckoned as detailed at sl. No.(iv) above.
- x. The Bidder can offer the same Claus & TGTU catalyst employed in the above reference unit
- xi. The Licensor must have designed a revamp/ grass root unit with oxygen enrichment technology for a SRU capacity increase by 25%.
- xii. Applicant shall not be under Holiday List/ Negative List/ Suspension List/ Banning List of Licensor or OWNER or its Administrative Ministry, MoP&NG.

8.1.2 Minimum Qualification criteria of Licensor for SWSU

Licensor engaged by Bidder should have designed and prepared a BEDP for sour water stripper unit processing sour water from hydro processing units in a refinery, meeting following requirement:

- i. The reference Unit should have been for a client other than Licensor himself (i.e. unit should be non-Captive)
- ii. The reference unit shall be a grass root unit (i.e. revamp or debottlenecking reference is not acceptable)

- iii. The reference Unit should have completed operation of at least one (01) year operation
- iv. The reference Unit should be a commercial unit i.e. not a Demo / Pilot plant

8.1.3 Minimum Qualification criteria of Licensor for ARU

Licensor engaged by Bidder should have designed and prepared a BEDP for Amine Regeneration Unit processing Rich Amine as solvent meeting the following requirement:

- i. The reference Unit should have been for a client other than Licensor himself (i.e. unit should be non-Captive)
- ii. The reference unit shall be a grass root unit (i.e revamp or debottlenecking reference is not acceptable)
- iii. The reference Unit should have completed operation of at least one (01) year operation
- iv. The reference Unit should be a commercial unit i.e. not a Demo / Pilot plant

8.1.4 Documents to be submitted by Bidder w.r.t Technical Criteria:

Compliance to the documentation part may be provided by Bidder during EOI stage for preliminary evaluation. Bidder to submit the undertaking in this regard. However, during tendering stage in NIT of end Customer/Consultant details as required in the NIT shall be submitted by Licensor/ Licensor cum Engineering Sub Contractor.

The tentative documentation applicable for Licensor/ Licensor cum Engineering Sub Contractor shall be as under:

- a) Copy of relevant pages of Work order(s)/ Contract agreements(s)/ contract documents(s) mentioning the value and the scope of Work for the reference unit(s) submitted for qualification.
- b) Completion Certificate by Owner/ Owner's Consultant indicating executed value & commissioning date for the reference unit(s) submitted for qualification.
- c) Proof of commissioning from Owner/ End User shall be submitted by the intending Bidder along with the Technical Bid. In case proof of commissioning is in the name of EPC contractor who has employed Bidder, the contract / supporting documents establishing the relationship between EPC contractor and Bidder for the subject project to be furnished.

Applicant shall singly meet the criteria at paras 8.1.1, 8.1.2, 8.1.3 and 8.1.4.

d) Additional document for SRU including TGTU:

- i. Details of reference unit I units including names, addresses, telephone numbers and email of contact person(s) for each reference unit.
- ii. Relevant extracts of License agreement or relevant work orders or contract agreement with the licensee /Licensees for the reference unit I units. The extracts should also include the following as minimum:

- a) Cover sheet depicting name of project.
 - b) Licensor-Licensee definition
 - c) Technology definition
 - d) Date of signing
 - e) Signature of Licensor-Licensee.
- iii. Relevant extracts of catalyst supply agreement(s) or purchase order(s) with the licensee I Unit owner for the reference unit(s) for each type of catalysts for SRU including TGTU.
 - iv. Relevant extract of BEDP supply agreement as proof of BEDP having been prepared by Licensor himself.
 - v. Relevant documents such as guarantee document in support of unit capacity, type of design feed, performance guarantees and recovery Sulphur product.
 - vi. Relevant extract of BEDP I Design basis document as a proof for having designed SRU on oxygen enrichment mode.
 - vii. For reference unit, any written communication from the licensee stating the following:
 - a) Date of commissioning
 - b) Design Sulphur production capacity
 - c) Operation of the unit while producing Sulphur recovery of 99.9 wt% for minimum one year post commissioning. (Due date being reckoned as per the criteria defined above).
 - viii. For reference catalysts, any written communication (including email) from the licensee stating the catalyst for Claus & TGTU that is in use for minimum one year and producing Sulphur as on last day of the month immediately previous to month in which tender is invited, while meeting Sulphur Recovery Efficiency as 99.9 wt.% min.
 - ix. Certificate/e-mail communication from the Licensee confirming the supply of Basic Engineering Design Package for a new SRU in last 7 years
 - x. The bidder shall ensure submission of complete authentic information/ documents along with the bid. Wherever specific compliance to the relevant documentation from the licensee in support of the criterion mentioned in qualification criteria.

e. Additional document for SWSU:

- i. Details of reference unit(s) including names, addresses, telephone numbers and email of contact person(s) for each reference unit.
- ii. Relevant extracts of contract agreement or relevant work orders with the client I owner for the reference unit I units.
- iii. Relevant extract of BEDP supply agreement as proof BEDP having been prepared by consultant himself.
- iv. For reference unit, any written communication (including email) from the Client/ Owner stating the following:
 - a) Date of commissioning
 - b) Design Sour Water capacity

- c) Operation of the unit for minimum one year post commissioning (due date being reckoned as per the criteria defined above).
- v. The bidder shall ensure submission of complete authentic information/ documents along with the bid. Wherever specific compliance to the relevant documentation from the licensee in support of the criterion mentioned in qualification criteria.

e) Additional document for ARU

- i. Details of reference unit(s) including names, addresses, telephone numbers and email of contact person(s) for each reference unit.
- ii. Relevant extracts of contract agreement or relevant work orders with the client/ owner for the reference unit(s).
- iii. Relevant extract of BDEP supply agreement as proof BDEP having been prepared by consultant himself.
- iv. For reference unit, any written communication (including email) from the Client/ Owner stating the following:
 - a) Date of commissioning
 - b) Design Rich Amine capacity
 - c) Operation of the unit for minimum one-year post commissioning (due date being reckoned as per the criteria defined above).
- v. The bidder shall ensure submission of complete authentic information/ documents along with the bid. Wherever specific compliance to the relevant documentation from the licensee in support of the criterion mentioned in qualification criteria.

8.2 Financial Criteria:

8.2.1 Annual Turnover Criteria(ATC):

Average Annual Turnover of the Bidder shall be minimum INR 30.00 Crore or 0.41 Million USD (indicative requirement) based on the bidder audited financial results at least one of the last three preceding financial years, i.e. FY 2019-2020, FY 2018-2019 and FY 2017- 2018, or Financial Years ending on 31.12.2020/ 31.12.2019/ 31.12.2018.

9.0 Documents to be submitted along with proposal:

Following information shall be submitted by Bidder along with their response to EOI document:

a.	General Information of Bidder	Annexure-1
b.	List of Similar Projects Commissioned / completed Projects in last 10 years in India as a "Licensor cum Engineering Sub Contractor (LESC)" or "Licensor (L)"	Annexure-2
c.	Option "Licensor cum Engineering Sub Contractor (LESC)" or "Licensor (L)" for which bidder intends to participate	Annexure-3
d.	Financial Details	Annexure-4
e.	Documents in Support of Technical Criteria. Project wise details/ Summary to be submitted by Bidder.	Annexure-5

10.0 Evaluation Criteria for EOI

10.1 EOI of the BIDDER who broadly meets the Pre-Qualification Criteria as defined in this EOI document shall be considered for evaluation. Prospective BIDDER may choose to associate with BHEL for

Option-1: Single party meeting both Licensing and Engineering Sub Contractor (LESC) requirement for SRU package

Option-2: Party opting for only Licensing requirement of SRU package

10.2 The EOI will be evaluated based on the responsiveness and willingness of prospective BIDDER to associate with BHEL in this project.

11. Other Salient terms and Conditions:

11.1 Retendering of contract by End Customer:

In the event of retendering of Tender by end customer, the following methodology will be adopted:

Case-1: Retendering with change in scope of work:

"Licensor cum Engineering Sub Contractor (LESC)" or "Licensor" to provide the man hours applicable for all disciplines for the execution of tender. In case of retendering of Tender by customer, the man hours furnished shall be used to finalise the additional price required for the execution of the change order / additional scope during pre-bid stage and post order stage.

Case-2: Retendering without any change in scope of Work:

If there is no change in the scope of work during re-tendering, "Licensor cum Engineering Sub Contractor (LESC)" or "Licensor" shall furnish the new MOU and supporting document to be submitted to customer as part of bidding document in line with the new tender references.

11.2 QUALITY OF WORK AND GUARANTEES

11.2.1 ENGINEERING GUARANTEE

- i. Since Residual Process Design and Detailed Engineering is within LESC's scope and the work shall be executed and UNIT established based on the Engineering performed, it shall be the prime responsibility of LESC to carry out such design and engineering in accordance with good and sound engineering practices using International Standards and Indian Codes & Regulations wherever applicable to such design and/or engineering.
- ii. In case any error or omission in design or engineering within LESC's scope i.e. the residual process design or detailed engineering requires re-engineering, which results in any new requirements for equipment/ materials, the same shall re-engineering by the LESC within the scope of relative work and within the contractual period without extra cost to the OWNER or entitlement of extension of time.

- iii. LESC shall guarantee that the system design for the Unit / Plant shall meet and comply with the Licensor's package, if so applicable, and;
 - a) the equipment selected
 - b) the site criteria
 - c) the Engineering specifications, standard and design guides
 - d) the Front-end engineering data as mentioned in Bidding document.
- iv. LESC shall check and satisfy themselves with Process Package, Front End Engineering Data for its accuracy, correctness and completeness to meet the agreed guarantees and in case of deficiency, LESC shall inform BHEL/OWNER/PMC the modifications proposed to be carried out to overcome the deficiency and rectify the same at no extra cost. LESC, if required, shall carry out corrective technical studies and engineering as may be required without any extra cost to BHEL/OWNER. Before proceeding with the re-work, Licensor approval, if applicable, shall be obtained.
- v. In case of only "Licensor" selection, the above scope shall be modified accordingly prior to Pre-bid tie-up in terms of end Customer tender condition.

11.2.2 PERFORMANCE GUARANTEES

- i. LESC shall be responsible for the process guarantees. LESC shall further be responsible for Engineering guarantees as per end Customer tender.
- ii. LESC's guarantees shall also cover the mechanical performance of such equipment/ materials and their efficiencies affected primarily due to defective engineering by LESC. LESC shall bear the cost of re-engineering of such Equipment which does not perform to the guarantees, primarily due to defective engineering by LESC, within the relative scope of services at no extra cost to BHEL and without entitlement of extension of time to LESC.
- iii. LESC's liabilities on account of not meeting the above said Engineering Guarantees and Performance Guarantees (because of Engineering related issues) shall be as specified in end Customer tender on back to back basis of the Post Order Engineering Work Contract value between BHEL and LESC, payment of which is reserved against issue of Commissioning and Performance Test Certificate by OWNER.
- iv. In case of only "Licensor" selection the above performance guarantees shall be modified accordingly prior to Pre-bid tie-up in terms of end Customer tender condition.

11.3 COMMERCIAL TERMS

- i. No Advance payment shall be done for Pre-bid Engineering Work.
- ii. Payment Schedule for Pre-bid Engineering Work:
 - 90% shall be made on submission of complete Purchase Specifications, BOQs, Technical Offer for OWNER Tender, filled-in formats applicable to "Licensor cum Engineering Sub Contractor (LESC)" or "Licensor" as required in OWNER Tender, etc. as mentioned in end Customer tender and certification by BHEL Contracting Engineer and acceptance by end

customer, MOU / Letter of Undertaking etc. furnished by “Licensor cum Engineering Sub Contractor (LESC)” or “Licensor” as per the customer’s Tender requirement for BHEL’s technical offer.

- 10% of payment for Pre-bid Engg work shall be made after price bid opening by OWNER or in case of cancellation of OWNER Tender.
- iii. Payment will be made within 45 days from receipt of invoice with all supporting documents and certifications.

11.4 Bid Bond, Price Discount & Payment Schedule for Post-Order Engineering Work:

- i. The successful “Licensor cum Engineering Sub Contractor (LESC)” or “Licensor” on whom LOI will be placed for Post-Order Engg Work, shall deposit to BHEL within 30 days of signing the MOU, 1% of Final agreed Price of Post-Order Engineering Work, towards Bid Bond (in the form of Bank Guarantee or Security Deposit etc, for continued commitment during the validity period of MOU.
- ii. In the event of price reduction during negotiation by BHEL with end Customer, corresponding reduction will be passed on to the successful “Licensor cum Engineering Sub Contractor (LESC)” or “Licensor” (on finalized Post-Order price).
- iii. Major terms & conditions such as acceptance of Liquidated Damages, Price Adjustment, Penalty, Guarantee/warranty, Liabilities etc. shall be on back-to-back basis with that of contract between BHEL and its end customer unless specifically agreed upon between BHEL and BIDDER.
- iv. Post-Order Payments shall be made on back-to-back conditions of expected tender as specified by BHEL’s customer, which are typically as follows:
 - a) 35% (Thirty-five percent) after completion of 30% 3D-Model review, on pro-rata basis on approval of construction drawings, P&IDs, other deliverables as per approved DCI and their approval under Code-B (i.e. issued for construction with comment) Code-2 (commented as noted) against the LESC’s certified Running Account Bill(s).

Note: For the purpose of release of above payment towards civil / piling drawings, same shall be approval code “approved with no comments – Final”.

- b) 40% (Forty percent) after completion of 60% 3D-Model review, on pro-rata basis on submission of all approved for construction drawings, P&IDs, Other deliverable as per approved DCI and their approval under Code-A/ Code-D (i.e. Final approval without comments), against the LESC’s certified Running Account Bill(s).
 - c) 10% (Ten percent) on completion of 90% 3D-Model review, submission of all “approved for construction drawings” and their approval in Code-A/Code-D (i.e. Final approval without comments) against the Contractor’s certified Running Account Bill(s).

- d) 05% (Five percent) on submission of the following on pro-rata basis;
 - i. All certificates and documents pertaining to the equipment comprised in Plant/works;
 - ii. Operating and Instructions Manuals with respect to the Plant/Unit
 - iii. Electronic files for all documents
 - iv. Finalised 3-D model against the LESC's certified Running Account Bill(s)
- e) 05% (Five percent) on submission of As-built drawings for the plant/unit along with its electronic files against the LESC's certified Running Account Bill(s).
- f) 05% (Five percent) on successful Commissioning of the Plant/works and against issue of Commissioning and Performance Test Certificate by OWNER.

Completion of all the above milestones will be considered for payment only if, concerned deliverables are acceptable to BHEL and OWNER.

BHEL will release payment to LESC, within 30 days of release of corresponding payment to BHEL from OWNER.

11.5 DELIVERY SCHEDULE:

Pre-bid Engineering (if applicable): Pre-bid Engineering shall be completed within 2 weeks from date of issue of LOI / Work order by BHEL.

Post-Order Engineering: Delivery schedule for Post-Order Engineering Work shall be mutually agreed between BHEL and LESC to meet the L2 network for project execution, after receipt of order by BHEL. The schedule shall be as per Project Specific Tender.

11.6 PENALTY CLAUSE:

11.6.1 Pre-Bid Engineering Work (if applicable)

- i. BHEL will reserve the right of accepting the delayed deliverables by LESC, if suitable time period is available to it for submitting its offer to OWNER, by imposing the Penalty at the rate of 2% of the order value per week of delay or part thereof subject to a maximum of 10% of Pre-bid Engg work order value.
- ii. LESC shall seek prior permission from BHEL to submit the deliverables with delay.
- iii. Beyond the permitted delivery period, deliverables shall be accepted by BHEL at its discretion.

11.6.2 Post-Order Engineering Work

- i. Penalty shall be 0.05% of the total order value per week of delay or part thereof, for the delay on the agreed delivery date for each particular deliverable milestones, subject to a maximum of 1.0 % of the Order value for post-order engineering work.

11.7 OTHER INSTRUCTIONS

- 11.7.1 Since speedy completion of project is essential for a tight project schedule, it shall be responsibility of LESC to ensure timely delivery of all milestones.
- 11.7.2 LESC shall familiarize fully with the standard/ procedures/ practice of BHEL/OWNER, to avoid any dispute at later date and after order placement.
- 11.7.3 BHEL shall not pay any amount, other than the fee specifically agreed, towards any cost incurred by LESC by way of salaries to their employees (income and taxes), insurance of any nature, benefits/ bonus to the employees, etc. BHEL's liability is limited to the amount contracted for the services to be rendered under the scope of work defined.
- 11.7.4 LESC shall not commit any expenditure on behalf of BHEL without BHEL's consent in writing, during the execution of the work defined in the scope.
- 11.7.5 LESC shall bear all expenses/ fee penalties if it infringes on patents/ licenses of any persons/ organizations or in case of suits, court proceedings, damage claims etc., due to any reason whatsoever.
- 11.7.6 LESC shall ensure that it possesses the latest revisions of various national and international standards, codes of practices, statutory & environmental regulations etc. as applicable, for execution of the work. BHEL shall not provide any such documents to LESC. Engineers of LESC assigned for this project shall have familiarity on relevant documents as mentioned above for their use and applications.
- 11.7.7 LESC shall maintain at their own cost the personal accidents policy, life insurance and / or any such insurance required in respect of their personnel deputed to outstation visits for the given contract.
- 11.7.8 BHEL reserves the right to terminate or suspend the contract or withdraw part of the scope of the work at any stage of its execution, if it is found that LESC has not met its obligation for the performance / progress is not up to the expected standards and overall work is likely to suffer. In such an event, BHEL shall give 15 days' notice in writing. In such case all costs incurred accordingly by BHEL to complete any work forming part of the contract shall be recovered from LESC. In case of such premature termination of contract, BHEL reserves the right to claim damages from LESC including the initiation of judicial proceedings.
- 11.7.9 LESC shall keep all information/data/drawings etc. related to the work as confidential information and shall not divulge or use the information indirectly or directly in any way detrimental to the interest of BHEL. All drawings, documents, manuals, design calculations

including all originals prepared or obtained during the work shall remain the property of BHEL and shall be handed over to BHEL on demand.

11.7.10 LESC shall comply with the laws and regulations of the country, the state and territories concerned, during the progress of the work.

11.7.11 LESC shall submit progress report on the status of the work entrusted to them periodically and as mutually agreed upon.

11.7.12 LESC shall ensure optimal & economic design while executing the work, but without sacrificing the customer specification requirements/ Statutory regulations/ code provisions/ safety aspects

11.7.13 Termination of the contract can be initiated by BHEL or LESC in following cases:

- i. Contract is not awarded to BHEL by its end customer.
- ii. Tender got cancelled entirely by BHEL's end Customer without retendering
- iii. Bankruptcy proceedings being initiated against either of the Parties
- iv. Mutual agreement between the "Parties"
- v. A prolonged suspension affects the whole of the Works;
- vi. BHEL or LESC is found, based on reasonable evidence, to have engaged in corrupt, fraudulent, collusive or coercive practice at any time in relation to the Works or to the Contract.

Annexure-1: General Information of the Bidder

(To be provided in the letter head of the Company)

Date:

Legal name of company	
Country of constitution:	
Year of constitution:	
Legal address in country of constitution/ Registered office:	
Contact details / Offices in India	
<p>Attached are copies of original documents of</p> <ul style="list-style-type: none"> ○ Articles of Incorporation or Documents of Constitution, and documents of registration of the legal entity named above, any other supporting documents. ○ Company Catalogue, company presentation may be provided. 	

(Signature of Authorized Signatory)

Name:

Designation:

Address:

Date:

Annexure-2: List of Similar Projects Commissioned / completed Projects in last 10 years in India as a Licensor/ Licensor cum Engineering Sub Contractor

Date:

Prospective Bidder's Legal Name:

Prospective Bidder should provide information of their executed projects

SI	Project	Customer, details	Value of order	Plant details	Date of order	Completion / Commissioning date (After June'2011)
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						

(Signature & Seal)

Annexure-3: Options for which bidder intends to participate

Option	Description	Please tick the Box
Option-1	Single party meeting both Licensing and Engineering Sub Contractor (LESC) requirement for SRU package	<input type="checkbox"/>
Option-2	Party opting for only Licensing requirement of SRU package	<input type="checkbox"/>

(Signature & Seal)

Annexure-4: Financial Information of the Bidder

(To be provided in letter head of prospective Partner)

Date: [insert day, month, year]

Legal Name: [insert full name]

1. Financial Data

Financial information (In equivalent INR)			
Descriptions	2017-18/ 31.12.2018	2018-19/ 31.12.2019	2019-20/ 31.12.2020
Annual Turnover			
Net Worth (NW)			
Profits After Taxes (PAT)			

* Where values are in foreign currency, exchange rate for conversion to INR shall be as published by Reserve Bank of India as on the last date of applicable financial year

2. Financial documents

The Prospective Bidder shall provide copies of the financial statements including balance sheets with all notes and related income statements for last **3 years financial year**.

The Prospective Bidder can alternatively submit the above details stating their Financial credentials viz. Annual Turnover, Net Worth, Profit after Taxes, Working Capital details duly signed and stamped during EO stage in the above format.

(Signature & Seal)

Annexure-5: Experience Details in support of Reference project meeting the Pre-Qualification Criteria

Date:

Prospective Bidder's Legal Name:

Name of Project:

Sl. No.	Reference Project No.	Details		
1.	Name of the Project, Location			
2	Description of Work			
3	Contract Value			
4	Name of Owner, Postal Address, Phone/ Fax No. & e-mail			
5	Name of Consultant, Postal Address, Phone/ Fax No. & e-mail			
6	Names of domain/ Sector			
	- Hydrocarbon Sector (Refinery/ Petrochemical Plant OR			
	- Fertiliser Sector OR			
	- Any Other not covered above (to Specify)			
7	Activity Performed under the Scope of Work	By Self / Leader of Consortium	By Member of Consortium	By Sub Contractor
	Licenser			
	Engineering Sub Contractor			
	Residual Process design			
	Detailed Engineering			
	Procurement & Supply			
	Construction including fabrication, erection			
	Inspection, testing, start-up and pre-commissioning			
	Commissioning Assistance			
	Commissioning			
9	Completion Status	Specify dates: i) Effective Date of Contract: _____ ii) Starting date: _____ iii) Scheduled Completion Date: _____ iv) Mechanical Completion Date: _____ v) Commissioning Date: _____ vi) Date of putting into operation: _____ vii) Actual Date of Completion of Contract: _____ viii) Date of completion of one year successful operation: _____		
	Confirm following documents enclosed <i>It is desirable that, BIDDERS may submit</i>	<ul style="list-style-type: none"> Copy of work order/contract agreement in line with BQC requirement 		

	<p><i>the details as a response to EOI.</i></p> <p><i>However, if BIDDERS having difficulty in submission of these details, same can be provided by BIDDERS during submission of Bid of end Customer.</i></p>	<p>Ref No._____ dated_____</p> <ul style="list-style-type: none"> • Proof of Commissioning in line with BQC in line with requirement Ref No._____ dated_____ • A proof that plant has been under operation for Last 1 year in line with BQC requirement Ref No._____ dated_____
	<p>Confirm that Bidder is meeting the Technical Criteria of PQC</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>

Declaration:

I hereby declare and confirm that the above information is truthful and correct. I understand that in case that this information is found to be false or misleading, we will be liable to be disqualified from the process and the BHEL shall reserve the right to initiate appropriate action.

Signature & Seal:

Authorized Signatory of the Party