

EXPRESSION OF INTEREST

Engagement of an experienced consultancy firm for carrying out comprehensive Techno Economic Viability Study for future augmentation of gas compression capacity of DNPL

Ref: DNPL/COMP/AUGMENTATION/2024/170/08 dated 17/07/2024

Date of publishing of EOI in portal: **22/07/2024**

Last Date of submission of EOI: **17/08/2024**

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CLIENT

DNP LTD. (DNPL)

(A Govt. of Assam Undertaking)

**1 no. Barpathar, Village-Madhuban, PO-Duliajan
District-Dibrugarh, Assam, PIN-786602**

1. Introduction

DNP Limited (DNPL) is a Govt. of Assam Undertaking & a Joint Venture company of Assam Gas Company Limited, Numaligarh Refinery Limited & Oil India Limited with its field head quarter in Duliajan, District-Dibrugarh and registered office at Guwahati in the state of Assam. DNPL is a downstream entity in the oil and gas industry having its own pipeline network of 192KM from Duliajan to Numaligarh.

2. Infrastructure in Brief

Company has its Natural Gas Compressor Station (Despatch Station) at Duliajan. There are total **5 (five) nos.** of gas engine driven reciprocating gas compressor packages. Gas is received from M/s OIL and post compression transported to NRL through 16" pipeline.

3. Technical Background

DNPL compressor station at Duliajan has 5 nos. of packages with following details as under-

- I. Compressor capacity: 0.55 MMSCMD each make Cameron & Ariel, 2stage reciprocating Driver: Gas Engine make Waukesha, ATGL & 275GL Plus Model, 12 cylinder.
- II. Combined capacity: 2.75 MMSCMD (total 5 packages)
- III. Current transportation: 1.0 MMSCMD (2 running +3 standby)
- IV. Current Driver: Waukesha Gas Engine 12V 275 GL Plus ESM 2 version.
- V. Designed compressor suction pr.: 8 bar, Max. designed delivery pr.: 60 bar.

4. Scenario Ahead

- I. There is a future plan to augment the compression capacity by additional 1.5 MMSCMD (current flow to NRL is 1 MMSCMD) which will take the final flow rate to 2.5 MMSCMD.
- II. To achieve this additional requirement, existing 05 (five) nos. of packages needs simultaneous running without the availability of any standby unit which is not operationally recommended.
- III. Thus new additional compression capacity of 1.00 MMSCMD will have to be added to the existing fleet which will make the configuration as 5 units running + 2 units standby.

5. Objective of floating EOI

The purpose of publishing this Expression of Interest (EOI) is to invite attention of suitably experienced consultancy firm who could be engaged in coming days to carry out a Techno Economic Feasibility/Viability Study of the proposal considering mainly 5 (five) nos. of possible options envisaged by company as on date which are mentioned as under. The consultant to be engaged for said purpose will study/analyze all the options in detail considering all the technical as well as financial aspects involved and suggest the most suitable option (out of 5 options given) for further review & consideration of the company .

6. Study Options/scenarios envisaged by company

Option I:

*A new compressor station at Duliajan inside existing premises with proposed 02 (two) nos. of similar configuration packages with **Gas Engine as Driver option (existing setup)***

Option II:

*A new compressor station at Duliajan inside existing premises with proposed 02 nos. of similar capacity packages but with **Electric Motor as Driver option***

Option III:

*A new compressor station at Duliajan inside existing premises of company which is to be executed on **BOO (build, own & operate)** basis.*

Option IV:

*A new compressor station at Dibrugarh inside process premises of BCPL at Lepatkata, Dibrugarh which is to be executed on **BOO (build, own & operate)** basis.*

Option V:

A new compressor station at Duliajan inside existing premises of company with only 01 no. of compressor package having standalone capacity of 1.00 MMSCMD driven by suitable driver either gas engine/electric motor/turbine.

7. Consultant's scope of work/deliverables in detail against envisaged options

Background: The existing compressor station building at Duliajan has no free space available inside to accommodate any new package as already there are 05 nos. of installed packages. Thus if it is desired to install new additional packages, a compressor building with complete new infrastructure (comprising of civil, electrical, structural, mechanical works etc.) will have to be erected as a Greenfield development project. The scope of study of the appointed consultant will be comprehensive in nature covering all the 05 (five) options/aspects with independent scope of work as defined below in detail.

7.1 Consultant's deliverables against Option No. I

*Under this option, a new compressor station at Duliajan is proposed inside existing premises with 02 (two) nos. of similar configuration new packages with **Gas Engine as Driver option** (similar to the existing setup)*

Under this option

- I. 02 nos. of gas engine driven packages with capacity 0.55 MMSCMD each could be installed to augment the capacity by additional 1.00 MMSCMD.
- II. Specs. of the package will be almost similar to the existing packages.

Consultant to be engaged will carryout

- A. Estimation of project capital cost required for this complete Greenfield development project involving all civil, mechanical, electrical, architectural aspects associated with such project.

7.2 Consultant's deliverables against Option No. II

*Under this option, a new compressor station at Duliajan is proposed inside existing premises with 02 (two) nos. of new compressor packages with **Electric Motor as Driver option***

Company may opt for installation of

- I. 02 nos. of new compressor packages with 0.55 MMSCMD capacity each to augment the capacity by additional 1.00 MMSCMD could be installed. However instead of gas engines, Electric Motor will be used as driver for compressor.
- II. Compressor will have similar configuration of existing package.

Consultant to be engaged will carryout

- A. Estimation of electrical power/energy required for compression of 0.55 MMSCMD of gas + auxiliary/utility power requirement (for gas & water cooling).
- B. Estimation of Total Driver Power Rating (in MW) for compressing 0.55 MMSCMD of gas considering point A+ all other selection/design factors applicable.
- C. Identification of new electrical infrastructure to be developed to establish a Motor Drive including transformer, substation etc. with their detailed CAPEX estimation.
- D. Estimation of project capital cost required for this complete Greenfield development project involving all civil, mechanical, electrical, architectural aspects associated with such project.
- E. Cost analysis and comparison of CAPEX involved between Electrical Motor Driven vs. Gas Engine Driven packages.
- F. Life cycle cost analysis and comparison between Electrical Motor Driven vs Gas Engine Driven packages considering 10 years of future operating scenario ahead.
- G. Suggest the best possible alternative between Electrical Motor Driven vs Gas Engine Driven packages based on study above.

7.3 Consultant's deliverables against Option No. III

A new compressor station at Duliajan inside existing premises of company is proposed which is to be executed on BOO (build, own & operate) basis.

Company may opt for installation of

- I. New compressor station infrastructure as a Greenfield project with additional capacity of 1.00 MMSCMD (02 nos. of packages with gas engine/electric motor which is found to be the most cost effective among the 02 options **on Build, Own & Operate (BOO) concept.**

Consultant to be engaged will carryout

- A. Study the techno economic feasibility of the proposal considering BOO philosophy.
- B. Development of a working model to execute the BOO philosophy.
- C. Cost analysis & comparison between BOO philosophy vs. other options applicable.

7.4 Consultant's deliverables against Option No. IV

A new compressor station at Dibrugarh inside process premises of BCPL at Lepetkata, Dibrugarh is proposed which is to be executed on BOO (build, own & operate) basis.

Background: BCPL has their petrochemical complex at Lepetkata in Dibrugarh district. The C2+ rich gas stream from CGGS,OIL at Duliajan is compressed and transported to Lepetkata plant and the lean gas post extraction returns back to CGGS. The lean gas header pressure is maintained at approx. 40-45 bar at Lepetkata. Thus if a compression facility could be envisaged at Lepetkata and further hooked up to the distribution network, in that case the compression load requirement will drastically decrease impacting the techno economic viability/feasibility in a significant manner.

Company may opt for installation of

- I. New compressor station infrastructure as a Greenfield project with additional capacity of 1.00 MMSCMD (02 nos. of packages with gas engine/electric motor which is found to be the most cost effective among the 02 options available inside BCPL Lepetkata complex **on Build, Own & Operate (BOO) concept.**

Consultant to be engaged will carryout

- A. Study the techno economic feasibility of the proposal.
- B. Estimation of project capital cost against this complete Greenfield development project inside BCPL complex.
- C. Cost analysis & comparison with other options applicable.

7.5 Consultant's deliverables against Option No. V

A new compressor station at Duliajan inside existing premises of company with only 01 no. of compressor package of standalone capacity of 1.00 MMSCMD is proposed with driver either gas engine/electric motor (suitable driver mode to be decided based on study)

Company may opt for installation of

- I. Only 01 no. of new compressor package with a standalone capacity of 1.00 MMSCMD (instead of opting for 02 nos. of package having capacity of 0.55 MMSCMD each) to augment the capacity by additional 1.00 MMSCMD.

Consultant to be engaged will carryout

- A. Study the technical feasibility of going for only 01 no. of package having capacity of 1.0 MMSCMD instead of having 02 nos. of packages.
- B. Identify the suitable compressor type *either Centrifugal or Reciprocating* that can cater for 1.0MMSCMD flow at desired pressure requirement.
- C. Identification of suitable driving mode (gas engine/electric motor) to meet standalone requirement of 1MMSCMD.
- D. Estimation of auxiliary/utility power requirement (gas and water cooling).
- E. Identification of ancillary infrastructure development required to execute such proposal and their complete CAPEX estimation.
- F. Estimation of project capital cost required for this complete Greenfield development project involving all civil, mechanical, electrical, architectural aspects associated with such project.
- G. Cost analysis & comparison with other options applicable.

8. Suggestion over & above mentioned options above

Consultant deployed based on its' expertise may suggest company with better alternatives if any to make the investment most cost effective. It is to be noted that selection of package type (whether reciprocating or centrifugal) against options envisaged will be carried out based on comparison of energy consumption requirement by both types. Objective is to select the most energy efficient and cost effective modes of compression in the long run.

IMPORTANT NOTE:

- A. DNPL will facilitate the coordination between consultant & organization concerned wherever required for the purpose of data collection, survey in regard to the study to be carried out.
- B. The vacant plot of land inside the existing compressor station premises has the station vent header line installed which needs to be relocated to a suitable place. The scope of study will also include this relocation aspect complying with the statutory guideline.
- C. Vacant land/space is available inside existing station premises for new infrastructure development in future.

9. Desired Credential of Party/Qualification Criteria

9.1 Technical

- I. The consultant firm should have experience of completing minimum 3 (three) assignments with similar/equivalent scope of work in the hydrocarbon sector in India or abroad for Govt. (State Govt./Central Govt./SPSU/CPSU) as well as large private sector clients in India as well as abroad within the last 7 years as on EOI floating date.
- II. The consultant firm must have their permanent office/base in India having their own set of experienced and skilled professional to execute the complete scope of work as defined above.
- III. The party should be a single entity (no JV or consortium).

Documents to be submitted in support of technical credential

- I. A profile of the consultancy firm with detailed list of key manpower having expertise in desired field of study.
- II. Work experience/List of similar completed projects accompanied by relevant work orders & completion certificates issued by clients/parent contractor in attached format.
- III. List of similar works in hand or in execution phase if any.
- IV. List of key experienced personnel to be involved in study with their CVs.

9.2 Commercial

- I. The party must be financially sound with average net worth of last 3 (three) years positive.
- II. Party must have valid GST, PAN registration.

Documents to be submitted in support of commercial credential

- I. CA certified Annual Turnover & Net Worth statement of last three FY in given format.
- II. CA certified Audited balance sheet of last three FY.
- III. IT returns of last three FY.
- IV. Valid PAN, GST reg. certificates.

10. EOI related information

Date of publishing of EOI in portal: 22/07/2024

Last Date of submission of EOI: 17/08/2024

Mode of collection of EOI: EOI could be downloaded from the portal www.dnpl.co.in , assamtenders.gov.in or may be collected by sending a request email to the official ids mentioned below.

Mode of submission of Bid: Party can upload the same in e tender portal assamtenders.gov.in or may email the same in .pdf format to email ids mentioned below. However hard copy of same needs to be mandatorily submitted through courier.

Clarification of queries if any: Party may email the same to the official email ids mentioned in this document for clarification of query if any.

Site visit: Interested parties may visit DNPL site office in Duliajan also if there are interested to do so in regard to the EOI published at their own cost.

Contact email ids:

Following are the official email ids for contact viz. gautom.neog@dnpl.co.in, bhaskarbpg@dnpl.co.in, deepsarma2003@dnpl.co.in

Hard copy of all documents forwarded along with a COVER LETTER (on company letterhead) in a sealed envelope mentioning EOI ref no. on top needs to be couriered to the following office address within 14 days of EOI closing date:

Dir. & CEO

DNPL Ltd.

1 No. Barpathar, Village-Madhuban, PO-Duliajan

Duliajan, Dibrugarh Dist., PIN- 786602, Assam,

11. Attachments/Formats to be submitted

- I. Party's General Information statement on company letterhead – Annexure 1.
- II. CA certified Annual Turnover & Net Profit statement (last three FY) - Annexure 2.
- III. Party's Work exp. format- Annexure 3.
- IV. Key personnel information- Annexure 4.

12. Other Salient Terms & Conditions of EOI

- I. Only suitable parties meeting the technical and commercial qualification criteria should respond to this EOI with all supporting documents as desired.
- II. Participation in this EOI & submission of documents doesn't make a party eligible for participation in future tendering related processes or award of job against the said scope of work in DNPL.
- III. DNPL reserves the right to cancel, modify the various T&C of this EOI at any time in its own discretion in the interest of company requirement.
- IV. During subsequent evaluation of EOI, DNPL reserves the right to ask for additional clarification/information on submitted documents by party.
- V. JV/Consortium participation is not allowed.
- VI. All documents submitted must be in English language.
- VII. All cost associated with submission of documents against this EOI will have to be borne by the party.
- VIII. If any party is interested to visit the site for future work assessment, in that case such visit will have to be arranged by party at their own cost only.
- IX. No price bid is desired to be submitted along with the documents.

Sd/-

DIR &CEO, DNPL

Annexure 1: PARTY'S GENERAL INFORMATION

EOI Document No. : Ref: DNPL/COMP/AUGMENTATAION/2024/170/08 dated 17/07/2024

Party Name:

GENERAL

Sr. No.	Details	Submitted by Bidder
1.	Bidder Name	
2.	Number of Years in Operation	
3.	Address of Registered Office	City / State /PIN
4.	Operational Office Address if different from above	City / State /PIN
5.	Phone Number	(Area Code) (Telephone Number)
6.	Fax Number	(Area Code) (Telephone Number)
7.	E-mail Address	
8.	Website	
9.	Quality Certification, if any	
10.	Whether Supplier / Manufacturer/ Dealer/ Trader/ Contractor	
11.	Type of Material Supplies	
12.	Banker's Name& Branch	
13.	Branch Code	
14.	Bank Account Number	
15.	PAN No.	
16.	GST No.	

Note:

1. Bidders will have to submit relevant documents in support of the above registrations (Sl. No. 15 -16).
2. Up to date clearance of Income Tax, GST, etc. and supporting documents for the same are to be submitted.
3. The above-required information's are required on the party's letterhead.

(SIGNATURE AND SEAL OF PARTY)

Annexure 2:ANNUAL TURNOVER & NET PROFIT

EOI Document No. : Ref: DNPL/COMP/AUGMENTATAION/2024/170/08 dated 17/07/2024

Party Name:

Year	Annual Turnover (INR)	Net Profit (INR)
Year 1: 2021-22		
Year 2 : 2022 - 23		
Year 3: 2023 -24		

(SIGNATURE AND SEAL OF PARTY)

Certificate from the Statutory Auditor/CA

This is to certify that(*name of the party*) has the turnover & net profit as shown above against the respective financial years.

Name of the auditor/CA:

Seal of the auditor/CA:

Date:

(Signature, name and designation of the authorized signatory)

Annexure 3: WORK EXPERIENCE OF THE BIDDER

EOI Document No. : Ref: DNPL/COMP/AUGMENTATAION/2024/170/08 dated 17/07/2024

Party Name:

List of completed projects

Sr. No.	Full Postal Address and phone no. of Client & Name of Officer-in-Charge	Description of the Work	Contract Value	WO Ref No.	Date of Work Commencement	Date of completion	Remarks

List of work in hand/being executed projects

Sr. No.	Full Postal Address and phone no. of Client & Name of Officer-in-Charge	Description of the Work	Contract Value	WO Ref No.	Date of Work Commencement	Date of completion	Remarks

(SIGNATURE AND SEAL OF PARTY)

NOTE:

1. Relevant WO & Completion Certificates are to be submitted against proof of submitted completed / work.
2. Against ongoing work, WO should be submitted.

Annexure 4: INFORMATION ON KEY EXPERIENCED PERSONNEL

EOI Document No. : Ref: DNPL/COMP/AUGMENTATAION/2024/170/08 dated 17/07/2024

Party Name:

Sl. No.	Name of Person	Designation	Qualification	Post Qualification Exp.	Year of Association with the Firm

Note:

1. CV needs to be submitted against individual mentioned.

(SIGNATURE AND SEAL OF PARTY)

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