

EOI No. COMP/PNGRB/UPGRADE/17/2015/55

Date: 02/03/2020

## **Expression of Interest (EOI) for Services to ascertain the health & residual life and fitness for service of natural gas compressor packages.**

### **Introduction**

Assam Gas Company Ltd., a Govt. of Assam Undertaking was incorporated on March 31, 1962 in Shillong as a limited company wholly owned by the Government of Assam to carry out all kinds of business related to natural gas in India. The first gas transportation business started in the year 1967 with supply of natural gas to Namrup Thermal Power Station of APGCL. Subsequently, the company grew from strength to strength and stands today as one of the premier natural gas transmission and distribution companies in India.

### **Background**

To provide uninterrupted pressurized gas to our consumers mainly situated at Namrup, Assam Gas Company Ltd (AGCL) has 9 nos of Booster Gas Compressors at Duliajan. The Natural Gas compressor station of AGCL is essentially a natural gas pressure booster station. The gas being supplied by producer at their off take point at a pressure of 9.5-11.24 kg/cm<sup>2</sup> g (135-160 PSIG) is fed to the compressor station of AGCL through a common carrier of 800 mm (32 ") and a 500 mm (20") underground steel pipeline. A portion of the gas is compressed to a pressure of 14.06-17.57 kg/cm<sup>2</sup> g (200-250 PSIG) and transported through one no of 400 mm (16") to BVFCL and one no of 500mm (20") underground steel pipelines to NTPS and APL at Namrup.

AGCL intends to identify potential solution providers who can "Ascertain the health, residual life and compliance to statutory norms mandated in T4s regulations for Natural gas compressor packages coupled to Natural Gas Engines".

The service provider who have enough experience and capability in this field and meet the qualifying criteria as per EOI Prequalification criteria are requested to visit Assam tenders web site <https://www.assamtenders.gov.in> for "Expression Of Interest" for further details and submit their proposal as per details procedure mentioned on the EOI on or before **16/03/2020 up to 14:30 HRS IST**. All Corrigenda, addenda, amendments, time extensions to the EOI will be hosted on the website and no separate notification shall be issued in the press. Prospective participants against the EOIs are requested to visit the website regularly to keep themselves updated.

## **1. PREAMBLE**

ASSAM GAS COMPANY LIMITED (AGCL), a Government of Assam Enterprise, is a premier Oil & Gas Company engaged in transportation and distribution of natural gas with its headquarters at Duliajan in the Dibrugarh district of Assam. AGCL has 9 Natural Gas booster compressor packages which compresses gas upto 250 psig and supply it to Power plant, fertilizer and petrochemical complex. The existing compressors were commissioned during different periods. The Unit 3 4 & 5 (three units were commissioned during 1974-75 , Unit# 6 & 7 were commissioned during 1982 and remaining 4 units Unit#8,9,10 & 11 were commissioned during 2004-05. With the advent of PNGRB regulation the safety aspects have been given due importance and since all these units had been commissioned much earlier than the advent of the regulations, it does not comply with many safety norms. To determine the useful life of the said units in terms of reliability, availability, capacity, meeting customer demands and compliance to Regulatory safety norms, the age of the units, old technology, obsolete spare parts etc are also a serious concern. The company is facing serious challenge in evaluating these old units.

## **2. OBJECTIVE**

The objective of the Expression of Interest (EOI) is to provide the company with the optimal cost effective implementable solution for ascertaining the health and residual life of the 5 compressor packages (Unit# 3,4,5,6 & 7). While evaluating the residual life of these packages the compliance of various regulatory norms and its cost implications had to be considered.

## **3. LOCATION OF SITE**

ASSAM GAS COMPANY LIMITED, DULIAJAN GAS COMPRESSOR STATION, DULIAJAN,  
ASSAM – 786602

## **4. SCOPE OF WORK**

- 4.1 The specification is to conduct Health & Residual Life Assessment study and Uprating study on Gas Engines, Gas Compressors, Air Exchanger & other auxiliaries in the individual packages and to conduct scientific study at site.
- 4.2 To provide the company with best possible option for these units on the following basis-
  - (a) Renovation and Modernization (R&M)
  - (b) Replacement with a new one at AGCL Gas Compressor StationTo submit a comprehensive report to AGCL, which shall eventually form the basis for preparation of tender specification for R&M or Replacement schemes.
- 4.3 The service provider shall determine the useful life of the said units in terms of reliability, availability, capacity, meeting customer demands and needs and meeting regulatory compliances. Other factors such as Technical advances which might make the existing asset obsolete and Economic Life of the unit's i.e the cost of continuing to operate such old assets against replacing the same by a new one etc may also be considered to determine the useful life.
- 4.4 The scope of study should include the following categories of tests besides other tests to be specified by the bidder:

- a. Inclusion of discharge Gas after coolers to limit the discharge gas temperature to allowable limits (max 50° C).
- b. Feasibility of functionality test of safety cut outs in existing panels.
- c. Inclusion of pressure safety valve in the discharge piping of compressor.
- d. Remote ESD system.

4.5 The Service provider shall submit realistic cost estimates of R&M / Replacement upgrade required with a holistic cost comparison of R&M / Replacement of the existing units.

4.6 The Assessment study shall be done in the best manner using the modern technology and scientific methods so that maximum benefits are derived at minimum cost / carrying out barest minimum and necessary works.

4.7 **Preliminary Assessment Report:**

Based on the study/testing, collection of data covered and discussion with department/ Management, a preliminary assessment report is to be prepared and has to be submitted to the Engineer In charge. Two (2) hard copies and One (1) soft copy of preliminary assessment report are to be submitted to HOD Compressor deptt.

The study report shall include the following besides the other data.

Date and time of test, Ambient Temperature, Engine and Compressor output, temperature of different parts, data observed, inferences arrived at and list of test equipments used, measured gas discharge, vibration at different levels and stress of different components, adequacy of safety systems and checking of their functionality on regular basis, compliance to T4S regulations. The report shall include recommendation on up gradation / replacement with cost comparison.

4.8 **Detailed Assessment Report (DAR):**

After detailed study, a draft DAR is to be submitted to the Company for approval / comments. Based on the approval on draft DPR, finalization of Detailed Assessment Report should be done duly considering the views of the Management. DAR should cover justification for the schemes and also every item of work apart from cost benefits with reference to investment. 3(Three) hard copies with 1 soft copies of final DAR is to be submitted.

**DAR should cover but not limited to the following :**

- i. Complete compliance to regulation requirements that can be achieved by R&M/R, M&U or Replacement scheme vis a vis cost comparison.
- ii. The best period to go in for R&M/R, M&U or Replacement of the tentative period of completion, estimated cost for all the options (R&M / R, M&U & Replacement) also be included in the report.
- iii. List of modifications suggested.
- iv. Scheme justification report duly considering the space availability and stability of civil and mechanical structures.
- v. Brief description and salient features of the proposed modifications and new equipments for R&M / RM&U schemes.
- vi. Additional flexibility in operation that could be achieved with the proposed modifications.
- vii. Payback period, cost benefit analysis.
- viii. Cost estimates specifying the assumptions made.

**Among the other things the Detailed Assessment Report should cover the following salient features:**

- a. Brief History of Gas Compression station.
- b. Salient features of the existing project and performance review.
- c. Need for the project and justification.
- d. Renovation and Modernization/ Renovation, Modernisation and Uprating or Replacement studies with descriptive narration of tests on different components, discussions and interpretations of test observations.
- e. Renovation and Modernisation/ Renovation, Modernisation and Uprating possibility and proposals.
- f. Project implementation Schedule with road ahead with year on year activity recommendations.
- g. Environmental aspects.
- h. Manpower and training.
- i. Capital cost and Financial Analysis.
- j. Conclusion and Recommendation.

**4.9 Special Conditions:**

- i. Power Facility: AC supply if required will be provided free of cost. Necessary cables, switchboard etc. shall be arranged by the bidder all such equipments shall conform to hazardous area application.
- ii. Tools & Plants and instruments: All instruments and tools and plants required for the study shall be arranged by the bidder at his own cost. Special tools and tackles if any required for the works will be spared, if available at free of cost on returnable basis at the discretion of Engineer In Charge. HOT Crane facility will be made available at free of cost.
- iii. Bidder shall have to make his own arrangements for accommodation and food of his personnel. Subject to availability, office and residential accommodation will be provided on chargeable basis.
- iv. Man Power Requirement: Required number of skilled and unskilled man power to be arranged by the bidder.
- v. Out of unit# 3 4 & 5 only one unit shall be spared at a time for assessment /study without affecting the operation of the compressor station. Similarly for Unit # 6 and 7 one unit shall be spared at a time.

Any dismantling procedure required for study, needs to be preplanned and in consultation with Engineer in Charge. Such invasive checks to be performed by bidder shall be included in the methodology that has to be submitted to AGCL at the kick of meeting.

**The offer should cover the following in the Part-I technical Bid:**

- a. Probable time of commencement of RLA.**
- b. Duration of RLA study for each unit and all the five units.**
- c. Details of tests to be conducted and the time required.**
- d. Period of shutdown required for conducting RLA and Uprating Study.**

## 5. PRE-QUALIFICATION CRITERIA:

The Bidder/Solution Provider must fulfill the following minimum prequalifying criteria to participate in the EOI.

- a. Experience of successfully carrying out such health and residual life of machineries in the oil and gas industry in the past Seven (7) years from the original EOI closing date.
- b. To demonstrate their experience and capabilities, the Solution Provider should provide information separately such as job completion certificates, work orders etc.
- c. The Bidder/Solution Provider shall have to submit their Annual financial turnover during any of the preceding 03 (three) financial/accounting years reckoned from the original EOI closing date. (Minimum Turnover 50 lakhs)
- d. Net worth of Bidder/Solution Provider must be positive for preceding financial / accounting year.

Note:

For proof of Annual Turnover & Net worth any one of the following documents must be submitted along with the EOI:

- i. A certificate issued by a practicing Chartered /Cost Accountant (with Membership Number and Firm Registration Number), certifying the Annual turnover & Net worth as per format prescribed in ANNEXURE-I

## 6.0 THE TECHNICAL PARTICULARS OF THE ASSETS UNDER STUDY:

- i) Tag No: Unit no # 3, 4 & 5.  
Compressor Make: IR- Canadian Compressor  
Compressor Model: RDS  
Compressor Serial No: YRS – 307 C, 308 C & 309 C  
Engine Make and Model: Waukesha L7042 GSI  
In service since 1974-75.  
Existing condition: All 3 in operations.  
CAPACITY (MMSCMD): **0.610 (ORIGINAL)**
- ii) Tag No: Unit no # 6 & 7.  
Compressor Make: INDIGENOUS INGERSOLL- RAND  
Compressor Model: RDH  
Compressor Serial No: YRS – 565 B, YRS – 564 B  
Engine Make and Model: Waukesha L7042 GSI  
In service since 1982.  
Existing condition: All 2 in operations.  
CAPACITY (MMSCMD): **0.500 (ORIGINAL)**

## **7. INSTRUCTIONS TO PARTICIPANTS**

### **7.1. COMPLETENESS OF RESPONSE**

- a. Solution providers are advised to study all instructions, forms, requirements and other information in the EOI documents carefully. Submission of the EOI shall be deemed to have been done after careful study and examination of the EOI document with full understanding of its implications.
- b. The response to this EOI should be full and complete in all respects. Failure to furnish all information required by the EOI documents or submission of a proposal not substantially responsive to this document will be at the Bidder's risk and would result in rejection of its Proposal.

### **7.2. EOI PROPOSAL PREPARATION COSTS & RELATED ISSUES**

- a. EOI should not be treated as a commercial tender document.
- b. The solution provider is responsible for all costs incurred in connection with participation in this process, including, but not limited to, costs incurred in conduct of informative and other diligence activities, participation in meetings/ discussions/ presentations/ demonstrations/ preparation of proposal, in providing any additional information required by AGCL to facilitate the evaluation process.
- c. This EOI does not commit AGCL to award a contract or to engage in negotiations. Further, no reimbursable cost may be incurred in anticipation of award or for preparing this EOI.

### **7.3. ISSUE OF ADDENDUM**

- a. At any time prior to the last date for receipt of EOI, AGCL may modify the EOI document by issuing an addendum/ corrigendum.
- b. The addendum/ corrigendum (if any) will be posted on the same tender site.
- c. Any such addendum/ corrigendum shall be deemed to be incorporated into this EOI.
- d. In order to provide reasonable time for taking the addendum/ corrigendum into account, OIL may, at its discretion, extend the last date for the receipt of EOI Proposals.

### **7.4. SUBMISSION OF EOI & FORMAT**

#### ***A. Submission:***

- a. Interested parties meeting the pre-qualifying criteria as above are invited to submit their EOI assam tenders within **16.03.2020**, followed by hard copies of the same through courier/post super-scribing "Expression of Interest No.: EOI NO. **COMP/PNGRB/UPGRADE/17/2015/55** at the following address:

CM-Mechanical  
ASSAM GAS COMPANY LIMITED  
COMPRESSOR DEPARTMENT  
P.O. DULIAJAN-786602  
DIST. DIBRUGARH, ASSAM, INDIA

#### ***B. EOI FORMAT:***

- a. The following undertaking shall be provided by the intending Supplier: -  
*"The information provided in the support of qualification criteria is factually correct and the company meets the pre-qualification criteria".*

- c. Solution providers shall submit all the required documents as mentioned below. It should be ensured that the formats mentioned in this EOI should be adhered to and no changes in the format should be done.
- d. EOI document submitted by the solution provider should be concise and contain only relevant information as required.
- e. AGCL reserves the right to modify and amend any of the above-stipulated condition/ criterion depending upon project priorities vis-à-vis urgent commitments.
- f. The proposal and all correspondence and documents shall be written in English.
- g. Validity of the EOI shall be for 90 days.

## **7.5. EVALUATION PROCESS**

- a. AGCL shall evaluate the responses to the EOI and all supporting documents & credentials of only those solution providers who confirm that they had prior such similar experience. Inability to submit requisite supporting documents or credentials by a bidder, may lead to non consideration of its proposal.
- b. Each of the responses shall be evaluated to validate compliance of the bidders according to this template, Forms and the supporting documents specified in this document and submitted during the presentation.
- c. The solution providers shall be called for a presentation/ technical demo. The Venue Shall be Duliajan and exact time-slots shall be communicated before the date of presentation through e-mail. The Solution provider shall submit a copy of the presentation/documents before the presentation date.

## **7.6. SPECIAL NOTES TO PARTICIPANTS**

- a. All documents submitted along with the EOI must be self-certified by the Bidder/Solution Provider and should be clear & legible.
- b. AGCL reserves the right to physically check the original documents/certificates, copies of which are submitted along with the EOI.
- c. The EOI is liable to be ignored in case of submission of any misleading/false representation by the Bidder in the form of statements and attachments.
- d. AGCL reserves the right to ignore any or all EOIs without assigning any reason thereof.
- e. AGCL reserves the right to curtail/enhance the scope of work stated above or cancel, if required, without assigning any reason thereof.
- f. Any attempt by a solution provider to influence the EOI evaluation process may result in the rejection of its EOI Proposal.
- g. AGCL reserves the right to (i) accept or reject any/all EOIs submitted by parties (ii) cancel the process at any time without any liability and assigning any reason thereof to the applicants.
- h. **This EOI is not an invitation for bids. After reviewing the EOI of the responding parties, a pre-tender meeting with the prospective solution providers will be held to discuss and finalise the detail scope and other terms and conditions. Time & Venue for the same shall be intimated separately nearer the time.**

## 8. MANDATORY REQUIREMENTS

All respondents MUST submit the following which will be the basis for short listing:

1. Name and full address of the Organization.
2. Management Structure.
3. Contact Person with designation.
4. Contact telephone numbers and fax No.
5. Email address.
6. Current operational areas of work.
7. Turnover for last three years.
8. Approval/registration with any Govt./Agency.
9. Details of expertise available in the developing such brown field projects.
10. Regular manpower available on roll for proposed work alongwith their age, qualification and experience (minimum expected qualification is Graduate in Engg./ Post Graduate)
11. Areas of work where expertise available pl. elaborate (Mech/Elec/Chem/Civil/Electronics/Metallurgical/Textile/Food etc.)
12. Any other credentials in the subject area.
13. Terms and conditions.
14. Annexure –I filled and duly signed and stamped.
15. Detailed description of proposed proposal.
16. No. of years of experience in the field of health and residual life assessment of machineries.
17. No. of successful completion of such similar jobs



**ANNEXURE-I**

**CERTIFICATE OF ANNUAL TURNOVER & NET WORTH**

TO BE ISSUED BY PRACTICING CHARTRED ACCOUNTANTS FIRM ON THEIR LETTER HEAD

**TO WHOM IT MAY CONCERN**

This is to certify that the following financial positions extracted from the audited financial statements of M/s .....(Name of the firm / service provider)For the last three (3) completed accounting years upto..... (as the case may be) are correct.

<b>Year</b>	<b>TURNOVER in INR (Rs)</b>	<b>Net Worth</b>

**Place:**

**Date:**

**Seal:**

**Signature**

**Name:**

**Designation:**

**Membership No.**

**Registration Code:**