EOI No.: HPCLR&D/NSG/PSA-01



HINDUSTAN PETROLEUM CORPORATION LIMITED (A Government of India Enterprise) PURCHASE DEPARTMENT HP Green R&D Centre, KIADB Industrial Area, Tarabahalli, Devanagundi, Hoskote, Bengaluru – 560 067

EXPRESSION OF INTEREST (EOI)

Hindustan Petroleum Corporation Limited (HPCL), HP Green R&D Centre, Bengaluru invites Expression of Interest (EOI) for the following:

Name of Work	Period of availability of EOI Document	EOI Due Date / Time
Technology Partner for Licensing & Supply of H2 PSA Technology. (EOI No.: HPCLR&D/NSG/PSA-01)	17 th August, 2018 to 06 th Sept, 2018	07 th September 2018 upto 15.00 Hrs. (IST)

The detailed EOI Document with contact details can be viewed and downloaded from HPCL's website: <u>http://www.hindustanpetroleum.com</u> or <u>https://etender.hpcl.co.in/</u> or from Govt. website: <u>http://eprocure.gov.in/cppp</u>.

Submission through Online means through HPCL's e-Proc website (https://etender.hpcl.co.in/)

All amendments, time extension, clarifications, etc. (if any), will be uploaded in the websites only and will not be published in newspapers. Bidders should regularly visit the above websites to keep themselves updated. Interested Agencies / Suppliers may submit the Response Form ONLINE on or before the Due Date & Time given above.

Chief Manager – Materials, HPCL-R&D, Bengaluru



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EXPRESSION OF INTEREST FOR 'TECHNOLOGY PARTNER FOR LICENSING & SUPPLY OF H2 PSA TECHNOLOGY'

EOI No.: HPCLR&D/NSG/PSA-01

Introduction:

Hydrogen is a critical process utility in refineries which is used in processes such as Diesel Hydro-desulphurization, Diesel Hydrotreating, Naphtha Hydrotreating, Hydrocracking, Isomerization and Lube upgradation. All the processes require high purity Hydrogen of more than 99 mole%. Pressure Swing Adsorption (PSA) is the widely used technology in refineries for H2 purification from about 70-75 mole% to more than 99 mole%.

In this context, HPCL R&D has developed H2 PSA technology and the first demonstration / commercial scale unit was successfully designed, installed and commissioned in HPCL's Visakh Refinery for processing CCR off-gas and producing high purity Hydrogen. Further, HPCL R&D has successfully completed adsorbent system replacement at one of the existing H2 PSA unit at its Mumbai Refinery for processing HGU gases and producing high purity Hydrogen. The units are successfully operating and performing satisfactorily.

By way of setting-up the demonstration / commercial scale unit and by way of replacing the adsorbent system at its refineries, HPCL has gained suitable experience, knowledge and technical know-how on adsorbents, valves sequencing and PLC program. As a next step, HPCL is now intending to offer / license Hydrogen PSA technology to customers in India and abroad through tie-up with a 'Technology Partner' who have complementary strengths in engineering, construction, commissioning and technology marketing.

In this regard, Expression of Interest from prospective technology / engineering companies is requested who can license & supply the HPCL R&D developed H2 PSA technology.

Terms and Conditions:

- 1. The questionnaire in the Annexure-I should be completed in all respects and be submitted ONLINE along with Expression of Interest by filling the Response Form (Refer Annexure II) along with their contact details.
- 2. As an Expression of Interest, vendors should print, fill, sign and stamp all the pages of the document and submit ONLINE.
- 3. Expression of Interest along with the required details should be submitted ONLINE before the last date mentioned above.

EOI No.: HPCLR&D/NSG/PSA-01



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- 4. Entries received before the last date will only be considered for further scrutiny. Any entries received after the last date will be liable to be rejected for further scrutiny.
- 5. Based on the responses given by the companies / vendors in the questionnaire (Refer Annexure I) as well as meeting HPCL requirements, vendors will be qualified for further considerations.
- 6. If vendor requires any additional information or clarifications, an email request should be sent to the contact person mentioned below.
- 7. A **Non-Disclosure Agreement (NDA)** has to be signed with HPCL to obtain the required information on H2 PSA technology and use the same. The data sharing, after signing NDA, may be done with only those vendors who are qualified as per the questionnaire given in Annexure I.
- 8. After due-diligence, HPCL shall float a tender to qualified bidders for submission of commercial proposals, which will be followed by evaluation and selection.
- 9. The qualification of Vendor is at HPCL discretion based on the responses given by the vendor for the Questionnaire given in Annexure I.
- 10. HPCL reserves the right to use in-house information for the assessment of vendor's capabilities for qualification along with the responses given for the Questionnaire given in Annexure I.
- 11. HPCL reserves the right to reject any or all applications without assigning any reason thereof.
- 12. All the information provided by the Agency/Supplier shall be kept confidential by Hindustan Petroleum Corporation Limited (HPCL), India and shall not be shared to any other third party / parties. The information provided shall only be used for evaluation of suitability.
- 13. This Expression of Interest (EOI) is solely for information and evaluation purposes of HPCL, India. HPCL does not assure and make any commitment whatsoever to Agency/Supplier.

Mode of Submission of Expression of Interest - ONLINE:

The completed questionnaire, Response form and all required details need to be submitted ONLINE as "Expression of Interest for Technology Partner for H2 PSA"

Contact Person for any Queries:

 Mr. T A Rajiv Kumar, Senior Manager – R&D Telephone: 080- 28078551 Email: <u>tarajivkumar@hpcl.in</u>



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ANNEXURE - I

Following are the compulsory criteria for the bidders to participate in the EOI:

Sr.	Question	Documentary Proof
No.		
1.	Bidder should have done technology licensing for at	(a) PO copies.
	least 1 no. commercial refinery unit during last 3	(b) BDEP submission
	years prior to the date of EOI.	certificates / reports.
2.	Bidder should have technology license / valid tie-up	Technology licensing details
	for technology license, in any one of the following	/ Tie-up agreements.
	commercial refinery technologies:	
	(a) Hydrogen Generation Unit (HGU)	
	(b) Continuous Catalytic Reforming (CCR)	
3.	Bidder or his subsidiaries / JVs / affiliates / parent	-
	company, should not have in-house developed /	
	patented Hydrogen PSA technology or should not be	
	a supplier of Hydrogen PSA technology for refineries	
	/ petrochemical complexes.	
4.	Bidder should have in-house resources & capabilities	(a) PO copies placed within
	for engineering and execution of commercial refinery	the last 7 years.
	projects / units.	(b) Manpower chart of
		personnel with technical /
		engineering qualifications
		for the given scope.

Bidders shall provide confirmation to all the above criteria along with submission of documentary proofs. Bidders failing to confirm any one of the above criteria shall be liable for rejection.

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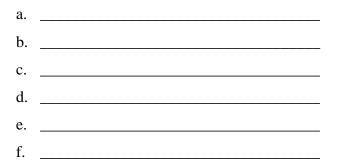


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<u>ANNEXURE – II</u>

Response Form for prospective vendors for Technology Partner for HPCL's H2 PSA Technology:

1. Company Name:		
2. Address:		
-		
3. Phone Number:		
4. Mobile Number:		
5. Fax Number:		
6. Email:		
7. Annual Turnover of	the Company Group:	
8. Documentary Proofs given for Annexure – I Questionnaire:		



I / We hereby certify that all the particulars given above are correct and by submitting this Response Form along with Questionnaire and required documents. I / We express interest for Technology Partner for HPCL's H2 PSA technology.

(Signature) Name: _____ Designation: _____ (With Official Seal of Company)