

(GLOBAL INVITATION FOR EXPRESSION OF INTEREST)

Numaligarh Refinery Limited
(A Government of India Enterprise)



**Invites
Expression of Interest (Eoi)**

**From
Any Indian/Global Company/their Consortium/Affiliates/JV/Representatives**

**For
Setting up a Carbon Monoxide (CO) Plant by using SMR (Steam
methane reforming) gas as feed from NRL`s Hydrogen Unit, at
Numaligarh**

EOI Document Ref. No. EOI/BD/2025-26/02

Dated 02.06.2025

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1. Letter for invitation of EOI

Letter for Invitation of EOI

Ref: EOI No. EOI/BD/2025-26/02

Sub: Setting up a Carbon Monoxide Plant by using SMR (Steam methane reforming) gas as feed from NRL's Hydrogen Unit, at Numaligarh.

NRL hereby invites Expression of Interest (EOI) from Indian/Global Company/their Consortium/Affiliates/JV/Representatives, herein after called "Applicant", for Setting up a Carbon Monoxide Plant by using SMR (Steam methane reforming) gas as feed from NRL's Hydrogen Unit, at Numaligarh .

Applicant shall submit response to the EOI, completed in all respect along with all documents on the CPP portal, on or before the last date of submission i.e. 03.07.2025 (Thursday).

The objective of this EOI is to identify and obtain the details of the prospective Applicants including their experience and financial capabilities for setting up of the Carbon Monoxide Plant from SMR Gas of Hydrogen Unit, on Built Own and Operate (BOO) or Job Work basis.

Interested Applicants may download the documents of EOI free of cost from

<http://eprocure.gov.in/eprocure/app>

and

www.nrl.co.in/Tenders

Authorized Signatory (NRL)

2. Particulars of the EOI

1. Introduction

- 1.1 Numaligarh Refinery Limited (NRL) is a Government of India Enterprise, located at Numaligarh, Dist. Golaghat, in Assam India. NRL is a group company of Oil India Limited and is a Category-I Mini Ratna PSU.
- 1.2 The current refining capacity of NRL is 3 MMTPA and the complex comprises of process units like CDU/VDU, DCU, HCU, HGU, MS Block, DHDT, SRU and Wax Block Units along with its own CPP (GTG+STG) and other utilities. The commercial production commenced from 1st October, 2000. Product slate of NRL comprises LPG, BS-VI HSD, BS-VI MS, ATF, SKO, MTO, Paraffin Wax, RPC/CPC (Raw/Calcined Petroleum Coke) and Sulphur. NRL has two marketing terminals at Numaligarh and Siliguri. Products viz. MS, SKO and HSD are transported from Numaligarh to Siliguri through the Product pipeline (NSPL) owned & operated by Oil India Limited.
- 1.3 NRL is currently pursuing the Refinery Expansion Project (NREP) for increase the refining capacity from 3.0 to 9.0 MMTPA by setting up a new train of 6.0 MMTPA, along with Crude oil pipeline from Paradip, Odisha to Numaligarh, Assam and a Crude Oil Import Terminal at Paradip, Odisha. The ongoing NREP is target to be completed by December 2025.
- 1.4 The hydrogen requirement of the existing refinery is met from the Hydrogen Generation Unit (HGU) of capacity 48 KTPA (67412 Nm³/hr), which is licensed by M/s Topsoe. Demand of H₂ for expansion project (NREP) shall be met by a 95 KTPA HGU, which is being set up under the BOO (Build, Own & Operate) mode. NRL has also taken initiatives to set up Green Hydrogen plants of total capacity 12.4KTPA at Numaligarh, in line with country's target to achieve net zero by 2070.
- 1.5 It is expected that the capacity of existing HGU may not be fully utilized in view of projected decline in demand of fossil fuel HSD & MS as well as due to availability of more H₂ from the new Green H₂ plants. Therefore, to utilize the maximum capacity of HGU, it is intended to repurpose the existing hydrogen unit to produce Carbon monoxide (CO) by using SMR gas (u/s of shift reactor) of HGU and also to capture CO₂.

2. The intent of EOI

- 2.1 NRL desires that a CO production plant can be set up to produce CO from SMR Gas of Hydrogen Unit. The plant to be setup on Build Own Operate (BOO) / Job Work basis.
- 2.2 NRL has issued this Expression of Interest with the best intention to explore the market for interested Entities/Agencies who are interested and eligible to enter into long term agreement with NRL (minimum 20 years) for setting up of Carbon Monoxide Production Plant from SMR Gas of Hydrogen Unit. The Purpose of the EOI is not to select any agency/ entity for the proposed project or for shortlisting for any tender.

- 2.3 NRL invites “Expression of Interest” (EOI) for the sole purpose of seeking information from prospective Applicants about their technical and financial capabilities for setting up of the plant including operating the unit for specific period.
- 2.4 The Applicant should be willing to share their past credentials for evaluation. Requisite Non-Disclosure Agreement shall be executed as deemed essential by the Applicant.
- 2.5 The estimated quantity of CO production is about 270TPD from the available SMR gas. Setting up of CO plant will require a CO₂ separation unit.

Note: This is not an invitation to tender.

3. Brief scope of Work / Services:

The brief scope of the Applicant under this project shall include but not limited to following:

- 3.1 Applicant is solely responsible for setting up the CO production plant by taking SMR feed from HGU B/L & Utilities, from NRL
- 3.2 The piping works for routing the feed & utilities from NRL B/L to the Applicant’s site is under Applicant’s scope.
- 3.3 The piping works for the H₂ rich gas and CH₄ rich gas from CO cold box to be laid by Applicant up to NRL’s B/L.
- 3.4 Applicant has to take necessary statutory clearances from government authorities for setting up the plant.
- 3.5 Applicant to select suitable technology for CO₂ removal and CO production.
- 3.6 To carryout BEDP & detail engg, procurement, erection, commissioning and operation, thereafter.
- 3.7 To supply CO & CO₂ as per the quality mentioned above at Applicants’s B/L.

4. NRL’s responsibility:

Following facilities shall be extended by NRL for this project :

- 4.1 To provide the required land to the bidder for setting up the CO plant. The tentative location of the plant will be inside NRL’s plant boundary, which is about 3 km (Aerial) from the existing hydrogen unit.
- 4.2 To provide the SMR feed at HGU B/L , as mentioned above.
- 4.3 To supply utilities like power, water, instrument air, steam, N₂ etc.
- 4.4 The modification required inside the existing Hydrogen unit to supply SMR gas.

5. Statutory Obligations

The Applicant has to ensure that all facilities to be constructed shall comply with the Rules and regulations applicable in Oil & Gas Industries, as per authorities of Govt. of India.

6. Time Schedule:

The tentative schedule planned for the project shall be as below :

- 6.1 Time Period for the Applicant to develop the facility: 24 (Twenty-four) Months from the date of issue of Letter of Acceptance).
- 6.2 The Applicant shall Operate and maintain the facilities for a minimum period of 20 (Twenty)

Years after Contractual COD or actual COD, whichever is later.

7. DESIRABLE DATA/DETAILS ALONG WITH SUPPORTING DOCUMENTS:

Applicant shall submit expression of interest along with the documents/ details as per following:

7.1 Technical Experience

- 7.1.1 The Applicant must have executed any greenfield or brownfield projects using Natural Gas (NG), or any other hydrocarbon feedstock for production of value-added chemical/ syngas.
- 7.1.2 The Applicant must have executed the project/s as mentioned under 7.1.1 above, in India or abroad as owner/or through JV/ partnership/subsidiary of the company.
- 7.1.3 Applicant will furnish Copy of WO & job completion certificate from client against the execution & completion of the project in line with clause 7.1.1

7.2 Financial Capability:

- 7.2.1 Applicant shall furnish complete set of audited annual financial statements including balance sheet and profit and loss account for the last 3 years in English language.
- 7.2.2 If the above documents are not in English language, then copies of the English translation of the same shall also be furnished duly certified, stamped and signed, as per the convention followed by the concerned authority in the respective country, by Local Chamber of Commerce or Indian Embassy in agency's country or agency's Embassy in India or any translator in India recognized/ authorized by agency's Embassy.

8. Quality & Process Parameters SMR gas ex HGU

The typical composition & Process parameters of SMR gas (u/s shift reactor at Full NG feed case) gas available ex-HGU shall be as below:

8.1 Composition of the SMR gas:

Component	Mole%
H ₂	73.45%
CO	15.94%
CO ₂	6.87%
CH ₄	3.5%
N ₂	0.25%

8.2 Process Parameters :

Flow : 59470 Nm³/h (Approx)
 Pressure: 21 kg/cm² (Approx)
 Temperature: 45 deg.C

9. Quality of CO & CO₂ produced:

9.1 The desired quality of CO produced are as mentioned below:

- i) Purity: 99.9 vol%(min)

- ii) Pressure of CO product: 30-35 kg/cm²g
- iii) Temperature: 45 deg.C (max).

9.2 The purity of CO₂ recovered from the SMR gas shall be 99% min.

10. Documents required to be submitted

In response to this EOI, you are requested to provide the following information :

- i) Instruction to Applicants : **Annexure -I**
- ii) Covering Letter cum Undertaking : **Annexure-II**
- iii) Applicant's General Information : **Annexure III**
- iv) Specific experience relevant to required capabilities : **Annexure-IV**
- v) Financial Details : **Annexure -V**

Please Note: In addition to the above, the prospective Applicant will also submit a brief Writeup on proposed business plan with NRL. The write-up shall also provide the details of proposed financial model of Capital investment to implement the Project on Job Work Model i.e., Execution is through Special Purpose vehicle/Special Purpose Company/Joint Venture OR by any other such mode, as well as payback model.

11. Pre-EOI discussion:

- 11.1 Pre-EOI discussion shall be on **12.06.2025 (Thursday) at 11:00** AM at NRL Centre, 122-A, GS Road, Guwahati-781005.
- 11.2 Interested parties can send their technical/ commercial queries before the schedule date of pre-bid discussion to the undersigned.

i) **Mr. Eebon Datta, Chief Manager (Business Development)**
Mobile no: 9435408025 Email ID: eebon.dutta@nrl.co.in

ii) **Mr. Debashis Thakur SM (TS),**
Mobile no: 9954052042 Email ID: debashis.thakur@nrl.co.in

12. Submission of responses to the EOI

Interested Agency shall upload the Expression of Interest by duly filled in forms along with its attachments at e-procurement portal <http://eprocure.gov.in/eprocure/app> , latest by 03.07.2025 upto 17:00HRS (IST). Response submitted shall be opened on 04.07.2025 at 14:00 HRS (IST).

13. EOI Evaluation Methodology:

After screening of all the applications on the basis of the Technical Experience and Financial Capability as mentioned in clause no 7 above, the offers and the supporting documents (Technical and Financial) submitted by the qualified applicants will be further evaluated by NRL only for preparation of tender for Setting up a Carbon Monoxide Plant by using SMR (Steam methane reforming) gas of Hydrogen Unit as feed to the plant, at Numaligarh on BOO/Job Work mode.

Based on the responses received against this EOI, a virtual meeting/ offline discussion (as per convenience of NRL may be held with the Applicant to discuss / clarify on the information provided. Date and time shall be intimated separately.

14. Disclaimer:

- 14.1 NRL is neither committed nor obliged to include any Applicant on the tender list or award any form of contract to any Entity/Agency and/or associated companies.
- 14.2 The EOI is liable to be ignored in case of submission of any misleading/false representation by the responding Entity/ Agency in the form of statements and attachments.
- 14.3 This EOI is non-binding in nature and submission of information should not be considered as shortlisting/ selection for company in any subsequent RFP/ Tender/ Bid process that may be undertaken in future.
- 14.4 No participant shall contact NRL on any matter relating to the EOI after the last date of submission of EOI unless requested for so in writing. Any effort by the responding entity/ agency to influence NRL in the decision making in respect of EOI will result in the rejection of that entity/agency.
- 14.5 It is also agreed that NRL in its sole discretion, may reject any and all proposal made by respondent(s), may change the conditions relating to the EOI or cancel this EOI at any time without assigning any reason.
- 14.6 Prospective respondent(s) acknowledge and agree that response to the EOI is purely voluntary action on their part and for any expenditure on this account shall be borne by the respondent(s).
- 14.7 NRL will have no obligation or liability to the respondent(s) in the event of cancellation of EOI.

Instructions to the Applicants**1. The Applicants should note that:**

- 1.1 Language of the responses to EOI or any query/ clarifications/ correspondences shall be in English only.
- 1.2 For expression of interest, Application Form and Annexures given in Section-3 shall be duly filled and furnished with the EOI offer.
- 1.3 Applicants should go through and Section-2 thoroughly before filling and submitting the application form and annexures in Section-3.
- 1.4 Applicants shall mention the name and contact details of relevant person(s), with complete address, phone number and email id.
- 1.5 NRL may, at its sole discretion, ask for additional information/ documents and/ or seek clarifications from the Applicant(s) after the Deadline for submission of response, inter alia, for the purpose of removal of inconsistencies or infirmities in their responses.
- 1.6 All costs incurred by applicant for preparing and submitting the Application for Enlistment, in providing clarification or any other expenses whatsoever shall be borne by Applicants themselves, regardless of the conduct or outcome of the enlistment process.
- 1.7 The financial data must be submitted in USD/Indian Rupees Only.
- 1.8 All the pages of the Application for Enlistment and attachments should be signed and corrections and over writings should be countersigned by the authorized signatory.
- 1.9 If it is established that the Applicant has submitted fraudulent documents or has indulged in to corrupt and fraudulent practice at any point of time, the Applicant would be debarred/ disqualified from the Enlistment / tendering / taking up of work in NRL.
- 1.10 NRL reserves the right to cross check and confirm the information / details furnished by the Applicant at any time during the period of enlistment.

2. Corrigendum :

At any time before the last date of submission of EOIs, NRL may, for any reason, whether at its own initiative or in response to a clarification requested by an Applicant, modify the Eoi document. The amendment will be posted on the website and will be binding on the Applicants and the Applicant will give due consideration to the same, while they submit their Eois, and would invariably enclose documents/ information, as required, on account of the amendment, as a part of the Eoi. NRL may, at its discretion, extend the deadline for the submission of Eois.

Applicants are requested to keep themselves updated with the website on regular basis for any addition / deletion / modification / clarification or notification in respect of this, at EOI stage. No separate notification will be issued in any other media.

3. Validity of the responses:

The Applicant shall submit the responses which shall remain valid up to twelve (12) months after the last date of submission. NRL may solicit the Applicant's consent for an extension of the period of validity of the response.

4. Submission of the response to EOI :

Interested Parties shall upload the Expression of Interest by duly filled in forms along with its attachments at e-procurement portal <http://eprocure.gov.in/eprocure/app> , latest by 03.07.2025 upto 17:00HRS (IST). Response submitted shall be opened on 04.07.2025 at 14:00 HRS (IST).

Any technical/commercial queries, before submission of EOI shall be sent by email to:

Mr. Eebon Datta
Chief Manager (Business Development)
Numaligarh Refinery Limited
NRL Centre, 122-A
G.S. Road, Ganeshguri
Guwahati, Assam, India
Pin: 781005
E-Mail id: eebon.dutta@nrl.co.in; Mobile : +919435408025

Annexure-II**FORMAT FOR COVERING LETTER CUM UNDERTAKING**

(The covering letter should be on the Letter Head of the Applicant)

Applicant's Ref. No. : _____

Date: _____

Place: _____

To,

.....

Sub.:

NRL Ref.:

Dear Sir,

We, the undersigned [insert name of the "Applicant"] having read, examined and understood in detail the INVITATION FOR EXPRESSION OF INTEREST, we confirm that neither we nor any of our Parent Company/ Affiliate/ Ultimate Parent Company has submitted response other than this response directly or indirectly in response to the aforesaid EoI.

1. We give our unconditional acceptance to the EoI, issued by NRL, including its amendments and/or clarification, if any, the receipt of which is hereby acknowledged. In token of our acceptance to the EoI, the same have been signed & stamped by us and enclosed to the response. We hereby confirm that the provisions of the EoI shall be binding on us.
2. We have submitted our response strictly as per provisions and formats of the EoI, with-out any deviations, conditions and without mentioning any assumptions or notes.
3. We hereby unconditionally and irrevocably agree and accept that the decision made by NRL in respect of any matter regarding or arising out of the EoI shall be binding on us. We hereby expressly waive any and all claims in respect of EoI process. We confirm that there are no litigations or disputes against us, which materially affect our ability to participate or function under the obligations with regard to EoI.
4. Details of the contact person of applicant are furnished as below:
Name:
Designation:
Address
Contact numbers
Email id
5. We are enclosing herewith the entire response containing duly signed formats in electronic format in CPP portal as per the EoI for consideration.

6. It is confirmed that our response is consistent with all the requirements of submission as stated in the EoI and subsequent communications from NRL, if any.
7. The information submitted in our response is complete, strictly as per the requirements stipulated in the EoI and is correct to the best of our knowledge and understanding. We would be solely responsible for any errors or omissions in our response.
8. We confirm that all the terms and conditions of our response are valid for acceptance for a period of twelve (12) months from the response Deadline.
9. We understand that NRL is not bound to accept any response it receives.

We remain,
Yours sincerely

Signature
Name
Designation

(Authorized Person in whose name Power of Attorney is issued)

Annexure: III

APPLICANT'S GENERAL INFORMATION

Applicant shall submit following general information along with supporting documents:

1. Name of the Company/Lead Partner of Consortium/ Affiliates/Representatives/
(Strike off whichever is not applicable)
2. Legal status of the Company/Consortium/Affiliates/Representatives
3. Brief description of the Company/Consortium/Affiliates/Representatives including details of its business groups/subsidiaries:
4. Date of Incorporation:
5. Date of Commencement of Business:
6. Full address including Telephone nos.: a. Registered Office: b. Head Office: c. Address for communication: d. Contact Details: e. Office Address in India, if any:
7. Any other documents considered relevant

(Sign & Company Seal)
Authorized signatory

Annexure IV

Sl. No.	Job Description	Client details	Year of start and completion, if completed	Details of Purchase Order and Contact details of client (Ph & Email)	Value of works (Development & Operation separately)	Remarks
1						
2						
3						

NOTES

Entity/ Agency shall furnish the details of best job/ experience/ capabilities in terms of value and quantum, executed in the recent past along with the work order and final completion certificate, for the completed job.

(Sign & Company Seal)

Authorized signatory

Annexure V

FINANCIAL DETAILS

- a. Entity/ Agency is a parent company (i.e., having its subsidiaries): < Entity/ Agency to select either of the following options and strike off the other>.

- i. Financial details are of parent company without the financial data of subsidiaries
- ii. Financial details are of parent company including the financial data of subsidiaries. It is further certified that separate annual report of Entity/Agency, without the financial data of subsidiaries, is not prepared and audited.

OR

- b. Entity/ Agency is a subsidiary company: < Entity/ Agency to select either of the following options and strike off the other>.

- i. Financial details are of subsidiary company
- ii. Financial details are of parent company including the financial data of subsidiaries. It is further certified that separate annual report of Entity/ Agency (i.e. subsidiary), is not separately prepared and audited.

OR

- c. Entity/ Agency does not have any subsidiary or parent company: Financial details of the Entity/ Agency itself.

OR

- d. Entity/ Agency is Joint Venture Company (Either incorporated or un-incorporated) : Financial details of the Entity/ Agency incase on incorporated or of all the JV Partners in case un-incorporated JV :

Sl. no.	Description	Year	Value in Currency (_____)	In case of currency in Financial statement is other than INR/USD, value to be converted in USD (*)
1.	Turnover	Latest financial year (____)		
		Preceding 1 st year (____)		
		Preceding 2 nd year (____)		
2.	Net Worth	Latest financial year (____)		
3.	Working Capital	Latest financial year (____)		

Notes:

1. Entity/ Agency shall provide financial data based on their standalone financial statements. In case standalone financial data is not prepared and audited, only in that case Entity/ Agency shall furnish the consolidated financial data.
2. Net worth calculation: Net worth means paid up share capital, Share Application Money pending allotment* and reserves# less accumulated losses and deferred expenditure to the extent not written off. Net worth has been calculated using the following formula, as per provisions of the enquiry document:

Reserves to be considered for the purpose of net worth shall be all reserves created out of the profits and securities premium account but shall not include reserves created out of revaluation of assets, write back of depreciation and amalgamation.

* Share Application Money pending allotment will be considered only in respect of share to be allotted.

Description		Values <in Currency>
Paid up Share capital (A)	:	
Add: Share Application Money pending allotment (B)	:	
Add: Reserves (As defined above) (C)	:	
Less: Accumulated Losses (D)	:	
Less: Deferred Revenue Expenditure to the extent not written off (E):	:	
Net Worth (A+B+C-D-E)	:	

3. Working Capital calculation: Working Capital shall be Current Assets minus Current Liabilities.
4. Turnover (for the Financial statement pertaining to post GST regime): Turnover shall be taken as Revenue from operation (excluding GST) as stated in Financial Statement of the Entity/ Agency, excluding other Income.

However, Turnover for the Financial statement pertaining to pre-GST regime shall be calculated as Revenue from operation Including Excise Duty but Excluding Other Income.

5. Net worth, Working Capital and Turnover have been calculated using the above mentioned formulae and after giving effect to the impact of Audit Qualifications given in the Audit Report.

(Sign & Company Seal)

Authorized signatory