

**Numaligarh Refinery Limited**  
(A Govt. of India Enterprise)



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**EXPRESSION OF INTEREST (EOI) – (16082018)**

**FOR DESIGN SUPPLY INSTALLATION AND COMMISSIONING  
ASSISTANCE / SUPERVISION FOR RETROFITTING OF AUTOMATIC  
HEADING-UNHEADING SYSTEM ON EXISTING COKE DRUM &  
STRUCTURE.**

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**AUGUST, 2018**

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## **1.0 TEXT OF ADVERTISEMENT**

**NUMALIGARH REFINERY LIMITED**  
**Pankagrang, PO: Numaligarh Refinery Project,**  
**District- Golaghat, Assam,**  
**India, 785699**

### **INVITATION FOR EXPRESSION OF INTEREST**

Numaligarh Refinery Limited invites sealed Expression of Interest (EOI) from Global / Indian organizations meeting the pre qualification criteria to participate in tender for '**Retrofitting of Automatic Heading-Unheading System upon existing Coke Drum & structure of NRL Delayed Coker Unit.**'

The EOI Document containing the details of qualification criteria, submission requirement, brief objective & scope of work and evaluation criteria etc. can be downloaded from the website [www.nrl.co.in](http://www.nrl.co.in)

Last date for submission of EOI is 17.09.2018 up to 1500 hrs. Sealed envelope marked to the captioned address, containing EOI may be submitted mentioning "FOR Retrofitting of Automatic Heading-Unheading System upon existing Coke Drum & structure of NRL Delayed Croker Unit." on the top cover:

**General Manager (Commercial) I/c.**  
**Numaligarh Refinery Limited,**  
**Pankagrang, PO: Numaligarh Refinery Project,**  
**District- Golaghat, Assam,**  
**India, 785699**

Applicants meeting the qualification criteria may be invited for presentation / proposal before the selection committee of NRL. Only the short listed applicants shall be eligible to participate in the subsequent tender to be evaluated on "Lowest Offer Basis".

Note: NRL or any of its designates reserves the right to cancel this request for EOI and/or invite afresh with or without amendments, without liability or any obligation for such request for EOI and without assigning any reason. Information provided at this stage is indicative and NRL reserves the right to amend/add further details in the EOI.

## 2.0 LETTER OF INVITATION

**Numaligarh Refinery Limited,  
Pankagrath, PO: Numaligarh Refinery Project,  
District- Golaghat, Assam,  
India, 785699**

**No.EOI/DCU-Coke Drum/001**

**Dated: 17.08.2018**

Dear Sir/Madam,

Numaligarh Refinery Limited invites sealed Expression of Interest (EOI) under International Competitive Bidding (ICB) process from organizations (both Indian & International) meeting the pre qualification criteria to participate in tender for Retrofitting of Automatic Heading-Unheading System upon existing Coke Drum & structure of NRL Delayed Coker Unit.

The EOI Document containing the details of pre qualification criteria, submission requirement, brief objective & scope of work and method of evaluation etc. is enclosed.

The EOI Document is also available on the NRL website [www.nrl.co.in](http://www.nrl.co.in)

You may submit your responses in sealed envelopes in prescribed format to the undersigned latest by 17.09.2018.

**General Manager (Commercial) I/c.  
Numaligarh Refinery Limited,  
Pankagrath, PO: Numaligarh Refinery Project,  
District- Golaghat, Assam,  
India, 785699**

Queries if any may be referred in writing to the G.M (Comml) I/c, at the above mentioned or Telephone No. 9435157861 / 9435152011 or at E-mail: [manabendra.gogoi@nrl.co.in](mailto:manabendra.gogoi@nrl.co.in) / [diganta.das@nrl.co.in](mailto:diganta.das@nrl.co.in)

| S. No. | Critical Dates               | Date     | Time     |
|--------|------------------------------|----------|----------|
| 1.     | Publishing Date              | 17.08.18 |          |
| 2.     | Document Download Start Date | 17.08.18 | 11:00A.M |
| 3.     | Document Download End Date   | 17.09.18 | 03:00P.M |
| 4.     | Bid Submission Start Date    | 17.08.18 | 11:00A.M |
| 5.     | Bid Submission End Date      | 17.09.18 | 03:00P.M |
| 6.     | Bid Opening Date             | 18.09.18 | 11:00A.M |

Yours faithfully,

G.M (Commercial) I/c.  
For & on behalf of Numaligarh Refinery Limited

Encl.: EOI Document.

### **3.0 Background:**

M/s Numaligarh Refinery Limited has a Delayed Coker unit with two numbers of coke drums. The coke drum top and bottom flange closing and opening operation is done manually at present. This causes direct exposure of steam and other mediums in coke chambers to personnel, unheading deck and to plant equipment and it may lead to fatalities and injuries. The entire flange opening and closing also very much time consuming and more numbers personnel are required.

To eliminate all the above problems, M/s NRL intends to install automatic heading-unheading system along with allied modernized facilities in their existing coke chambers & structure.

### **4.0 Aims & Objectives:**

The objectives of retrofitting of Automatic Heading-Unheading System upon existing Coke Drum & structure is to have a totally enclosed system from top head to coke receiving area which eliminates exposure risks i.e. no exposure to personnel, unheading deck, or to plant equipment. It is also aimed at reducing time required for heading-unheading process & eliminate manpower involvement.

### **5.0 Venue & Deadline for submission of proposal**

Proposal, in its complete form in all respects as specified in the EOI, must be submitted to NRL at the address specified herein earlier. In exceptional circumstances and at its discretion, NRL may extend the deadline for submission of proposals by issuing an amendment to be made available on the NRL website, in which case all rights and obligations of NRL and the vendors previously subject to the original deadline will thereafter be subject to the deadline as extended.

### **6.0 Validity of Offer:**

The offer for EOI as per this document shall be valid for a period of three (3) months initially which may be extended further if required by NRL.

### **7.0 TERMS OF REFERENCE**

The detailed terms of reference are enclosed at **Annexure-I**.

### **8.0 INSTRUCTIONS TO VENDORS**

8.1 The Expression of Interest is to be submitted in the manner prescribed below:-

All information as detailed below is to be submitted in two hard copies in separately sealed envelopes and one soft copy in CD:-

- 8.1.1. Applicant's Expression of Interest as per Format-1.
- 8.1.2. Experience of the organization as per Format-2.
- 8.1.3. List of three (03) experts/ consultants on payroll as per Format-3.
- 8.1.4. Financial strength of the company as per Format-4.
- 8.1.5. Additional information as per Format-5.
- 8.1.6. Declaration as per Format-6.

8.2 EOI Documents have been hosted on the website [www.nrl.co.in](http://www.nrl.co.in) and may be downloaded from the website.

The vendors are expected to examine all instructions, forms, terms and other details in the EOI document carefully. Failure to furnish complete information as mentioned in the EOI document or submission of a proposal not substantially responsive to the EOI documents in every respect will be at the Vendor's risk and may result in rejection of the proposal.

#### **9.0 Pre Qualification Criteria:**

Following will be the minimum pre-qualification criteria. Each eligible vendor should possess all the following pre-qualification criteria. Responses not meeting the minimum pre-qualification criteria will be rejected and will not be evaluated.

| Sl. No. | Pre-Qualification Criteria                                                                                                                                                                                                                                                                                                                                                                                                                   | Supporting Document                                                                                                    |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| 1       | The vendor shall have prior experience and proven capabilities in Retrofitting of Automatic Heading-Unheading System (with center feed facility) upon existing Coke Drum & structure of at least 3 nos. to any industry within the last 10 years. At least one of the jobs carried out shall have a minimum capacity of 715.5 m3. Also one system should be performing satisfactorily for the last 03 years from due date of EOI submission. | Copy of Purchase Order/ Work Order with Inspection release note/Delivery challan and End user performance certificate. |
| 2       | The Vendor has to be profitable and should not have incurred loss in any of the last 3 consecutive Financial Years (FY 2015-16, 2016-17 & 2017-18)                                                                                                                                                                                                                                                                                           | Format-5 to be certified & validated by Chartered Accountant (CA) of the vendor's organization.                        |

|   |                                                                                          |                                             |
|---|------------------------------------------------------------------------------------------|---------------------------------------------|
| 3 | The vendor shall have at least 03 full time service engineers on its pay rolls.          | Certificate signed by Authorized signatory. |
| 4 | The firm should not be blacklisted by any Central Govt. / State Govt. / PSU/Govt. Bodies | Certificate signed by Authorized signatory. |
| 5 | PAN No. / Service Tax Registration Certificate                                           | Copy of Certificate to be enclosed.         |

#### 10.0 Evaluation Criteria and Method of Evaluation:

- a. Screening of EOIs shall be carried out as per pre-qualification criteria mentioned in this document and based on verification of testimonials submitted.
- b. Vendors who qualify as per the pre qualification criteria will be provided a brief about the existing Coke Chamber & structure.
- c. Vendors must visit NRL site at their own cost to have an idea about the Coke chamber and the troubles faced by NRL in the operation and maintenance during heading-unheading.
- d. The vendors shall be required to make a presentation to a committee show-casing their proposals.
- e. Only the short listed applicants shall be eligible to participate in an ensuing tender to be evaluated on **“Lowest Offer Basis”**.

#### 11.0 Response:

11.1 Vendors must ensure that their Bid response is submitted as per the formats attached with this document. Special comments on the objectives and scope of the service projected in the enquiry may also be submitted along with the offer.

11.2 Application in sealed cover super scribed, as **“EOI FOR RETROFITTING OF AUTOMATIC HEADING-UNHEADING SYSTEM UPON EXISTING COKE DRUM & STRUCTURE OF NRL DELAYED CROKER UNIT.”**

#### 12.0 Conflict of Interest:

12.1 Where there is any indication that a conflict of interest exists or may arise, it shall be the responsibility of the Vendor to inform NRL, detailing the conflict in writing as an attachment to this Bid.

12.2 NRL will be the final arbiter in cases of potential conflicts of interest. Failure to notify NRL of any potential conflict of interest will invalidate any verbal or written agreement.

12.3 A Conflict of Interest is where a person who is involved in the procurement has or may be perceived to have a personal interest in ensuring that a particular Vendor is successful. Actual and potential conflicts of interest must be declared by a person involved in a Bid process.

**13.0 Condition under which EOI is issued:**

The EOI is not an offer and is issued with no commitment. NRL reserves the right to withdraw EOI and or vary any part thereof at any stage. NRL further reserves the right to disqualify any vendor, should it be so necessary at any stage.

**14.0 Last date of submission of EOI:**

The last date of submission of EOI is 17.09.2018 (03:00 PM.)  
Bid Opening Date & Time is 18.09.2018 (11:00 AM )

**15.0 FORMATS FOR SUBMISSION:**

**FORMAT – 1**

**APPLICANT'S EXPRESSION OF INTEREST**

To,

**The General Manager (Commercial) I/c.  
Numaligarh Refinery Limited,  
Pankagrath, PO: Numaligarh Refinery Project,  
District- Golaghat, Assam,  
India, 785699**

**SUB: SUBMISSION OF EXPRESSION OF INTEREST FOR RETROFITTING OF  
AUTOMATIC HEADING-UNHEADING SYSTEM UPON EXISTING COKE DRUM  
& STRUCTURE OF NRL DELAYED CROKER UNIT.**

Dear

In response to the Invitation for Expressions of Interest (EOI) published for the above purpose, we would like to express interest to carry out the above proposed task. As instructed, we attach 2 sets of the following documents in separately sealed envelopes and one soft copy:

1. Experience in related fields (Format-2)
2. List of service engineers on payroll at least 3 (Format-3)
3. Financial strength of the organization (Format-4)
4. Additional information (Format-5)
5. Declaration (Format-6)

Sincerely Yours,

Signature of the applicant

[Full name of applicant]

Stamp.....

Date:

Encl.: As above.

Note: This is to be furnished on the letter head of the organization.

**FORMAT 2**

| <b>Past Experience Details</b>                                                                                                                                         |                                                                  |                                              |                                                                        |                                           |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------|------------------------------------------------------------------------|-------------------------------------------|--|
| Overview of the past experience of the Organization related to the subject job                                                                                         |                                                                  |                                              |                                                                        |                                           |  |
| Sl. No.                                                                                                                                                                | Item                                                             | No. of orders executed during last 10 years. | Order value of each order in lakhs of Rs. (enclose copy of each order) | Mention the name of client/ organization. |  |
| 1                                                                                                                                                                      | Experience in carrying out similar works                         |                                              |                                                                        |                                           |  |
| 1.1                                                                                                                                                                    | Experience of carrying out similar assignments in Public Sector. |                                              |                                                                        |                                           |  |
| 1.2                                                                                                                                                                    | Experience of carrying out similar assignments in Public Sector. |                                              |                                                                        |                                           |  |
| <p style="text-align: right;">Signature of applicant:</p> <p style="text-align: right;">Full name of applicant:</p> <p style="text-align: right;">Stamp &amp; Date</p> |                                                                  |                                              |                                                                        |                                           |  |

**FORMAT 3**

| <b>List of service engineers on payroll (at least 3)</b>                                                                                                               |      |             |               |                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------------|---------------|---------------------|
| Sl. No.                                                                                                                                                                | Name | Designation | Qualification | Relevant Experience |
| 1                                                                                                                                                                      |      |             |               |                     |
| 2                                                                                                                                                                      |      |             |               |                     |
| 3                                                                                                                                                                      |      |             |               |                     |
| 4                                                                                                                                                                      |      |             |               |                     |
| 5                                                                                                                                                                      |      |             |               |                     |
| 6                                                                                                                                                                      |      |             |               |                     |
| <p style="text-align: right;">Signature of applicant:</p> <p style="text-align: right;">Full name of applicant:</p> <p style="text-align: right;">Stamp &amp; Date</p> |      |             |               |                     |

#### FORMAT – 4

| Financial Strength of the Organization |                |                             |                                  |                                       |                                                                       |
|----------------------------------------|----------------|-----------------------------|----------------------------------|---------------------------------------|-----------------------------------------------------------------------|
| Sl. No.                                | Financial Year | Whether profitable (Yes/No) | Annual Net Profit (in Cr. of Rs) | Overall Annual Turnover (in Cr of Rs) | Annual Turnover from only consultancy rendered in India (in Cr of Rs) |
| 1                                      | 2015-16        |                             |                                  |                                       |                                                                       |
| 2                                      | 2016-17        |                             |                                  |                                       |                                                                       |
| 3                                      | 2017-18        |                             |                                  |                                       |                                                                       |

Note: Please enclose auditor's certificate in support of your claim

Signature of applicant:

Full Name of applicant:

Stamp & Date:

#### FORMAT 5

| Additional Information                                                                         |             |              |
|------------------------------------------------------------------------------------------------|-------------|--------------|
| 1. List all enclosures related to the previous sections.                                       |             |              |
| Sl. No.                                                                                        | Description | No. of pages |
|                                                                                                |             |              |
|                                                                                                |             |              |
|                                                                                                |             |              |
| 2. Additional information to support the eligibility as per Section 6 (Not more than 2 pages). |             |              |
| Signature of the applicant:                                                                    |             |              |
| Full name of applicant:                                                                        |             |              |
| Stamp & Date:                                                                                  |             |              |

**FORMAT -6**

| <b>Declaration</b>                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>WE HEREBY CONFIRM THAT WE ARE INTERESTED IN COMPETING FOR<br/><b>RETROFITTING OF AUTOMATIC HEADING-UNHEADING SYSTEM UPON EXISTING<br/>COKE DRUM &amp; STRUCTURE OF NRL DELAYED CROKER UNIT.</b></p> <p>All the information provided herewith is genuine and accurate.</p> <p>Authorized Person's Signature:</p> <p>Name and Designation:</p> <p>Date of Signature:</p> |

Note: The declaration is to be furnished on the letter head of the organization.

**RETROFITTING OF AUTOMATIC HEADING-UNHEADING SYSTEM UPON EXISTING COKE DRUM & STRUCTURE OF NRL DELAYED CROKER UNIT.**

**TERMS OF REFERENCE**

**1.0 BACKGROUND**

M/s Numaligarh Refinery Limited has a Delayed Coker unit with two numbers of coke drums of capacity 715.5 m<sup>3</sup> each. The coke chambers have top & bottom covers which are to be opened regularly during hydraulic decoking of the coke drums. Presently, the coke drum cover flange closing and opening operation is done manually. This causes direct exposure of steam and other mediums in coke chambers to personnel, unheading deck and to plant equipment and it may lead to fatalities and injuries. The entire flange opening and closing operation involves lot of time & requires extensive manpower involvement.

Further details of the system are delineated herein:

- Design Pressure : 5 kg/cm<sup>2</sup>(g) (at Top & bottom)
- Design Temperature : 500 deg.C to 520 deg. C
- Capacity : 715.5 m<sup>3</sup>
- Weight : 1,59,500.00 kg (empty); 6,35,500.00 kg (operation weight)

**2.0 OBJECTIVES**

The objectives of retrofitting of Automatic Heading-Unheading System upon existing Coke Drum & structure is to have a totally enclosed system from top head to coke receiving area which eliminates exposure risks i.e. no exposure to personnel, unheading deck, or to plant equipment. It is also aimed at reducing time required for heading-unheading process & minimize manpower involvement.

All modifications, testing, supply of materials/equipments, supervision for installation/replacement of parts/equipments, and commissioning of the automatic heading-unheading system shall be in the scope of the bidder. The parties selected through the EOI shall only be eligible to participate in a competitive bidding.

### **3.0 TERMS OF REFERENCE**

The terms of reference of the exercise are:-

3.1 The offered system shall essentially have the following features:

- 3.1.1 Totally enclosed system from top head to coke receiving area which eliminates exposure risks i.e. no exposure to personnel, unheading deck, or to plant equipment.
- 3.1.2 System should facilitate Center feed. Coke feed lines remain mounted during heading-unheading operation.
- 3.1.3 Heading and unheading time shall be approximately 5 minutes.
- 3.1.4 Eliminates labour and tools.
- 3.1.5 No disassembly, cleaning and re-assembly required at each cycle.
- 3.1.6 No gaskets necessary after each drum cycle like during manual unheading.
- 3.1.7 Clean operation.
- 3.1.8 Satisfy all safety interlocks.
- 3.1.9 Remotely operable from:
  - 3.1.9.1 Local control panel.
  - 3.1.9.2 Control room.

3.2 To retrofit of automatic heading-unheading system upon existing coke drum & structure.

3.3 To reduce manual intervention in the system.

3.4 To supply and install the parts/equipments and commission the automatic heading-unheading system.

3.5 To guarantee the performance of the new system for continuous operation during the year.

### **4.0 METHODOLOGY**

Vendor has to visit NRL site and carry out a detailed analysis of the existing system. The vendor has to interact with the Operation and Maintenance personnel of NRL who will provide all available inputs related to the existing system.

The supply of the automatic system and successful installation & commissioning shall be the responsibility of the vendor. Vendor has to submit a detailed time schedule for supply of materials and commissioning.

#### **5.0 TIME SCHEDULE**

Time being the essence of the project, supply, installation & commissioning needs to be completed within 18 months from the date of placement of Purchase order (PO). Further, Installation & commissioning has to be completed within 01 month.

#### **6.0 INPUTS TO BE PROVIDED BY NRL**

NRL will facilitate interaction of agency/individuals/service engineers with the concerned Operation & Maintenance teams of NRL. NRL shall provide all the available process parameters and data sheets. All parameters sought by the party may not be available with NRL and in such a scenario; the party has to calculate the required parameters by itself.

#### **7.0 DELIVERABLES**

7.1 Supply of the Automatic Heading-Unheading System.

7.2 Retrofitting of supplied System upon existing Coke Drum & structure.

7.3 Successful installation & commissioning of the supplied system.

7.4 Conduct and submit the HAZOP report.

7.5 Conduct Performance Guarantee Test Run of the supplied system.

7.6 To submit the operation and maintenance manual for the system.

7.7 Supply of commissioning spares and mandatory spares.

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