

LIMITED DOMESTIC COMPETITIVE BIDDING
BID DOCUMENT FOR PROCUREMENT OF
CNG CASCADE
(TENDER NO: TECH/CNG/2019/5)

BID DOCUMENT FEE : NIL

DUE DATE & TIME FOR BID SUBMISSION : at 1300 Hrs. (IST)

DUE DATE & TIME FOR BID OPENING: at 1500 Hrs. (IST)

E-mail- jkbora@agclgas.com

Website: www.assamgas.org & www.assamtenders.gov.in

Assam Gas Company Limited herein after called AGCL, a Government of Assam Undertaking invites bids from eligible domestic bidders for supply, installation, testing & commissioning of one CNG cascade in complete accordance with the following details and enclosed Tender Documents under e-tender for single stage two bid systems from competent Manufacturers/Suppliers in India.

(A) NAME OF SUPPLY/WORK: Supply, Installation, commissioning of CNG Cascade

(B) DELIVERY SCHEDULE: 8 Weeks from the date of Letter of Intent.

(C) BID SECURITY / EARNEST MONEY DEPOSIT (EMD) Not applicable

(D) DUE DATE & TIME OF BID-SUBMISSION 14:00 Hrs of

(F) TYPE OF BIDDING 2(Two) Bid System (Un-priced and Priced)

(G) DATE & TIME OF UN-PRICED BID OPENING 15:00 Hrs of

(H) VENUE FOR OPENING OF UN-PRICED BIDS Assam Gas Company Limited, Duliajan Pin- 786602, Dibrugarh, Assam

(I) CONTACT DETAILS: E-mail: jkbora@agclgas.com

(II) Mobile 9435039715

If any of the days specified above happens to be a holiday in AGCL, the next working day shall be implied.

INSTRUCTIONS TO BIDDERS (ITB):

[A] – GENERAL

1 SCOPE OF BID:

1.1 The Owner i.e. Assam Gas Company Ltd. wishes to receive Bids as described in the Bidding Document/Tender document issued by Owner. Owner/AGCL occurring herein under shall be considered synonymous.

1.2 SCOPE OF BID: The scope of work/ Services shall be as defined in the Bidding documents.

1.3 The successful bidder will be expected to complete the scope of Bid within the period stated in Special Conditions of Contract.

1.4 Throughout the Bidding Documents, the terms 'Bid', 'Tender' & 'Offer' and their derivatives [Bidder/Tenderer, Bid/Tender/Offer etc.] are synonymous. Further, 'Day' means 'Calendar Day' and 'Singular' also means 'Plural'.

2 ELIGIBLE BIDDERS:

2.1 The Bidder shall not be under a declaration of ineligibility by Employer for Corrupt/ Fraudulent/ Collusive/ Coercive practices, as defined in "Instructions to Bidders [ITB], Clause No. 39 (Action in case Corrupt/ Fraudulent/ Collusive/ Coercive Practices).

2.2 The Bidder is not put on "Holiday" or banned/blacklisted by Government department/Central/State Public Sector for poor performance or corrupt & fraudulent practices on due date of submission of bid. Further, neither bidder nor their allied agency(ies) (as defined in the Procedure for Action in case of

Corrupt/ Fraudulent/ Collusive/ Coercive Practices) are on banning list of any central/state PSU or the Ministry of Petroleum and Natural Gas. If the bidding documents were issued inadvertently/ downloaded from website, offers submitted by such bidders shall not be considered for opening/ evaluation/Award and will be returned immediately to such bidders. In case there is any change in status of the declaration prior to award of contract, the same has to be promptly informed to AGCL by the bidder.

It shall be the sole responsibility of the bidder to inform AGCL in case the bidder is put on 'Holiday' or banned/blacklisted by Government department/ Public Sector on due date of submission of bid and during the course of finalization of the tender. Concealment of the facts shall tantamount to misrepresentation of facts and shall lead to action against such Bidders as per clause 39 of ITB.

2.3 The Bidder should not be under any liquidation court receivership or similar proceedings on due date of submission of bid. In case there is any change in status of the declaration prior to award of contract, the same has to be promptly informed to AGCL by the bidder.

2.4 Bidder shall not be affiliated with a firm or entity:

(i) that has provided consulting services related to the work to the Owner during the preparatory stages of the work or of the project of which the works/services forms a part of or

(ii) that has been hired (proposed to be hired) by the Owner as an Engineer/ Consultant for the contract.

2.5 Pursuant to qualification criteria set forth in the bidding document, the Bidder shall furnish all necessary supporting documentary evidence to establish Bidder's claim of meeting qualification criteria.

2.6 Power of Attorney: In case of a Single Bidder, Power of Attorney issued by the Board of Directors/ CEO / MD / Company Secretary of the Bidder/ all partners, in case of Partnership firm/Proprietor in favour of the authorised employee(s) of the Bidder, in respect of the particular tender for signing the Bid and all subsequent communications, agreements, documents etc. pertaining to the tender and to act and take any and all decision on behalf of the Bidder, is to be submitted.

In case of a Consortium/JV, Power of Attorney issued by Board of Directors/ CEO / MD / Company Secretary of the Consortium Leader as well as Consortium Member(s) of the Consortium/ partners of JV, in favour of the authorised employee(s) of the Consortium Leader/Lead member of JV, for signing the documents on behalf of the Bidder, in respect of this particular tender, to sign the Bid and all subsequent communications, agreements, documents etc. pertaining to the tender and act and take any and all decision on behalf of the Consortium/JV, are to be submitted. The authorized employee(s) of the Bidder shall be signing the Bid and any consequence resulting due to such signing shall be binding on the Bidder.

3.1 Bids from consortium/ JV of two or more members (maximum three including leader) are acceptable provided that they fulfill the qualification criteria and requirements stated in the Bidding Documents. Participating Consortium/ JV shall submit the Agreement as per the format F-17 clearly defining the scope and responsibility of each member. Members of consortium/ JV shall assume responsibility jointly & severally. The EMD shall be submitted by the Bidder (Consortium/ JV).

3.2 The Consortium/ JV Agreement must clearly define the leader/ lead partner, who shall be responsible for timely completion of work/ services and shall receive/ send instructions for and on behalf of the consortium during the period the bid is under evaluation as well as during the execution of contract.

3.3 All the members shall authorize the representative from the lead partner by submitting a Power of attorney (on a non judicial stamp paper of appropriate value) signed by legally authorized signatories of all the member(s). Such authorization must be accompanied with the bid. The authorized signatory shall sign all the documents relating to the tender/ contract. However, in case of award, payment shall be made to the consortium.

3.4 A consortium/JV once established at the time of submitting the Bid shall not be allowed to be altered with respect to constituting members of the JV/ Consortium or their respective roles/ scope of work, except if and when required in writing by owner. If during the evaluation of bids, a consortium/JV proposes any alteration/ changes in the orientation of consortium/JV or replacements or inclusions or exclusions of any partner(s)/ member(s) which had originally submitted the bid, bid from such a consortium/JV shall be liable for rejection.

3.5 Any member of the consortium/ JV shall not be eligible either in an individual capacity or be a part of any other consortium/JV to participate in this tender. Further, no member of the consortium/ JV shall be on "Holiday" or banned/blacklisted by Government department/ Public Sector on due date of submission of bid. Offer submitted by such consortium/ JV shall not be considered for opening/ evaluation/Award.

4 ONE BID PER BIDDER:

4.1 A Firm/Bidder shall submit only 'one [01] Bid' in the same Bidding Process. A Bidder who submits or participates in more than 'one [01] Bid' will cause all the proposals in which the Bidder has participated to be disqualified.

4.2 Alternative Bids shall not be considered.

5 COST OF BIDDING & TENDER FEE:

5.1 COST OF BIDDING: The Bidder shall bear all costs associated with the preparation and submission of the Bid including but not limited to Bank charges all courier charges including taxes & duties etc. incurred thereof. Further, AGCL will in no case, be responsible or liable for these costs, regardless of the outcome of the bidding process.

5.2 TENDER FEE: NOT APPLICABLE

6. Clause deleted.

[B] – TENDER DOCUMENTS

7 DOCUMENTS COMPRISING THE BID:

7.1 The Bid prepared by the Bidder shall comprise the following components:

7.2 PART-I:

"Techno-commercial / Un-priced Bid" shall contain the following:

- (a) 'Covering Letter' on Bidder's 'Letterhead'
- (b) 'Bidder's General Information
- (c) Bid Form
- (d) EMD/Bid Security.
- (e) Copy of Schedule of Rate (SOR) with prices blanked out
- (f) 'Letter of Authority'
- (g) 'No Deviation Confirmation'
- (h) 'Bidder's Declaration
- (i) 'Certificate' from Bidder
- (j) 'Agreed Terms and Conditions'
- (k) 'ACKNOWLEDGEMENT CUM CONSENT LETTER'
- (l) Documents substantiating "BID EVALUATION CRITERIA [BEC]"
- (m) Any Other Forms and Formats not mentioned above but deemed relevant by the bidder.
- (n) Any other information/details required as per Bid Document

Note: All pages of the Bid must be signed by the "authorized signatory" of the Bidder. The PART-I "Techno-commercial /Un-priced Bid" comprising all the above documents along with copy of EMD/Bid Bond should be uploaded in the relevant folders of Assam Govt. e-tendering portal.

7.3 PART-II : Price Bid

- i) The Prices are to be submitted strictly as per the Schedule of Rate and AGCL shall not be responsible for any failure on the part of the bidder to follow the instructions.
- ii) Bidders are advised NOT to mention Rebate/Discount separately, either in the SOR format or anywhere else in the offer. In case bidder(s) intend to offer any Rebate/Discount, they should include the same in the item rate(s) itself under the "Schedule of Rates (SOR)" and indicate the discounted unit rate(s) only. In case, it is observed that any of the bidder(s) has/have mentioned Discount/Rebate separately, the same shall not be considered for evaluation. However, in the event of the bidder emerging as the lowest bidder, the Discount/Rebate offered by the bidder shall be considered for Award of Work and the same will be conclusive and binding on the bidder.

8 CLARIFICATION OF BIDDING DOCUMENTS:

8.1 A prospective Bidder requiring any clarification(s) of the Bidding Documents may notify AGCL in writing or by fax or email no later than 02 (two) days prior to pre-bid meeting (in cases where pre-bid meeting is scheduled) or 05 (five) days prior to the due date of submission of bid in cases where pre-bid meeting is not held. AGCL reserves the right to ignore the bidders request for clarification if received after the aforesaid period. AGCL may respond in writing to the request for clarification. AGCL's response including an explanation of the query, but without identifying the source of the query will be uploaded on AGCL's tendering web site <http://www.assamtenders.gov.in> communicated to prospective bidders by e-mail/ fax.

8.2 Any clarification or information required by the Bidder but same not received by the Employer at clause 8.1 above is liable to be considered as "no clarification / information required".

9. AMENDMENT OF BIDDING DOCUMENTS:

9.1 At any time prior to the 'Bid Due Date', Owner may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Bidding Documents by addenda/ corrigendum.

9.2 Any addendum/ corrigendum thus issued shall be integral part of the Tender Document and shall be hosted on the websites. Bidders have to take into account all such addendum/ corrigendum before submitting their Bid.

9.3 The Owner, if considered necessary, may extend the date of submissions of Bid in order to allow the Bidders a reasonable time to furnish their most competitive bid taking into account the amendment issued thereof.

[C] – PREPARATION OF BIDS

10. LANGUAGE OF BID: The bid prepared by the Bidder and all correspondence, drawing(s), document(s), certificate(s) etc. relating to the Bid exchanged by Bidder and AGCL shall be written in English language only. In case a document, certificate, printed literature etc. furnished by the Bidder in a language other than English, the same should be accompanied by an English translation duly authenticated by the Chamber of Commerce of Bidders Country, in which case, for the purpose of interpretation of the Bid, the English translation shall govern.

11. Any bidder who wishes to quote against this Tender may download the Tender Documents from Govt. of Assam website www.assamtenders.gov.in and submit the bid, complete in all respects as per terms and conditions of the Tender on or before the "Due Date & Time of Bid Submission", along with an undertaking that the contents of the Tender Documents have not been altered or modified.

12 Earnest Money Deposit/Bid Security:

- a) Bidders shall submit EMD/Bid Security for an amount of Rs.40000/- (Rupees Forty Thousand Only) in favour of Assam Gas Company Ltd. Payable at Duliajan, Assam, India, Pin-786 602
- b) Vide Govt. of Assam notification No.FEB.269/2017/27 Dtd. Dispur the 21st August 2019, EMD should be paid through online by logging into Govt. of Assam E-tendering website www.assamtenders.gov.in either online payment or NEFT/RTGS
- c) The 'Bid Security' is required to protect AGCL against the risk of Bidder's conduct, which would warrant the 'Bid Security's' forfeiture.
- d) AGCL shall not be liable to pay any Bank charges, commission or interest on the amount of 'Bid Security'. 'Earnest Money / Bid Security' shall be valid for 'two [02] months' beyond the 'Bid Validity Period'
- e) "Central Public Sector Undertakings of Government of India" and "Firms Registered with NSIC and MSME are exempted from furnishing Bid Security, provided they are registered for the quoted items up to the monetary limit, they intend to quote and subject to their enclosing with their Bid a copy of latest and current 'Registration Certificate'".
- f) Unsuccessful Bidder's 'Earnest Money / Bid Security' will be discharged/ returned as promptly as possible, but not later than 'thirty [30] days' after expiry of the 'Period of Bid Validity' prescribed by AGCL.
- g) The successful Bidder's 'Bid Security' will be discharged within 30 days from the last date of supply of material and submission of PBG.
- h) The 'Bid Security' may be forfeited:
 - i) If a Bidder withdraws his Bid during the 'Period of Bid Validity'
 - ii) In the case of a successful Bidder, if the Bidder fails:
 - iii) To accept the "Notification of Award" / "Fax of Acceptance [FOA]", or
 - iv) To furnish "Contract Performance Security / Security Deposit"
 - v) To accept 'arithmetical corrections'

BID CURRENCIES: Indian Rupees only

14 BID VALIDITY

14.1 Bids shall be kept valid for 'three [03] months' from the final 'Bid Due Date'. A Bid valid for a shorter period may be rejected by AGCL as 'non-responsive'.

14.2 In exceptional circumstances, prior to expiry of the original 'Bid Validity Period', the Employer may request that the Bidders extend the 'Period of Bid Validity' for a specified additional period. The request and the responses thereto shall be made in writing or by fax/email. A Bidder may refuse the request without forfeiture of his 'Bid Security'. A Bidder agreeing to the request will not be required or permitted to modify his Bid, but will be required to extend the validity of its 'Bid Security' for the period of the extension and in accordance with "ITB: Clause-15" in all respects.

15 FORMATS AND SIGNING OF BID

15.1 The original and all copies of the Bid shall be typed or written in indelible ink [in the case of copies, photocopies are also acceptable] and shall be signed by a person or persons duly authorized to sign on behalf of the Bidder. The name and position held by each person signing, must be typed or printed below the signature. All pages of the Bid except for unamended printed literature where entry(s) or amendment(s) have been made shall be initialed by the person or persons signing the Bid.

15.2 The Bid shall contain no alterations, omissions, or additions, unless such corrections are initialed by the person or persons signing the Bid.

16 ZERO DEVIATION AND REJECTION CRITERIA:

16.1 ZERO DEVIATION: Deviation to terms and conditions of "RFQ" may lead to rejection of bid. AGCL will accept bids based on terms & conditions of "RFQ" only. Bidder may note AGCL will determine the substantial responsiveness of each bid to the Bidding Documents. For purpose of this, a substantially

responsive bid is one which conforms to all terms and conditions of the Bidding Documents without deviations or reservations. AGCL's determination of a bid's responsiveness is based on the content of the bid itself without recourse to extrinsic evidence. Technical and/or commercial query(s), if required, may be raised on the bidder(s) - the decision for which will be solely based on circumspection by AGCL. The response(s) to the same shall be in writing, and no change in the price(s) or substance of the bids shall be sought, offered or permitted. The substance of the bid includes but not limited to prices, completion, scope, technical specifications, etc. Bidders are requested to not to take any deviation/exception to the terms and conditions laid down in this "RFQ/Tender Document", and submit all requisite documents as mentioned in this "RFQ/Tender Document", failing which offer will be liable for rejection.

16.2 REJECTION CRITERIA: Deviation to the following clauses of "RFQ" shall lead to rejection of Bid:

- (a) Firm Price
- (b) Earnest Money / Bid Security
- (c) Specifications & Scope of supply
- (d) Special Conditions of Contract [SCC]
- (e) General Conditions of Contract [GCC-Goods]
- (f) Schedule of Rates / Price Schedule / Price Basis
- (g) Duration of Contract/Completion Schedule
- (h) Contract Performance Security / Security Deposit
- (i) Guarantee / Defect Liability Period
- (j) Force Majeure
- (h) Period of Validity of Bid
- (i) Price Reduction Schedule
- (j) Arbitration / Jurisdiction of Court
- (k) Force Majeure
- (l) Documentary Evidence to Substantiate "BID EVALUATION CRITERIA [BEC]"

17 PAYMENT-TERMS

As per Special Conditions of Contract.

[D] - SUBMISSION OF BIDS:

18 SUBMISSION OF BIDS:

18.1 Bid shall be submitted through e-tender mode in the manner specified elsewhere in tender document. No Manual/ Hard Copy (Original) offer shall be acceptable.

19 DEADLINE FOR SUBMISSION OF BIDS

19.1 Bids must be uploaded online not later than the date and times specified in the RFQ.

19.2 AGCL may, in exceptional circumstances and at its discretion, extend the deadline for submission of Bids.

[E] - BID OPENING AND EVALUATION:

20.0 BID EVALUATION CRITERIA: The following are the BEC parameters

20.1 TECHNICAL:

20.1.1 The Bidder should be regular manufacturer of CNG Storage Cascade handling CNG at 250 Bar(G) Pressure

20.1.2 The Bidder should have engineered, manufactured, assembled, tested and supplied from the proposed facility of manufacturing at least one number of CNG storage cascade of minimum 2200 litres water capacity or more within last seven years reckoned from bid due date.

20.1.3 The bidder should have manufacturing/fabrication facilities with adequate testing/quality assurance facilities as per applicable codes.

20.1.4 Cylinder manufacturing facility shall have valid approval of Chief Controller of Explosives, Government of India. Bidder shall submit a copy of above approval.

20.2 Documents required to be submitted by bidder along with the bid for qualification of BEC

BEC clause No	Description	Documents required for qualification
20.1.1	Manufacturer	Copies of BIS certificate/ISO certificate/PESO approval
20.1.2	Experience criteria	a) Copies of detailed purchase order b) Inspection release note c) Dispatch document etc.
20.1.3	Fabrication facilities as per testing/quality control requirement	a) ISO certificate etc. b) List of testing facilities/Quality Assurance facility
20.1.4	Cylinder manufacturing facility	Certificate from Chief Controller of Explosives, Govt. of India

In absence of requisite documents AGCL reserves the right to reject the bid without making any reference to bidders.

20.2 FINANCIAL CRITERIA :**20.2.1 Annual Turn over**

The minimum annual turnover achieved by the bidder as per their audited financial results in any one of the 3 (three) immediate preceding financial years i.e. FY 2016-17, FY 2017-18 & FY 2018-19 shall be above RS. 30 Lakhs.

20.2.2 Network

Net worth of the bidder should be positive as per the financial results of immediate preceding year 2018-19.

20.2.3 Working Capital

Bidder should have minimum working capital of Rs.30 Lakhs as per the last audited financial statement (2018-19). If the Bidder's working capital is inadequate, the bidder should submit a letter from the bidder's bank having net worth not less than Rs.1 Crore, confirming the availability of line of credit for the working capital requirement as stated above.

20.3 Documents required to be submitted by bidder along with the bid for qualification of BEC:

Bidder(s) shall submit copy of Audited Annual Financial Statement [Balance Sheet and Profit & Loss Account Statement with all schedules] of the three (3) preceding Financial Year(s), along with un-price bid. For authentication of document submitted in support of Financial Criteria of Bid Evaluation criteria (BEC), the bidder shall submit "Details of financial capability of bidder" in prescribed form at duly signed and stamped by a chartered accountant. Further, copy of audited annual financial statements submitted in bid shall be duly certified/ attested by notary public with legible stamp. In absence of requisite documents AGCL reserves the right to reject the bid without making any reference to bidders.

20.4 BID OPENING

AGCL will open bids at due date & time as stipulated in the tender. The bidder's names, the presence (or absence) and amount of bid security and any other such details as AGCL may consider appropriate will be announced by AGCL.

21. PROCESSES TO BE CONFIDENTIAL:

Information relating to the examination, clarification, evaluation, and comparison of Bids, and recommendations for the award of a Contract, shall not be disclosed to Bidders or any other persons officially concerned with such process. Any effort by a Bidder to influence the Owner's processing of Bids or award decisions may result in the rejection of the Bidder's Bid.

22 CONTACTING THE OWNER:

22.1 From the time of Bid opening to the time of award of Contract, if any Bidder wishes to contact the Owner on any matter related to the Bid, it should be in writing.

22.2 Any effort by the Bidder to influence the Owner in 'Bid Evaluation', 'Bid Comparison', or 'Contract Award' decisions may result in the rejection of the Bidder's Bid.

23. EXAMINATION OF BIDS AND DETERMINATION OF RESPONSIVENESS

23.1 Prior to the detailed evaluation of Bids, the Owner will determine whether each Bid,

- (a) Meets the "BEC" / 'techno-commercial requirements' of the Bidding Documents;
- (b) Has been properly signed;
- (c) Is accompanied by the required 'Earnest Money / Bid Security';
- (d) Is substantially responsive to the requirements of the Bidding Documents; and
- (e) Provides any clarification and/or substantiation that the Owner may require to determine responsiveness pursuant to "ITB: Clause-23.2"

23.2 A substantially responsive Bid is one which conforms to all the terms, conditions and specifications of the Bidding Documents without material deviations or reservations. A material deviation or reservation is one,

- (a) That affects in any substantial way the scope, quality, or performance of the works;
- (b) That limits in any substantial way, inconsistent with the Bidding Documents, the Owner's rights or the Bidder's obligations under the Contract; or
- (c) Whose rectification would affect unfairly the competitive position of other Bidders presenting substantially responsive bids.

23.3 If a Bid is not substantially responsive, it may be rejected by the Owner and may not subsequently be made responsive by correction or withdrawal of the nonconforming deviation or reservation.

24. CORRECTION OF ERRORS

24.1 The bids will be checked for any arithmetical errors as follows:

24.1.1 Rates should be quoted only in Figures. In case of any error in total indicated by the Bidder, the unit price alone shall be considered valid and binding on the Bidder.

If the bidder does not accept the correction of errors, its bid will be rejected and the bid security will be forfeited.

25. CONVERSION TO SINGLE CURRENCY FOR COMPARISON OF BIDS (NOT APPLICABLE)

26. EVALUATION AND COMPARISON OF BIDS

26.1 Evaluation shall be done Item wise and on FOT site basis. AGCL reserves the right to place order on one party or multiple parties at its own discretion.

27. PURCHASE PREFERENCE:

27.1 Purchase preference to Central government public sector Undertaking shall be allowed as per Government instructions in vogue.

28. COMPENSATION FOR EXTENDED STAY - NOT APPLICABLE

[F] - AWARD OF CONTRACT

29. AWARD

Assam Gas Company Limited shall award the Contract to the successful Bidder whose Bid has been determined to be substantially responsive and has been determined as the lowest is determined to be qualified for satisfactory performance.

30. OWNER'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS

AGCL reserves the right to accept or reject any Bid, and to cancel the Bidding process and reject all Bids, at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligations to inform the affected Bidder or Bidders.

31. NOTIFICATION OF AWARD / FAX OF ACCEPTANCE

31.1 Prior to the expiry of 'Period of Bid Validity', AGCL will notify the successful Bidder in writing, in the form of "Notification of Award" / "Letter of Intent"(LOA) through e-mail/fax, that his Bid has been accepted. In response, the successful Bidder will be required to confirm acceptance of the Award/Letter of Intent either by fax or email.

31.2 'Time Period' shall be commenced from the date of "Notification of Award" or as may be mentioned in the "Letter of Acceptance [LOA]/ "Fax of Acceptance [FOA]". The "Letter of Acceptance [LOA]" will constitute the formation of a Contract, until the Contract has been affected pursuant to signing of Contract". Upon the successful Bidder's / Contractor's furnishing of 'Contract Performance Security / Security Deposit', pursuant to "ITB, AGCL will promptly notify each successful Bidder and will discharge his 'Earnest Money / Bid Security', pursuant to "ITB.

32. CORRUPT OR FRAUDULENT PRACTICES:

32.1 AGCL requires that Contractor(s) observes the highest standard of ethics during the execution of the Contract. In pursuance of this policy, the Owner:

(a) Defines, for the purposes of this provision, the terms set forth below as follows:

(i) "Corrupt practice" means the offering, giving or soliciting of anything of value to influence the action of a public official in the procurement process or in Contract execution; and

(ii) "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a Contract to the detriment of the Owner, and includes collusive practice among Bidders [prior to or after Bid submission] designed to establish Bid prices at artificial noncompetitive levels and to deprive the Owner of the benefits of free and open competition.

(b) Will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the Contract in question;

(c) Will declare a Firm ineligible and put on Holiday, either indefinitely or for a stated period of time if it at any time determines that the Firm has engaged in corrupt/fraudulent practices in competing for, or in executing a Contract.

33. SUBMISSION OF FORGED DOCUMENTS:

33.1 Bidder is required to furnish the complete and correct information / documents required for evaluation of their bids. If the information / documents forming basis of evaluation is found to be false / forged, the same shall be considered to be adequate ground for rejection of the Bids.

In case, the information / document furnished by the vendor/contractor forming basis of evaluation of his bid is found to be false /forged after the award of the contract, AGCL shall have full right to terminate the contract and get the remaining job executed at the risk & cost of such vendor/contractor without any prejudice to other rights available to AGCL under the contract such as withholding of payment etc.

Incase this issue of submission of false document comes to the notice after execution of work, AGCL shall have full right to forfeit any amount due to the vendor/contractor.

Further, such bidder/vendor/contractor shall be put on Blacklist/Holiday List of AGCL debarring them from future business with AGCL.

GENERAL CONDITIONS OF CONTRACT:

The following terms shall have the following respective meanings:

1.0 BIDDER: Designates the individual or legal entity which has made a proposal, a tender or a bid with the aim of concluding a Contract with the PURCHASER.

1.2 CONTRACT shall mean Purchase Order/Contract and all attached exhibits and documents referred to therein and all terms and conditions thereof together with any subsequent modifications thereto.

1.3 CONTRACT PRICE shall mean the price payable to the Seller under the Contract for the full and proper performance of his contractual obligations.

1.4 COMPLETION DATE shall mean the date on which the goods are successfully commissioned by the Seller and handed over to the PURCHASER.

1.5 COMMERCIAL OPERATION shall mean the condition of the operation in which the complete equipment covered under the Contract is officially declared by the PURCHASER to be available for continuous operation at different loads up to and including rated capacity.

1.6 DELIVERY terms shall be interpreted as the date of LR/GR.

1.7 DRAWINGS shall mean and include Engineering drawings, sketches showing plans, sections and elevations in relation to the Contract together with modifications and/or revisions thereto.

1.8 ENGINEER or Engineer-in-Charge of the Project SITE shall mean the person designated from time to time by PURCHASER/CONSULTANT at SITE and shall include those who are expressly authorized by him to act for and on his behalf for operation of this CONTRACT.

1.9 FINAL ACCEPTANCE shall mean the PURCHASER's written acceptance of the Works performed under the Contract after successful completion of performance and guarantee test.

1.10 GOODS shall mean articles, materials, equipment, design and drawings, data and other property to be supplied by Seller to complete the contract.

1.11 INSPECTOR shall mean any person or outside Agency nominated by PURCHASER/CONSULTANT through CONSULTANT to inspect equipment, stage wise as well as final, before dispatch, at SELLER's works and on receipt at SITE as per terms of the CONTRACT.

1.12 INITIAL OPERATION shall mean the first integral operation of the complete equipment covered under the Contract with sub-systems and supporting equipment in service or available for service.

1.13 PURCHASER shall mean AGCL having its registered office at Duliajan, District Dibrugarh, Assam-786602 The term PURCHASER includes successors, assigns of AGCL.

1.14 PERFORMANCE AND GUARANTEE TESTS shall mean all operational checks and tests required to determine and demonstrate capacity, efficiency and operating characteristics as specified in the Contract documents.

PROJECT designates the aggregate of the Goods and /or Services to be provided by one or more Contractors.

Quantities - Bills of quantities

Bills of quantities

Designate the quantity calculations to be taken into account when these calculations are made from detailed or construction drawings, or from work actually performed, and presented according to a jointly agreed breakdown of the Goods and/or Services.

1.15 SELLER shall mean the person, firm or company with whom PURCHASE ORDER/CONTRACT is placed/ entered into by PURCHASER for supply of equipment, materials and services. The term Seller includes its successors and assigns.

1.16 SERVICE shall mean erection, installation, testing, commissioning, provision of technical assistance, training and other such obligations of the Seller covered under the Contract.

1.17 SITE designates the land and/or any other premises on, under, in or across which the Goods and/or Services have to be supplied, erected, assembled, adjusted, arranged and/or commissioned.

1.18 SPECIFICATIONS shall mean and include schedules, details, description, statement of technical data, performance characteristics, standards (Indian as well as International) as applicable and specified in the Contract.

1.19 SUB-CONTRACT shall mean order placed by the Seller, for any portion of the contracted work, after necessary consent and approval of PURCHASER.

1.20 SUB-CONTRACTOR shall mean the person named in the CONTRACT for any part of the work or any person to whom any part of the CONTRACT has been sub-let by the SELLER with the consent in writing of the CONSULTANT/PURCHASER and will include the legal representatives, successors, and permitted assigns of such person.

1.21 START-UP shall mean the time period required to bring the equipments covered under the Contract from an inactive condition, when construction is essentially complete to the state of readiness for trial operation. The start-up period shall include preliminary inspection and check out of equipment and supporting subsystems, initial operation of the complete equipments covered under the Contract to obtain necessary pre-trial operation data, perform calibration and corrective action, shutdown inspection and adjustment prior to the trial operation period.

1.22 TESTS shall mean such process or processes to be carried out by the Seller as are prescribed in the Contract or considered necessary by PURCHASER or his representative in order to ascertain quality, workmanship, performance and efficiency of equipment or part thereof.

1.23 TESTS ON COMPLETION shall mean such tests as prescribed in the Contract to be performed by the Seller before the Works are taken over by the PURCHASER.

2. Seller To Inform

2.1 The Seller shall be deemed to have carefully examined all contract documents to his entire satisfaction. Any lack of information shall not in any way relieve the Seller of his responsibility to fulfill his obligation under the Contract.

3. Application

3.1 These General Conditions of Contract (GCC-Goods) shall apply to the extent that they are not superseded by provisions of other parts of the Contract.

4. Country of Origin

4.1 For purposes of this Clause "origin" means the place where the Goods were mined, grown or produced, or from which the services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembling of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.

5. Scope of Contract

5.1 Scope of the CONTRACT shall be as defined in the PURCHASE ORDER/CONTRACT specifications, drawings and Annexure thereto.

5.2 Completeness of the EQUIPMENT shall be the responsibility of the SELLER. Any equipment, fittings and accessories which may not be specifically mentioned in the specifications or drawings, but which are usual or necessary for the satisfactory functioning of the equipment (successful operation and functioning of the EQUIPMENT being SELLER's responsibility) shall be provided by SELLER without any extra cost.

5.3 The SELLER shall follow the best modern practices in the manufacture of high grade EQUIPMENT notwithstanding any omission in the specifications. The true intent and meaning of these documents is

that SELLER shall in all respects, design, engineer, manufacture and supply the equipment in a thorough workmanlike manner and supply the same in prescribed time to the entire satisfaction of PURCHASER.

5.4 The SELLER shall furnish twelve (12) copies in English language of Technical documents, final drawings, preservation instructions, operation and maintenance manuals, test certificates, spare parts catalogues for all equipments to the PURCHASER.

5.5 The documents once submitted by the SELLER shall be firm and final and not subject to subsequent changes. The SELLER shall be responsible for any loss to the PURCHASER/CONSULTANT consequent to furnishing of incorrect data/drawings.

5.6 All dimensions and weight should be in metric system.

5.7 All equipment to be supplied and work to be carried out under the CONTRACT shall conform to and comply with the provisions of relevant regulations/Acts (State Government or Central Government) as may be applicable to the type of equipment/work carried out and necessary certificates shall be furnished.

5.8 The Seller shall provide cross sectional drawings, wherever applicable, to identify the spare part numbers and their location. The size of bearings, their make and number shall be furnished.

5.9 Specifications, design and drawings issued to the SELLER along with RFQ and CONTRACT are not sold or given but loaned. These remain property of PURCHASER/CONSULTANT or its assigns and are subject to recall by PURCHASER/CONSULTANT. The SELLER and his employees shall not make use of the drawings, specifications and technical information for any purpose at any time except for manufacture against the CONTRACT and shall not disclose the same to any person, firm or corporate body, without written permission of PURCHASER/CONSULTANT. All such details shall be kept confidential.

5.10 SELLER shall pack, protect, mark and arrange for dispatch of EQUIPMENT as per instructions given in the CONTRACT.

6. Standards

6.1 The GOODS supplied under the CONTRACT shall conform to the standards mentioned in the Technical Specifications, or such other standards which ensure equal or higher quality, and when no applicable standard is mentioned, to the authoritative standard appropriate to the GOODS' country of origin and such standards shall be the latest issued by the concerned institution.

7. Instructions, Direction & Correspondence

7.1 The materials described in the CONTRACT are to be supplied according to the standards, data sheets, tables, specifications and drawings attached thereto and/or enclosed with the CONTRACT, itself and according to all conditions, both general and specific enclosed with the contract, unless any or all of them have been modified or cancelled in writing as a whole or in part.

a. All instructions and orders to SELLER shall, excepting what is herein provided, be given by PURCHASER/CONSULTANT.

b. All the work shall be carried out under the direction of and to the satisfaction of PURCHASER/CONSULTANT

c. All communications including technical/commercial clarifications and/or comments shall be addressed to PURCHASER and shall always bear reference to the CONTRACT.

d. Invoices for payment against CONTRACT shall be addressed to PURCHASER.

e. The CONTRACT number shall be shown on all invoices, communications, packing lists, containers and bills of lading, etc.

8. Contract Obligations:

8.1 If after award of the contract, the Seller does not acknowledge the receipt of award or fails to furnish the performance guarantee within the prescribed time limit, the PURCHASER reserves the right to cancel the contract and apply all remedies available to him under the terms and conditions of this contract.

8.2 Once a contract is confirmed and signed, the terms and conditions contained therein shall take precedence over the Seller's bid and all previous correspondence.

9. Modification In Contract:

9.1 All modifications leading to changes in the CONTRACT with respect to technical and/or commercial aspects including terms of delivery shall be considered valid only when accepted in writing by PURCHASER/CONSULTANT by issuing amendment to the CONTRACT. Issuance of acceptance or

otherwise in such cases shall not be any ground for extension of agreed delivery date and also shall not affect the performance of contract in any manner except to the extent mutually agreed through a modification of contract.

9.2 PURCHASER/CONSULTANT shall not be bound by any printed conditions or provisions in the SELLER's Bid Forms or acknowledgment of CONTRACT, invoices, packing list and other documents which purport to impose any conditions at variance with or supplemental to CONTRACT.

10. Use of Contract Documents & Information:

10.1 The Seller shall not, without the PURCHASER's/ CONSULTANT's prior written consent, disclose the CONTRACT or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the PURCHASER in connection therewith, to any person other than a person employed by the SELLER in the performance of the CONTRACT. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purpose of such performance.

10.2 The SELLER shall not, without the PURCHASER's prior written consent, make use of any document or information enumerated in Article 10.1 except for purpose of performing the CONTRACT.

11. Patent Rights, Liability & Compliance of Regulations

11.1 SELLER hereby warrants that the use or sale of the materials delivered hereunder will not infringe claims of any patent covering such material and SELLER agrees to be responsible for and to defend at his sole expense all suits and proceedings against PURCHASER based on any such alleged patent infringement and to pay all costs, expenses and damages which PURCHASER and/or CONSULTANT may have to pay or incur by reason of any such suit or proceedings.

11.2 The SELLER shall indemnify the PURCHASER against all third party claims of infringement of patent, trade mark or industrial design rights arising from use of the GOODS or any part thereof in the PURCHASER'S country.

11.3 SELLER shall also protect and fully indemnify the PURCHASER from any claims from SELLER'S workmen/employees or their heirs, dependants, representatives, etc. or from any other person/persons or bodies/companies etc. for any acts of commissions or omission while executing the CONTRACT.

11.4 SELLER shall be responsible for compliance with all requirements under the laws and shall protect and indemnify completely the PURCHASER from any claims/penalties arising out of any infringements.

12. Performance Guarantee

12.1 Within 15 days after the SELLER's receipt of notification of award of the CONTRACT, the SELLER shall furnish Performance Guarantee in the form of Bank Guarantee/irrevocable Letter of Credit to the PURCHASER, in the form provided in the Bidding Documents, for an amount equivalent to 10% of the total value of the CONTRACT.

12.2 The proceeds of Performance Guarantee shall be appropriated by the PURCHASER as compensation for any loss resulting from the SELLER's failure to complete his obligations under the CONTRACT without prejudice to any of the rights or remedies the PURCHASER may be entitled to as per terms and conditions of CONTRACT. The proceeds of this Performance Guarantee shall also govern the successful performance of Goods and Services during the entire period of Contractual Warrantee/Guarantee.

12.3 The performance guarantee shall be denominated in the currency of the CONTRACT.

12.4 The Performance Guarantee shall be valid for the duration of 90 days beyond the expiry of Warrantee/Guarantee period. The Bank Guarantee will be discharged by PURCHASER not later than 6 months from the date of expiration of the Seller's entire obligations, including any warrantee obligations, under the CONTRACT.

13. **Inspection, Testing & Expediting:**

13.1 The PURCHASER or its representative shall have the right to inspect and/or to test the GOODS to confirm their conformity to the CONTRACT specifications. The special conditions of CONTRACT and/or the Technical Specifications shall specify what inspections and tests the PURCHASER requires and where they are to be conducted. The PURCHASER shall notify the SELLER in writing the identity of any representative(s) retained for these purposes.

13.2 The inspections and tests may be conducted on the premises of the SELLER or his sub-contractor(s), at point of DELIVERY and/or at the GOODS' final destination, When conducted on the premises of the SELLER or his subcontractor (s), all reasonable facilities and assistance including access to the drawings and production data shall be furnished to the inspectors at no charge to the PURCHASER.

13.3 Should any inspected or tested GOODS fail to conform to the specifications, the PURCHASER may reject them and the SELLER shall either replace the rejected GOODS or make all alterations necessary to meet Specifications' requirements, free of cost to the PURCHASER.

13.4 The PURCHASER's right to inspect, test and where necessary reject the GOODS after the GOODS' arrival in the PURCHASER's country shall in no way be limited or waived by reason of the GOODS having previously been inspected, tested and passed by the PURCHASER, or their representative prior to the GOODS shipment from the country of origin.

13.5 The INSPECTOR shall follow the progress of the manufacture of the GOODS under the CONTRACT to ensure that the requirements outlined in the CONTRACT are not being deviated with respect to schedule and quality.

13.6 SELLER shall allow the INSPECTOR to visit, during working hours, the workshops relevant for execution of the CONTRACT during the entire period of CONTRACT validity.

13.7 In order to enable PURCHASER's representatives to obtain entry visas in time, SELLER shall notify PURCHASER two months before assembly, testing and packing of main EQUIPMENT. If requested, SELLER shall assist PURCHASER's representatives in getting visas in the shortest possible time (applicable only in case of foreign order).

13.8 SELLER shall place at the disposal of the INSPECTOR, free of charge, all tools, instruments, and other apparatus necessary for the inspection and/or testing of the GOODS. The INSPECTOR is entitled to prohibit the use and dispatch of GOODS and/or materials which have failed to comply with the characteristics required for the GOODS during tests and inspections.

13.9 SELLER shall advise in writing of any delay in the inspection program at the earliest, describing in detail the reasons for delay and the proposed corrective action.

13.10 ALL TESTS and trials in general, including those to be carried out for materials not manufactured by SELLER shall be witnessed by the INSPECTOR. Therefore, SELLER shall confirm to PURCHASER by fax or e-mail about the exact date of inspection with at least 30 days notice. SELLER shall specify the GOODS and quantities ready for testing and indicate whether a preliminary or final test is to be carried out.

13.11 If on receipt of this notice, PURCHASER should waive the right to witness the test, timely information will be given accordingly.

13.12 Any and all expenses incurred in connection with tests, preparation of reports and analysis made by qualified laboratories, necessary technical documents, testing documents and drawings shall be at SELLER's cost. The technical documents shall include the reference and numbers of the standards used in the construction and, wherever deemed practical by the INSPECTOR, copy of such standards.

13.13 Nothing in Article-13 shall in any way release the SELLER from any warranty or other obligations under this CONTRACT.

13.14 Arrangements for all inspections required by Indian Statutory Authorities and as specified in technical specifications shall be made by SELLER.

13.15 Inspection & Rejection of Materials by consignees

When materials are rejected by the consignee, the supplier shall be intimated with the details of such rejected materials, as well as the reasons for their rejection, also giving location where such materials are lying at the risk and cost of the contractor/supplier. The supplier will be called upon either to remove the materials or to give instructions as to their disposal within 14 days and in the case of dangerous, infected and perishable materials within 48 hours, failing which the consignee will either return the materials to the contractor freight to pay or otherwise dispose them off at the contractor's risk and cost. The PURCHASER shall also be entitled to recover handling and storage charges for the period, during which the rejected materials are not removed @ 5% of the value of materials for each month or part of a month till the rejected materials are finally disposed off.

14. Time Schedule & Progress Reporting

14.1 Time Schedule Network/Bar Chart

14.1.1 Together with the Contract confirmation, SELLER shall submit to PURCHASER, his time schedule regarding the documentation, manufacture, testing, supply, erection and commissioning of the GOODS.

14.1.2 The time schedule will be in the form of a network or a bar chart clearly indicating all main or key events regarding documentation, supply of raw materials, manufacturing, testing, delivery, erection and commissioning. Time Schedule / Bar Chart shall be updated weekly.

14.1.3 The original issue and subsequent revisions of SELLER's time schedule shall be sent to PURCHASER.

14.1.4 The time schedule network/bar chart shall be updated at least every second month.

14.2 Progress Trend Chart/Monthly Report

14.2.1 SELLER shall report monthly to PURCHASER, on the progress of the execution of CONTRACT and achievement of targets set out in time bar chart.

14.2.2 The progress will be expressed in percentages as shown in the progress trend chart attached to the Time Schedule specification.

14.2.3 The first issue of the Progress Trend Chart will be forwarded together with the time bar chart along with CONTRACT confirmation.

14.3.1 PURCHASER's/CONSULTANT's representatives shall have the right to inspect SELLER's premises with a view to evaluating the actual progress of work on the basis of SELLER's time schedule documentation.

14.3.2 Irrespective of such inspection, SELLER shall advise PURCHASER, at the earliest possible date of any anticipated delay in the progress.

14.4 Notwithstanding the above, in case progress on the execution of contract at various stages is not as per phased time schedule and is not satisfactory in the opinion of the PURCHASER/CONSULTANT which shall be conclusive or SELLER shall neglect to execute the CONTRACT with due diligence and expedition or shall contravene the provisions of the CONTRACT, PURCHASER/CONSULTANT may give notice of the same in writing to the SELLER calling upon him to make good the failure, neglect or contravention complained of. Should SELLER fail to comply with such notice within the period considered reasonable by PURCHASER/CONSULTANT, the PURCHASER/CONSULTANT shall have the option and be at liberty to take the CONTRACT wholly or in part out of the SELLER's hand and make alternative arrangements to obtain the requirements and completion of CONTRACT at the SELLER's risk and cost and recover from the SELLER, all extra cost incurred by the PURCHASER on this account. In such event PURCHASER/CONSULTANT shall not be responsible for any loss that the SELLER may incur and SELLER shall not be entitled to any gain. PURCHASER/CONSULTANT shall, in addition, have the right to encash Performance Guarantee in full or part.

15. Delivery & Documents

15.1 Delivery of the GOODS shall be made by the SELLER in accordance with terms specified in the CONTRACT, and the goods shall remain at the risk of the SELLER until delivery has been completed.

15.2 Delivery shall be deemed to have been made:

a) In the case of FOB, CFR & CIF Contracts, when the Goods have been put on board the ship, at the specified port of loading and a clean Bill of Lading is obtained. The date of Bill of Lading shall be considered as the delivery date.

b) In case of FOT dispatch point contract (For Indian bidder), on evidence that the goods have been loaded on the carrier and a negotiable copy of the GOODS receipt obtained. The date of LR/GR shall be considered as the date of delivery.

c) In case of FOT site (for Indian bidders) on receipt of goods by PURCHASER/Consultant at the designated site(s).

15.3 The delivery terms are binding and essential and consequently, no delay is allowed without the written approval of PURCHASER/CONSULTANT. Any request concerning delay will be void unless accepted by PURCHASER/CONSULTANT through a modification to the CONTRACT.

15.4 Delivery time shall include time for submission of drawings for approval, incorporation of comments, if any, and final approval of drawings by PURCHASER/CONSULTANT.

15.5 In the event of delay in delivery, Price Reduction Schedule as stipulated in Article - 26 shall apply.

15.6 The documentation, in English Language, shall be delivered in due time, in proper form and in the required number of copies as specified in the contract.

15.7 The additional copies of final drawings and instructions will be included in the package of goods, properly enveloped and protected.

15.8 The SELLER should comply with the Packing, Marking and Shipping Documentation Specifications enclosed.

16. Transit Risk Insurance

All goods supplied under the contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery.

17. Transportation

17.1 Where the SELLER is required under the CONTRACT to deliver the GOODS on FOT Site basis and the cost thereof shall be included in the Contract price.

18. Incidental Services

18.1 The Seller may be required to provide any or all of the following services:

18.1.1 Performance or supervision of onsite assembly and/or start-up of the supplied Goods:

18.1.2 Furnishing tools required for assembly and/or maintenance of the supplied Goods:

18.1.3 Performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Seller of any warranty/guarantee obligations under the Contract.

18.1.4 Training of the Purchaser's personnel at the Seller's plant and/or at Site, in assembly, start-up operation, maintenance and/or repair of the supplied Goods at no extra cost. However, Purchaser will bear boarding, lodging & personal expenses of Trainees.

18.2 Prices charged by the Seller for the preceding incidental services, shall not exceed the prevailing rates charged to other parties by the Seller for similar services.

18.3 When required, Seller shall depute necessary personnel for supervision and/or erection of the Equipment at site for duration to be specified by Purchaser on mutually agreed terms. Seller's personnel shall be available at Site within seven days for emergency action and twenty-one days for medium and long-term assistance, from the date of notice given by Purchaser.

18.4 The cost of incidental services shall not be included in the quoted prices. The cost of applicable incidental services should be shown separately in the price schedules.

19. Spare Parts, Maintenance Tools, Lubricants

19.1 Seller may be required to provide any or all of the following materials and notification pertaining to spare parts manufactured or distributed by the Seller.

19.1.1 Such spare parts as the Purchaser may opt to purchase from the Seller, provided that his option shall not relieve the Seller of any warranty obligations under the Contract, and

19.1.2 In the event of termination of production of the spare parts:

i) Advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements, and

ii) Following such termination, furnishing at no cost to the Purchaser, the blue prints, drawings and specifications of the spare parts, if any when requested.

19.2 Seller shall supply item wise list with value of each item of spare parts and maintenance tools requirements, along with full details of manufacturers/vendors for such spares/maintenance tools for:

19.2.1 The construction, execution and commissioning.

19.3 Spare parts shall be new and of first class quality as per engineering standards/ codes, free of any defects (even concealed), deficiency in design, materials and workmanship and also shall be completely interchangeable with the corresponding parts.

19.4 Spare parts shall be packed for long storage under tropical climatic conditions in suitable cases, clearly marked as to intended purpose.

19.5 A list of special tools and gauges required for normal maintenance and special handling and lifting appliances, if any, for the Goods shall be submitted to Purchaser.

19.6 Bidders should note that if they do not comply with Clause 19.2 above, their quotation may be rejected.

20. Guarantee:

20.1 All Goods or Materials shall be supplied strictly in accordance with the specifications, drawings, data sheets, other attachments and conditions stated in the Contract. No deviation from such specifications or alterations or of these conditions shall be made without PURCHASER'S /CONSULTANT'S agreement in writing which must be obtained before any work against the order is commenced. All materials supplied by the SELLER pursuant to the Contract (irrespective of whether engineering, design data or other information has been furnished, reviewed or approved by PURCHASER/CONSULTANT) are guaranteed to be of the best quality of their respective kinds (unless otherwise specifically authorized in writing by PURCHASER/CONSULTANT) and shall be free from faulty design, workmanship and materials, and to be of sufficient size and capacity and of proper materials so as to fulfill in all respects all operating conditions, if any, specified in the Contract. If any trouble or defect, originating with the design, material, workmanship or operating characteristics of any materials, arises at any time prior to twelve(12) months from the date of the first commercial operation of the Plant for which the materials supplied under the Contract form a part thereof, or twenty four (24) months from the date of last shipment whichever period shall first expire, and the SELLER is notified thereof, SELLER shall, at his own expense and as promptly as possible, make such alterations, repairs and replacements as may necessary to permit the materials to function in accordance with the specifications and to fulfill the foregoing guarantees. PURCHASER/CONSULTANT may, at his option, remove such defective materials, at SELLER'S expense in which event SELLER shall, without cost to PURCHASER/CONSULTANT and as promptly as possible, furnish and install proper materials. Repaired or replaced materials shall be similarly guaranteed by the SELLER for a period of no less than twelve (12) months from the date of replacement/repair. In the event that the materials supplied do not meet the specifications and/or not in accordance with the drawings data sheets or the terms of the Contract and rectification is required at site, PURCHASER/ CONSULTANT shall notify the SELLER giving full details of differences. The SELLER shall attend the site within seven (7) days of receipt of such notice to meet and agree with representatives of PURCHASER/ CONSULTANT, the action required to correct the deficiency. Should the SELLER fail to attend meeting at Site within the time specified above, PURCHASER/ CONSULTANT shall immediately rectify the work/ materials and SELLER shall reimburse PURCHASER all costs and expenses incurred in connection with such trouble or defect.

20.2 PERFORMANCE GUARANTEE OF EQUIPMENT

20.2.1 SELLER shall guarantee that the performance of the EQUIPMENT supplied under the CONTRACT shall be strictly in conformity with the specifications and shall perform the duties specified under the CONTRACT.

20.2.2 If the SELLER fails to prove the guaranteed performance of the EQUIPMENT set forth in the specification, the SELLER shall investigate the causes and carry out necessary rectifications/modifications to achieve the guaranteed performance. In case the SELLER fails to do so within a reasonable period, the SELLER shall replace the EQUIPMENT and prove guaranteed performance of the new equipment without any extra cost to PURCHASER.

20.2.3 If the SELLER fails to prove the guarantee within a reasonable period, PURCHASER/CONSULTANT shall have the option to take over the EQUIPMENT and rectify, if possible, the EQUIPMENT to fulfill the guarantees and/or to make necessary additions to make up the deficiency at Seller's risk and cost. All expenditure incurred by the PURCHASER/ CONSULTANT in this regard shall be to SELLER's account.

21. Terms of Payment

21.1 The method of payment to be made to the SELLER under this CONTRACT shall be specified in the Special Conditions of Contract.

21.2 The type(s) of payment to be made to the SELLER under this CONTRACT shall be specified in the Special Conditions of Contract.

21.3 The SELLER's request(s) for payment shall be made to the PURCHASER in writing accompanied by an invoice describing, as appropriate, the Goods delivered and services performed, and by shipping documents submitted, and upon fulfillment of other obligations stipulated in the Contract.

21.4 Payment will be made in the currency or currencies in which the Contract Price has been stated in the SELLER's bid, as well as in other currencies in which the SELLER had indicated in his bid that he

intends to incur expenditure in the performance of the Contract and wishes to be paid. If the requirements are stated as a percentage of the bid price along with exchange rates used in such calculations these exchange rates shall be maintained.

General Notes:

- i) For dispatches on FOT dispatch point (in India) basis, the payment shall be through PURCHASER's bank. Payment through Bank, wherever applicable, shall be released as per normal banking procedures.
- ii) Payment shall be released within 30 days after receipt of relevant documents complete in all respects.
- iii) All bank charges incurred in connection with payments shall be to Seller's account.
- iv) No interest charges for delay in payments, if any, shall be payable by PURCHASER.
- v) In case of Indian bidder, variation, if any, on account of customs duty on their built-in- import content, as per terms of bid document, shall be claimed separately by bidder after receipt of goods at site (s). However, any price benefits to the PURCHASER, on account of such variation as per terms specified in the bid document, shall be passed on to the PURCHASER along with invoicing itself.
- vi) Agency commission, if any, to Indian agent for Foreign bidders, indicated in prices, shall be paid to the agent in equivalent Indian Rupees on receipt and acceptance of material at site.

22. Prices

22.1 Prices charged by the SELLER for Goods delivered and services performed under the CONTRACT shall not, with the exception of any price adjustments authorized by the Contract vary from the prices quoted by the SELLER in his bid.

23. Subletting & Assignment

23.1 The contractor shall not without previous consent in writing of the PURCHASER authority, sublet, transfer or assign the contract or any part thereof or interest therein or benefit or advantage thereof in any manner whatsoever. Provided, nevertheless, that any such consent shall not relieve the contractor from any obligation, duty or responsibility under the contract.

24. Time is Essence of Contract

24.1 The time and date of delivery/completion of the GOODS/SERVICES as stipulated in the Contract shall be deemed to be the essence of the Contract.

25. Delays in the Seller's Performance:

25.1 If the specified delivery schedule is not adhered to or the progress of manufacture or supply of the items is not satisfactory or is not in accordance with the progress schedule the PURCHASER has the right to:

- i) hire for period of delay from elsewhere goods which in PURCHASER's opinion will meet the same purpose as the goods which are delayed and SELLER shall be liable without limitation for the hire charges; or
- ii) Cancel the CONTRACT in whole or in part without liability for cancellation charges. In that event, PURCHASER may procure from elsewhere goods which PURCHASER's opinion would meet the same purpose as the goods for which is cancelled and SELLER shall be liable without limitations for the difference between the cost of such substitution and the price set forth in the CONTRACT for the goods involved; or
- iii) Hire the substitute goods vide (i) above and if the ordered goods continue to remain undelivered thereafter, cancel the order in part or in full vide (ii) above.

25.2 Any inexcusable delay by the SELLER or his sub-contractor shall render the SELLER liable, without prejudice to any other terms of the Contract, to any or all of the following sanctions: forfeiture of Contract performance guarantee, imposition of price reduction for delay in delivery and termination of the contract for default.

26. Price Reduction Schedule For Delayed Delivery:

26.1 Subject to Article -29, if the SELLER fails to deliver any or all of the GOODS or performance the services within the time period (s) specified in the CONTRACT, the PURCHASER shall, without prejudice to his other remedies under the CONTRACT, deduct from the CONTRACT PRICE, a sum calculated on the basis of the CONTRACT PRICE, including subsequent modifications.

26.1.1 Deductions shall apply as per following formula: In case of delay in delivery of equipment/materials or delay in completion, total contract price shall be reduced by 0.5% (half percent) of the total contract price per complete week of delay or part thereof subject to a maximum of 5% (five percent) of the total contract price.

26.2 In case of delay in delivery on the part of Seller, the invoice/document value shall be reduced proportionately for the delay and payment shall be released accordingly.

26.3 In the event the invoice value is not reduced proportionately for the delay, the PURCHASER may deduct the amount so payable by SELLER, from any amount falling due to the SELLER or by recovery against the Performance Guarantee.

Both seller and PURCHASER agree that the above percentages of price reduction are genuine pre estimates of the loss/damage which the PURCHASER would have suffered on account of delay/breach on the part of the SELLER and the said amount will be payable on demand without there being any proof of the actual loss/or damage caused by such breach/delay. A decision of the PURCHASER in the matter of applicability of price reduction shall be final and binding.

27. Rejections, Removal of Rejected Equipment & Replacement:

27.1 Preliminary inspection at SELLER's works by INSPECTOR shall not prejudice PURCHASER's/CONSULTANT's claim for rejection of the EQUIPMENT on final inspection at SITE or claims under warranty provisions.

27.2 If the EQUIPMENTS are not of specification or fail to perform specified duties or are otherwise not satisfactory the PURCHASER/CONSULTANT shall be entitled to reject the EQUIPMENT/MATERIAL or part thereof and ask free replacement within reasonable time failing which obtain his requirements from elsewhere at SELLER's cost and risk.

27.3 Nothing in this clause shall be deemed to deprive the PURCHASER AND/OR AFFECT ANY rights under the Contract which it may otherwise have in respect of such defects or deficiencies or in any way relieve the SELLER of his obligations under the Contract.

27.4 EQUIPMENT rejected by the PURCHASER/CONSULTANT shall be removed by the Seller at his cost within 14 days of notice after repaying the amounts received against the SUPPLY. The PURCHASER shall in no way be responsible for any deterioration or damage to the EQUIPMENT under any circumstances whatsoever.

27.5 In case of rejection of EQUIPMENT, PURCHASER shall have the right to recover the amounts, if any, from any of CONTRACTOR'S invoices pending with PURCHASER or by alternative method(s).

28. Termination of Contract:

28.1 Termination for Default

28.1.1 The PURCHASER may, without prejudice to any other remedy for breach of CONTRACT, by written notice of default sent to the SELLER, terminate the CONTRACT in whole or in part:

a) If the SELLER fails to deliver any or all of the GOODS within the time period(s) specified in the CONTRACT; or

b) If the SELLER fails to perform any other obligation(s) under the CONTRACT, and

c) If the SELLER, in either of the above circumstances, does not cure his failure within a period of 30 days (or such longer period as the PURCHASER may authorize in writing) after receipt of the default notice from the PURCHASER.

28.1.2 In the event the PURCHASER terminates the CONTRACT in whole or in part, pursuant to Article

28.1.1, the PURCHASER may procure, upon such terms and in such manner as it deems appropriate, goods similar to those undelivered and the SELLER shall be liable to the PURCHASER for any excess costs for such similar GOODS. However, the SELLER shall continue performance of the CONTRACT to the extent not terminated.

28.1.3 In case of termination of CONTRACT herein set forth (under clause 28) except under conditions of Force Majeure and termination after expiry of contract, the VENDOR shall be put under holiday [i.e. neither any enquiry will be issued to the party by AGCL against any type of tender nor their offer will be considered by AGCL against any ongoing tender (s) where contract between AGCL and that particular VENDOR (as a bidder) has not been finalized] for three years from the date of termination .

28.2 Termination for Insolvency

28.2.1 The PURCHASER, may at any time, terminate the CONTRACT by giving written notice to the SELLER, without compensation to the SELLER, if the SELLER becomes bankrupt or otherwise insolvent, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the PURCHASER.

28.3 Termination for Convenience

28.3.1 The PURCHASER may, by written notice sent to the SELLER, terminate the CONTRACT, in whole or part, at any time for his convenience. The notice of termination shall specify that termination is for the PURCHASER's convenience, the extent to which performance of work under the CONTRACT is terminated and the date upon which such termination becomes effective.

28.3.2 The GOODS that are complete and ready for shipment within 30 days after the SELLER's receipt of notice of termination shall be purchased by the PURCHASER at the CONTRACT terms and prices. For the remaining GOODS, the PURCHASER may opt:

- a) To have any portion completed and delivered at the CONTRACT terms and prices, and /or
- b) To cancel the remainder and pay to the SELLER an agreed amount for partially completed GOODS and for materials and parts previously procured by the SELLER.

29. Force Majeure:

29.1 Shall mean and be limited to the following:

- a) War/hostilities
- b) Riot or Civil commotion
- c) Earthquake, flood, tempest, lightening or other natural physical disaster.
- d) Restrictions imposed by the Government or other Statutory bodies which prevents or delays the execution of the Contract by the SELLER. The SELLER shall advise PURCHASER/ CONSULTANT by a registered letter duly certified by the local Chamber of Commerce or statutory authorities, the beginning and end of the above causes of delay within seven (7) days of the occurrence and cessation of such Force Majeure Conditions. In the event of delay lasting over one month, if arising out of causes of Force Majeure, PURCHASER/CONSULTANT reserves the right to cancel the Contract and the provisions governing termination stated under Article 28.0 shall apply. For delays arising out of Force Majeure, the SELLER shall not claim extension in completion date for a period exceeding the period of delay attributable to the causes of Force Majeure and neither PURCHASER/CONSULTANT nor SELLER shall be liable to pay extra costs provided it is mutually established that Force Majeure Conditions did actually exist. SELLER shall categorically specify the extent of Force Majeure Conditions prevalent in their works at the time of submitting their bid and whether the same have been taken into consideration or not in their quotations. In the event of any force majeure cause, the SELLER or the PURCHASER shall not be liable for delays in performing their obligations under this order and the delivery dates will be extended to the SELLER without being subject to price reduction for delayed deliveries, as stated elsewhere.

30 Resolution of Disputes/Arbitration:

30.1 The PURCHASER and the SELLER shall make every effort to resolve amicably by direct informal negotiations any disagreement or dispute arising between them under or in connection with the contract.

30.2 If, after thirty days from the commencement of such informal negotiations, the PURCHASER and the SELLER have been unable to resolve amicably a Contract dispute, either party may require that the dispute be referred for resolution to the formal mechanism as specified hereunder.

30.3 Legal Construction:

The Contract shall be, in all respects be construed and operated as an Indian Contract and in accordance with Indian Laws as in force for the time being and is subject to and referred to the Court of Law situated within the state of Assam.

30.4 Arbitration

All disputes, controversies, or claims between the parties (except in matters where the decision of the Engineer-in-Charge is deemed to be final and binding) which cannot be mutually resolved within a reasonable time shall be referred to Arbitration by a sole arbitrator.

The PURCHASER shall suggest a panel of three independent and distinguished persons to the Seller to select any one among them to act as the sole Arbitrator. In the event of failure of the Seller to select the Sole Arbitrator within 30 days from the receipt of the communication suggesting the panel of arbitrators, the right of selection of Sole Arbitrator by the other party shall stand forfeited and the PURCHASER shall have

discretion to proceed with the appointment of the Sole Arbitrator. The decision of the PURCHASER on the appointment of Sole Arbitrator shall be final and binding on the parties. The award of the Sole Arbitrator shall be final and binding on the parties and unless directed/awarded otherwise by the Sole Arbitrator, the cost of arbitration proceedings shall be shared equally by the parties. The arbitration proceeding shall be in English language and the venue shall be at Guwahati, India. Subject to the above, the provisions of (Indian) Arbitration & Conciliation Act, 1996 and the rules framed there under shall be applicable. All matters relating to this contract are subject to the exclusive jurisdiction of the Courts situated in the State of Delhi (India). Seller may please note that the Arbitration & Conciliation Act 1996 was enacted by the Indian Parliament and is based on United Nations Commission on International Trade Law (UNCITRAL model law), which were prepared after extensive consultation with Arbitral Institutions and centers of International Commercial Arbitration. The United Nations General Assembly vide resolution 31/98 adopted the UNCITRAL Arbitration rules on 15 December 1996. The WORK under the CONTRACT shall, however, continue during the Arbitration proceedings and no payment due or payable to the Seller shall be withheld on account of such proceedings.

31. Governing Language:

31.1 The Contract shall be written in English language as specified by the PURCHASER/CONSULTANT in the Instruction to Bidders. All literature, correspondence and other documents pertaining to the Contract which are exchanged by the parties shall be written in English language. Printed literature in other language shall only be considered, if it is accompanied by an English translation. For the purposes of interpretation, English translation shall govern and be binding on all parties.

32. Notices:

32.1 Any notice given by one party to the other pursuant to the Contract shall be sent in writing or by telegram or fax, telex/cable confirmed in writing.

32.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

33. Taxes & Duties

33.1 Seller shall be entirely responsible for all taxes, duties, license fees etc. incurred until the delivery of the contracted goods to the PURCHASER. However, Sales Tax and Excise duty on finished products shall be reimbursed by PURCHASER.

33.2 Customs duty payable in India for imported goods ordered by PURCHASER shall be borne and paid by PURCHASER.

34. Books of Records:

34.1 SELLER shall maintain adequate books of records in connection with Contract and shall make them available for inspection and audit by PURCHASER/ CONSULTANT or their authorized agents or representatives during the terms of Contract until expiry of the performance guarantee. Fixed price (lump sum or unit price) Contract will not be subject to audit as to cost except for cost reimbursable items, such as escalation and termination claims, transportation and comparable requirements.

35. Permits & Certificates:

35.1 SELLER shall procure, at his expense, all necessary permits, certificates and licenses required by virtue of all applicable laws, regulations, ordinances and other rules in effect at the place where any of the work is to be performed, and SELLER further agrees to hold PURCHASER and/or CONSULTANT harmless from liability or penalty which might be imposed by reason of any asserted or established violation of such laws, regulations, ordinances or other rules. PURCHASER will provide necessary permits for SELLER's personnel to undertake any work in India in connection with Contract.

36. General:

36.1 In the event that terms and conditions stipulated in the General Conditions of Contract should deviate from terms and conditions stipulated in the Contract, the latter shall prevail.

36.2 Losses due to non-compliance of Instructions

Losses or damages occurring to the PURCHASER owing to the SELLER's failure to adhere to any of the instructions given by the PURCHASER/CONSULTANT in connection with the contract execution shall be recoverable from the SELLER.

36.3 Recovery of sums due

All costs, damages or expenses which the PURCHASER/CONSULTANT may have paid, for which under the CONTRACT SELLER is liable, may be recovered by the PURCHASER (he is hereby irrevocably authorized to do so) from any money due to or becoming due to the SELLER under this Contract or other Contracts and/or may be recovered by action at law or otherwise. If the same due to the SELLER be not sufficient to recover the recoverable amount, the SELLER shall pay to the PURCHASER, on demand, the balance amount.

36.4 Payments, etc. not to affect rights of the PURCHASER

No sum paid on account by the PURCHASER nor any extension of the date for completion granted by the PURCHASER/CONSULTANT shall affect or prejudice the rights of the PURCHASER against the SELLER or relieve the SELLER of his obligation for the due fulfillment of the CONTRACT.

36.5 Cut-off Dates

No claims or correspondence on this Contract shall be entertained by the PURCHASER/Consultant after 90 days after expiry of the performance guarantee (from the date of final extension, if any).

36.6 Paragraph heading

The paragraph heading in these conditions shall not affect the construction thereof.'

37. Import License

37.1 No import license is required for the imports covered under this document.

38. Fall Clause

38.1 The price charged for the materials supplied under the order by the supplier shall in no event exceed the lowest price at which the supplier or his agent/principal/dealer, as the case may be, sells the materials of identical description to any Persons/Organizations including the Purchaser or any Department of the Central Govt. or any Department of a State Govt. or any Statutory Undertaking of the Central or State Govt. as the case may be, during the currency of the order.

38.2 If at any time during the said period, the supplier or his agent/principal/dealer, as the case may be, reduces the sale price, sells or offers to sell such materials to any persons/organizations including the Purchaser or any Department Of Central Govt. or State Govt. as the case may be, at a price lower than the price chargeable under the order, he shall forthwith notify such reduction or sale or offer of sale to the Purchase Authority who has issued this order and the price payable under the order for the materials supplied after the date of coming into force of such reduction or sale or offer of sale shall stand correspondingly reduced.

The above stipulation will, however, not apply to:

- a) Exports by the Contractor/Supplier or
- b) Sale of goods as original equipment at prices lower than the prices charged for normal replacement
- c) Sale of goods such as drugs which have expiry dates.

38.3 The supplier shall furnish the following certificate to the concerned Paying Authority along with each bill for payment for supplies made against this order:

"I/We certify that there has been no reduction in sale price of the items/goods/materials of description identical to those supplied to the AGCL under the order herein and such items/goods/materials have not been offered/sold by me/us to any person/organizations including the Purchaser or any Department of Central Govt. or any Department of State Govt. or any Statutory Undertaking of the Central or State Govt. as the case may be up to the date of bill/during the currency of the order whichever is later, at a price lower than the price charged to AGCL under the order". Such a certificate shall be obtained, except for quantity of items/goods/materials categories under sub-clause (a), (b) & (c) of sub-para 38.2 above, of which details shall be furnished by the supplier.

39. Publicity & Advertising:

39.1 Seller shall not without the written permission of PURCHASER/CONSULTANT make a reference to PURCHASER/CONSULTANT or any Company affiliated with PURCHASER/CONSULTANT or to the destination or the description of goods or services supplied under the contract in any publication, publicity or advertising media.

40. Repeat Order

40.1 PURCHASER reserves the right, within 6 months of order to place repeat order up to 50% of the total order value without any change in unit price or other terms and conditions.

41. Limitation of Liability:

41.1 Notwithstanding anything contrary contained herein, the aggregate total liability of Seller under the Agreement or otherwise shall be limited to 100% of Agreement / Order price. However, neither party shall be liable to the other party for any indirect and consequential damages, loss of profits or loss of production.

SPECIAL CONDITIONS OF CONTRACT

1. Special Conditions of Contract shall be read in Conjunction with the General Conditions of Contract, Specification of work, Drawing and any other documents forming part of this Contract wherever the context so require.

Notwithstanding the sub-division of the documents into these separate sections and volumes every part of each shall be deemed to be supplementary to and complementary of every other part and shall be read within the Contract so far as it may be practicable to do so.

Where any portion of the General Conditions of Contract is repugnant to or at variance with any provisions of the Special Conditions of Contract, unless a different intention appears, the provisions of the Special Conditions of Contract shall be deemed to over-ride the provisions of the General Conditions of Contract and shall be the extent of such repugnancy, or variations, prevail.

2. DELIVERY SCHEDULE:

Delivery is the essence of contract. CNG Cascade shall be delivered within 8 Weeks from the date of issue of LOI.

a) The date of LR shall be considered as the date of delivery for LD calculations.

b) Installation, Commissioning & Testing for CNG CASCADE to be done within 15 days of intimation by AGCL

3. Place of Delivery:

Material shall be delivered as per the instructions of EIC in the stores of AGCL at the designated site in Dibrugarh Districts of Assam.

4. Payment Terms:

A) For Supply: 90% (Ninety Percent), along with Taxes and duties will be paid on receipt of material at the delivery Site and submission of Invoice in Triplicate (within 30 days) along with:

1. Original Lorry Receipt
2. Packing List
3. Insurance Cover note covering Transit Insurance
4. Inspection Release Note issued by AGCL's Consultant/Third Party Inspection Agency;
5. Certificate from Manufacturer that all items/equipment under supply including its component or raw material used with manufacturing are new and conform to the tender requirement.
6. Final Technical File as per bid document including all test certificates.
7. Document related to CENVAT credit to be claimed by Owner, if applicable.

B) Balance 10% will be released within 30 days from the date of receipt of ordered materials and its successful installation, testing & commissioning and acceptance at Site by the Engineer-In-Charge of AGCL.

C) Invoice shall be made after adjusting the Price Reduction Schedule pursuant to General Conditions of Contract (Goods).

5. Performance Bank Guarantee:

Pursuant to General Conditions of Contract (Goods), within 15 days of receipt of notification of award from AGCL, the supplier shall submit Contract Performance Guarantee for 10% of Total Contract Price valid till 90 days beyond the expiry period of the Guarantee.

6. Evaluation shall be done and on FOT site basis. AGCL reserves the right to place order on one party or multiple parties at its own discretion.

7. Upon placement of order, AGCL shall nominate Engineer-in-charge for this supply/work.

8. Any Statutory Variation in Taxes and Duties during the currency of contract shall be to owner's account.

9. All BEC documents need to be notarized.

10. New Tax /Duty /Levy

Any new tax & duties if imposed by Govt of India on output services after the Bid Due Date but before the contractual delivery/completion shall be reimbursed to the contractor on submission of documentary evidence for proof of payment to Govt. authorities and after ascertaining its applicability with reference to the contract. However, if such new taxes etc. is in substitution of existing taxes same will be considered on merit of each case.

FORMS & FORMATS

FORMS AND FORMATS

FORM-1

BIDDERS GENERAL INFORMATION

To

Assam Gas Company Ltd.

Duliajan, Assam

Sub: Supply o f.....

1. Name of Bidder / Firm:

2. Status of Firm : Proprietorship Firm / Partnership Firm [Mark V]

3. Number of Years in Operation

4. Registered Address

5. Operational Address [if different from above]

6. Telephone Number

[Area Code] [Number]

7. E-mail ID & Website

8. Tele-fax Number

9. ISO Certification [If Any] [If 'Yes', Please Furnish Details]:

10. PAN [Number]

11. Service Tax Number

[Enclose Copy of 'PAN Card']

[Enclose Copy of 'Service Tax Registration Certificate']

Place: Date:

[Signature of Authorized Signatory of Bidder]

Name: Designation:

Seal:

FORM-2
BID FORM

To
Assam Gas Company Ltd.
Duliajan, Assam

Sub: Supply of.....

Dear Sir, After examining / reviewing the Bidding Documents for Supply of CNG Cascade for the CNG project of AGCL including "Specifications & Scope of Supply", "General Conditions of Contract [GCC]", "Special Conditions of Contract [SCC]" and "Schedule of Rates [SOR]", etc. the receipt of which is hereby duly acknowledged, we, the undersigned, pleased to offer to execute the whole part of the work and in conformity with the said Bid Documents, including Addenda / Corrigenda Nos._____.

We confirm that this Bid is valid for a period of "three [03] months" from the date of opening of "Techno-Commercial / Un-priced Bid", and it shall remain binding upon us and may be accepted by any time before the expiry of that period.

Until a final Agreement is prepared and executed, the Bid together with your written acceptance thereof in your "Notification of Award" shall constitute a binding Agreement between us.

We understand that Bid Document is not exhaustive and any action and activity not mentioned in Bid Documents but may be inferred to be included to meet the intend of the Bid Documents shall be deemed to be mentioned in Bid Documents unless otherwise specifically excluded and we confirm to perform for fulfillment of "Agreement" and completeness of the Work in all respects within the time frame and agreed price.

We understand that you are not bound to accept the lowest priced or any Bid that you may receive.

Place:
Date:

[Signature of Authorized Signatory of Bidder]
Name:
Designation:
Seal:

Duly authorized to sign Bid for and on behalf of _____

[Signature of Witness]

Name of Witness:

Address:

FORM-3
LIST OF ENCLOSURES

To
Assam Gas Company Ltd.
Duliajan, Assam

Sub: Supply o f.....

Dear Sir,

We are enclosing the following documents as part of the bid:

1. Power of Attorney of the signatory to the Bidding Document.
2. Copy of Bidding Documents along with addendum/corrigendum duly signed and sealed on each page, in token of confirmation that Bid Documents are considered in full while preparing the bid and in case of award, work will be executed in accordance with the provisions detailed in Bid Documents.
3. Documentary Evidences showing the Bidder's claim of meeting Technical Criteria as mentioned in Clause 4 of ITB.
4. All Formats duly filled and signed with seal

(SEAL AND SIGNATURE OF BIDDER)

Format—3A

FORMAT FOR STATUTORY AUDITOR'S/ CHARTERED ACCOUNTANT* CERTIFICATE FOR FINANCIAL CAPABILITY OF THE BIDDER (For Supply of Goods/ Works/ Services)

We have verified the Annual Accounts and other relevant records of M/s.....(Name of the bidder) and certify the following

A. ANNUAL TURNOVER OF LAST 3 YEARS:

Year	Amount
------	--------

Year 1:

Year 2:

Year 3:

B. FINANCIAL DATA FOR LAST AUDITED FINANCIAL YEAR :

Description	Year
	Amount

1. Current Assets
2. Current Liabilities
3. Working Capital (Current Assets-Current liabilities)
4. Net Worth (Paid up share capital and Free Reserves & Surplus)

Name of Audit Firm/
Signatory]

Chartered Accountant Name:

Date:

[Signature of Authorized

Designation:

Seal:

Membership no.

Instructions:

1. The financial year would be the same as one normally followed by the bidder for its Annual Report.
2. The bidder shall provide the audited annual financial statements as required for this Tender document. Failure to do so would result in the Proposal being considered as non responsive.

3. For the purpose of this Tender document, (
- i) Annual Turnover shall be “Sale value/ Operating Income”
 - (ii) Working Capital shall be “Current Assets less Current liabilities” and
 - (iii) Net Worth shall be “Paid up share capital and Free Reserves & Surplus” * Bidder whose accounts are not audited by auditors as per law/jurisdiction, certification from a Chartered Accountant to be submitted.

FORM-4

Not Required.

FORM-5
LETTER OF AUTHORITY

[Pro forma for Letter of Authority (ON LETTER HEAD) for Attending Subsequent 'Negotiations' / 'Pre-Bid Meetings' / 'Un-priced Bid Opening' / 'Price Bid Opening']

Ref:

Date:

To
Assam Gas Company Ltd.
Duliajan, Assam

Sub: Supply of CNG Cascade for the CNG project of AGCL

Dear Sir,
I/We, _____ hereby authorize the following representative(s) for attending any 'Negotiations' / 'Meetings [Pre-Bid Meeting]', 'Unpriced Bid Opening', 'Price Bid Opening' and for any subsequent correspondence / communication against the above Bidding Documents:

[1] Name & Designation .

Phone/Cell:

Fax:

E-mail:

Signature

[2] Name & Designation .

Phone/Cell:

Fax:

E-mail:

Signature

We confirm that we shall be bound by all commitments made by aforementioned authorised representative(s).

Yours faithfully,

Place:

Date:

[Signature of Authorized Signatory of Bidder]

Name:

Designation:

Seal:

FORM-6
"NO DEVIATION" CONFIRMATION

To
Assam Gas Company Ltd.
Duliajan, Assam

Sub: Supply of.....

Dear Sir,

We understand that any 'deviation / exception' in any form may result in rejection of Bid. We, therefore, certify that we have not taken any 'exception / deviation' anywhere in the Bid and we agree that if any 'deviation / exception' is mentioned or noticed, our Bid may be rejected.

Place:

Date:

[Signature of Authorized Signatory of Bidder]

Name:

Designation:

Seal:

FORM-6A
DECLARATION

To
Assam Gas Company Ltd.
Duliajan, Assam

Sub: Supply of

Dear Sir,

We hereby confirm that we are not under any 'liquidation', any 'court receivership' or similar proceedings and 'bankruptcy' and we agree that if any noticed in future, our Bid may be rejected / terminated.

Place:

[Signature of Authorized Signatory of Bidder]

Date:

Name:

Designation:

Seal:

FORM-7
CERTIFICATE

To

Assam Gas Company Ltd.
Duliajan, Assam

Sub: Supply of.....

Dear Sir,

"We agree and acknowledge that the Employer is entering into the Agreement solely on its own behalf and not on behalf of any other person or entity. In particular, it is expressly understood & agreed that the Government of India is not a party to the Agreement and has no liabilities, obligations or rights there under. It is expressly understood and agreed that the Employer is authorized to enter into Agreement, solely on its own behalf under the applicable laws of India. We expressly agree, acknowledge and understand that the Employer is not an agent, representative or delegate of the Government of India. It is further understood and agreed that the Government of India is not and shall not be liable for any acts, omissions, commissions, breaches or other wrongs arising out of the Agreement. Accordingly, we hereby expressly waive, release and forego any and all actions or claims, including cross claims, VIP claims or counter claims against the Government of India arising out of the Agreement and covenants not to sue to Government of India as to any manner, claim, cause of action or things whatsoever arising of or under the Agreement."

Place:

[Signature of Authorized Signatory of Bidder]

Date:

Name:

Designation:

Seal:

FORM-8
AGREED TERMS & CONDITIONS

Sub: Supply of CNG DISPENSERS

This Questionnaire duly filled in, signed & stamped must form part of Bidder's Bid and should be returned along with Un-priced Bid. Clauses confirmed hereunder need not be repeated in the Bid.

Sl.	DESCRIPTION	BIDDER'S CONFIRMATION
1	Bidder's name and address	
2	Please confirm the currency of quoted prices is in Indian Rupees.	
3	Confirm quoted prices will remain firm and fixed till complete execution of the order	
4	Rate of applicable Tax & Duties ST/VAT:% Excise Duty:%	
5(i)	Confirm acceptance of relevant Terms of Payment specified in the Bid Document	
5(ii)	In case of delay, the bills shall be submitted after deducting the price reduction due to delay	
6	Confirm that Contract Performance Bank Guarantee shall be furnished as per Bid Document	
7	Confirm compliance to Delivery/ Completion Schedule as specified in Bid document.	
8.a)	Confirm acceptance of Price Reduction Schedule for delay in completion schedule specified in Bid document. Liquidated damages or penalty are not acceptable.	
8.b)	In case of delay, the bills shall be submitted after deducting the price reduction due to delay. Confirm.	
9.a)	Confirm acceptance of complete Bid Document (all sections).	
9.b)	Confirm that printed terms and conditions of bidder are not applicable	
10	Confirm your offer is valid for 3 months from Final/Extended due date of opening of Techno-commercial Bids.	
11	Please furnish EMD/Bid Security details: a) EMD/ Bid Security No. & date b) Value c) Validity	
12	Confirm that, in case of contradiction between the confirmations provided in this format and terms & conditions mentioned elsewhere in the offer, the confirmations given in this format shall prevail.	
13	The bidder is required to state (in sentence form) whether any of the Directors of bidder is a relative of any Director of Owner or the bidder is a firm in which any Director of Owner AGCL or his relative is a partner.	
14	Confirm that you have not been banned or delisted by any Government or Quasi-Government agencies or Public Sector Undertakings. If you have been banned or delisted by any Government or Quasi-Government agency or Public Sector Undertakings, then this fact must be clearly stated. If this declaration is not furnished bid shall be treated as	

	non-responsive and liable for rejection.	
15	All correspondence must be in ENGLISH language only.	
16	Owner reserves the right to make any change in the terms & conditions of the TENDER/BIDDING DOCUMENT and to reject any or all bids including those received late or incomplete.	
17	Confirm that all Bank charges associated with Bidder's Bank shall be borne by Bidder.	

Bidder: M/s
Place : ____

Date
Seal

(Signature of Authorized Signatory)
Name : _____
Designation : _____

FORM-9
ACKNOWLEDGEMENT CUM CONSENT LETTER

(On receipt of tender document/information regarding the tender, Bidder shall acknowledge the receipt and confirm his intention to bid or reason for non-participation against the enquiry /tender through e-mail/fax to concerned executive in AGCL issued the tender, by filling up the

Format)

To

Assam Gas Company Ltd.
Duliajan, Assam
Fax : (0374) 2800557

Sub: Supply o f.....

Dear Sir,

We hereby acknowledge receipt of a complete set of bidding document along with enclosures for subject item/job and/or the information regarding the subject tender.

We intend to bid as requested for the subject item/job and furnish following details with respect to our quoting office:

Postal Address with Pin Code :

Telephone Number :

Fax Number :

Contact Person :

E-mail Address :

Mobile No. :

Date :

Seal/Stamp :

We are unable to bid for the reason given below:

Reasons for non-submission of bid:.....

Agency's Name
Signature
Name

Designation
Date
Seal/Stamp

FORM-10
Undertaking on Letter head

To

Assam Gas Company Ltd.
Duliajan, Assam

Sub: Supply of

Dear Sir

We hereby confirm that “The contents of this Tender Document No. _____ have not been modified or altered by M/s..... (Name of the bidder with complete address). In case, it is found that the tender document has been modified / altered by the bidder, the bid submitted by M/s.....(Name of the bidder) shall be liable for rejection”.

It is also confirmed that this undertaking is hereby given in place of submission of tender document duly signed in all pages.

(SIGNATURE OF BIDDER)

FORM-11

PROFORMA OF "BANK GUARANTEE" FOR "CONTRACT PERFORMANCE SECURITY / SECURITY DEPOSIT" (ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

To,
Assam Gas Company Ltd.
Duliajan, Assam – 786606

Dear Sir(s),

M/s. _____ having registered office at _____ (herein after called the "contractor/supplier" which expression shall wherever the context so require include its successors and assignees) have been placed/ awarded the job/work of _____ vide PO/LOA/FOA No. _____

_____ dated _____ for Assam Gas Company Limited having its Registered Office at Duliajan, District Dibrugarh, Assam -786602 (herein after called the "AGCL" which expression shall wherever the context so require include its successors and assignees).

The Contract conditions provide that the SUPPLIER/CONTRACTOR shall pay a sum of Rs..... (Rupees) as full Contract Performance Guarantee in the form therein mentioned. The form of payment of Contract Performance Guarantee includes guarantee executed by Nationalized Bank/Scheduled Commercial Bank, undertaking full responsibility to indemnify Assam Gas Company Limited, in case of default.

The said M/s. _____ has approached us and at their request and in consideration of the premises we having our office at _____ have agreed to give such guarantee as hereinafter mentioned.

1. We _____ hereby undertake to give the irrevocable & unconditional guarantee to you that if default shall be made by M/s. _____ in performing any of the terms and conditions of the tender/order/contract or in payment of any money payable to Assam Gas Company Limited, we shall on first demand pay without demur, contest, protest and/ or without any recourse to the contractor to GGPL in such manner as GGPL may direct the said amount of Rupees _____ only or such portion thereof not exceeding the said sum as you may require from time to time.

2. You will have the full liberty without reference to us and without affecting this guarantee, postpone for any time or from time to time the exercise of any of the powers and rights conferred on you under the order/contract with the said M/s. _____ and to enforce or to forbear from endorsing any powers or rights or by reason of time being given to the said M/s. _____ and such

postponement forbearance would not have the effect of releasing the bank from its obligation under this debt.

3. Your right to recover the said sum of Rs. _____ (Rupees _____) from us in manner aforesaid is absolute & unequivocal and will not be affected or suspended by reason of the fact that any dispute or disputes have been raised by the said M/s. _____ and/or that any dispute or disputes are pending before any officer, tribunal or court or arbitrator or any other authority/forum and any demand made by you in the bank shall be conclusive and binding. The bank shall not be released of its obligations under these presents by any exercise by you of its liberty with reference to matter aforesaid or any of their or by reason or any other act of omission or commission on your part or any other indulgence shown by you or by any other matter or changed what so ever which under law would, but for this provision, have the effect of releasing the bank.

4. The guarantee herein contained shall not be determined or affected by the liquidation or winding up dissolution or changes of constitution or insolvency of the said supplier/contractor but shall in all respects and for all purposes be binding and operative until payment of all money due to you in respect of such liabilities is paid.

5. This guarantee shall be irrevocable and shall remain valid upto _____ (this date should be 90 days after the expiry of defect liability period/ Guarantee period) _____. The bank undertakes not to revoke this guarantee during its currency without your previous consent and further agrees that the guarantee shall continue to be enforceable until it is discharged by AGCL in writing. However, if for any reason, the supplier/contractor is unable to complete the supply/work within the period stipulated in the order/contract and in case of extension of the date of delivery/completion resulting extension of defect liability period/guarantee period of the supplier/contractor fails to perform the supply/work fully, the bank hereby agrees to further extend this guarantee at the instance of the supplier/contractor till such time as may be determined by AGCL. If any further extension of this guarantee is required, the same shall be extended to such required period on receiving instruction from M/s.

_____ (contractor) on whose behalf this guarantee is issued.

6. Bank also agrees that AGCL at its option shall be entitled to enforce this Guarantee against the bank (as principal debtor) in the first instant, without proceeding against the supplier/contractor and notwithstanding any security or other guarantee that AGCL may have in relation to the supplier's/contractor's liabilities.

7. The amount under the Bank Guarantee is payable forthwith without any delay by Bank upon the written demand raised by AGCL. Any dispute arising out of or in relation to the said Bank Guarantee shall be subject to the exclusive jurisdiction of courts at Dibrugarh.

8. Therefore, we hereby affirm that we are guarantors and responsible to you on behalf of the Supplier/Contractor up to a total amount of _____ (amount of guarantees in words and figures) and we undertake to pay you, upon your first written demand declaring the Supplier/Contractor to be in default under the order/contract and without caveat or argument, any sum or sums within the limits of (amounts of guarantee) as aforesaid, without your needing to prove or show grounds or reasons for your demand or the sum specified therein.

9. We have power to issue this guarantee in your favor under Memorandum and Articles of Association and the undersigned has full power to do under the Power of Attorney, dated granted to him by the Bank.

Yours faithfully,

Bank by its Constituted Attorney

Signature of a person duly authorized to sign on behalf of the Bank

TECHNICAL SPECIFICATION FOR CNG CASCADE:

MATERIAL REQUISITION

Items : CNG Storage Cascades

Sl. No.	Description	Quantity (Nos.)
1.0	CNG Cascade of 4500 WL	
1.1	Design, Engineering, Manufacturing, Assembly, Supply, Inspection and Testing at works and at site if required of CNG Station STORAGE CASCADE OF MINIMUM 4500 WL capacity at 15°C. for filling and storing of CNG at 250 bar (g) at 20 to 48°C as specified in Technical Specification inclusive of services as stipulated in the tender document.	1
1.2	Mandatory spares consisting of all the Quantities as specified at 1.2.1 to 1.2.8 for total Quantity of the CNG Cascades at Sr No. 1.1 above	
1.2.1	Pressure Gauge Range (0 — 400) kg/cm ²	3
1.2.2	Cylinder Valve with end tube fitting	3
1.2.3	Isolation Valve	1
1.2.4	Check Valve	1
1.2.5	Tube Pig Tail	1
1.2.6	Burst Disc with Washer	2
1.2.7	Spindle & Handles for cylinder valves	2
1.2.8	Safety Relief Device	1

Note :

1. The Vendor shall be completely responsible for the design, materials, manufacture & fabrication, testing, inspection, preparation for shipment and transport of the above equipment strictly in accordance with the MR and all attachment there to. All items shall be provided with test certificates.
2. Vendor has to appoint TPI Agency (Third Party Inspection Agency) for inspection at manufacturer's works as per approved QAP. No separate payment for the same shall be paid.
3. The mandatory spares shall be supplied along with the corresponding stationary / mobile cascade.

1.0 CNG MOBILE AND STATIONARY CASCADES DESCRIPTION

1.1 General

The intent of this tender is to outline minimum requirement for Design, Engineering, Manufacturing, Assembly, Testing, Supply, Testing at site, Commissioning of CNG storage both Stationary and mobile storage systems as per Technical specification of tender.

Storage Sizing(WL) Stationary

Capacity	Qty
4500	1

In the CNG Stations, the compressed natural gas would be directly filled into stationary storage cascades.

2.0 FEED GAS SPECIFICATION:

2.1 Gas Composition: The expected gas composition of the feed gas to the CNG Storage Cascade is given below.

Component	Range %
N ₂	0.41
CO ₂	
Methane	94.46
Ethane	3.09
Propane	0.606
I-Butane	0.223
N-Butane	0.21
I-Pentane	0.09
N-Pentane	0.08
C6+/Hexane	0.21

NOTES

Mass Density: 0.732 Kg/SM3 at 15.5 °C and 0.101325 MPA pressure

Mass Density: 219.943 Kg/M3 at 15.5 °C temps and 25 MPA

Mass Density: 180.276 Kg/M3 at 52 °C temps and 25 MPA

Gas Temps 30 °C

2.2 Climate

Height above Mean sea level: 12.8 meters (Approx.)

Max. site temp.: 40 °C

Minimum site temp.: 8 °C

Maximum RH: 98% in the month of August.

Minimum RH: 45% in the month of March

2.3 Gas Storage Pressure

Fill Pressure: - 250 Kg/cm² (g)

Gas Delivery Temperature Maximum °C Dependant on ambient temperature

2.4 CNG Specification

The CNG specification shall meet the IS- 15127:2002 natural gas quality designation for use as a compressed fuel for vehicles.

The proposed specification of the CNG is as follows:

Gas Temperature 0 °C to +55 °C

Pressure dew-point - 25 °C

Particulate matter Less than 5 microns

Odorant - Mercaptane 2 to 7 mg/SCM

2.5 Design Philosophy

Storage fulfils four functions.

ONE - It allows more vehicles to fill than the compressor could fill directly one after the other during peak times.

TWO - It allows the vehicle to fill at a faster rate than if directly from the compressor.

THREE - It prevents the compressor from stopping and starting too often.

FOUR- The combined storage capacity is compartmentalized in three banks. Each bank is separated with check valve and direction of flow should be from high bank to low bank and also provided with pressure relief valve.

It is anticipated that the natural gas feed composition, flow rate and pressure will be fluctuating. Hence, Supplier should design the CNG storage facilities with optimum degree of flexibility, reliability, operability to accommodate the varying composition of feed, other unexpected contaminants, flow rate and pressure.

The CNG storage facilities should consist of standardised modules, which are assembled into a complete system. Each system should be designed in standardized modular frames. The modular approach allows the CNG Stationary storage and mobile storage facilities to be easily installed there by reducing installation time.

The design life of the CNG storage facilities should be 20 years.

2.5 Design Basis

The Supplier should prepare the design basis required to meet the demands mentioned in items 1.0 & 2.0 and liaise with Assam Gas Company Ltd. to obtain necessary confirmation and approval.

2.6 Applicable Standards and Codes

The design, construction, manufacture, supply, testing and other general requirements of the Storage Cascades should be strictly in accordance with the Applicable Standards and Codes and should comply fully with relevant Indian / International standards, Gas Cylinder Rule 2004, Indian Explosives Act- 1884, Stationary and Mobile Pressure Vessels (Unfired) Rules (SMPV) 1981, CNG Cylinder Design Code, IS:7285-2004 part-2 (with amendment no.1,2,3 & 4) & including any other latest amendment, CNG Cylinder Valves, IS:3224-2002, Hydrostatic Stretch Test, IS: 5844 – 1970, Safety Devices of Gas Cylinders, IS : 5903 -1970, regulations of Insurance Association of India and Factories Act while carrying out work as per this specification.

The bidder without any additional cost and delivery implications should carry out any modification suggested by the statutory bodies either during drawing approval or during inspection, if any.

The following codes and standards (versions/ revisions valid on the date of order) are referenced to & made part of specification:

1. NFPA 52 Standards for CNG vehicular fuel systems & CNG Cylinder Codes IS: 7285-2004 part-2.
2. OISD 179 Safety requirements for compression, storage, handling and refueling of CNG for use in automotive sector.
3. GAS CYLINDER RULE 2004 Standards for CNG Storage and Gas Cylinder Rules.
4. STATIC AND MOBILE PRESSURE VESSELS (UNFIRED) RULES, (SMPV) 1981
5. CNG CYLINDER DESIGN CODE, IS : 7285 – 2004 part 2 (with amendment 1,2,3 and 4)
6. CNG CYLINDER VALVES, IS : 3224 – 1979
7. HYDROSTATIC STRETCH TEST, IS: 5844 – 1970,
8. SAFETY DEVICES OF GAS CYLINDERS, IS : 5903 -1970, regulations of Insurance Association
9. INDIAN EXPLOSIVES ACT

10. ANSI, ASTM, NEC, NEMA, ASNZ, OISD 179

3.0 STATIONARY GAS STORAGE AND MOBILE STORAGE CASCADES:

3.1 Cylinders

Supply of CNG storage cascades of water liter capacity as specified at clause no. 1.1. Permissible tolerance -0 + 5% at 15°C with the following minimum details:

3.1.1 All cylinders should be designed, constructed and tested in accordance with the Indian Standard 7285, as amended from time to time, IS : 7285 – 2004 or (US) D.O.T 3AA or similar such other standard code approved by the Chief Controller of Explosives.

3.1.2 Cylinder material shall be seamless alloy steel (Cr-Mo) or as per design approval by Chief Controller of Explosives. The neck threading shall be as per IS: 3224 – 1979 or as per design approval by Chief Controller of Explosives. The thread size of dia. 25.4 mm standards, type 4 threads with taper of 1 in 8 on diameter confirming to IS: 3224-1970 or equivalent is recommended. The shut off valve shall be fusible burst disc confirming to requirements of IS: 3224 or as per design approval by Chief Controller of Explosives.

3.1.3 A Test and Inspection certificate issued by the manufacturer of the cylinder duly countersigned by an Inspector that the Cylinder meets the requirements of the standard or code referred above submitted to Chief Controller of Explosives shall be provided to the Purchaser.

3.1.4 All cylinders should be new and unused. Re-certified cylinders are not acceptable. Before using the Cylinder or before refilling the cylinder, which has to be made gas-free, air contained therein shall be purged by an inert gas (Nitrogen) or by the CNG gas. Cylinder of 75/125 lit water capacity at 15°C are only envisaged. All cylinders in a cascade shall be of same capacity.

3.1.5 Total storage volume with no negative tolerance should be designed to meet storage patterns sizes for storage:

Stationary - 4500WL at 15 degree centigrade.

3.1.6. The stationary storage cascade comprising of the multiple cylinders shall be designed as per the requirements of OISD 179 latest edition. These stationary cascades are envisaged to be installed on the roof top of various buildings at the CNG station location.

To ensure ready access and to ensure that all cylinder fittings should be arranged to face one direction in each unit. For easy access, operation and maintenance of the cascade system, 1.0 m clear space all around each of the cascades shall be provided. Each such storage unit should be separated from other units by a distance of not less than 2m. Where horizontal units are placed parallel to each other, cylinder fittings should be arranged so that they do not face cylinder fittings of other units.

3.1.7 The cylinder shut-off valve shall be with fusible burst disc confirming to requirements of IS:3224 or as per design approved by PESO, Govt. of India.

3.1.8 The burst disc shall rupture on excess pressure as well as excess temperature either individually or combined. The burst disc discharge shall be manifold to a common header for safe venting. Vendor shall indicate burst pressure and temperature.

3.1.9 The cylinder shut-off valve orifice shall be designed for high flow to permit the combined flow of 100 kg/min for each bank at a pressure of 250 bar(g). Vendor to furnish necessary calculation indicating overall pressure drop of each bank, coefficient of flow (Cv) values, valve orifice size etc.

3.1.10 Number of cylinders in the cascade shall be divided into three independent banks for low, medium & high pressure of different storage pressure. Vendor shall optimise the number of cylinder in each bank for maximizing the recovery from the storage cascade and submit the calculations along with the bid. Generally cylinder ratio of Low: Medium: High bank is kept as 5:3:2 by Volume.

3.1.11 The interconnecting tube work of cylinder manifold in configuration suitable for priority filling and sequential dispensing system by the electronic CNG dispensers.

3.1.12 Full bore ¾" ball valves for isolation shall be provided at inlet/ outlet of each line/ banks.

3.1.13 Interconnecting tube work shall be minimum of ¾" OD SS-316 tubing. The sizing of connecting tubing between each outlet and its associated cylinder shall be such that where they join the total incoming flow areas shall not be less than the total outgoing area. The loops in the tube work shall be provided for absorbing contraction, expansion and vibration. Piping/ tubing shall be suitably clamped to the frame structure.

3.1.14 There shall not be any back flow between any two banks with all valves open for 3 bank cascades. However, for mobile cascades, single bank cascades will be procured.

3.1.15 Cylinders installed horizontally should be separated from one another in each storage unit by a distance of not less than 30mm. The material used to separate the cylinders should be sufficiently strong enough and should not absorb moisture. Special precautions should be taken to avoid corrosion at the point of contact.

3.1.16 All cylinder valves and fittings must be rated for the full range of temperature and pressures and the manufacturer should stamp or otherwise permanently mark the valve body to indicate the service rating.

3.1.17. All cylinders to be hydrostatically tested and approved by third party certification body. Test certificates shall be duly endorsed by approval body and issued before delivery.

3.1.18 The location of inlet/ outlet tube manifold and pressure/temperature gauges shall be towards the length side of cascade for stationary .

3.1.19 The cascade cylinder shall be purged & Blanketed with N2 at 1 bar(g) pressure before dispatch.

3.1.20. Markings of Cylinders:-

a) Every Gas cylinder shall be clearly and permanently marked in accordance with the following conditions by stamping, engraving or similar process;

i) on the shoulder of the cylinder which shall be enforced by forging or other means, or

ii) on such a part which is inseparably bound with the cylinder and which is not or only negligibly effected by the stresses due to the gas pressure within it.

b) The name plate shall not be affixed to the cylinder by soldering, if there is risk of corrosion or embrittlement.

c) In conjunction with the original marking, space shall be provided for stamping the test date obtained at the periodic inspection.

d) Markings shall be as carried out and the letters and numerals used shall be of such shape and size that the marking is clear and easily readable and does not give place for misreading.

e) All cylinders must be permanently stamped with the word CNG together with the following information:

1) manufacturer's, owner's and inspector's marking and rotation number; (These markings shall be registered with the Chief Controller of Explosives);

2) specifying that the cylinder has been manufactured for "CNG only"

3) A symbol to indicate the nature of heat treatment (such as normalizing, quenching, or tempering) given to the cylinder during manufacture.

4) The date of the last hydrostatic or hydrostatic stretch test, as the case may be, with the code mark of recognized testing station where the test was carried out. The code mark shall be registered with the Chief Controller of Explosives.

5) Working pressure and test pressure;

6) Tare weight

7) Water capacity.

f) All the markings, except the manufacturer's marking, which may be on the base, shall be stamped on the neck end of the cylinder.

3.1.21 Marking on the Valves:-

Valves fitted to the cylinder shall be clearly and durably marked in accordance with the following provisions by stamping, engraving or similar process:

1) the specification of the valves;

- 2) year and quarter of manufacture;
- 3) manufacturer's symbol;
- 4) working pressure;
- 5) the name or chemical symbol of the gas for which the valve is to be used;
- 6) the type of screw threads on the outlet namely left handed (L.H) or right handed (R.H);
- 7) Inspector's stamp if possible;

3.1.22 Identification colors:-

Every cylinder is painted with the appropriate identification colors specified in IS: 4379 for Industrial cylinders.

Color of the Cylinder shell	----- White
Color of band at neck end of cylinder	----- Red (IS Standard Color No. 537)
Color of the Frame	----- Yellow

3.1.23 Labeling of cylinders

1) Every cylinder shall be labeled with the name "CNG ONLY" with letter of at least 25mm high in contrasting colour and the name and address of the Purchaser by whom the cylinder was filled with gas.

2) A warning in the following terms shall be attached to every cylinder containing Compressed Natural Gas namely:-

- i) Do not change the color of the cylinder
- ii) This cylinder should not be filled with any gas other than CNG.
- iii) No flammable material should be stored in the immediate vicinity of this cylinder or in the same place in which it is kept.
- iv) No oil or similar lubricant should be used on the valves or other fittings of this cylinder.
- v) Please look for the next date of test, which is marked on a metal ring inserted between the valve and the neck of the cylinder, and if this date is over, do not accept the cylinder.

3.1.24 All storage system should be supplied in a three bank arrangement. Low bank 50%, Medium bank 30% and High bank 20% of the total storage system.

3.2 Pressure Relief Devices

3.2.1. Each cylinder used for the storage of CNG should be equipped with a suitable pressure relieving device and a suitable isolating valve which should be readily accessible when installed in the storage bank. The isolating valve should not be capable of closing off the pressure relieving device, or should be locked in the open position.

Relief devices should be positioned in such a way as to avoid discharge of high pressure gas to the operator or persons in close vicinity.

3.3 Safety Relief Devices for Cylinder Storage

3.3.1 Cylinders manufactured in India, if fitted with safety relief devices in their bodies, shall have such safety devices manufactured and maintained in accordance with IS: 5903.

3.3.2 Piping and gas storage systems should be protected against overpressure by safety relief devices. Relief devices installed to protect the storage systems should have sufficient capacity to vent the maximum

flow produced by the compressor and should be set to open at a pressure not exceeding 20% above the maximum allowable working pressure of the system or the pressure which produces a hoop stress of 75% of the specified minimum yield strength, whichever is lower.

3.3.3 A combination burst disc/fusible alloy assembly should be incorporated in the cylinder valve. Burst disc should yield at a pressure not less than 1.5 times manufacturer's recommended operating pressure of the cylinder, and not more than test pressure. The disc should relieve pressures in excess of 30Mpa

3.3.4 In addition to 3.3.2 a mechanical pressure relief valve which opens at a predetermined pressure should be used. This should not be part of the cylinder valve.

3.3.5 Safety relief valves should be provided with means to seal to prevent tampering by unauthorized persons.

3.3.6 Minimum required rate of discharge from the safety valve should be at least equal to any input from the system whether stored or being compressed.

3.3.7 Each safety relief valve should be clearly marked by the manufacturer.

3.3.8 The maximum pressure in the storage system should not exceed 255 Kgf/cm².

3.3.9 The cascade cylinders should be supplied with impact test certification.

3.4 Corrosion Protection

3.4.1. Pressure vessels which are made of materials that are subject to corrosion by atmospheric conditions should be protected by painting or other equivalent means necessary to prevent corrosion.

3.4.2. Importance should be drawn to avoiding corrosion which can limit the working life of a cylinder and affect the fatigue characteristics in serious cases. The implementation of good periodic maintenance anti-corrosion procedures is strongly recommended.

3.5 Valves

3.5.1 All Valves fitted to gas cylinders shall comply in all respects with the following Specifications namely:

- a. In respect of Industrial Gas Cylinder, IS: 3224
- b. Valves for cylinders shall have outlets provided with left hand screw threads for the pipes or connections.
- c. The valves shall be attached to the cylinder neck by screwing and not by making any permanent attachment or inserting adapter in between.
- d. The design of spindle operated valves shall be such that when fitted to the cylinders it shall not be possible to withdraw the spindle under normal operating conditions.

3.5.2. Each gas storage unit should have a quick action gas storage isolation valve installed in the steel supply pipe immediately adjacent to its gas storage unit to enable individual shut off and isolation of each unit. These valves will be within fence enclosure.

3.5.3. Separate common valve system to be supplied for each storage bank complete with non-return valve.

3.6 Rigid Piping

3.6.1. All rigid piping, tubing and other components on the storage system should be designed for the full range of pressures, temperatures and loadings to which they may be subjected with the factor of safety of at least 4 based on the tensile strength at 20°C. Any materials used including gaskets and packing should be compatible with natural gas and its service conditions.

3.6.2. All piping should be designed in accordance with engineering calculations based on the requirements of ASME B31.3 in conjunction with EEMUA supplement to ASME B31.3 or equivalent design standards. Standards used should be used in total.

3.6.3. All welding piping should be fabricated and tested in accordance with ANSI/ASME B31.3, API 1104 or an equivalent standard. Whichever standard is chosen for use, it should be used in total.

3.6.4 All piping to be tested after assembly to a pressure equal to that of the pressure relief device setting and proved leak free.

3.6.5. Cylinders to be connected in stainless steel tubing 316 (Stainless Steel Tubing Specifications ASTM A269, ultimate tensile 517 Mpa, or equivalent of Sandvik or Tubacax) incorporating stress reducing hoops. Only approved manufacturers (e.g. Parker, Swagelok, SSP, BMT Superlok, Hylork and Hoke) of high pressure fittings to be used.

3.7 Pressure Gauges

3.7.1. Every CNG storage unit including each manifold group or bulk storage tank should be provided with a suitable pressure gauge for each bank. The pressure gauge should be directly connected to the tank or storage system. The gauge should be dial graduated to read approximately double the operating pressure. Pressure gauge should be equipped with 3-way valve or 2-valve manifold block. Pressure gauges on mobile cascades shall have IP 55 protection.

3.7.2. A good quality industrial pressure gauge should be used with a dial face of at least 63mm or larger. Gauges should be built to requirements of BS 1780 or ANSI/ASME B40.1 or OISD-179 equivalent.

3.8 Pipe Work, Valves and Fittings

Pipe work should be designed, tested and installed to ensure its safe operation at the worst conceivable conditions of flow, pressure and temperature.

All pipe work should be ASTM 316 stainless steel tube. Double compression ferrule Fittings shall be used in tube connection tubes. And makes of these fittings shall be of SS 316 of Swagelok/ Parker/SSP/ and Hoke and tubes shall be of SANVIK/ TUBACEX only. The system should be "go-no-go" gaugable to demonstrate that fittings are properly tightened. Wherever possible valves and control devices should incorporate the same end connector system. The number of fittings used should be minimised. The Supplier should ensure that personnel assembling the pipe work should be competent in the system employed.

The preferred valve types for isolation are ¾" turn ball valves. Such valves have similar material to the tube they are attached to. Ball valves must be of good quality and be appropriately selected frequency of use. Ball seats must be suitable for natural gas operation of the gas composition indicated. Valves and fittings

subject to corrosion must be either inherently resistant, or be coated with a corrosion inhibiting paint or surface treatment.

The gas inlet connection of each bank shall be terminated with ¾" union after the isolation valve.

3.9 Cascade Frame

3.9.1 Cascade storage system to be skid mounted and complete with removable metal frames and non-metal / non-sparking spacer material.

3.9.2 Cascade and spacer frame to be painted with anti-rust and etching primer under coat. Importance should be drawn to avoiding corrosion which can limit the working life of a cylinder and affect the fatigue characteristics in serious cases. The implementation of good periodic maintenance anti-corrosion procedures is strongly recommended.

3.9.3 Each storage system should be supplied with suitable lifting lugs. Bottom and top of frame shall be reinforced to prevent any twisting or strain to inter connections among cascade cylinders during lifting by crane, forklift and during transport.

3.9.4 All cylinder tubing, manual isolation valves and pressure relief valves should be protected from knocking by any moving object and should not protrude outside the metal frame or brackets.

3.9.5 The frame shall not allow lateral and rotational movement of cylinders during regular road transport under circumstances.

3.9.6 The frame structure of each cascade shall be capable of withstanding 4g (four times gravity) impact from any direction without any distortion..

3.9.7 All structural items used in the frame shall be weather proof.

3.9.8 Supplier shall submit structural drawing of the frame giving details of the steel, welding procedure, corrosion protection for approval before commencing fabrication work.

3.9.9 Frame shall be suitably covered with canopy from top to avoid the ingress of rain water.

3.9.10 Frame Painting

Surface preparation by Short Blasting as per grade SA 2 1/2, Swedish standard SIS-055 909 or Indian Standard IS 9954/International Standard ISO 8501-1. Three coats of paint shall be applied with minimum thickness of 300 micron. (Permissible thickness in each coat shall be within 80 to 120 micron.)

3.10 Protection of Valves and accessories

3.10.1 All valves and accessories shall be safeguarded against accidental damage or interference.

3.10.2 Valves and accessories shall be mounted and protected in such a way that risk of accidental rupture of the branch to which the valve or accessory is connected is minimized.

3.10.3 Valves and accessories situated at the rear of a vehicle shall be protected by the rear cross member of the frame of the vehicle against damage.

3.11 Equipment

3.11.1 Piping, Fittings and meters:

I) all piping, fittings and meters mounted on the vehicle shall be designed to withstand the most severe combined stresses imposed by the following, namely:

- a) the maximum designed pressure of the vessel.
- b) the super imposed pumping pressure of the shock loading caused by road movements;

II) the materials used for vessel equipment shall be sufficient ductile to withstand rough usage and accidental damage. Brittle materials such as cast iron shall not be used.

3.11.2 Protection of piping and equipment;

I) all piping and equipment shall be adequately protected to minimize accidental damage which may be caused by rough usage, collision or over-turning;

II) any equipment or section of piping in which liquid may be trapped shall be protected against excessive pressure caused by thermal expansion of the contents.

3.11.3 Marking of connections- All connections on the vehicle which require manipulation by the operator of the vehicle should be clearly marked to prevent incorrect operation. The form of this marking should correspond with the operating procedure laid down for the vehicle.

4.0 TESTING AND COMMISSIONING

Before bringing any items of equipment to site, factory testing should be carried out to demonstrate the function of all equipment within the system if so desired.

The Company should be given 2 weeks' notice of the date and location of the tests so that the equipment may be witnessed if desired.

Upon delivery to the site, all the equipment should be assembled in a complete system. Thereafter, final site acceptance test would be carried out. Such tests should be witnessed and signed off by the Company representative. The Supplier should rectify and replace all defects,

faults, failures, etc. and all costs should be borne by Supplier. The costs should include accommodation, travelling, expenses, etc.

5.0 CALIBRATIONS, TEST CERTIFICATES AND THIRD PARTY CERTIFICATION

5.1. Every Cylinder should be carried with Hydrostatic or Hydrostatic stretch test and a certificate should be provided.

5.2. Leak test should be carried for each cylinders or cascades with all tubing's, valves and a certificate should be furnished to the Owner.

5.3. All Instrument gauges, Valves, Pressure gauges, safety relief devices, shut off valves tubing's and piping etc should be Pressure tested, calibrated and such test , calibration certificates, should be presented upon

delivery to site. If any of the test certificates is not in order, the Supplier's should replace the affected equipment with valid certificate at Supplier cost.

5.4. Calculation shall be carried for 4g Stationary of one complete cascade with all cylinders mounted and filled and the same should be submitted for review of the Owner.

5.5. Burst test of one cylinder from the entire supplies shall be produced and incase offered once are new design the schedule for the test should be informed prior to enable the Owner or their authorized representative to depute their personnel for witnessing the test.

5.6. All standards shop tests/ QA / QC as per the recommendation of the manufacturer / Chief Controller of Explosives to be carried out and a copy of such certificates shall be furnished to the Owner.

5.7. Record of storage capacity check of each cylinder in a cascade shall be furnished and same shall be demonstrated to the Owner/ its representative.

5.8. Inspection: Vendor shall appoint the TPIA for inspection purpose in a manner described hereunder-

5.9. "The Successful Vendor shall propose minimum four (4) nos. of TPIA's from the below listed TPIA's within two (2) weeks from date of FOA for approval by Assam Gas Company Ltd. The Successful Vendor shall appoint the same approved TPIA for inspection purpose."

- a) Lloyd Register of Industrial Services
- b) Technische Ulierwachsungs Verein(TUV)
- c) Det Norske Veritas (DNV)
- d) AB-Vincotte
- e) Bureau Veritas
- f) SGS
- g) American Bureau Services
- h) Velosi Certification Services
- i) Certification Engineers International Limited(CEIL)
- j) International Certification Services Limited
- k) BVQI
- l) Dr. Amin Controllers Pvt. Ltd.

6.0 TRAINING REQUIREMENTS

The Supplier should develop a training proposal and prepare a schedule for the Company's review, comment and approval.

The training programme should be phased to suit the construction program such that the Company's personnel are fully conversant with all aspects of the operations and maintenance of the storage systems including all aspects of operations, including decanting CNG from mobile gas storage trailers, pressure control and integration of the overall system.

Commissioning will not be deemed to have completed and formal acceptance will not be granted until training has been completed to the satisfaction of the Company.

The training programme should cover but not limited to the following subject areas:

- The physical characteristics of the gas and the procedure and precautions to be observed in handling and control.
- Start-up, operations and maintenance procedures for the CNG storage facilities.

7.0 WARRANTY SERVICING AND SPARE PARTS

7.1 All necessary spare parts to sustain the operations and maintenance of the CNG Stationary and mobile storage facilities should be supplied and stock at the Supplier workshop / warehouse located in India for immediate replacement of parts. The costs to stock these spare parts should be at supplier cost. However, once the parts are replaced in the Stationary and Mobile Cascades, the Company's should compensate the Supplier's accordingly provided that the warranty period has expired.

7.2 Warranty shall be Governed by clause no 20 of GCC-Goods

7.3 All the material and equipment to be free from defects in design, manufacture, material and workmanship.

7.4 Replacement shall be made if any defective items found damaged or not performing to the specified requirements of any part of cylinder for at least 24 months from the date of delivery or 12 months from the date of successful commissioning whichever is later.

8.0 SERVICES

- Preparation of submission of document/ drawing.
- Obtaining approvals from statutory authorities.
- Bidder to submit foundation and other drawings indicating requirement of work to be carried out by Owner within one month of placement of order.
- Upon delivery to the site, all the equipments should be assembled in a complete system. The erection and commissioning of the Cascade system shall be carried out by other contractor appointed by AGCL. And final commissioning shall be carried out at site. During the commissioning of the cascade system at site if any defect, fault or failure etc. is observed in the system, the supplier should rectify and replace all defects, faults, failure etc and all costs should be borne by the supplier. The cost should include accommodation, travelling expenses etc.

9.0 DATA AND DRAWING DETAIL

After the placement of FOI, a conference (kick off meeting) will be held at such date and at such place, as may be mutually agreed upon between the Bidder and the purchaser. The intent of this conference should be to discuss / clarify various requirements and finalize the modus operandi for execution of the contract within the scheduled delivery period.

Along with the technical bid the following information is to be provided.

1. Process and instrument diagram along with Bill of Material. The Bill of Material should indicate all items, quantity of all items installed per storage system, their part nos and make.
2. Process and instrument diagram along with Bill of Materials for all major components within the tender.
3. General arrangement drawing of the storage system giving overall dimensions and erection / shipping weight.
4. Technical data sheet of storage system.
5. Typical cross sectional drawing and literature to fully describe the details of all major components such as Cylinders, valve, gauges piping etc. Data sheet indicating material of tube, tube size etc, piping and instrument diagram.
6. List of mandatory spares, supplier to provide a comprehensive list of spares for all Major components both within the storage system and all auxiliary equipment. (Itemized rate to be given in price bid).
7. List of spares required in addition to those mentioned above for 2 years normal operation & maintenance per storage system (itemized rate to be given in price bid)

8. List of commissioning spares per storage system.
9. List of special tools & Tackles required for installation & maintenance per storage system.
10. Leaflets, catalogues for all major items.
11. Shop test procedure.
12. Maintenance schedule of the storage system along with list of Spares for O&M during warranty period.
13. A complete zonal drawings of the Storage Cascade (complete package), all certification for all components used within the hazardous areas should be provided
14. Reference list of similar / identical storage system supplied in last 7 years of CNG application.
15. Deviation sheet (if any).

Within one month from date of P.O.

16. General arrangement drawing, schematic of cascade piping, drawing of cascade frame the storage system giving overall dimension and erection / shipping weight.
17. Detailed quality control procedure for manufacture of cascade, fabrication of frame submitted to AGCL for approval.
18. Detailed foundation drawing of the storage system for casting foundation giving load pattern etc.
19. Details of inlet gas termination to the storage system including X, Y, Z co-ordinates with respect to center of storage system skid or any reference.
20. Detailed time schedule for supply indicating time periods required for cylinder manufacturing, cascade frame fabrication, shop testing, despatch of material from works and delivery at site.

Along with supply.

21. Operation and maintenance manuals – 3 sets all in original for each Storage cascade. The instruction manual should describe in details the construction and recommended procedure for maintaining, operating and trouble shooting of the storage system should also include cross-sectional drawings, exploded views of all spare parts along with part nos., quantity installed per storage unit. The manual should provide detailed catalogues of all bought out items.
22. Test certificates of all major components like cylinders, shutoff valves, pressure relief valves tubing / pipe work etc.
23. Calibration certificates for all measuring and protection devices.
24. In case of foreign supply, the bidder should get all certificates endorsed by office of Chief Controller of Explosives (CCOE), Govt. of India within one month of delivery of cascades at site.

10.0. Check List for Mandatory Spares of Storage Cascade System

10.1 All the mandatory spare parts shall be wrapped and packaged for prolonged life, so that they will be preserved in original condition.

10.2 The spare parts shall be properly tagged and coded so as to facilitate easy identification.

10.3 Spares shall be packaged separately and clearly marked spares and shipped at same time as the main equipment.

Sl No	PARAMETER	Information on offered model	Information on existing cascade	
			1	2
1	No. of Units Supplied			
2	Service	CNG		
3	Working Pressure of Cascade in bar (g)			
4	Site min. /max. Temp			
5	Normal flow from each bank Kg/hr.			
6	Cascades water capacity- Ltrs.			
7	Water capacity of single cylinder used in cascade – Ltrs.			

8	Material of Cylinder			
9	Thickness of cylinder wall and disc end in mm			
10	Material of vent tubing			
11	Piping material and make			
12	Valve make			
13	Valve type and Dia.			
14	Nos. of banks in cascade			
15	Nos. of cylinders in low bank			
16	Nos. of cylinders in medium bank			
17	Nos. of cylinders in high bank			
18	Water capacity of cylinders individual banks – Ltrs.			
19	4-G Stationary calculation for one complete assembled package			
20	Cylinder burst test for one cylinder			
21	Design standard code used			
22	Total weight of cascade in - Tonnes			
23	Burst pressure and temperature for burst disc in bar(g)			
24	Hydrostatic or Hydrostatic Stretch test			
25	Pressure test for Leakage			
26	Design case gas composition			
27	Approved Manufacturer License certificate from			
28	Dimensions of the Total package			
29	Warranty certificates			
30	Dimension of package max.			
31	Calibration certificates for all instrument gauges etc of package			
32	Test certificates of all instruments with cylinder, tubing's, fittings of total package			
33	Date of commissioning of cascade			
34	Where cascades are located : Address and Fax/Telephone no. of Contact person			
35	Major problems encountered if any			

12. CHECK LIST FOR SCOPE OF SUPPLY

Notes:

- 1) Bidder shall furnish all the equipments of Storage Cascade System instruments and gauges and safety devices as per the enquiry document. Anything required over and above what is specified, for safe and satisfactory operation of the equipment package shall be included by the bidder in his scope.
- 2) Bidder to write YES/NO against each item. Bidder is required to include complete scope, as such 'NO' is not warranted. However, in case for any of the items if vendor's reply is 'NO', vendor should give reason for the same:
- 3) Bidder's scope of supply shall include but not limited to the following:

SI No	Description	Specified by purchaser yes/No	Included by bidder Yes/No	Remarks
1	Each Storage cascade Package complete with:	Yes		
1.1	Specification – Indian Standard 2825, as amended from time to time, IS : 7285 – 1988 or B55045:Part1 or (US)	Yes		

	D.O.T 3AA or similar such other standard code approved by the Chief Controller of Explosives			
1.2	Cylinder material – Seamless alloy steel (Cr-Mo) or standard code approved by the Chief Controller of Explosives.	Yes		
1.3	All the fittings, Valves, Safety devices, gauges are as per IS 3224 or standard code approved by the Chief Controller of Explosives	Yes		
1.4	Tubing's are of rigid type ASTM 316 stainless steel tube.	Yes		
1.5	All cylinders are Hydro static Tested	Yes		
1.6	Water capacity of single cylinder used in cascade not less than 50 Ltrs.	Yes		
1.7	Nos. of banks in cascade- three bank system	Yes		
1.8	One Cylinder should be burst test	Yes		
1.9	4-G Stationary calculation for one complete assembled package is done	Yes		
1.10	Working Pressure of Cascade min. 255 bar (g)	Yes		
1.11	Pressure test for Leakage on cylinders with assembled condition	Yes		
1.12	Isolation Valve complete with venting line valve and end plug installed on the inlet of the cylinder	Yes		
1.13	Copy of Calibration certificates for all instrument gauges etc of Cascade package, Test certificates of all instruments with cylinder, tubing's, fittings of total package	Yes		
1.14	BOQ with weight of each component	Yes		
1.15	Drawing of cylinder of specified parameters and proposed to be used in offered cascades approved by CCOE	Yes		
1.16	Drawing of cascade frame	Yes		
1.17	Storage cascade with frame assembly is shipped in fully and assembled condition only to be mounted on anchored bolts laid at site.	Yes		
1.18	GA drawing of the cascade	Yes		
1.19	Warranty for a period of 12 months is provided from the date of final site acceptance of CNG facilities by the Company's	Yes		
1.20	Make of bought out items	Yes		
1.21	Detailed time schedule for supply indicating time periods required for cylinder manufacturing, cascade frame fabrication, shop testing, dispatch of material from works at delivery site	Yes		
	2.0 Spares and Tools /Tackles			
2.1	All necessary spare parts to sustain the operations and maintenance of the storage cascades facilities within the warranty period are supplied and stock at the supplier workshop/ warehouse located in India for immediate replacement of parts	Yes		
2.2	Mandatory spares as specified in the "Check List for Mandatory Spares"(Indicate separate price for each item)	Yes		
	3.0 Inspection and Testing			
3.1	As specified on the Inspection and testing clauses	Yes		
	4.0 Vendor Data and drawings			
4.1	All data & drawings as required per VDR format as per clause 11	Yes		
	5.0 Supervision during the Trial Run if required at site of the CNG storage cascade system			
5.1	Additional Items not specified by purchaser but recommended by bidder for safe smooth and normal	Yes		

	operation. (Bidder shall indicate separate list of such items in his proposal)			
	6.0 Technical Parameters to be confirmed by vendor			
6.1	Pressure range from 19 bar (g) -250 bar at 15 °C	Yes		
6.2	Fill Pressure Kg/cm ² g or [bar(g)] -200	Yes		
6.3	Operating Temperature range –[-55°C to 70°C]	Yes		
6.4	Design Code :IS 2825, IS 7285, IS 3224 or as per Applicable standard Codes or approved by CCOE	Yes		
6.5	Calibration traceability - To NIST as per ISO 5168	Yes		
6.6	Enclosure weather proof to - IP65,NENA4x	Yes		
6.7	Process Temperature effect - ± 0.01% of nominal flow rate/degree C on zero offset	Yes		
6.8	All valves as per IS 3224or as Applicable standard code or approved by CCOE	Yes		
6.9	Safety relief devices as per IS: 5903 or Applicable standard code or approved by CCOE	Yes		

SCHEDULE OF RATES
Tender No. TECH/CNG/2019/5

SL NO	Item Description	Qty (No/Set)	Unit FOT Desp.Point price including P&F charges (Rs)	Unit Excise Duty (Rs) (Applicable on col. 4)	GST	Unit Freight upto FOT Project Site incl. Octroi/ entry tax, transit Insurance & unloading	Total FOT Site Price
1	2	3	4	5	6	7	8
1.1	A Design, Engineering, Manufacturing, Assembly, Supply, Inspection and Testing at works and at site if required, loading, unloading at site of CNG Stationary Storage Cascade of minimum 4500 litre water capacity at filling temperature of 15°C, for filling and storing of CNG at 250 bar g and suitable for 10 to 55°C with 3 bank as specified in Technical Specification inclusive of services as stipulated in the tender document.	1					
1.2	Mandatory Spares for above Cascades as defined in bid document. SI 1.2.1 to SI 1.2.9						
1.2.1	Pr Gauge range 0-400 Kg/cm ²	3					
1.2.2	Cylinder valve with end tube fitting	3					
1.2.3	Isolation valve	1					
1.2.4	Check valve	1					
1.2.5	Tube pig tail	1					
1.2.6	Burst Disc with washer	2					
1.2.7	Spindle & Handle for cylinder valves	2					
1.2.8	Safety Relief Device	1					
1.2.9	Temperature gauges as described in specification	1					

Bidder's signature
Company's name

PRICE SCHEDULE FOR 2 YEARS SPARES

Tender No. TECH/CNG/2019/5
Item CNG Cascade

Sl No	Item Description	Description of spares recommended for ...					