



CENTRAL UP GAS LIMITED

(CITY GAS PROJECT IN KANPUR & BAREILLY)

**BID DOCUMENT FOR THE
PROCUREMENT OF
STATIONARY & MOBILE
CASCADES**

BID DOCUMENT NO: CUGL/C&P/TEN2021/20,219,003

OPEN DOMESTIC COMPETITIVE BIDDING

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SECTION-I

सेन्ट्रल यू.पी. गैस लिमिटेड
(गैल (इंडिया) लिमिटेड एवं भारत पेट्रोलियम का संयुक्त उद्यम)



Central U.P. Gas Limited
(A Joint Venture of GAIL (India) Limited and BPCL)

INVITATION FOR BID (IFB)

Bid Document No. : CUGL/C&P/TEN2021/20,219,003
To,

Date : 10/06/2020

Contact No. :

Kind Attn :

Dear Sir,

Central UP Gas Limited (CUGL), a Joint Venture company between GAIL & BPCL, as part of its service to provide clean fuel to Kanpur & Bareilly city is currently executing City Gas Distribution Project to supply Natural Gas to Industrial, Commercial and Domestic consumers and CNG for Vehicles.

- | | |
|----------------------------|---|
| 1.0 Project | : City Gas Distribution |
| 2.0 Name of Work | : Procurement of Stationary & Mobile Cascades for Kanpur, Unnao, Bareilly & Jhansi |
| 3.0 Scope of Work | : As per Tender Document |
| 4.0 Time Schedule | : ARC for 02 years from the date of award |
| 5.0 Bid Validity | : 120 days from the bid due date |
| 6.0 Bid Security / EMD | : Item No. 1 : Rs. 6,71,800/-
Item No. 2 : Rs. 5,59,800/- |
| 7.0 Pre-Bid Meeting | : 19/06/2020; 12:30 Hrs. IST |
| 8.0 Bid due Date with Time | : 01/07/2020 up to 15:00 Hrs. IST |
| 9.0 Designated Place | : CENTRAL U.P. GAS LIMITED,
Regd. Off. 7th Floor, UPSIDC Complex, A-1/4, Lakhanpur,
Kanpur-208024 India |
| 10.0 Type of bid | : Two Bid System |
| 11.0 Basic of Evaluation | : Item wise |

Bidders to quote for complete items as per SOR. Please note that Owner intends to evaluate and finalize this tender on Item wise. Failure to quote for any of the items listed to rejection of bid.
CUGL has the right to award the job either in part or full.

For & on behalf of
Central U.P. Gas Limited

Sr. Manager C&P

रजिस्टर्ड ऑफिस : सातवाँ तल, यूपीएसआईडीसी कॉम्प्लेक्स, ए-1/4, लखनपुर, कानपुर - 208 024 उ.प्र. • दूरभाष : 0512-2585001, 2583462 • फैक्स : 2582453 • वेबसाइट : www.cugl.co.in

Registered Office : 7th Floor, UPSIDC Complex, A-1/4, Lakhanpur, Kanpur-208024, U.P. • Tel.: 0512-2585001, 2583462 • Fax : 2582453 • Website : www.cugl.co.in
CIN No. : U40200UP2005PLC029538

An ISO 9001:2008, ISO 14001:2004, OHSAS 18001:2007 Certified Organisation

**ITB
(INSTRUCTION TO
BIDDER)**

SECTION -II

INSTRUCTIONS TO BIDDERS

A. GENERAL

1.0 SCOPE OF BID:

- 1.1 The Employer/ Owner/ CUGL as defined in the "General Conditions of Contract [GCC]", wishes to receive Bids as described in the Bidding Document/Tender document issued by Employer/Owner/CUGL.
- 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'.

2.0 ELIGIBLE BIDDERS:

- 2.1 The Bidder shall not be under a declaration of ineligibility by Employer for Corrupt & Fraudulent practices, as defined in "Instructions to Bidders [ITB], Clause No. 39"
- 2.2 The Bidder is not put on 'Holiday' by CUGL or banned/blacklisted by Government department/ Public Sector on due date of submission of bid. 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 CUGL by the bidder.

It shall be the sole responsibility of the bidder to inform CUGL in case the bidder is put on 'Holiday' by CUGL 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 CUGL by the bidder.

It shall be the sole responsibility of the bidder to inform CUGL in case the bidder is under any liquidation court receivership or similar proceedings 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 no.39 of ITB.

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

- (i) that has provided consulting services related to the work to the Employer 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 Employer 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.

3.0 BIDS FROM JOINT VENTURE/CONSORTIUM

NA

4.0 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.

5.0 COST OF BIDDING

- 5.1 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, CUGL will in no case, be responsible or liable for these costs, regardless of the outcome of the bidding process.

6.0 SITE VISIT

- 6.1 The Bidder is advised to visit and examine the site of works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the Bid and entering into a Contract for the required job. The costs of visiting the site shall be borne by the Bidder.
- 6.1 The Bidder or any of its personnel or agents shall be granted permission by the Employer to enter upon its premises and land for the purpose of such visits, but only upon the express conditions that the Bidder, its personnel and agents will release and indemnify the Employer and its personnel, agents from and against all liabilities in respect thereof, and will be responsible for death or injury, loss or damage to property, and any other loss, damage, costs, and expenses incurred as a result of inspection.
- 6.3 The Bidder shall not be entitled to hold any claim against CUGL for non-compliance due to lack of any kind of pre-requisite information as it is the sole responsibility of the Bidder to obtain all the necessary information with regard to site, surrounding, working conditions, weather etc. on its own before submission of the bid.
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B BIDDING DOCUMENTS

7.0 CONTENT OF BIDDING DOCUMENT

- 7.1 The contents of bidding documents/Tender documents are those stated below and should be read in conjunction with any addenda/corrigendum issued in accordance with ITB clause no. 9.0
- Section –I : Invitation for bids (IFB)
 - Section –II : Instruction to Bidders (ITB)
 - Section-III : General conditions of Contract (GCC)
 - Section IV : BEC (Bid Evaluation Criteria)

- Section –V: Special Conditions of Contract (SCC)
- Section-VI: Forms & Format
- Section –VII: Technical Specification
- Section-VII: Price schedule/Schedule of Rates (SOR)

7.2 The bidder is expected to examine all instructions, forms, terms, specifications and drawings in the bidding documents. The Bidding Document together with all its attachment thereto, shall be considered to be read Understood and accepted by the bidder. Failure to furnish all information required by the Bid Documents or Submission of a bid not substantially responsive to the Bidding Documents in every respect will be at bidders risk and may result in the rejection of the Bid.

8.0 CLARIFICATION ON BID DOCUMENTS

- 8.1 A prospective bidder requiring any clarification of the Bidding Documents may notify OWNER in writing or by fax or e-mail at the address indicated in the Invitation for Bids. OWNER will respond in writing to any request for clarification of the Bidding documents which it receives not later than 5 days prior to the deadline for the submission of bids prescribed by OWNER. Written copies of OWNER response (including an explanation of the query but without identifying the source of the query) will be sent to all bidders to whom the bidding documents were issued. Any Clarification or information required by the bidder and not received within the stipulated time period shall be liable to be considered as no clarification/information required.
- 8.2 In case pre-bid conference is envisaged, all quotations/queries should be referred to OWNER at least 3 days before scheduled date of pre bid conference. The questions/queries received by OWNER prior to pre-bid conference will be replied in the pre-bid conference.

9.0 AMENDMENT OF BID DOCUMENTS

- 9.1 At any time prior to the deadline for submission of bids, the OWNER may, for any reason, whether on its own requirement or in response to a clarification requested by prospective bidders, modify the Bidding Documents by issuing addenda/corrigendum.
- 9.2 Any addendum thus issued shall be part of the Bidding Documents and shall be notified in writing by fax/post/email to all the bidders to whom the bidding documents were issued. Prospective bidders shall promptly acknowledge receipt

of each addendum by fax/post/to the Owner/ Consultant and take the same in the account all such addendum before submitting their bids.

- 9.3 The OWNER/Consultant may, at its discretion, extend the date of submission of Bids in order to allow the bidders a reasonable time to furnish their most competitive bid taking into account the amendments issued.

C. PREPARATION OF BIDS

10.0 LANGUAGE OF BID

- 10.1 The bid prepared by the bidder, all correspondence/drawings and documents relating to the bid exchanged by the bidder with the OWNER/Consultant shall be written in English Language alone provided. Any printed literature furnished by the bidder may be written in another language so long as accompanied by an English translation duly authentication by the chamber of commerce of bidders country, in which case, for the purpose of interpretation of the bid, the English translation shall govern.
- 10.2 In the event of submission of any document/certificate by the bidder in a language other than English, the Bidder shall submit the English translation of the same duly authenticated by Chamber of Commerce of Bidder's country.

10.0 DOCUMENTS COMPRISING THE BID

- 11.1 The bid prepared by the bidder shall comprise the following:
- 11.1.1 **ENVELOPE-I : SUPER SCRIBING TECHNO-COMMERCIAL UN-PRICED BID (PART-1)**

Part-I: Techno-commercial/un-priced Bid (to be furnished in 1 original and 1 copy) and shall contain the following documents:

- a) 'Covering Letter' on Bidder's 'Letterhead' clearly specifying the enclosed contents.
- b) 'Bidder's General Information', as per 'Form F-1'.
- c) 'Bid Form', as per 'Form F-2'
- d) Copies of documents, as required in 'Form F-3'

- e) As a confirmation that the prices are quoted in requisite format complying with the requirements copy of Schedule of Rate (SOR) with prices blanked out mentioning quoted / not quoted (as applicable) written against each item.
 - f) 'Letter of Authority' on the Letter Head, as per 'Form F-5'
 - g) 'No Deviation Confirmation', as per 'Form F-6'
 - h) 'Bidder's Declaration regarding Bankruptcy', in 'Form F-7'
 - i) 'Certificate for Non-Involvement of Government of India ' from Bidder, as per 'Form F-8'
 - j) 'Agreed Terms and Conditions', as per 'Form F-10'
 - k) Duly attested documents in accordance with the "BID EVALUATION CRITERIA [BEC]" establishing the qualification.
 - l) Undertaking on the Letter head, as per the Form F-12.
 - m) Power of Attorney for authorized signatory in non-judicial stamp paper/copy of Board Resolution, the authorized signatory shall be signing the bid and any consequence resulting due to such signing shall be binding on the bidder.
 - n) Any other information/details required as per Bidding Document
 - o) All forms and Formats including Annexures.
 - p) EMD /Bid Security
 - q) Tender document duly signed by authorized signatory.
- r) All the pages of the Bid must be signed by the "Authorized Signatory" of the Bidder.

11.1.2 ENVELOP-II : SUPERSCRIBING “PRICE BID – NOT TO OPEN WITH TECHNO-COMMERCIAL UN-PRICED BID”-PART-II

11.1.3 Part-II: PRICE BID

Part-II of the BID shall be submitted in Envelope –II and shall contain Price Bid only. The Prices are to be submitted strictly in the Price Schedule/Schedule of Rate (SOR) format of the Tender Document. CUGL shall not be responsible for any failure on the part of the bidder to follow the instructions given in the Note below:

Note

- i) Bidders are advised NOT to mention Rebate/Discount separately, either in the SOR format or anywhere else in the Bid. In case Bidder(s) intend to offer any Rebate/Discount, they should include the same in the item rate(s) itself under the “Price Schedule/Schedule of Rates (SOR)” and indicate the discounted unit rate(s) only.
- ii) If any unconditional rebate has been offered in the quoted rate the same shall be considered in arriving at evaluated price. However, no cognizance shall be taken for any conditional discount for the purpose of evaluation of the Bid.

- iii) In case, it is observed that any of the Bidder(s) has/have offered suo-moto Discount/Rebate after opening of unpriced bid but before opening of price bid, such discount/rebate(s) shall not be considered for evaluation. However, in the event of the Bidder emerging as the lowest evaluated Bidder without considering the discount/rebate(s), then such discount/rebate(s) offered by the Bidder shall be considered for Award and the same will be conclusive and binding on the Bidder.
- iv) In the event as a result of techno-commercial discussions or pursuant to seeking clarifications / confirmations from Bidder, while evaluating the un-priced part of the Bid, any of the bidders offers upward revised prices; such Bidder(s) will be requested to withdraw the revised prices failing which the bid will not be considered for further evaluation. In case, any of the bidders offers discount/rebate / downward revised prices, the same shall not be considered for evaluation and their bid will be evaluated as per the original price bid. However, in the event of the Bidder emerging as the lowest evaluated Bidder without considering the discount/rebate(s), then such discount/rebate(s) offered by the Bidder shall be considered for Award and the same will be conclusive and binding on the Bidder.
- v) In case any bidder does not quote for any item(s) of “Schedule of Rates” and the estimated price impact is more than 10% of the quoted price, then the bid will be rejected. If such price impact of unquoted items is 10% or less of his quoted price, then the unquoted item(s) shall be loaded highest of the price quoted by the other bidders . If such bidder happens to be lowest evaluated bidder, price of unquoted items shall be considered as included in the quoted bid price.

11.1.4 ENVELOP-III : SUPERSCRIBING “BID SECURITY” – PART-II

Part-III: Bid Security shall contain 1 original and 1 copy of Bid Security in separate sealed envelopes.

12 BID PRICES

12.1 Bidders shall indicate the following in the Price Schedule/SOR format:-

- A) Ex-works Price including packing and forwarding charges (such price to include all costs as well as duties and taxes paid or payable on components and raw materials incorporated or to be incorporated in the goods).
- B) GST (CGST & SGST/UTGST or IGST) on the finished goods including inland transportation (which will be payable on the finished goods, if this Contract is awarded).

- C) The Bidder shall indicated breakup of the quantum of imports involved for import of necessary raw materials and components giving CIF value of Import and included in bid price.
- 12.2 In case of import of raw material and components incorporated or to be incorporated in the finished goods (clause no. 12.1 (C) refers), the Bidder shall provide description of such material, quantity, rate, value, Import Duty considered etc. as per proforma provided in Price Schedule/ SOR.
- 12.3 It shall be the endeavour of the Purchase to arrange transit insurance (if applicable). For the purpose of arranging transit insurance of the goods dispatched / shipped, vendors are required to furnish the dispatch / shipping particulars to the Insurance Company giving complete details of dispatches along with Policy No. etc.
- 12.4 Prices must be filled exactly in the format for “Price Schedule/ Schedule of Rates (SOR)” enclosed as part of Tender Document. If quoted in separate typed sheets and any variation in item description, unit, quantity, any conditions of SOR etc., is noticed, the Bid is liable to be rejected.
- 12.5 The date of receipt of materials shall be considered as date of delivery. Other terms shall be interpreted as per INCOTERMS®2010 or its latest version.
- 12.6 All duties, taxes and other levies (if any) payable by the Seller under the Contract or for any other cause, except GST (CGST & SGST/UTGST or IGST) on finished product & on the incidental services, shall be included in the rates / prices and the total bid-price submitted by the Bidder. The quoted rate of GST (CGST & SGST/UTGST or IGST) on finished product & on the incidental services shall be indicated in F-10 and the bid prices. Bidders are required to quote the prices after carefully reading the provisions mentioned in tender document including SCC, GCC, Scope of work, etc.
- 12.7 Prices quoted by the Bidder, shall remain firm and fixed and valid until completion of the Contract and will not be subject to variation on any account, whatsoever.
- 12.8 The Bidder shall quote the rates in ‘figures’ & ‘words’, as per Price Schedule /SOR format provided in the Tender Document. There should not be any discrepancy between the prices indicated in figures and in words. In case of any discrepancy, the same shall be dealt as per clause no. 32 of ITB.
- 12.9 Further, Bidder shall also mention the Harmonized System Nomenclature (HSN)/ SAC (Service application code) at the designated place n Price Schedule.

13 TAXES & DUTIES

- 13.1 Within the contractual delivery period, the statutory variation in applicable GST (CGST & SGST/UTGST or IGST) on supply and on incidental services, shall be to CUGL's account.

Beyond the contractual delivery period, in case CUGL is not entitled for input tax credit of GST (CGST & SGST/UTGST or IGST), then any increase in the rate of GST (CGST & SGST/UTGST or IGST) beyond the contractual delivery period shall be to Supplier's account whereas any decrease in the rate GST (CGST & SGST/UTGST or IGST) shall be passed on to the Purchaser.

Beyond the contractual delivery period, in case CUGL is entitled for input tax credit of GST (CGST & SGST/UTGST or IGST), then statutory variation in applicable GST (CGST & SGST/UTGST or IGST) on supply and on incidental services, shall be to CUGL' account.

The base date for the purpose of applying statutory variation shall be the Bid Due Date.

- 13.2 In case of statutory variation(s) in the taxes & duties mentioned at clause no. 13.1 above, the Supplier shall submit a copy of the 'Government Notification' to evidence the rate as applicable on the Bid Due Date and on the date of revision. Claim for payment of Statutory variation should be raised preferably along with the Invoice. Any claim for arrears on account of statutory variation shall be submitted to Purchaser within two (02) months from the date of issue of such 'Government Notification', otherwise such claim may not be entertained.
- 13.3 With respect to clause no. 12.1 (C) and 12.2, the statutory variation in Import Duty (except component (s) for which input tax credit is avliable) on CIF value indicated, within contractual delivery period shall be to Purchaser's account against submission of the documentary evidence. However, any increase in the rate of Import Duty beyond the contractual delivery / completion period shall be to Bidder's account. In case of wrong classification, no variation including statutory variation of Import Duty will be payable to Supplier and any penalty due to the same shall be to Supplier's account. Any decrease in the rate of Import Duty shall be passed on to the Purchaser. Statutory variation on account of Import Duty will be allowed only on component for which input tax credit is not available.
- 13.4 New Taxes & duties: Any new taxes & duties, if imposed by the State/Central Govt. of India on the finished goods after the due date of bid submission but before the Contractual Delivery/Completion Date, shall be reimbursed to the Supplier on submission of copy of notification(s) issued from State/Central Govt.

Authorities along with documentary evidence for proof of payment of such taxes & duties, but only after ascertaining it's applicability with respect to the Contract.

- 13.5 Deemed Export benefits are not applicable and Bidder should furnish prices without considering the same.
- 13.6 Supplier shall ensure timely submission of correct invoice(s), as per GST rules/regulation, with all required supporting document(s) without a period specified in Contract to enable CUGL to avail input credit of GST (CGST & SGST/UTGST or IGST). Further, returns and details required to be filled under GST laws & rules should be timely filed by Supplier of Goods/Services with requisite details.

If input tax credit is not available to CUGL for any reason not attributable to CUGL, then CUGL shall not be obligated or liable to pay or reimburse GST (CGST & SGST/UTGST or IGST) claimed in the invoice(s) and shall be entitled to deduct/setoff /recover such GST (CGST & SGST/UTGST or IGST) together with all penalties and interest, if any, against any amounts paid or payable by CUGL to the Suppliers.

- 13.7 The supplier shall mention the particulars of CUGL on the Invoice. Besides, if any other particulars of CUGL are required to be mentioned, under GST rules/regulations on the date of dispatch, the same shall also be mentioned on the Invoice.
- 13.8 In case CBEC (Central Board of Excise and Customs)/ any equivalent government agency brings to the notice of CUGL that the Supplier has not remitted the amount towards GST (CGST & SGST/UTGST or IGST) collected from CUGL to the government exchequer, then, that Supplier shall be put under Holiday list of CUGL for period of six months.
- 13.9 CUGL will prefer to deal with registered supplier of goods/ services under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet.

However, in case any unregistered bidder is submitting their bid, their prices will be loaded with applicable GST (CGST & SGST/UTGST or IGST) during evaluation of bid. Where CUGL is entitled for input credit of GST (CGST & SGST/UTGST or IGST), the same will be considered for evaluation of bid as per evaluation methodology of tender document.

- 13.10 In case the GST rating of vendor on the GST portal / Govt. Official website is negative / black listed, then the bids may be rejected by CUGL. Further, in case rating of bidder is negative / black listed, after award of work for supply of goods / services, then CUGL shall not be obligated or liable to pay or reimburse **GST**

(CGST & SGST/UTGST or IGST) to such vendor and shall also be entitled to deduct / recover such **GST (CGST & SGST/UTGST or IGST)** along with all penalties/ interest, if any, incurred by CUGL.

13.11 Anti-profiteering clause

As per Clause 171 of GST Act, it is mandatory to pass on the benefit due to reduction in rate of tax or from input tax credit to the consumer by way of commensurate reduction in prices. The Service Provider may not the above and quote their prices accordingly.

14.0 BID CURRENCY

Bidders must submit bid in Indian Rupees only.

15.0 BID VALIDITY

15.1 The bid shall remain valid for acceptance for 4 (four) months from the bid due date. Owner/Employer shall reject a bid valid for a shorter period for being non-responsive.

15.2 In exceptional circumstance, prior to expiry of the original bid validity period, the Owner/Employer may request the bidders extend the period of validity for a specified additional period. The requests and the Responses thereto shall be made in writing (by fax/ post / e-mail). A bidder may refuse the request without forfeiture of its 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 in all respects.

16.0 EARNEST MONEY

16.1 Bids must be accompanied with '**Earnest Money / Bid Security**' in the form of '**Demand Draft**' [in favor of Central UP Gas Limited, payable at Kanpur] or '**Banker's Cheque**' or '**Bank Guarantee**' **as per the format given in Form -4 of the bidding documents**. Bidders shall ensure that 'Bid Security', having a validity of at least 'two [02] months' beyond the validity of the bid, must accompany the Bid in the format(s) made available in the Bidding Document. Bid not accompanied with 'Bid Security', or 'Bid Security' not in requisite form shall be liable for rejection. The Bid Security shall be submitted in Indian Rupees only.

In case Bidders registered with NSIC or District Industries Center (DIC) as small/Micro Category Enterprises are exempted from submission of EMD. The above exemption is not extended to the traders/dealers/Distributors/stockiest /wholesalers.

The documentary evidence/certificate in support of being registered with NSIC/DIC submitted by the bidder shall be duly certified by the statutory auditor of the bidder or a practicing Chartered Accountant (not being an employee or a director or not having any interest in the bidder's company/firm). The certificate should not older than 3 months from the bid due date and should indicate the Name of bidder, NSIC/DIC registration Number, Category of Enterprises, CA firm name, CA name and CA membership Number who is issuing the certificate.

- 16.2 The 'Bid Security' is required to protect CUGL against the risk of Bidder's conduct, which would warrant the 'Bid Security's' forfeiture, pursuant to provision of ITB.
- 16.3 CUGL shall not be liable to pay any Bank charges, commission or interest etc. on the amount of 'Bid Security'. In case 'Bid Security' is in the form of a 'Bank Guarantee', the same shall be from any Indian scheduled Bank or a branch of an International Bank situated in India and registered with 'Reserve Bank of India' as Scheduled Foreign Bank. However, in case of 'Bank Guarantee' from Banks other than the Nationalized Indian Banks, the Bank must be commercial Bank having net worth in excess of Rs. 100 Crores [Rupees One Hundred Crores] and a declaration to this effect should be made by such commercial Bank either in the 'Bank Guarantee' itself or separately on its letterhead. 'Earnest Money / Bid Security' shall be valid for 'two [02] months' beyond the 'Bid Validity Period'
- 16.4 Any Bid not secured in accordance with "ITB Clause 16.1 & 16.3" may be rejected by CUGL as non-responsive.
- 16.5 Unsuccessful Bidder's 'Earnest Money / Bid Security' will be discharged/ returned as promptly as possible, but not later than 'thirty [30] days' after finalization of tender.
- 16.6 The successful Bidder's 'Bid Security' will be discharged upon the Bidder's acknowledging the 'Award' and signing the 'Agreement' and furnishing the 'Contract Performance Security / Security Deposit' as per the provisions of tender document.
- 16.7 Notwithstanding anything contained herein, the 'Bid Security' may also be forfeited in any of the following cases:
- (a) If a Bidder withdraws his Bid during the 'Period of Bid Validity'
 - (b) If a Bidder has indulged in corrupt/fraudulent /collusive/coercive practice
 - (c) If the Bidder modifies bids during the period of bid validity (after submission date).

- (d) Violates any other condition, mentioned elsewhere in the tender document, which may lead to forfeiture of EMD.
- (e) In the case of a successful Bidder, if the Bidder fails to:
 - (i) to acknowledge receipt the "Notification of Award" / "Fax of Intent [FOI]/ Fax of Acceptance[FOA]",
 - (ii) to furnish "Contract Performance Security / Security Deposit"
 - (iii) to accept 'arithmetical corrections' as per provision of ITB.

16.8 Bid Security should be in favor of Central UP Gas Limited and addressed to CUGL. In case Bid Security is in the form of 'Bank Guarantee' or 'Letter of Credit', the same must indicate the Bid Document No. and the Work for which the Bidder is quoting. This is essential to have proper correlation at a later date. The 'Bid Security' should be in the form provided in tender document.

17.0 PRE-BID MEETING

17.1 As per IFB.

18.0 FORMAT AND SIGNING OF BID

18.1 The bidder shall prepare one original of the document comprising the bid as per clause 11 of ITB marked "original" in addition, the bidder shall submit 1 copy of the bid clearly marked as "Copy". In the event of any discrepancy between the original and the copy, the original will govern.

18.2 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 the person or persons duly authorized to sign on behalf of the bidder.

18.3 The name and position held by each person signing must be typed or printed below the signature. All pages of the bid except any catalogues/literatures shall be signed and sealed by the person or persons signing the bid.

18.4 The bid shall contain no alterations, omissions or additions, unless the person or persons signing the bid initial such corrections.

19 ZERO DEVIATION AND REJECTION CRITERIA

19.1 ZERO DEVIATION: Deviation to terms and conditions of "Bidding Documents" may lead to rejection of bid. CUGL will accept bids based on terms & conditions of "Bidding Documents" only. Bidder may note CUGL will determine the substantial responsiveness of each bid to the Bidding Documents pursuant to provision contained in

clause 30 of ITB. 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. CUGL's determination of a bid's responsiveness is based on the content of the bid itself without recourse to extrinsic evidence. CUGL reserves the right to raise technical and/or commercial query(s), if required, may be raised on the bidder(s). 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 "Tender Documents", and submit all requisite documents as mentioned in this "Tender Documents", failing which their offer will be liable for rejection. If a bidder does not reply to the queries in the permitted time frame then its bid shall be evaluated based on the documents available in the bid.

19.2 REJECTION CRITERIA: Notwithstanding the above, deviation to the following clauses of Tender document shall lead to summarily rejection of Bid:

- (a) BEC
- (b) Scope of work
- (c) Firm Price
- (d) Earnest Money Deposit / Bid Security (exempted for SME enterprises as clause no. 16.1)
- (e) Specifications & Scope of Work
- (f) Schedule of Rates / Price Schedule / Price Basis
- (g) Duration / Period of Contract/ Completion schedule
- (h) Period of Validity of Bid
- (i) Price Reduction Schedule
- (j) Contract Performance Bank Guarantee / Security Deposit
- (k) Guarantee / Defect Liability Period
- (l) Arbitration / Resolution of Dispute/Jurisdiction of Court
- (m) Force Majeure& Applicable Laws
- (n) Not submitting an undertaking that the bidder is not Holiday/ Blacklisted by CUGL or any other Govt. Dept./PSUs.
- (o) Any other condition specifically mentioned in the tender document elsewhere that non-compliance of the clause lead to rejection of bid

Note:Further, it is once again reminded not to mention any condition in the Bid which is contradictory to the terms and conditions of Tender document.

20.0 E-PAYMENTS

NA

21.0 AGENT / CONSULTANT / REPRESENTATIVE / RETAINERS / ASSOCIATES

21.0 NA

D. SUBMISSION OF BIDS

22.0 SEALING AND MARKING OF BIDS

22.1 Bid shall be submitted in the following manner in separate sealed envelopes duly super scribed as below as per clause no. 11 of ITB:

Part-I –Techno-commercial /un-priced bid

Part-II Priced Bid

Part III-Original Bid Security

22.2 Techno-Commercial Un-Priced : (Part-I) Original Bid of Techno - Commercial un-priced Bid (1 Original + 1 Copy) shall be sealed in one separate envelope super scribing “Techno-Commercial Un-Priced Bid”.

22.3 Price Bid : (Part II) Original Priced Bid (1 Original + 1 Copy) shall be sealed in separate envelope super scribing “Priced Bid” (1 Original + 1 Copy) “Not to open along with Techno –Commercial Un-Priced Bid”.

22.4 Bid Security: (Part III) Original and 1 copy shall be sealed in separate envelope clearly super scribing “Bid Security” as the case may be.

22.5 All three envelopes containing; Techno-Commercial un-priced Bids, Priced Bids and Bid security shall further be sealed in one outer envelope super scribing “ Bid Document for the Procurement of Stationary & Mobile Cascades for City Gas Projects” bid document number and shall be addressed to Sr. Manager (C&P) at address mentioned below.

22.6 Bids must be submitted at the following Address:

The Sr. Manager (C&P)
CUGL, 7th Floor UPSIDC Complex,
Lakhanpur, Kanpur-208024
Phone NO.0512-2582455
Email: kkgupta@cugl.co.in / sbhatia@cugl.co.in

22.7 Each envelope shall indicate name and address of the bidder to enable the bid to be returned unopened, if required.

- 22.8 If the outer envelope is not sealed and marked as above, the Employer/Consultant will assume no responsibility for the misplacement or premature opening of the bid.

23.0 DEADLINE FOR SUBMISSION OF BID

- 23.1 The Bid must be submitted at the address as specified in clause 22.6 above not later than the time and date as specified in Section-I, IFB.
- 23.2 The Employer may, in exceptional circumstances and at its discretion,, on giving reasonable notice by fax or any written communication to all prospective bidders who have been issued the bidding document, extend the deadline for the submission of bids. In which case all rights and obligations of the Employer and bidders, previously subject to the original deadline will thereafter be subject to deadline as extended.
- 23.4 In case any bid is submitted by bidder who is on Holiday' by CUGL or banned/blacklisted by Government department/ Public Sector on due date of submission of bid, such bid will not be opened /evaluated and such bids shall be returned to the party immediately
- 23.5 In case of the days specified in IFB happens to be a holiday in CUGL, the next working day shall be implied.

24.0 LATE BIDS

- 24.1 Any bid received by the owner after the deadline for submission of bid prescribed by the Owner pursuant to clause 23 of ITB, will be declared "Late" & Rejected and shall be returned unopened to the bidder.

25.0 MODIFICATION AND WITHDRAWAL OF BIDS

- 25.1 The bidder may modify or withdraw its bid after the bid submission, but, before the due date of submission provided that written notice of the modification, including substitution or Withdrawal of the bid, is received by the Employer prior to the deadline prescribed for submission of bids.
- 25.2 The bidder's modification or withdrawal note shall be prepared, sealed, marked and delivered in accordance with the provisions of clause 22 of ITB with the outer envelopes additionally marked "modification" or withdrawal as appropriate. A withdrawal notice may also be sent by fax /post, but followed by signed confirmation copy, post marked not later than the deadline for submission of bids.
- 25.3 No bid shall be modified/withdrawn after the deadline for submission of bid.

- 25.4 No bid shall be allowed to be withdrawn/modified in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the bidder on the bid form, Withdrawal/ modification of a bid during this interval shall result in the bidders forfeiture of its bid security, pursuant to clause 15 of ITB.
- 25.5 The latest bid hence submitted shall be considered for evaluation and all other bids shall be considered unconditionally withdrawn.

26.0 OWNER/EMPLOYER'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS

The Owner/Employer reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of the contract without thereby incurring any liability to the affected bidder or bidder or any obligations to inform the affected bidder or bidders of the ground for Owner/Employer action.

D. BID OPENING AND EVALUATION

27.0 BID OPENING

27.1 *Unpriced Bid Opening :*

CUGL will open bids, in the presence of bidders' designated representatives who choose to attend, at date, time and location stipulated in the tender document. The bidders' representatives, who are present shall sign a bid opening register evidencing their attendance.

27.2 *Priced Bid Opening:*

CUGL will open the price bids of those bidders who meet the qualification requirement and whose bids is determined to be technically and commercially responsive. Bidders selected for opening of their price bids shall be informed about the date of price bid opening. Bidders may depute their authorized representative to attend the bid opening. The bidders' representatives, who are present shall sign a register evidencing their attendance and may be required to be present on a short notice.

- 27.3 The price bids of those bidders who were not found to be techno-commercially responsive shall be unopened and returned unopened after opening of the price bids of techno-commercially responsive bidders.

28.0 PROCESS TO BE CONFIDENTIAL

- 28.1 Information relating to the examination, clarifications, evaluation and comparison of bids, and recommendations for the award of a Contract, shall not be disclosed to bidders or any other person officially concerned with such Process.
- 28.2 Any efforts by a bidder to influence the Owner/Employer in any manner in respect of Preparation of Bidding document & further evaluation of bids will result in the rejection of that bid.

29.0 CONTACTING THE OWNER/EMPLOYER

- 29.1 From the time of the bid opening to the time of the Contract award, if any bidder wishes to contact the Owner/Employer for any matter relating to the bid, it should do so in writing. Any effort by a bidder to influence the Owner/Employer in any manner in respect of bid evaluation or award will result in the rejection of that bid.

30.0 EXAMINATION OF BIDS AND DETERMINATION OF RESPONSIVENESS

- 30.1 The owner's determination of a bid's responsiveness is based on the content of the bid only. Prior to the detailed evaluation of Bids, the Employer will determine whether each Bid:-
- (a) Meets the "Bid Evaluation Criteria" 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 Employer may require to determine responsiveness pursuant to "ITB: Clause-28.2"
- 30.2 A substantially responsive Bid is one which conforms to all the terms, conditions and specifications of the Bidding Documents without material deviations or reservations or omissions for this purpose employer defines the foregoing terms below:-
- a) "Deviation" is departure from the requirement specified in the tender documents.
 - b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirement in the tender documents.
 - c) "Omission" is the failure to submit part or all of the information or documentation required in the tender document.
- 30.3 A material deviation, reservation or omission is one that,

- a) If accepted would,
- i) Affect in any substantial way the scope, quality, or performance of the job as specified in tender documents.
- ii) Limit, in any substantial way, inconsistent with the Tender Document, the Employer's rights or the tenderer's obligations under the proposed Contract.
- b) If rectified, would unfairly affect the competitive position of other bidders presenting substantially responsive bids.

30.4 The employer shall examine all aspects of the bid to confirm that all requirements have been met without any material deviation reservation or omission.

30.5 If a Bid is not substantially responsive, it may be rejected by the Employer and may not subsequently be made responsive by correction or withdrawal of the of material deviation, reservation or omission.

30.6 CUGL reserves the right to seek any clarification from the bidder, if required on the submitted document for evaluating their bid, the same shall be asked.

31.0 PRICE BID OPENING

The Owner/Employer will open priced bids of all techno-commercially acceptable bidders.

32.0 ARITHMETIC CORRECTIONS & CORRECTION OF ERRORS

32.1 Bids determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer as follows:

- (i) When there is a difference between the rates in figures and words, the rate which corresponds to the amount worked out by the contractor (by multiplying the quantity and rate) shall be taken as correct.
- (ii) When the rate quoted by the contractor in figures and words tallies but the amount is incorrect, the rate quoted by the contractor shall be taken as correct and not the amount and the amount corrected.
- (iii) When it is not possible to ascertain the correct rate, in the manner prescribed above, the rate as quoted in words shall be adopted and the amount worked out, for comparison purposes

32.2 The amount stated in the bid will be adjusted by the Employer in accordance with the above procedure for the correction of errors. If the bidder does not accept the

corrected amount of bid, its bid will be rejected, and the bid security shall be forfeited.

33.0 CONVERSION TO SINGLE CURRENCY

All bids to submitted in INR.

34.0 EVALUATION AND COMPARISON OF BIDS

34.1 The evaluation & comparisons of the bids will be carried out for previously determined as substantially responsive pursuant to ITB Cl. No.28.

34.2 The evaluation & Comparison of all the responsive bids for supplies/works/services to be arrived at the lowest evaluated offer as Under (i) the evaluated price of bidders shall include the following:

- I. Total price quoted by the bidder (including Taxes & duties).
- II. Technical loading if any as per Technical specification.

34.3 In case more than one bidder is tied up at one position based on evaluated price, then lowest cost bidder shall be shortlisted using following tie breaker criteria in the order of sequence (i.e. criteria no. 2 will be applied only in case there is still a tie after criteria no.1):

Criteria No. 1 - The bidders who have got the higher turnover in any of the last 03 (three) Financial Year.

Criteria No. 2- The bidders who have got the higher working capital (without taking into consideration of letter of credit submitted from bank) in the last Financial Year.

34.4 In case it is observed that any bidder has not quoted for any item in the Schedule of Rates (such unquoted item not being in large numbers), the quoted price for the purpose of evaluation shall be considered as the maximum rate quoted by the remaining bidders for such items. If after evaluation, such bidder is found to be the lowest evaluated bidder, the rates for the missing item shall be considered as included in quoted bid price. If the estimated price impact of the unquoted items is more that 10% of the bidder's quoted price, the above provision shall not be applicable and such bid shall be rejected

34.0 POST QUALIFICATION

35.1 In the absence of prequalification, the Owner/Employer will determine to its satisfaction whether the bidder selected as having submitted the lowest evaluated, responsive bid is qualified to satisfactorily perform the contract.

35.2 The determination will take into account the bidders financial, technical and production capabilities. It will be based upon an examination of the documentary evidence of the bidders qualifications submitted by the Bidder, pursuant to ITB Clause-10, as well as such other information as the Owner/Employer deems necessary and appropriate.

An affirmative determination will be a prerequisite for award of the contract to the bidder. A Negative determination will result in rejection of the bidders bid.

F - AWARD OF CONTRACT

36.0 AWARD

36.1 The Owner/Employer will award the contract to the successful bidder (s) whose bid has been determined to be Substantially responsive and/or have been determined as a lowest on least cost to Owner/Employer and is determined to be qualified to satisfactorily perform the Contract.

37.0 NOTIFICATION OF AWARD/FAX OF ACCEPTANCE

37.1 Prior to the expiration of period of bid validity, Owner/Employer (CUGL) will notify the successful bidder in writing by Post/Fax/E-mail to be confirmed in writing, that his bid has been accepted. The notification of award/Fax of Intent will constitute the formation of the Contract.

37.2 The Completion period shall commence from the date of notification of award/Fax of Acceptance (FOA).

37.3 The notification of award will constitute the formation of a Contract.

37.4 Upon the successful bidder's/ Contractor's CPBG/SD shall promptly discharge his EMD.

38.0 SIGNING OF AGREEMENT

38.1 After the successful bidder has been notified for acceptance of his bid, the bidder is required to execute the Contract Agreement within 21 days of receipt of Fax of Acceptance in the form provided in the Bidding Documents. The Contract Agreement is to be executed on the non-judicial paper of appropriate value (the cost of stamp paper shall be borne by the Contractor/Service Provider).

- 38.2 In the event of failure on the part of the successful bidder to sign the AGREEMENT within the above stipulated period, the Bid Security shall be forfeited and the acceptance of the award shall be considered as cancelled.

39.0 PERFORMANCE GUARANTEE

- 39.1 Pursuant to clause no. 04 of GCC- works, bidder will provide performance Guarantee of appropriate value within 21 days of receipt of award from the Owner/Employer. The Performance Guarantee shall be in form of Bank Guarantee and shall be in the currency of the Contract.
- 39.2 Failure of the successful bidder to comply with the requirement of this clause shall constitute a breach of contract, cause for annulment of the award, forfeiture of the bid security and any such remedy the Employer may take under the Contract pursuant to Clause as per tender and the Owner/Employer may resort to awarding the Contract to the next ranked bidder.

40.0 Repeat Order

- 40.1 As per GCC

41.0 CORRUPT AND FRAUDULENT PRACTICES

- 41.1 The Owner/Employer requires that Bidders/contractors observe the highest standard of ethics during the execution of Contract. In pursuance of this policy, the Employer defines, for the purposes of this provision, the terms set forth below as follows:
- a) "Corrupt Practice" means the offering, giving, receiving, or soliciting of anything of value to influence the action of public official in contract execution, and
 - b) "Fraudulent Practice" means a misrepresentation of facts in order to secure the contract or influence the execution of a Contract to the detriment of the Employer, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Employer of the benefits of free and open competition; The Employer will reject a proposal for award if it determines that the bidder recommended for award has engaged corrupt or fraudulent practices in competing for the Contract in question.
- 41.2 The Owner/Employer will declare a firm ineligible for a period pursuant to clause as per tender.

42.0 INCOME TAX & CORPORATE TAX

- 42.1 Income tax deduction shall be made from all payments made to the contractor as per the rules and regulations in force and in accordance with the Income Tax Act prevailing from time to time.
- 42.2 Corporate Tax liability, if any, shall be to the contractor's account.

43.0 WAIVER OR TRANSFER OF THE AGREEMENT

- 43.1 The successful bidder shall not waive the Agreement or transfer it to third parties, whether in part or in whole, nor waive any interest that is included in the Agreement without the prior written permission of the Owner/Employer.

44.0 EVALUATION OF PERFORMANCE

Performance of the contract awarded shall be evaluated as per vendors evaluation policy of CUGL which is available on CUGL website.

**GCC
(GENERAL
CONDITIONS OF
CONTRACT)**

SECTION-III

General conditions of Contract

Section-1 Definitions

1.0 Definitions In this document, General Conditions of Contract (GCC-Goods), 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.
- 1.1 **CONSULTANT:** - NA
- 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 any proper performance of his contractual obligations.
- 1.4 **COMPLETION DATE** shall mean the date on which the goods are successfully commissioned by the supplier and handed over to OWNER.
- 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 OWNER to be available for continuous operation at different loads up to and including rated capacity.
- 1.6 **DELIVERY** terms shall be interpreted as per INCO TERMS 2000 in case of contract with a foreign bidder and as the date of LR/GR in the case of a contract with an Indian bidder.
- 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 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 work 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 OWNER directly or through CONSULTANT to inspect equipment, stage-wise as well as final, before dispatch, at SUPPLIER'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 of available for service.
- 1.13** OWNER shall mean Central UP Gas Limited (CUGL), having its registered office at 7th Floor, UPSIDC Complex, A-1/4, Lakhanpur, Kanpur -208024, UP, India. The term OWNER includes successors, assigns of CUGL
- 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** SUPPLIER shall mean the person, firm or company with whom PURCHASE ORDER /CONTRACT is placed/entered into by

SUPPLIER for supply of equipment, materials and services. The term Seller includes its successor and assigns.

- 1.16** SERCIVE shall mean erection, installation, and testing commissioning, provision of technical assistance, training and other such obligations of the Supplier 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-CONTRACTOR shall mean order placed by the Supplier, for any portion of the contracted work, after necessary consent and approval of OWNER.
- 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 CONTRAT has been sub-let by the SUPPLIER with the consent in writing of the OWNER 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 form 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 sub-systems, initial operation of the complete equipments covered under the Contract obtain necessary trial operation date, perform calibration and corrective action, shutdown inspection 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 OWNER 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 Supplier before the Works are taken

2.0 Seller to inform 2.1 The Supplier 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 Supplier of his responsibility to fulfill his obligation under the Contract.

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

4.0 Country of Origin 4.1 For purposes of this Clause “origin” means the place where the **Origin** 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.

5.0 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 him SUPPLIER. 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 SUPPLIER’s responsibility) shall be provided by SUPPLIER without any extra cost.

5.3 The SUPPLIER 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 SUPPLIER 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 OWNER.

5.4 The SUPPLIER 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 OWNER.

- 5.5** The documents once submitted by the SUPPLIER shall be firm and final and not subject to subsequent changes. The SUPPLIER shall be responsible for any loss to the OWNER consequent to furnishing of incorrect date/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 Govt.) 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 OWNER OR ITS ASSIGNS AND ARE SUBJECT TO RECALL BY OWNER. The supplier 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 OWNER. All such details shall be kept confidential.
- 5.10** SUPPLIER shall pack, protect, mark and arrange for dispatch of EQUIPMENT as per instructions given in the CONTRACT.

6.0 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.

7.0 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 SUPPLIER shall, excepting what is herein provided, be given by OWNER.
- b.** All the work shall be carried out under the direction of and to the satisfaction of purchaser.
- c.** All communications including technical/commercial clarifications and / or comments shall be addressed to CUGL in quintuplicate and shall always bear reference to the CONTRACT.
- d.** Invoices for payment against CONTRACT shall be addressed to OWNER.
- e.** The CONTRACT number shall be shown on all invoices, communications, packing lists, containers and bills of lading, etc.

8.0 Contract Obligation

- 8.1** If after award of the contract, the Supplier does not acknowledge the receipt of award or fails to furnish the performance guarantee within the prescribed time limit, the OWNER 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 Supplier's bid and all previous correspondence.

9.0 Modification in

- 9.1** All modifications leading to changes in the contract with respect to Contract technical and / or commercial aspects including terms of delivery shall be considered valid only when accepted in writing by OWNER 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** OWNER shall not be bound by any printed conditions or provisions in the Supplier's Bid Forms OR ACKNOWLEDGEMENT 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 document & Information 10.1 The supplier shall not, without the owner'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 OWNER in connection therewith, to any person other than a person employed by the SUPPLIER in the performance of the CONTRACT. Disclosure to any such employed person shall be made in confidence and shall extend only as far as may be necessary for purpose of such performance.

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

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

11.2 The SUPPLIER shall indemnify the OWNER against all third party claims of infringement of patent, trademark or industrial design rights arising from use of the GOODS or any part thereof in the OWNER's country.

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

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

12. Performance Guarantee 12.1 Within 21 days after the Seller's receipt of notification of award of the CONTRACT, the **SUPPLIER** shall furnish performance guarantee in the form of Bank Guarantee/Demand Draft/ Banker cheque to the OWNER, in the bidding documents, for an amount equivalent to 3% of the total order value (exclusive of GST) of the CONTRACT & 7% of individual delivery orders.

1) Validity of PBG for 3% = Rate Contract Issue Date (Start Date of Rate Contract) + Rate Contract Period (validity of Rate Contract) + Contractual Delivery Period of material + Contractual Guarantee/warranty period + 3 month

2) Validity of PBG for 7% = DO Issue Date + Contractual Delivery Period of material +Contractual Guarantee/warranty period + 3 months

12.2 The proceeds of performance guarantee shall be appropriated by the OWNER as compensation for any loss resulting from the **Supplier's** failure to complete his obligations under the CONTRACT without prejudice to any of the rights or remedies the OWNER 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 warranty/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 Warranty/Guarantee period. OWNER will discharge the Bank Guarantee not later than 6 months from the date of Expiration of the Supplier's entire obligations, including any warranty obligations, under the CONTRACT.

13.0 Inspection, and/Testing &Expediting **13.1** The OWNER or its representative shall have the right to inspect 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 OWNER requires and where they are to be conducted. The OWNER shall notify the SUPPLIER in writing the identity of any representative(s) retained for these purposes.

13.2 The inspection and tests may be conducted on the premises of the SUPPLIER or his sub-contractor(s), at point of DELIVERY and/ or at the GOODS final destination, When conducted on the premises of the SUPPLIER or his sub-contractor(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 OWNER.

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

- 13.4** The Owner's right to inspect, test and where necessary reject the GOODS after the GOODS arrival in the Owner's country shall in no way be limited or waived by reason of the GOODS having previously been inspected, tested and passed by the OWNER, 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** Supplier shall allow to visit, during working hours, the workshop relevant for execution of the CONTRACT during the entire period of CONTRACT during the entire period of CONTRACT validity.
- 13.7** In order to enable OWNER'S representatives to obtain entry visas in time, SUPPLIER shall notify OWNER two months before assembly, testing and packing of main EQUIPMENT. If requested, seller shall assist OWNER representatives in getting visas in the shortest possible time (applicable only in case of foreign order).
- 13.8** SUPPLIER shall place at the disposal of the INSPECTOR free of charge, all tools, instruments, and other apparatus necessary for the 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** SUPPLIER 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 SUPPLIER 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. SUPPLIER 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, owner 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 supplier'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 Argicl-13 shall in any way release the seller from any warrantee or other obligations under this contract.

13.14 Arrangement for all inspections required by Indian statutory Authorities and as specified in technical specifications shall be made by supplier.

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 eh 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 contractors risk and cost. The owner 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.

14.0 Time Schedule & 14.1 Time Schedule Network/Bar Chart

Progress

Reporting

14.1.1 Together with the contract confirmation, supplier shall submit to his time schedule regarding the documentation, manufacture, testing, owner supply, erection and commissioning of the GOODS

14.1.2 The time schedule will b e 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.

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

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 SUPPLIER shall report monthly to OWNER, 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 of the execution of CONTRACT and achievement of targets set out in time bar chart.

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 OWNER's representatives shall have the right to inspect supplier'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, supplier shall advise consultant, with copy to purchaser, at the earliest possible date of any anticipated delay in the progress.

14.3.3 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 conclusive or supplier shall neglect to execute the contract with due diligence and expedition or shall contravene the provisions of the contract owner may give notice of the same in writing to the supplier calling upon him to make good the failure, neglect or contravention complained of. Should Supplier fail to comply with such notice within the period considered reasonable by owner the owner shall have the option and be at liberty to take the contract wholly or in part out of the supplier's hand and make alternative arrangements to obtain the requirements and completion of contract at the supplier's risk and cost and recover from the supplier, all extra cost incurred by the owner on this account. In such event owner shall not be responsible for any loss that the supplier may incur and supplier shall not be entitled to any gain. Owner shall, in addition, have the right to encase performance Guarantee in full or part.

15.0 Delivery & Documents

15.1 Delivery of the goods shall be made by the supplier in accordance with specified in the contract, and the goods shall remain at the risk of the Supplier until delivery has been completed.

15.2 Delivery shall be deemed to have been made:

- a) In case of FOT dispatch point contract, 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.

- b) In case of FOT site, on receipt of goods by owner 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 owner. Any request concerning delay will be void unless accepted by owner through a modification of 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 owner.
- 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 supplier should comply with the packing, marking and shipping documentation specifications enclosed.

16.0Transit Risk

16.1 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.

Insurance Requirements:

All Transit risk insurance shall be in the scope of Bidder.

17.0Transportation 17.1

Where the supplier is required under the contract to deliver the goods at FOT site, all expenses shall be arranged and paid for by the seller and the Cost thereof shall be included in the contract price's.

18.0 Incidental Services

- 18.1 The supplier 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 supplier of any warrantee/guarantee obligations under the contract.
- 18.1.4 Training of the Owner's personnel at supplier's plant and/ or at site, in assembly, start-up operation, maintenance and/or repair of the supplied Goods at no extra cost. However, Owner will bear boarding, lodging & personal expenses of Trainees.
- 19.0 **Spare Parts Maintenance Tools Lubricants**
- 19.1 Supplier may be required to provide any or all of the following materials & notification pertaining to spare parts manufactured or distributed by the supplier.
- 19.2 In the event of termination of production of the spare parts:
- i) Advance notification to the Owner of the pending termination, in sufficient time to permit the Owner procure needed requirements, and
 - ii) Following such termination, furnishing at no cost to the owner, the blue prints, drawings and specifications of procure needed requirements, and
- 19.3 Supplier 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 :
- 19.4 The construction, execution and commissioning.
- 19.5 Two (2) years operation and maintenance.
- 19.6 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 with the corresponding parts.
- 19.7 Type and sizes of bearings shall be clearly indicated.
- 19.8 Spare parts shall be packed for long storage under tropical climatic conditions in suitable cases, clearly marked as to intended purpose.
- 19.9 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 owner.
- 19.10 Bidders should note that if they do not comply with Clause 19.2 above, their quotation may be rejected.

19.11 Lubricants

19.12 Whenever lubricants are required, supplier shall indicate the quantity of lubricants required for the first filing, the frequency of changing, the quantity of lubricants required for the one years continuous operation and the types; of recommended lubricants indicating the commercial name (Trademark), quality and grade.

19.13 If Supplier is unable to recommend specific oil, basic recommended characteristics of the lubricants shall be given.

19.14 Supplier shall indicate various equivalent lubricants available in India.

20.0 **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 OWNER'S agreement in writing which must be obtained before any work against the order is commenced. All materials supplied by the supplier pursuant to the Contract (irrespective of whether engineering, design data or other information has been furnished, reviewed or approved by owner are guaranteed to be of the best quality of their respective kinds (unless otherwise specifically authorized in writing by owner 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 of 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 supplier is notified thereof, supplier shall, at his own expense and as promptly as possible, make such permit the materials to function in accordance with the specifications and to fulfill the foregoing guarantees.

Owner may, at his option, remove such defective materials, at supplier's expense in which event supplier shall, without cost to owner and as promptly as possible, furnish and install proper materials. Repaired or replaced materials shall be similarly guaranteed by the supplier 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, Owner shall notify the supplier giving full details of differences. The supplier shall attend the site within seven (7) days of receipt of such notice to meet and agree with representatives of owner, the action required to correct the deficiency. Should the supplier fail to attend meeting at site within the time specified above work/materials and supplier shall reimburse owner all costs and expenses incurred in connection with such trouble or defect.

20.2 PERFORMANCE GUARANTEE OF EQUIPMENT

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

20.2.3 If the Supplier fails to prove the guarantee within a reasonable period, owner 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 supplier's risk and cost. All expenditure incurred by the owner in this regard shall be to supplier's account.

21.0 TERMS OF PAYMENT: 100% Payment along with 100% taxes, duties, freight and other levies (if applicable) shall be released against receipt of material at store/site on submission of PBG, final dispatch documents and dispatch clearance from CUGL. Vendor shall submit following documents for getting payments from CUGL

- (i) GST Invoice
- (ii) All test certificates with one set of copy
- (iii) Packing List
- (iv) LR
- (v) IRN (inspection Release Note)

22.0 Prices

22.1 Prices charged by the supplier 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 supplier in his bid.

23 Subletting & Owner's

23.1 The supplier shall not without previous consent in writing of assignment authority, sublet, transfers 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 As Essence

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 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 Owner has right to :

- i) Hire for period of delay from elsewhere goods which in Owner's opinion will meet the same purpose as the goods which are delayed and supplier 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, Owner may procure from elsewhere goods which Owner's opinion would meet the same purpose as the goods for which Contract is cancelled and Supplier 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 (1) above and if the ordered goods continue to remain undelivered thereafter, cancel the order in part or in full vide (ii) above.
- iv) Any inexcusable delay by the Supplier or his subcontractor shall render the Supplier 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

26.1 In case, vendor fail to complete the work within the stipulated period, then unless such failure is due to force majeure as defined in the bid document, the contract price

shall be reduced by ½ % (half percent) of the total price of undelivered quantities of the lot quantity of material covered in that lot for which delivery is delayed, per week or part thereof of delay subject to a maximum of 5% (five percent) of total contract value.

All lots shall be considered separately for applying PRS in case of delay as described above

The decision of the Engineer-In-Charge in regard to applicability of PRS shall be final and binding on the Vendor.

In case of delay on the part of the Vendor the invoice shall be submitted after applicable price reduction.

- | | | |
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| 27 | Rejections,
Removal
Rejected
Equipment &
Replacement | 27.1 Preliminary inspections at Supplier's works by Inspector shall not prejudice purchase'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 owner 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 Supplier's cost and risk. |
| | | 27.3 Nothing in this clause shall be deemed to deprive the Owner 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 supplier of his obligations under the Contract. |
| | | 27.4 Equipment rejected by the Owner shall be removed by the supplier at his cost within 14 days of notice after repaying the amounts received against the supply. The owner 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, Owner shall have the right to recover the amounts, if any, from any of contractor's invoices pending with Owner or by alternative method(s) |
| 28 | Termination of
Contract | 28.1 Terminations for Default |
| | | 28.1.1 The Owner may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, terminate the Contract in whole or in part |

- A) If the Supplier fails to deliver any or all of the goods within the time
 - B) If the Supplier fails to perform any other obligation(s) under the Contract, and
 - C) If the Supplier, in either of the above circumstances, does not cure his failure within a period of 30 days (or such longer period as the Owner may authorize in writing) after receipt of the default notice from the Owner.
- 28.1.2 In the event the Owner terminates the Contract in whole or in part, pursuant to Article 28.1.1, the Owner may procure, upon such terms and in such undelivered and the Supplier shall be liable to the Owner for any excess costs for such similar 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 SUPPLIER shall be put under holiday i.e. neither any enquiry will be issued to the party by CUGL Against any type of tender nor their offer will be considered by CUGL against any ongoing tender(s) where contract between CUGL and that particular SUPPLIER (as a bidder) has not been finalized) for three years from the date of termination by CUGL to such SUPPLIER.
- 28.2 Termination for Insolvency
- 28.2.1 The Owner may, by written notice sent to the Supplier, terminate the Contract, in whole or part, at any time for his convenience. The notice of termination shall specify that termination is for the Owner'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 Termination for Convenience
- 28.3.1 The Owner may, by written notice sent to the Supplier, terminate the Contract, in whole or part, at any time for his convenience. The notice of termination shall specify that termination is for the Owner'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 Supplier's receipt of notice of termination

shall be purchased by the Owner at the Contract terms and prices. For the remaining Goods, the Owner 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 Supplier an agreed amount for partially completed Goods and for materials and parts previously procured by the Supplier.

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 Supplier shall advise Owner 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, Owner 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 Supplier shall not claim extension in completion date for a period exceeding the period of delay attributable to the causes of Force Majeure and neither Owner nor Supplier shall be liable to pay extra costs provided it is mutually established that Force Majeure Conditions did actually exist,.

Supplier 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 Supplier or the Owner shall not be liable for delays in performing their obligations under this order and the delivery date will be extended to the Supplier without being subject to price reduction for delayed deliveries, as stated elsewhere.

30 **Resolution of
Dispute /
Arbitration**

30.1 The Owner and the Supplier 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 Owner and the Supplier 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 Union Territory of New Delhi.

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 OWNER (CUGL) shall suggest a panel of three independent and distinguished persons to the Supplier to select any one among them to act as the sole Arbitrator, In case event of failure of the Supplier to select the Sole Arbitrator within 30 days from the receipt of the communication suggesting the panel of arbitrator, the right of selection of Sole Arbitrator by the other party shall stand forfeited and the Owner shall have discretion to proceed with the appointment of the Sole Arbitrator. The decision of the Owner 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 Kanpur, Uttar Pradesh, India.

Subject to the above, the provisions of (Indian) Arbitration & Conciliation Act, 1996 and the rules framed hereunder 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)

Supplier 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 WORKs under the CONTRACT shall, however, continue during the Arbitration proceedings and no payment due or payable to the Supplier 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 Owner 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 A foreign supplier shall be entirely responsible for all taxes stamp duties, license fees, and other such levies imposed outside the Owner's country.

33.2 A domestic Supplier shall be entirely responsible for all taxes, duties, license fees etc. incurred until the delivery of the contracted goods to the owner. However, Sales Tax and Excise Duty on finished products shall be reimbursed by Owner.

33.3 Customs duty payable in India for imported goods ordered by Owner on foreign supplier shall be borne and paid by Owner

33.4 Any income tax payable in respect of supervisory services rendered by foreign supplier under the Contract shall be as

per the Indian Income Tax Act and shall be borne by Supplier. It is up to the bidder/supplier to ascertain the amount of these taxes and to include them in his bid price.

- 34 Books & records 34.1** Supplier shall maintain adequate books and records in connection with contract and shall make them available for inspection and audit by Owner 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 & Certificate 35.1** Supplier shall procure, at his expense, all necessary permits, certificates and duties, license fees, and other such levies imposed outside the 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 supplier further agrees to hold Owner and / or 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. Owner will provide necessary permits for Supplier personnel to undertake any work in India in connection with Contract.

36.General

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

- 36.1 Losses due to non-compliance of Instructions**
Losses or damages occurring to the Owner owing to the Supplier's
Failure to adhere to any of the instructions given by the Owner in connection with the contract execution shall be recoverable from the Supplier.

- 36.2 Recovery of sums due**

All costs, damages of expenses which the Owner may have paid, for which under the Contract Supplier is liable, may be recovered by the Owner (he is hereby irrevocably authorized to do so) from any money due to or becoming due to the Supplier under this contract or other Contracts and/or may be recovered by action at law or otherwise. If the same due to the Supplier be not sufficient to recover the

recoverable amount, the Supplier shall pay to the Owner, on demand, the balance amount.

36.3 Payments, etc. not to affect rights of the Owner No sum paid on account by the Owner nor any extension of the date for completion granted by the Owner shall affect or prejudice the rights of the Owner against the Supplier or relieve the Supplier of his obligation for the due fulfillment of the Contract.

36.4 **Cut-off Dates**

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

36.5 **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 Owner of any department of the Central Govt. or any Department of a State Govt. or any Statutory Undertaking of the Central of 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 Owner or any Department. Of Central Govt. or State Govt. as the case may be , at 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 CUGL 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 the CUGL 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 39.1

Supplier shall not without the written permission of Owner or any Company affiliated with Owner 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 Prices and discounts, if any and other terms & conditions shall also remain valid up to twelve months from the placement of notification of award (Fax of Intent) for the purpose of placement of repeat order up to 100% ordered quantity

41 Limitation of Liability 41.1

notwithstanding anything contrary contained herein] the aggregate total liability of Supplier 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

BEC (BID EVALUATION CRITERIA)

SECTION-IV

BID EVALUATION CRITERIA (BEC)

The Bidder shall be a BIS & PESO certified manufacturer of CNG cylinders having fabrication/ Testing/Quality assurance facilities.

1.0 TECHNICAL CRITERIA – (STATIONARY CASCADES)

1.1 The Bidder shall have single point responsibility for the complete engineering, manufacturing, assembling & testing of CNG Storage Cascades handling CNG at 255 bar pressure (MOP). The Bidder's should have Designed, Engineered, Manufactured, Assembled, Tested and Supplied at least Five (5 Nos.) cascade of 3000/4500 liters of water capacity or higher storage capacity in a single order in any of CGD company in India within last seven (7) years reckoned from the bid due date.

1.2 Cascade and Cylinder manufacturing facility should have valid approval of Petroleum and Explosives Safety Organisation (PESO), Government of India (Copy of valid PESO certificate to be submitted with the BID)

2.0 TECHNICAL CRITERIA – (MOBILE CASCADES)

2.1 The Bidder shall have single point responsibility for the complete engineering, manufacturing, assembling & testing of CNG Storage Cascades handling CNG at 255 bar pressure (MOP). The Bidder's should have Designed, Engineered, Manufactured, Assembled, Tested and Supplied at least Five (5 Nos.) cascade of 3000/4500 liters of water capacity or higher storage capacity in a single order in any of CGD company in India within last seven (7) years reckoned from the bid due date.

2.2 Cascade and Cylinder manufacturing facility should have valid approval of Petroleum and Explosives Safety Organisation (PESO), Government of India (Copy of valid PESO certificate to be submitted with the BID)

3.0 FINANCIAL CRITERIA

3.1 Annual Turnover

The minimum annual turnover achieved by the Bidder as per their audited financial results during any one of the preceding three (03) financial years should be as below:

Minimum annual Turn Over shall be as follows:

Item No. : 1 (Stationary Cascades)	-	Rs. 167.95 Lacs.
Item No. : 2 (Mobile Cascades)	-	Rs. 139.95 Lacs.

3.2 Net worth

Net worth of the Bidder should be positive as per the last audited financial statement.

3.3 Working capital

The minimum working capital of the Bidder as per the last audited financial statement should be as below;

Minimum working capital shall be as follows:

Item No. : 1 (Stationary Cascades)	-	Rs. 33.59 Lacs.
Item No. : 2 (Mobile Cascades)	-	Rs. 27.99 Lacs.

If the bidder's working capital is inadequate, the bidder shall supplement the shortfall with letter issued by his Banker, having a net worth not less than INR 100 Crores confirming the availability of line of credit to meet the specified working capital requirement.

In case of tenders having the bid closing date up to 30th September of the relevant financial years and audited financial results of immediate 3 (three) preceding financial years being not available, the bidder has an option to submit the audited financial results of three years immediately prior to that relevant financial year. Wherever , the bid closing date is after 30th September of the relevant financial year, bidder has to compulsorily submit the audited financial results of immediate preceding three financial years.

DOCUMENTS REQUIRED TO REVIEW QUALIFICATION CRITERIA

Bidder shall meet the qualification criteria as stated Bid Evaluation Criteria. Bidder shall furnish following documents along with the bid, to justify meeting the stipulated qualification criteria.

- A valid BIS certification Marks License No. mentioning name of the bidder.
- A copy of Purchase Order/Letter of award / Letter of Acceptance (executed with in last 07 years reckoned from bid due date) and documentary proof for its completion of supply i.e. IRN/Dispatch clearance/ Satisfactory Performance

Certificate from TPI/PMC/Client and should have cross reference to the PO / WO.

- A valid PESO certificate.
- Annual audited reports including Balance Sheets and Profit & Loss account statement for which the data to be provided so that the data provided above can be verified. In case, Audit is not mandatory as per the Statutory Norms for Bidder, it is required to submit a copy of his Annual Accounts duly certified by a Chartered Accountant along with the copy of Income Tax Return.
- Owner reserves the right to get direct feedback from user on satisfactory performance.

If bidder fails to provide the requisite documents, CUGL reserves the right to reject the Bid.

In case the bidder quotes for more than one items, the requirement of Technical & financial criteria shall be on cumulative basis for the quoted items.

Evaluation of bid shall be on item wise lowest offer basis.

**SCC
(SPECIAL
CONDITIONS OF
CONTRACT)**

SECTION-V

SPECIAL CONDITIONS OF CONTRACT

GENERAL

Special Condition 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 requires.

Notwithstanding the sub-division of the documents into these separate sections and volumes every part of each Section/Volume shall be deemed to be supplementary to and complementary of every other part and shall be read in conjunction with each other so far as it may be practicable to do. Where any portion of the General Condition of Contract is repugnant to or at variance with any provision of the Special Conditions of Contract, unless a different intention appear, the provisions of the Special Conditions of Contract, shall be deemed to override the provisions of the General Condition of Contract and shall not the extent of such repugnancy, observations, prevail.

SCOPE OF SUPPLY

The scope of supply is as stated in Material Requisition (MR) Schedule of Rates (SOR) and Bid Document.

REGISTRATION OF THE CONTRACT WITH STATUTORY AUTHORITIES

Within 30 days of execution of the contract agreement, the CONTRACTOR shall register themselves and the contract at their own cost with the Reserve Bank of India, Income Tax, Sales Tax and such other statutory authorities, as may be required under the rules and regulations governing in India. The Contract price shall be deemed to include all costs towards the same. A copy of all documents related to all such registration shall be submitted to Owner/Consultant for record.

3.0 CONTRACT CUM EQUIPMENT PERFORMANCE BANK GUARANTEE

For partial addition of GCC clause for Contract cum Performance Bank Gurantee following to be noted.

3.2 In the event completion of work is delayed beyond the scheduled completion date for any reason, whatsoever, the CONTRACTOR shall have the validity of the guarantee suitably extended to cover the period mentioned above.

3.3 The owner shall have an unqualified option under this guarantee to invoke the Banker's Guarantee and claim the amount there under in the event of the CONTRACTOR failing to honor any of the commitments entered into under this contract and or in respect of any amount due from the CONTRACTOR TO THE Owner. In case CONTRACTOR fails to furnish the requisite Bank Guarantee as stipulated above, then the owner shall have the option to terminate the Notification of award of Work and forfeit the Bid Security amount and no compensation for

the works performed shall be payable upon such termination. Upon completion of the works as per completion schedule stipulated in the Contract, the above said guarantee shall be considered to constitute the Contracts warranty/guarantee for the work done by him or for the works supplied and their Performance as per the specifications and any other conditions against this contract. The warranty/guarantee shall be in force from the date of issuance of certificate of Completion and Acceptance against this contract as per GCC.

The **CONTRACTOR** shall also arrange for the Contract Performance Bank Guarantee to remain valid until the expiration of the guarantee period for entire works covered under the contract.

In the event of Completion of project being delayed beyond the Scheduled Completion Date, for any reason whatsoever, the Owner may without prejudice to any other right or remedy available.

To the owner, operate the Bank Guarantee to recover the Compensation for delay livable as per relevant clause of GCC. The Bank Guarantee amount shall thereupon be increased to the original amount, or the **CONTRACTOR** may alternatively submit a fresh Bank Guarantee for the equivalent amount of compensation for delay recovered.

5.0 ADVANCE

No advance shall be paid under the contract.

PROJECT SCHEDULING AND INSPECTION

CONTRACTOR shall within 15 (fifteen) day, after receipt of notification of award of work provide detailed schedule covering the Scheduled status of all functions of the project like procurement, manufacture and commissioning phases. This network shall be reviewed by the Owner/Engineer-Charge and the agreed schedule shall form the basis of scheduling and monitoring.

7.0 PRICE ESCALATION

The contract price shall be deemed to be firm and valid for the entire duration of the contract till the completion of work, and shall not be subject to any adjustment due to increase in price of materials, utilities, or any other input for Performance of work and the contract except for increase/decrease in taxes and duties on account of subsequent legislation.

8.0 LABOR LICENSE

Before starting of work, **CONTRACTOR** shall obtain a license from concerned authorities under the Contract Labor (Abolition and Regulation) Act 1970 and amendment thereof, if any, and furnish copy of the same to "Owner.

PROVIDENT FUND (NOT APPLICABLE FOR THIS TENDER)

The **CONTRACTOR** shall strictly comply with the provisions of Employees Provident Fund Act as applicable and register them with RPFC before commencing work, as required. The **CONTRACTOR SHALL DEPOSIT** Employees and Employers contributions to the RPFC every

month. The CONTRACTOR shall furnish along with each running bill, the challan /receipt for the payment made to the RPFC for the preceding months.

In case the RPFC's challan/receipt, as above, is not furnished, owner shall deduct 16(Sixteen)% of the payable amount from Contractor's running bill and retain the same as a deposit. Such retained amounts shall be refunded to CONTRACTOR on production of RPFC challan /receipt for the period covered by the related running bill.

PACKING, MARKING AND SHIPMENT

10.1 The contractor, wherever applicable shall after proper painting, pack and crate all goods for sea/air/road transportation in a manner suitable to tropical humid climatic region in accordance with the internationally accepted practices and in such a manner so as to protect it from damage and deterioration, in transit and during storage till the time of issuance to erection seller/contractor. The seller/contractor shall be held responsible for all damages due to improper packing. The seller/contractor will ensure sizing or packing of all oversized consignments in such a way that availability of carrier and/or road route is properly taken into consideration.

Shipping documents, amongst others, shall also include "Clean on Board Ocean Bill of Lading", made in favour of CUGL, and shall be sent by Air Courier so as to reach at least two weeks before the arrival of consignment at the port of entry.

INCOME TAX

11.1 Income Tax along with surcharge of Income Tax as applicable at the prevailing rate on the gross amount billed shall be deducted from the Contractor's bills as per applicable laws in India and Tax Deduction at Source (TDS) certificate shall be issued.

SERVICES

The quoted prices for all services shall include all taxes/service tax and duties including works contract tax. Owner will not reimburse any taxes and duties payable on any services rendered for Performance of the contract.

13.0 WITHHOLDING, ACCOUNTING AND TAX REQUIREMENTS

13.1 CONTRACTOR agrees for withholding from wages and salaries of its agents, servants or employees all sums, required to be withheld by the laws of the Republic of India or any other agency having jurisdiction over the area where CONTRACTOR is conducting operations, and to pay the same promptly and directly when due to the proper authority. CONTRACTOR further agrees to comply with all accounting and reporting requirements of any Nation having jurisdiction over the subject matter hereof and to confirm to such laws and regulations and to pay the cost of such compliance. If requested by Owner CONTRACTOR will furnish to Owner the evidence of payment of applicable taxes, in the country of the Contractor's and his sub-CONTRACTOR(S) and expatriate employees.

INSURANCE

In addition to the transit insurance clause in GCC, the bidder shall take all other insurances like Workmen's Compensation, Comprehensive General Liability Insurance etc., normally required and take care of all his liabilities either direct or indirect, in pursuance of this contract

15.0 COMPLETION SCHEDULE

Delivery schedule to be as per following:

Sr. No.	Description	1 st Lot	Balance Quantity in Multiple Lot
1	Mobile Cascade 4500 WL	10	14
2	Stationary cascade 4500 WL	10	10

Delivery within 10 weeks from the date of award for 1st Lot.

In multiple lots as and when required and within 10 Weeks from the date of Intimation by CUGL and within a period of two year from Fax of Indent/Letter of Intent. CUGL will provide call out orders for the required nos. of Static & Mobile cascades within a period of two year from the date of LOI.

Note :

The date of receipt of material shall be considered for the date of delivery for Price Reduction Schedule.

Delivery of goods shall be based on FOT CUGL Store/Project Site basis. The date of receipt and acceptance of materials at CUGL Store/Project Site shall be considered as the date of delivery.

Failing to meet delivery schedule will be subject to Price Reduction and / or other remedies available to the Purchaser in Bidding Documents.

Price Reduction Schedule (PRS) shall be applicable as per clause of GCC.

Delivery period as detailed in GCC/SCC shall be the essence of Agreement and no variation shall be permitted.

The delivery period shall be reckoned from the date of Fax of Intent (FOI).

16 Third Party Inspection

All the cascades must be inspected by Third Party Inspection Agency and only after getting their Inspection Release Note CUGL will issue dispatch clearance to the vendor. CUGL shall appoint a

TPIA (Third Party Inspection Agency) for inspection of Cascades. All inspections and tests shall be made as required by the specifications forming part of this contract. Contractor shall advise Owner/ Consultant/TPIA in writing at least 10 days in advance of the date of final inspection/tests. Manufactures inspection or testing certificates for equipment and materials supplied, may be considered for acceptance at the discretion of Owner/ Consultant/TPIA. All costs towards testing etc. shall be borne by the contractor within their quoted rates. All inspection of various items shall be carried out based on Quality Assurance Plan, which will be submitted by the Contractor and duly approved by Owner/ Consultant.

17.0 TERMS OF PAYMENT

17.1 FOR SUPPLIES

Payments shall be released by the Owner along with the following documents:

100% Payment along with 100% taxes, duties, freight and other levies (if applicable) shall be released within 30 days against receipt of material at store/site on submission of PBG, final dispatch documents and dispatch clearance from CUGL.

Vendor shall submit following documents for getting payments from CUGL

- (i) GST Invoice as per GST Rules
- (ii) All test certificates in two sets along-with soft form (PDF)
- (iii) Packing List
- (iv) LR
- (v) IRN (Inspection Release Note)

In case of delay in supply, the invoice value shall be reduced to take care of stipulation of PRS clause of the contract.

A certificate from manufacturer that the all items/ equipment under supply including its component or raw material used with manufacturing are new and conform to the tender requirement. In case manufacturer is not the contractor this certificate will duly be endorsed by the contractor owning overall responsibility

FORMS & FORMATS

SECTION-VI

F-1

BIDDER'S GENERAL INFORMATION

To,
Central UP Gas Limited,
7th floor, UPSIDC complex
A-1/4, Lakhampur
Kanpur-208024
India _____

TENDER NO:

SUB :

1	Bidder Name	
2	Status of Firm	Proprietorship Firm/Partnership firm/ Limited/Others If Others Specify: _____ [Enclose certificate of Registration]
3	Name of Proprietor/Partners/Directors of the firm/company	
4	Whether supplier/ manufacturer / Dealer/ Trader/ Contractor	
5	Number of Years in Operation	
6	Address of Registered Office: *In case of Partnership firm, enclose letter mentioning current address of the firm and the full names and current addresses of all the partners of the firm.	<div>City:</div> <div>District:</div> <div>State:</div> <div>PIN/ZIP:</div>
7	Operation Address (if different from above)	<div>City:</div> <div>District:</div> <div>State:</div> <div>PIN/ZIP:</div>

8	Telephone Number	_____ (Country Code) (Area Code) (Telephone No.)
9	E-mail address	
10	Website	
11	Fax Number:	_____ (Country Code) (Area Code) (Telephone No.)
12	ISO Certification, if any	{If yes, please furnish details}
13	Bid Currency	
14	Banker's Name	
15	Branch	
17	Bank account number	
18	PAN No.	[Enclose copy of PAN Card]
19	EPF Registration No.	[Enclose copy of EPF Registration Certificate]
20	ESI code No.	[Enclose copy of relevant document]
21	GST No.	

Place:

Date:

[Signature of Authorized Signatory of Bidder]

Name:

Designation:

Seal:

F-2
BID FORM

To,
Central UP Gas Limited,
7th floor, UPSIDC complex
A-1/4, Lakhanpur
Kanpur-208024
India

SUB:
TENDER NO:
Dear Sir,

After examining / reviewing the Bidding Documents for the tender of
“_____” including
"Specifications & Scope of Work", "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, are pleased to offer to execute the whole part of
the job and in conformity with the said Bid Documents, including Addenda / Corrigenda Nos. -.

We confirm that this Bid is valid for a period of "four [04] 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.

If our Bid is accepted, we will provide the "Contract Performance Security / Security Deposit"
equal to "_____ of the Contract Price" or as mentioned in Tender Document for the due
performance within "thirty [30] days" of such Award.

Until a final Agreement/Letter of Award is prepared and executed, the tender document
(including addenda/ corrigenda) together with the "Notification of Award" shall constitute a
binding Agreement between us.

We understand that Bidding Document is not exhaustive and any action and activity not
mentioned in Bidding Documents but may be inferred to be included to meet the intend of the
Bidding Documents shall be deemed to be mentioned in Bidding 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:	[Signature of Authorized Signatory of Bidder]
Date:	Name:
	Designation:
	Seal:

Duly authorized to sign Bid for and on behalf of _____

[Signature of Witness]

Name of Witness:

Address:

F-3
LIST OF ENCLOSURES

To,
Central UP Gas Limited,
7th floor, UPSIDC complex
A-1/4, Lakhanpur
Kanpur-208024
India
SUB:

TENDER NO:

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. Document showing annual turnover for the last three years such as annual reports, profit and loss account, net worth etc. along with information as sought in enclosed format F-16
3. Document showing Financial Situation Information as sought in enclosed format F-16
4. 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.
5. Documentary Evidences showing the Bidder's claim of meeting Technical Criteria as mentioned in Clause 4 of ITB.
6. Bid Security/EMD*
7. Power of Attorney*
8. Duly certified document from chartered engineer and or chartered accountant.

Note: * In case of e-bidding the bidder has the option to submit specified documents in physical form on/before the bid due date or within seven days from the bid opening date. However, scanned copy of these (same) documents must be submitted on-line as part of e-bid before the bid due date/time.

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

FORMAT F-4
PROFORMA OF "BANK GUARANTEE" FOR "EARNEST MONEY / BID
SECURITY"

(To be stamped in accordance with the Stamp Act)

Ref.....

Bank Guarantee No.....

Date.....

To,

Central UP Gas Limited,
7th floor, UPSIDC complex
A-1/4, Lakhanpur
Kanpur-208024
India

SUB:

TENDER NO:

Dear Sir(s),

In accordance with Letter Inviting Tender under your reference No _____ M/s.

_____ having their Registered / Head Office at _____ (hereinafter called the Tenderer), wish to participate in the said tender for

As an irrevocable Bank Guarantee against Earnest Money for the amount of _____ is required to be submitted by the Tenderer as a condition precedent for participation in the said tender which amount is liable to be forfeited on the happening of any contingencies mentioned in the Tender Document.

We, the _____ Bank at _____ having our Head Office _____ (Local Address)

guarantee and undertake to pay immediately on demand without any recourse to the tenderers by Central UP Gas Limited, the amount _____ without any reservation, protest, demur and recourse. Any such demand made by CUGL, shall be conclusive and binding on us irrespective of any dispute or difference raised by the Tenderer.

This guarantee shall be irrevocable and shall remain valid up to _____ [this date should be two (02) months beyond the validity of the bid]. If any further extension of this

guarantee is required, the same shall be extended to such required period on receiving instructions from M/s. _____ whose behalf this guarantee is issued.

In witness whereof the Bank, through its authorized officer, has set its hand and stamp on this _____ day of _____ 20__ at _____.

WITNESS:

(SIGNATURE)
(NAME)

(SIGNATURE)
(NAME)

Designation with Bank Stamp

(OFFICIAL ADDRESS)

Attorney as per
Power of Attorney No. _____
Date: _____

INSTRUCTIONS FOR FURNISHING "BID SECURITY / EARNEST MONEY"
BY "BANK GUARANTEE"

1. The Bank Guarantee by Bidders will be given on non-judicial stamp paper as per "Stamp Duty" applicable. The non-judicial stamp paper should be in the name of the issuing Bank. In case of foreign Bank, the said Bank's Guarantee to be issued by its correspondent Bank in India on requisite non-judicial stamp paper
2. The expiry date should be arrived at in accordance with "ITB: Clause-15.1".
3. The Bank Guarantee by bidders will be given from Bank as specified in "ITB".
4. A letter from the issuing Bank of the requisite Bank Guarantee confirming that said Bank Guarantee / all future communication relating to the Bank Guarantee shall be forwarded to the Employer at its address as mentioned at "ITB".
5. Bidders must indicate the full postal address of the Bank along with the Bank's E-mail / Fax / Phone from where the Earnest Money Bond has been issued.
6. If a Bank Guarantee is issued by a commercial Bank, then a letter to Employer confirming its net worth is more than Rs. 1,000,000,000.00 [Rupees One Hundred Crores] or equivalent alongwith documentary evidence.

F-4A
PROFORMA OF "LETTER OF CREDIT" FOR "EARNEST MONEY / BID
SECURITY"

To,

Central UP Gas Limited,
7th floor, UPSIDC complex
A-1/4, Lakhanpur
Kanpur-208024
India

SUB:

TENDER NO:

Irrevocable and confirmed Letter of Credit No. Amount: Rs.
..... Validity of this Irrevocable:
..... (in India)Letter of Credit (2
months beyond validity of Offer)

Dear Sir,

1. You are here by authorized to draw on (Name of Applicant with full address) for a sum not exceeding available by your demand letter (draft) on them at sight drawn for Rs. accompanied by a certificate by Central UP Gas Limited, with the Tender No. duly incorporated therein, that one or more of the following conditions has/have occurred, specifying the occurred condition(s):

(i) The Bidder withdraws its Bid during the period of Bid validity or any extension thereof duly agreed by the Bidder.

(ii) The Bidder varies or modifies its Bid in a manner not acceptable to CUGL (India) Limited during the period of bid validity or any extension thereof duly agreed by the Bidder.

(iii) The Bidder, having been notified of the acceptance of its Bids,

(a) Fails or refuses to execute the Supply Order/Contract

(b) Fails or refuses to furnish the Contract Performance Security within 30 days before expiry of Bid Security.

(c) Fails to accept arithmetic corrections as per tender conditions.

2. This Irrevocable Letter of Credit has been established towards Bid Security Tender No for (Item)

3. We hereby guarantee to protect the Drawers, Endorsers and bonafide holders from any consequences, which may arise in the event of the non-acceptance or non-payment of Demand Letter (draft) in accordance with the terms of this credit.

4. This Credit is issued subject to the Uniform Customs and Practices for Documentary Credits International Chamber of Commerce brochure No. 600.
5. Please obtain reimbursement as under:
6. All foreign as well as Indian bank charges will be on the account of M/s. (Applicant)

FOR

Authorized Signature
(Original Bank)

Counter Signature

F-5
LETTER OF AUTHORITY

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

Ref:

Date:

To,

Central UP Gas Limited,
7th floor, UPSIDC complex
A-1/4, Lakhanpur
Kanpur-208024
India

SUB:

TENDER NO:

Dear Sir,

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

[1] Name & Designation _____ Signature _____

Phone/Cell:

Fax:

E-mail: @

[1] Name & Designation _____ Signature _____

Phone/Cell:

Fax:

E-mail: @

[2] Name & Designation _____ Signature _____

Phone/Cell:

Fax:

E-mail: @

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

Place:

[Signature of Authorized Signatory of Bidder]

Date:

Name:

Designation:

Seal:

Note: This "Letter of Authority" should be on the **"letterhead"** of the Firm / Bidder and should be signed by a person competent and having the 'Power of Attorney' to bind the Bidder. Not more than 'two [02] persons per Bidder' are permitted to attend "Techno-commercial / Un-priced" & "Price Bid" Openings. Bidders authorized representative is required to carry a copy of this authority letter while attending the un-priced and priced bid opening, the same shall be submitted to CUGL.

F-6
"NO DEVIATION" CONFIRMATION

To,

Central UP Gas Limited,
7th floor, UPSIDC complex
A-1/4, Lakhanpur
Kanpur-208024
India

SUB:

TENDER NO:

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:

F-7

**DECLARATION REGARDING HOLIDAY/BANNING AND LIQUIDATION,
COURT RECEIVERSHIP**

To,

Central UP Gas Limited,
7th floor, UPSIDC complex
A-1/4, Lakhampur
Kanpur-208024
India

Dear Sir,

We hereby confirm that we are not on 'Holiday' by CUGL or banned by Government department/ Public Sector on due date of submission of bid.

We also confirm that we are not under any liquidation, court receivership or similar proceedings or 'bankruptcy'.

In case it comes to the notice of CUGL that the bidder has given wrong declaration in this regard, the same shall be dealt as 'fraudulent practices' and action shall be initiated as per provision of tender document.

Further, we also confirm that in case there is any change in status of the declaration prior to award of contract, the same will be promptly informed to CUGL by us.

Place:

[Signature of Authorized Signatory of Bidder] Date:

Name:

Designation:

Seal:

F-8
CERTIFICATE FOR NON-INVOLVMENT OF GOVT. OF INDIA

To,

Central UP Gas Limited,
7th floor, UPSIDC complex
A-1/4, Lakhanpur
Kanpur-208024
India

SUB:

TENDER NO:

Dear Sir,

If we become a successful Bidder and pursuant to the provisions of the Bidding Documents, award is given to us for the tender for “
_____”, the following

Certificate shall be automatically enforceable:

"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 thereunder. 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:

F-9
PROFORMA OF "BANK GUARANTEE" FOR "CONTRACT PERFORMANCE
SECURITY / SECURITY DEPOSIT"
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

To,
Central UP Gas Limited,
7th floor, UPSIDC complex
A-1/4, Lakhanpur
Kanpur-208024
India
PERFORMANCE GUARANTEE No.

Dear Sir(s),

M/s. _____
having registered office at _____ (herein after called the “contractor”
which expression shall wherever the context so require include its successors and assignees)
have _____ been _____ awarded _____ the _____ work _____ of
_____ vide LOA /FOA No.
_____ dated _____ for Central U.P. Gas Limited, Kanpur

The Contract conditions provide that the 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,
undertaking full responsibility to indemnify CUGL, in case of default.

The said _____ 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 or in payment of any
money payable to Central U.P. Gas Limited we shall on first demand pay without
demur, contest, protest and/ or without any recourse to the contractor to you in such
manner as you 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 contract with the said
_____ and to enforce or to forbear from
endorsing any powers or rights or by reason of time being given to the said
_____ 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 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 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 our 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 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 Warranty/Guarantee period) _____. The bank undertakes not to revoke this guarantee during its currency without your previous consent and further agrees that the guarantee. However, if for any reason, the contractor is unable to complete the work within the period stipulated in the contract and in case of extension of the date of completion resulting extension of defect liability period of the contractor fails to perform the work fully, the bank hereby agrees to further extend this guarantee at the instance of the contractor till such time as may be determined by the owner. 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. The Bank Guarantee's payment of an amount is payable on demand and in any case within 2 working days of the presentation of the letter of invocation of Bank Guarantee. Any dispute arising out of or in relation to the said Bank Guarantee shall be subject to the jurisdiction of KANPUR Courts.
7. Therefore, we hereby affirm that we are guarantors and responsible to you on behalf of the 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 Contractor to be in default under the 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.
8. 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

INSTRUCTIONS FOR FURNISHING
"CONTRACT PERFORMANCE SECURITY / SECURITY DEPOSIT" BY "BANK
GUARANTEE"

1. The Bank Guarantee by successful Bidder(s) will be given on non-judicial stamp paper as per 'stamp duty' applicable. The non-judicial stamp paper should be in name of the issuing bank. In case of foreign bank, the said Bank Guarantee to be issued by its correspondent bank in India on requisite non-judicial stamp paper and place of Bid to be considered as Delhi.
2. The Bank Guarantee by Bidders will be given from bank as specified in Tender.
3. A letter from the issuing bank of the requisite Bank Guarantee confirming that said Bank Guarantee and all future communication relating to the Bank Guarantee shall be forwarded to Employer.
4. If a Bank Guarantee is issued by a commercial bank, then a letter to Employer and copy to Consultant (if applicable) confirming its net worth is more than Rs. 100,00,00,000.00 [Rupees One Hundred Crores] or its equivalent in foreign currency alongwith documentary evidence.

F-10
AGREED TERMS & CONDITIONS

To,

Central UP Gas Limited,
7th floor, UPSIDC complex
A-1/4, Lakhanpur
Kanpur-208024
India

SUB:

TENDER NO:

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 Service Tax & Edu. Cess thereon	SEC----- Total %
5.	i) Confirm acceptance of relevant Terms of Payment specified in the Bid Document. 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 will be furnished as per Bid Document.	
7.	Confirm that Contract Performance Bank Guarantee shall be from any Indian scheduled bank or a branch of an International bank situated in India and registered with Reserve bank of India as scheduled foreign bank. However, in case of bank guarantees from banks other than the Nationalised Indian banks, the bank must be a commercial bank having net worth in excess of Rs 100 crores and a declaration to this effect shall be made by such commercial bank either in the Bank Guarantee itself or separately on its letterhead.	
8.	Confirm compliance to Completion Schedule as specified in Bid document. Confirm contract period shall be reckoned from the date of Fax of Acceptance.	
9.	Confirm acceptance of Price Reduction Schedule for delay in completion schedule specified in Bid document.	
10.	a) Confirm acceptance of all terms and conditions of Bid Document (all sections). b) Confirm that printed terms and conditions of bidder are not applicable.	
11.	Confirm your offer is valid for 4 months from Final/Extended due date of opening of Techno-commercial Bids.	
12.	Please furnish EMD/Bid Security details : a) EMD/ Bid Security No. & date	

Sl.	DESCRIPTION	BIDDER'S CONFIRMATION
	b) Value c) Validity	
13.	Confirm acceptance to all provisions of ITB	
14.	Confirm that Annual Reports for the last three financial years are furnished alongwith the Un-priced Bid.	
15.	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.	
16.	Confirm the none of Directors of bidder is a relative of any Director of Owner or the bidder is a firm in which any Director of Owner/ CUGL or his relative is a partner.	
17.	All correspondence must be in ENGLISH language only.	
18	Owner reserves the right to make any change in the terms & conditions of the TENDER/BIDDING DOCUMENT and to reject any or all bids.	
19	Confirm that all Bank charges associated with Bidder's Bank shall be borne by Bidder.	

Place:

Date:

[Signature of Authorized Signatory of Bidder]

Name:

Designation:

Seal:

F-11
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 CUGL issued the tender, by filling up the Format)

To,

Central UP Gas Limited,
7th floor, UPSIDC complex
A-1/4, Lakhanpur
Kanpur-208024
India

SUB:

TENDER NO:

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	:

F-12
UNDERTAKING ON LETTERHEAD

To,

Central UP Gas Limited,
7th floor, UPSIDC complex
A-1/4, Lakhampur
Kanpur-208024
India

SUB:

TENDER NO:

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”.

Place:

Date:

[Signature of Authorized Signatory of Bidder]

Name:

Designation:

Seal:

F-13
BIDDER'S EXPERIENCE

To,

Central UP Gas Limited,
7th floor, UPSIDC complex
A-1/4, Lakhanpur
Kanpur-208024
India

SUB:

TENDER NO:

Sl. No	Description of the Services	LOA /WO No. and date	Full Address & phone nos. of Client. <i>Name, designation and address of Engineer/ Officer-in-Charge (for cases other than purchase)</i>	Postal & phone nos. of Client. <i>Name, designation and address of Engineer/ Officer-in-Charge (for cases other than purchase)</i>	Value of Contract/Order (Specify Currency Amount)	Date of Commencement of Services	Scheduled Completion Time (Months)	Date of Actual Completion	Reasons for delay in execution, if any
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)	(10)	

Place:

Date:

[Signature of Authorized Signatory of Bidder]

Name:

Designation:

Seal:

F-14
CHECK LIST

Bidders are requested to duly fill in the checklist. This checklist gives only certain important items to facilitate the bidder to make sure that the necessary data/information as called for in the bid document has been submitted by them along with their offer. This, however, does not relieve the bidder of his responsibilities to make sure that his offer is otherwise complete in all respects.

Please ensure compliance and tick (√) against following points:

S. No.	DESCRIPTION	CHECK BOX	REFERENCE PAGE NO. OF THE BID SUBMITTED
1.0	on each sheet of offer, original bidding document including SCC, ITB, GCC ,SOR drawings, addendum (if any)		
2.0	Confirm that the following details have been submitted in the Un-priced part of the bid		
i	Covering Letter, Letter of Submission		
ii	Bid Security		
iii	Signed and stamped original copy of bidding document along with drawings and addendum (if any)		
iv	Power of Attorney in the name of person signing the bid.		
v	Copies of documents defining constitution or legal status, place of registration and principal place of business of the company		
vi	Bidders declaration that regarding, Holiday/ Banning, liquidation court receivership or		

	similar proceedings		
vii	Details and documentary proof required against qualification criteria along with complete documents establishing ownership of equipment as per SCC are enclosed		
viii	Confirm submission of document alongwith techno-commercial bid as per bid requirement.		
3.0	Confirm that all forms duly filled in are enclosed with the bid duly signed by authorised person(s)		
4.0	Confirm that the price part as per Price Schedule format submitted with Bidding Document.		
7.0	Confirm that annual reports for last three financial years & duly filled in Form 16 are enclosed in the offer for financial assessment (where financial criteria of BEC is applicable).		

Place:

Date:

[Signature of Authorized Signatory of Bidder]

Name:

Designation:

Seal:

(TO BE INCLUDED ONLY WHERE FINANCIAL CRITERIA OF BEC IS APPLICABLE)

F-15

**FORMAT FOR CERTIFICATE FROM BANK
IF BIDDER'S WORKING CAPITAL IS INADEQUATE**

(To be provided on Bank's letter head)

Date:

To,

Central UP Gas Limited,
7th floor, UPSIDC complex
A-1/4, Lakhanpur
Kanpur-208024
India

Dear Sir,

This is to certify that M/s (name of the bidder with address) (hereinafter referred to as Customer) is an existing customer of our Bank.

The Customer has informed that they wish to bid for CUGL's RFQ/Tender no. dated for (Name of the supply/work/services/consultancy) and as per the terms of the said RFQ/Tender they have to furnish a certificate from their Bank confirming the availability of line of credit.

Accordingly M/s (name of the Bank with address) confirms availability of line of credit to M/s (name of the bidder) for at least an amount of Rs. _____

It is also confirmed that the net worth of the Bank is more than Rs. 100 Crores (or Equivalent USD) and the undersigned is authorized to issue this certificate.

Yours truly,

for (Name & address of Bank)

(Authorized signatory)

Name of the signatory :

Designation :

Stamp

F-16
FORMAT FOR FINANCIAL CAPABILITY OF THE BIDDER

A. ANNUAL TURNOVER OF LAST 3 YEARS:

Year	Amount (Currency)
Year 1:	
Year 2:	
Year 3:	

B. FINANCIAL DATA FOR LAST AUDITED FINANCIAL YEAR :

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

Place: [Signature of Authorized Signatory]
Name:
Date: Designation:
Seal:

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”

F-17

BIDDER'S QUERIES FOR PRE BID MEETING

To,
Central UP Gas Limited,
7th floor, UPSIDC complex
A-1/4, Lakhanpur
Kanpur-208024
India

Sub :
Tender No :

SL. NO.	REFERENCE OF BIDDING DOCUMENT				BIDDER'S QUERY	CUGL'S REPLY
	SEC. NO.	Page No.	Clause No.	Subject		

NOTE: The Pre-Bid Queries may be sent by fax and also by e-mail before due date for receipt of Bidder's queries.

SIGNATURE OF BIDDER: _____

NAME OF BIDDER : _____

Date

CA CERTIFICATE FORMAT FOR MSE

TO WHOMSOEVER IT MAY CONCERN

This is to Certify that M/s ----- (Company Name) having its registered office at ----- (Address) is registered under MSMED Act 2006 . Entrepreneur Memorandum No. (Part-II) ----- dated ----- Category: - -----(Whether Micro or Small).

Further verified from the Books of Accounts that the investment of the company as per last Audited Balance Sheet is as follows:

Investment in Plant and Machinery Rs. ----- (Lakhs)

The above Investment of Rs. ----- Lacs is within permissible limit of Rs. ----- Lacs for ----- (Micro or Small) Category under MSMED Act, 2006. Also, M/s ----- (Company Name) have not exceeded the monetary limit criteria mentioned in the NSIC Certificate.

The above format shall be printed on CA's letter head, filled, signed and stamped by a practicing Chartered Accountant (not being an employee or a Director or not having any interest in the bidder's company/firm) where audited accounts are not mandatory as per law. The certificate should not older than 03 months from the bid due date.

TECHNICAL SPECIFICATIONS /SCOPE OF SUPPLY

SECTION-VII

INTRODUCTION

CUGL was incorporated to supply Natural gas to Domestic, Automobile, Commercial and Industrial consumers in the city of Kanpur, Bareilly, Unnao & Jhansi in UP.

CUGL is now inviting tenders on Competitive Bidding basis for procurement of 'CNG STATIONARY & MOBILE CASCADES' of 4500 WL capacity for storage & installation in LCV's to be hired / supplied by CUGL for the purpose to be used in Online / Daughter Booster CNG Station / industries.

The present document covers the technical specifications for this tender.

SCOPE

The intent of this tender is to outline minimum requirement for Design, Engineering, Manufacturing, Assembly, Inspection, Testing at works, Supply, transportation up to CUGL store/site at Kanpur/Bareilly/Unnao/Jhansi & nearby Ares.

Loading, unloading, transportation along with transit insurance to CUGL store/site are in the bidder's scope.

This tender covers the supply of Storage Cascades for CUGL.

S. No.	Storage Sizing	Type	Quantity
	(Water Ltrs capacity) at 15°C		Nos.
1.	4500 (60 Nos. x 75 WL)	Stationary	24
2.	4500 (60 Nos. x 75 WL)	Mobile	20

The Compressed Natural gas shall be filled in Mobile cascade and shall be transported to the other locations for dispensing.

The Compressed Natural gas shall be filled in Stationary cascade and shall be Stored at CNG Dispensing Stations.

AMBIENT CONDITIONS

The climatic conditions to be considered for selection, design and derating of equipment shall be as indicated below:

Design Amb tem min/max⁰C : 4.7⁰C/52⁰C
Design relative humidity : 94%
Design Temp : 60⁰C

The equipment offered shall be suitable for smooth, efficient and trouble free service in the tropical climate prevailing at site as indicated above.

The equipment shall be designed to give efficient and reliable performance under industrial conditions and shall be rendered proof against rats, lizards and other vermin.

INSTRUCTIONS TO VENDORS

This specification describes the technical specification of the equipment to be supplied and/or installed for CNG stations and for transportation of CNG.

Various parts of the specification shall be read in conjunction with each other. In cases where requirements given in different parts differ, the most stringent shall govern.

The specification indicates the scope and requirements completely and clearly as to be extent possible. Any additional work/equipment or technical requirement not mentioned in the specification but required to make the offered system complete in accordance with the specification or required for safe operation shall be deemed to be included in the offer.

The drawings and reference information mentioned elsewhere in this specification shall be considered as part of this document. Anything specified in this specification but not clearly shown in the drawings, or vice versa shall be treated as indicated in both specification and drawings.

Vendor may contact CUGL India and obtain clarifications required, if any, at any stage, before submission of offer/after placement of the order.

The Vendors are advised to visit the sites before submission of their offers, to ascertain for themselves type, nature and extent of work involved and actual site condition. Failure to do so shall not absolve the Vendor of their responsibilities regarding supply, installation, testing, commissioning etc. under their scope of work. Further more, no plea of the Vendor based on unfavorable site conditions and/or non-availability/lack of information shall be considered.

The Vendor shall confirm clause by clause acceptance of technical specification. Comments and/or deviation if any, of the Vendor on Owner Consultant's NIT document (including technical specification) shall be given clause wise. Clauses, on which no specific comment or deviation will be indicated in the offer, shall be treated as accepted by the Vendor.

It will be the responsibility of the Vendor to comply fully with relevant National/International standards, Indian Explosives Act, Regulations of Insurance association of India and Factories Act, while supplying materials and/or carrying out work as per this specification.

Vendors responsibility shall also include to prepare and submit all necessary drawings, calculations, test certificates etc. as required by concerned inspectorate.

The Vendor, free of cost and without affecting agreed milestones, shall carry out modifications suggested by the statutory bodies.

The Vendor shall be deemed to have inspected the site area and access and ascertained all conditions affecting the contract. The Vendor shall be deemed to be fully conversant with the complete requirements of the work.

Civil engineering work i.e. foundation, trenches etc. shall be arranged by Owner. The Vendor shall submit foundation and other drawings indicating requirement of work to be carried out by Owner. In case the requisite information regarding requirement of slots, holes, pipe and other fixing inserts etc. as required for proper installation of equipment is not indicated by the Vendor within two weeks from placement of order, such facilities shall have to be arranged/provided by the Vendor at their own cost.

The Vendor shall not vary the scope of work as detailed in the approved drawings and specification, without written permission of the Owner. The work shall be done as per approved prints of the drawings only.

The Vendor shall complete and fulfill all formalities with the statutory authorities having jurisdiction in the area. Vendor shall also arrange for inspection and approval of installation.

The Vendor shall attend progress meetings and all other meetings called by the Owner. The Vendor's representative shall have the authority to make all decisions related to the Contract.

The Progress report shall be submitted by Vendor in duplicate. The reports shall clearly define all major activities completed during the previous period and identify manning levels, programs etc. The report format shall be provided by/finalized after discussion with the consultant for adherence by the Vendor
The Vendor shall correct all project original drawings with "As Built" information and shall on completion of erection of the equipment submit originals of all finalized drawings to the Owner.

All expenses for all the above activities shall be done and borne by the vendor. The responsibility of Owner shall be limited to the extent of reimbursement of inspection fee charged by any statutory authority.

All pages of the offer shall be numbered and contents with pages numbers shall be given at the beginning. All pages of the offer shall be submitted in bound volume.

GAS COMPOSITION

Component	% mole
Methane	90.5-92.5
Ethane	4.0-5.6
Propane	0.3-0.8
Nitrogen	0.1-0.2
Carbondioxide	3.5-4.2
C6+	0.01-0.21

Total	100
-------	-----

2.2 Gas Storage Pressure

Fill Pressure: - 250 bar (g)

Gas Delivery Temperature Maximum 55°C Dependant on ambient temperature

2.3 CNG Specification

The CNG specification shall meet the ISO 15403:2000 (E) natural gas quality designation for use as a compressed fuel for vehicles.

The proposed specification of the CNG is as follows:

Gas Temperature : 0 Degree Celsius to +55 Degree Celsius

Pressure dew-point : - 25 Degree Celsius

Particulate matter : Less than 5 microns

Odorant (Mercaptan) : 2 to 7 mg/SCM

CODES AND STANDARDS TO BE FOLLOWED (versions, revisions valid on the date of order)

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 or International standards, Gas Cylinder Rule 1981, Indian Explosives Act- 1884, Stationary and Mobile Pressure Vessels (Unfired) Rules (SMPV) 1981, CNG Cylinder Design Code, IS:7285,2004(part-2), CNG Cylinder Valves, IS:3224 1979 (Amendments 1983,84,85,86,89,92,98), 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:

- i) NFPA 52 Standards for CNG vehicular fuel systems and CNG cylinder code “IS:7285-2004(PART-2) as per latest amendments.
- ii) OISD 179 Safety requirements for compression, storage, handling and refueling of CNG for use in automotive sector.
- iii) GAS CYLINDER RULE 2004 Standards for CNG Storage and Gas Cylinder Rules as per latest amendments.
- iv) STATIC AND MOBILE PRESSURE VESSELS (UNFIRED) RULES (SMPV) (Latest Edition)
- v) CNG CYLINDER DESIGN CODE IS: 7285 2004 (Part-2) (Latest Edition)
- vi) CNG CYLINDER VALVES, IS: 3224 (Latest Edition)
- vii) HYDROSTATIC STRETCH TEST IS: 5844 (Latest Edition)
- viii) SAFETY DEVICES OF GAS CYLINDERS IS: 5903 (Latest Edition)-Regulations of Insurance Association
- ix) INDIAN EXPLOSIVES ACT
- x) ANSI, ASTM, NEC, NEMA, ASNZ

All the applicable statutory codes, national laws and local regulations for safety and environment protection shall be followed by the vendor for shall be followed by the vendor for design, engineering, fabrication etc. The vendor shall obtain from concerned authorities all necessary approvals.

EXTENT OF SUPPLY AND SERVICES

SUPPLY

Supply of CNG storage cascades of water liter capacity specified in SOR $\pm 10\%$ AT 15 °C with following minimum details:

- Each cylinder equipped with cylinder shut- off valve and fusible burst disc.
- Galvanized iron cascade frame / MS Frame to be shot blasted applied with Epoxy base Zinc Phosphate Primer 2 coat and two coat of PU Finish paint. Thickness of each coat shall be minimum 35µm DFT. Total coating thickness will be minimum 140µm.
- Interconnecting tubing/ piping, fitting, valves.
- Non return valves (NRVs) as required for three-bank operation.
- Pressure gauge on each bank.

- **Supply of anchor bolts and nuts.**

Any other item required for completing the cascade assembly.

SERVICE

The services to be rendered by vendor shall include but not limited to the following:

- **Preparation and submission of documents/drawings as per schedule.**
- **Obtaining approvals from concerned departments/agencies/authorities.**
- **Procurement of raw materials, bought out components, fabrication, shop assembly.**
- **Shop inspection and testing including third party inspection and statutory approvals.**

Packing, crating, dispatch of cascades, transportation, unloading at CUGL store / site.

TECHNICAL SPECIFICATIONS

The following specification is to give the vendor the technical and operating conditions the cascades must fulfill. Features other than those indicated herein but which call for a better design, increase in efficiency, enhance reliability, optimization may be accepted subjected to CUGL's approval. The Vendor may submit their bid for any alternative design as optional item which may be indicated separately describing all advantages. The cascade shall be shipped in completely assembled conditions. Gas supply line and delivery connection shall be made at site. The Vendor shall bid in their main offer, items according to the technical specifications outlined below.

8.1 Stationary & Mobile CASCADE

Cascade shall be a group of cylinders of capacity required to meet the specified total water capacity, dimensional and weight limitations. The cascades shall also be provided with structural frame having facility of lifting and placement.

Cascade Storage capacity

The water storage capacity of each cascade shall be 4500 (-0%+5%) water liters at 15 degree C for Stationary & Mobile Cascades with 60 Nos of Cylinders in each cascades and 75 WL capacity.

Cascade Storage dimension and configuration

For 4500 WL Capacity (Stationary & Mobile) with Horizontal Configuration (75 WL x 60 Cylinder)

- The overall dimensions, (cylinders are kept horizontal), shall not exceed Length-5500 mm, Width-2000 mm. and Height-1800 mm.
- The Water liter capacity of any individual cylinder in-group of cylinders forming cascades shall not exceed 250 liters at 15 degree C.
- The design of cylinder shall be as per IS 7285 -1988 (or Latest Amendment) and approved by chief Controller of Explosives (CCOE), Government of India for use in India for use in India for specified conditions.
- Working Pressure of cascade cylinder shall be Maximum 255 bar (260 kg·f/cm²) at 15 °C.
- Cylinder material shall be seamless alloy steel (Cr-Mo) as per design approval by chief Controller of Explosives (CCOE), Government of India.
- Cylinder neck threading shall be as per IS 3224-1979 (latest amendment) or as per design approved by Chief Controller of Explosive (CCOE) Government of India.

- The cylinder shut-off valve shall be with fusible burst disc confirming to requirements of IS: 3224 or as per design approved by Chief Controller of Explosives (CCoE), Government of India.
- The burst disc shall rupture on excess pressure as well as excess temperature either individually or combined. The burst disc discharge shall be manifolded to a common header for safe venting. Vendor shall indicate burst pressure and temperature.
- The cylinder shut-off valve orifice shall be designed for high flow to permit the combined flow of 100 kg/min from each bank at pressure of 255 bar g. Vendor to furnish necessary calculations indicating overall pressure drop for each bank, Coefficient of flow (Cv) Values, Valve orifice size etc.
- Number of cylinders in the cascade shall be divided into three independent banks of low, medium and high pressure of different storage pressures. Vendor shall optimize the number of cylinders in each bank for maximizing the recovery from the cascade storage and submit the calculations along with the bid. Vendor may assume the residual cylinder pressure of the vehicle coming for refill at 50 bar g and 28-bar g in case of booster compressor at daughter station.
- The interconnecting tube work of cylinders manifold in configuration suitable for priority filling and sequential dispensing system by the electronic CNG dispensers at the Retail Outlets as indicated in Schedule of Rates.
- Full bore ball valves for isolation shall be provided at inlet of each fill line and at each bank outlet line.
- The interconnecting tube work shall be minimum of ¾" OD tubing. The sizing of connecting tubing between each outlet and its associated cylinders shall be such that where they join the total incoming flow areas shall not be less than outgoing area. The loops in tube work shall be provided for absorbing contraction, expansion and vibration piping/ tubing shall be suitably clamped to the frame structure. Tubing with ¼" for Pressure Gauge Line and 3/8" Copper tube loops for Vent Manifold and their interconnection should be through nut and ferrule fittings
- Cylinders in the cascade shall be horizontally placed. In horizontal configuration, minimum 30 mm cylinder to cylinder gap shall be provided.
- All cylinders in cascade shall be identical (capacity).
- The end connection for unloading/loading of Mobile cascade shall be ½" MNPT with Quick connect coupling with NRV function.
- The end connection for stationary cascade shall be ¾".
- Non return valves (NRVs) as required for three-bank operation.
- All the Stationary shall be supplied with Canopy of MS Sheet with corrosion protective paint. Cascade shall be protected from the effects of the weather by a canopy designed so that the dispersion of free or escaped gas and shall not permit gas to be trapped. The vent pipe shall be taken above canopy at a height of 1000 MM above canopy with proper support.
- All the Mobile Cascades shall be supplied with Canopy of MS Sheet with corrosion protective paint. Cascade shall be protected from the effects of the weather by a canopy designed so that the dispersion of free or escaped gas and shall not permit gas to be trapped. The vent pipe shall be taken above canopy at a height of 300 MM above canopy with proper support.
- All cylinders shall be new and unused. Re-certified cylinders are not acceptable. Before dispatch, using or refilling the cylinder has to be made gas-free, air contained therein shall be purged by N2 gas. For cascades, Cylinders of 75 WL capacity at 15°C shall only be envisaged. All cylinders in a cascade shall be of same capacity.

Cascade frame

The frame shall not allow lateral and rotational movement of cylinders during regular road transport under any circumstances. Vendors shall take into account the rough patches/bumps on roads.

Frame shall be free standing and have facility for lifting by crane and forklift the complete assembled cascade.

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 the transport.

Frame structure of each cascade shall be capable of withstanding 4g impact (four times gravity) from any direction without any distortion. Vendor to test one frame for satisfactory performance, strength and stability. Test results / Calculations and report shall be submitted to CUGL.

All items used in the frame shall be weatherproof.

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

8.3. Piping/Tubing/Fitting/Pressure gauges

Materials used for the piping shall be stainless steel 316 fully annealed seamless confirming to STM A269 with maximum hardness of Rb80 or less and suitable for bending and flaring. OD tolerance shall not exceed 0.005%.

The piping/tubing material shall be of Sandvik/Tubacex/Parker/Swagelok make.

All fittings including valves shall be of SWAGELOK/ / PARKER make only.

Material Shall be SS 316 conforming to ASTM A269. Open ends on fittings and vents shall be provided with caps.

Liquid filled (Glycerin) pressure gauge of diameter 4", (0-400 kg/cm²) make Wika/Warree/General/Baumer with a 3- way/2 way isolating valve on each bank shall be used. Thus each cascade shall have three pressure gauges.

Pressure gauges shall be securely mounted.

All end connections for quick release coupling, pressure gauges, valves and fittings of cascade shall be within tamper proof, wire cage enclosure / Acrylic sheet header box. These shall be on one side of cascade for ease of operation. After opening the doors only, flexible hose quick release coupling connections to the cascade are authorized.

For Mobile Cascade the tubing end connection shall be located at Center of cascade side wise and 300 mm above from bottom of cascade with provision of quick connect coupling of size ½" (Body+Stem) connection for loading/unloading operation, fitted with pressure gauges, valves, fittings, etc. Material of vent tubing shall be Copper 3/8" and their interconnection should be through nut and ferrule fittings..

Liquid filled (Glycerin) pressure gauge of diameter 4", (0-400 kg/cm²) make Wika/Warree/General/Baumer with a 3- way isolating valve or 2-Valve manifold block on each bank shall be used. Thus each cascade shall have three pressure gauges. Pressure gauges shall be securely mounted. One common Temperature gauge of the range 0-100 deg C shall also be provided.

Single SRV for venting of the cascade in case of a runaway pressure is accepted. Each bank (All the three banks) used for the storage of CNG shall be equipped with the suitable isolating valve which shall be readily accessible when installed in the storage bank. The isolating valve shall not be capable of closing off the pressure relieving device.

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

SRV Pressure shall not exceed 20% above MAWP of the system.

Vent of the SRV shall be left outside canopy for direct venting into the atmosphere in case of functioning.

The cascade cylinder shall be purged with N2 and maintained at 1 bar (g) pressure before dispatch.

Painting

Cylinders shall be painted as per Gas Cylinder Rules/IS code as follows:

White color on cylinder body

Signal red on cylinder neck portion

Yellow color on frame

The paint shall be chosen, primed and applied as to have a service life of ten years. The exterior surface is required to corrosion free for ten years and to have fade free life without oxidation of paint surface for five years in an environment of bright sun light with an intense UV CONTENT.

8.5 Specifications of valves

All the valves shall be either of SWAGELOK/ / PARKER make only. of specification mentioned above.

8.6 Specifications of the Tubes

All the tubes shall be either of Parker/Sandvik/Tubacex/Swagelok make of specifications mentioned above.

8.7 Specifications of fittings / Break away Coupling

All fittings shall be either of SWAGELOK/ / PARKER make only of specifications mentioned above.

9. INSPECTION AND TESTING

Vendor shall carryout 4-G static calculation of one complete assemblies cascade with all the cylinders mounted and filled and submit the same for Owner/Consultant's review.

Vendor shall carryout cylinder burst test of one cylinder from the entire batch produced for supply to CUGL in case offered cylinders are of new design. Vendor shall inform the schedule of the test well in advance to enable Owner or their authorized representative to depute technical personnel for witnessing the test.

Vendor shall carry out all standard shop test/QA/QC as per recommendation of manufacturer/ Chief Controller of Explosives. Copies of the testing/inspection carried out shall be furnished to CUGL.

Vendor shall furnish record of storage capacity check of each cylinder in a cascade and the same need to be demonstrated to Owner/Consultant or their authorized representative.

Each assembled storage cascade with all tubing, valves shall be pressure tested to ensure existence of no leakage prior to dispatch.

The vendor shall depute his representative at site for successful demonstration of operability of cascade storage system within specified parameters if required and instructed by the EIC. There shall not be any back flow between any two banks with all valves open. Defects noticed, if any, shall be repaired and test shall be repeated.

10. PROTECTION DURING SHIPPING

The cascade shall be packaged to withstand rough handling during ocean shipment and inland journey. It shall be vendor's responsibility to make good any deterioration and that occurs during shipment. Sling points shall be clearly indicated on crates.

11. WARRANTY

Vendor shall warranty all material and equipment to be free from defects in design, material and workmanship. Vendor shall warranty all cylinders satisfying the requirement of intended use.

Replacement of any defective item/equipment found damaged by Owner or their authorized representative at the time of delivery.

Assume responsibility for obtaining manufacturer's warranty of all bought out items.

Replacement of any part found not performing to the specified requirements for at least 18 months from date of delivery or 12 months from the date of successful commissioning, whichever is earlier.

12.0 STATIONARY & MOBILE CASCADES FOR STORAGE & TRANSPORTING COMPRESSED NATURAL GAS

12.1 Supply of CNG storage cascades of water litre capacity as specified above

Permissible tolerance -0% or + 5% at 15°C with the following minimum details:

12.1.1 All cylinders should be designed, constructed and tested in accordance with the Indian Standard 7285, as amended from time to time, IS : 7285 or B 55045:Part 1 or (US) D.O.T 3AA or similar such other standard code approved by the Chief Controller of Explosives. All standards with latest amendments shall be followed.

12.1.2 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 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 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.

Cylinder wall thickness shall be in accordance with Amendment No. 4 introduced in IS 7285: Part II and also complying to OISD Rules, PESO standard/guidelines.

12.1.3 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.

12.1.4 All cylinders should be new and unused. Re-certified cylinders are not acceptable. Before dispatching, using or refilling the cylinder which has to be made gas-free, air contained there in shall be purged by N2 gas. Cylinder of 75 litre water capacity at 15°C is only envisaged. All cylinders in a cascade shall be of same capacity.

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

Stationary & Mobile Cascade Storage- 4500 WL Capacity at 15°C with 60 Nos of cylinder in each cascades and 75 WL capacity of Cylinders

12.1.6 The storage facilities in which cylinders are in a horizontal position, the storage unit should be limited to a height of 1.8 M, a length of 5.5 M and width of the cascade should be limited to approximately 10% more than the length of cylinder for 4500 WLC Mobile & Stationary cascade . To ensure ready access all cylinder fittings should be arranged to face one direction in each unit.

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

12.1.8 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.

12.1.9 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.

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

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

12.1.12 Full bore 3/4" ball valves for isolation shall be provided at inlet/outlet of each line/ banks.

12.1.13 Pressure gauge of appropriate range suitable for CNG service shall be provided in each bank at the common manifold point with enclosure having transparent panel for visibility of the gages. One common temperature gauge of the range 0-100°C should also be provided.

12.1.14 Inter-Connecting tube work shall be maximum of 3/4" 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. Tubing with 1/4" for Pressure Gauge Line and 3/8" Copper tube loops for Vent Manifold and their interconnection should be through nut and ferrule fittings.

12.1.15 There shall not be any back flow between any two banks with all valves open.

12.1.16 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 and anti-static material. Special precautions should be taken to avoid corrosion at the point of contact.

12.1.17 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.

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

12.1.19 The location of inlet/outlet tube manifold and pressure/temperature gauges shall be at the first width side of the cascades taking anti-clockwise from the side of the common cylinders valves.

2.1.20 The cascade cylinder shall be purged with N₂ and maintain 1 bar (g) pressure before despatch.

12.1.21 Marking 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 affected 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.

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:

- i) Manufacturers, owners and inspectors marking and rotation number;
 - ii) Specifying that the cylinder has been manufactured for "CNG only"
 - iii) A symbol to indicate the nature of heat treatment (such as normalizing, quenching, or tempering) given to the cylinder during manufacture.
 - iv) The date of the 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.
 - v) Working pressure and test pressure;
 - vi) Tare weight
 - vii) Water capacity.
- f. All the markings, except the manufacturers marking, which may be on the base, shall be stamped on the neck end of the cylinder.

12.1.22 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:

- i) The specification of the valves;

- ii) Year and quarter of manufacture;
- iii) Manufacturers symbol;
- iv) Working pressure;
- v) The name or chemical symbol of the gas for which the valve is to be used;
- vi) The type of screw threads on the outlet namely left handed (L.H) or right handed (R.H);
- vii) Inspectors stamp;

12.1.23 Identification Colours

Every cylinder is painted with the appropriate identification colours specified in IS:

4379 for Industrial cylinders.

Colour of the Cylinder shell --- White

Colour of band at neck end of cylinder--- Red (IS Standard Colour No. 537) Colour of the Frame --- Yellow

12.1.24 Labelling of cylinders

- i) Every cylinder shall be labelled 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.
- ii) A warning in the following terms shall be attached to every cascade containing Compressed Natural Gas namely:
 - a. Do not change the colour of the cylinder
 - b. This cylinder should not be filled with any gas other than CNG.
 - c. No flammable material should be stored in the immediate vicinity of this cylinder or in the same place in which it is kept.
 - d. No oil or similar lubricant should be used on the valves or other fittings of this cylinder.

e. 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.

12.1.25 All storage system should be supplied in three banks arrangement:- Low Bank-50% by volume of the total capacity

Medium Bank- 30% by volume of the total capacity

High Bank- 20% by volume of the total capacity

12.2 Pressure Relief Devices

12.2.1 Each bank (All the three banks) used for the storage of CNG should be equipped with a suitable pressure relieving device or Single SRV for venting of the cascade in case of a runaway pressure is also accepted. 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.

12.2.2 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 and suitably extended.

12.3 Safety Relief Devices for Cylinder Storage

12.3.1 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.

12.3.2 Piping and gas storage systems should be protected against overpressure by safety relief devices fitted in each bank. 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.

12.3.3 A combination burst disc/fusible alloy assembly should be incorporated in the cylinder valves. 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 30 MPa.

12.3.4 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.

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

12.3.6 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.

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

12.3.8 The maximum pressure in the storage system should not exceed 255 bar (g)

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

12.4 Corrosion Protection

12.4.1 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.

12.5 Valves

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

- i) In respect of Industrial Gas Cylinder, IS: 3224
- ii) Valves for cylinders shall have outlets provided with left hand screw threads for the pipes or connections.
- iii) The valves shall be attached to the cylinder neck by screwing and not by making any permanent attachment or inserting adapter in between.
- iv) 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.

12.5.2 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.

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

12.6 Rigid Piping

12.6.1 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 maybe 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.

12.6.2 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.

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

12.6.4 The pressure manifolds (Tubes, Fittings & Valves) to be tested at a pressure of 1.1 x Working Pressure of 255 Bar.

12.6.5 Cylinders to be connected in stainless steel tubing 316 (Stainless Steel Tubing Specifications ASTM A269, ultimate tensile 517 MPA, or equivalent) incorporating stress reducing hoops. Only approved manufacturers of high pressure fittings are to be used. All fitting should be of fractional dimension in Inch unit.

12.7 Pressure & Temperature Gauges

12.7.1 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 bank or storage system. The gauge should be dial graduated to read approximately double the operating pressure. Pressure gauge should be equipped with 3-way relief/isolation valve. Similarly one surface contact type / Gas Actuated Temperature gauge should be provided at a suitable location representing the equivalent temperature of the whole cascade.

12.7.2 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 equivalent.

12.8 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. Fittings shall be of SS 316 of approved make. 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 minimized. The Supplier should ensure that personnel assembling the pipe work should be competent in the system employed. Valves & Fittings shall be of SWAGELOK/ / Parker make. make and SS tubing shall be of Sandvik/Tubacex/Parker/Swagelok make. Vendor to ensure that only one make, out of the specified makes of SS Tubes, Valves & fittings shall be used in a cascade and no mixing of makes shall be permitted among cascades.

The valve types for isolation are ¼” turn full 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.

12.9 Cylinder Frame

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

12.9.2 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.

12.9.3 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

12.9.4 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.

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

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

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

12.9.8 Supplier shall submit structural drawing of the frame giving details of the steel design calculation, welding procedure, corrosion protection etc. for approval before commencement of fabrication work.

12.9.9 Cascade Assembly to be protected by a roof MS sheet canopy supported on cylinder frame. Roof sheeting to be precoated galvanized iron or approved equivalent.

12.10 Protection of Valves and accessories

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

12.10.2 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.

12.10.3 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.

12.11 Equipment

12.11.1 Piping, Fittings and meters:

i) All piping, fittings and meters mounted on the Cascade shall be designed to withstand the most severe combined stresses imposed by the following, namely:

a. The maximum design pressure of the vessel

b. The superimposed 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.

12.11.2 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.

12.11.3 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.

13.0 CALIBRATIONS TEST CERTIFICATES AND THIRD PARTY CERTIFICATION

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

13.2 Leak test should be carried for each cylinder or cascades with all tubings, valves and a certificate should be furnished to the Owner.

13.3 All Instrument gauges, Valves, Pressure gauges, safety relief devices, shut off valves tubings and piping etc should be Pressure tested, calibrated and such test, calibration certificates.

13.4 If any of the test certificates is not in order, the Suppliers should replace the affected equipment with valid certificate at Supplier cost.

13.5 Calculation shall be carried out for 4G Static of one complete cascade with all cylinders mounted and filled and the same should be submitted for review of the Owner.

13.6 Burst test of one cylinder from the entire supplies shall be produced and in case 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.

13.7 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.

13.8 Record of storage capacity check of each cylinder in a cascade shall be furnished and same shall be demonstrated.

13.9 Third Party Inspection

All the above quality system implementation, witness and verification of requisite documents shall be independently check, verified and certified by CUGL appointed Third Party Inspection Agencies.

Vendors shall notify CUGL well in advance (minimum 10 days) of such inspections so as to enable CUGL provides clearance for conducting the inspections and may also to depute CUGL official to witness the same.

Pre-dispatch third party inspection shall be arranged by CUGL.

14.0 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.

- i) 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.
- ii) Process and instrument diagram along with Bill of Materials for all major components within the tender.

- iii) General arrangement drawing of the storage system giving overall dimensions and erection shipping weight.
- iv) Technical data sheet of storage system.
- v) 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.
- vi) 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.
- vii) List of spares required in addition to those mentioned above for 2 years normal operation & maintenance per storage system.
- viii) List of commissioning spares per storage system.
- ix) List of special tools & tackles required for installation & maintenance per storage system.
- x) Leaflets, catalogues for all major items.
- xi) Shop test procedure.
- xii) Maintenance schedule of the storage system along with list of Spares for O&M during warranty period.
- xiii) A complete zonal drawings of the Storage Cascade (complete package), all certification for all components used within the hazardous areas should be provided.
- xiv) Reference list of similar / identical storage system supplied in last 5 years of CNG application.
- xv) Deviation sheet (if any). Within one month from date of P.O.
- xvi) General arrangement drawing, schematic of cascade piping, drawing of cascade frame the storage system giving overall dimension and erection / shipping weight.
- xvii) Detailed foundation drawing of the storage system for casting foundation giving load pattern etc.
- xviii) Details of inlet gas termination to the storage system including X, Y, Z coordinates with respect to centre of storage system skid or any reference.
- xix) Detailed time schedule for supply indicating time periods required for cylinder manufacturing, cascade frame fabrication, shop testing, dispatch of material from works and delivery at site.

ALONG WITH SUPPLY:

xx) 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.

xxi) Test certificates of all major components like cylinders, shutoff valves, pressure relief valves tubing / pipe work etc.

xxii) Calibration certificates for all measuring and protection devices.

xxiii) The bidder should get all the cylinders with serial numbers endorsed by office of Chief Controller of Explosives (CCOE), Govt of India.

Material Requisition (MR)

Kanpur City Gas Projects			
S.No.	Description	UOM	Quantity
1	2	3	4
1	Supply of CNG Stationary Cascades including design, engineering, manufacturing, assembly, shop testing, Inspection, commissioning spares, packaging and forwarding, insurance and delivery to site, unloading at site/store (75x60=4500WL horizontal configuration) as per OISD 179, IS : 7285 - (Part2):2004 , Gas cylinder Rules, PNGRB T4S & CUGL Technical specifications	Nos.	24
2	Supply of CNG Mobile Cascades including design, engineering, manufacturing, assembly, shop testing, Inspection, commissioning spares, packaging and forwarding, insurance and delivery to site/store, unloading at site	Nos.	20

(75x60=4500WL horizontal configuration) as per OISD 179, IS : 7285 - (Part2):2004, Gas cylinder Rules, PNGRB T4S & CUGL Technical specifications.		
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Note: Third Party agency for Pre- Dispatch inspection shall be appointed by CUGL.

Technical Data Sheet for Stationary & Mobile Cascade

Sr. No.	Parameter/Description	Specification	Vendor's Specs (All specifications to be given by Vendor)
1	Type of Service	CNG - for storage / transportation of Compressed Natural Gas (CNG) by LCV for industries & CNG Station	
2	Capacity (in water liter)	4500 liters CNG Stationary & Mobile Cascade (in horizontal configuration of 75 liters x 60 cylinders)	
3	No. of banks	3	
4	Cascade Dimensions	OISD-179 (clause no. 3.5) /Gas Cylinder Rules 2004/SMPV Rules 1981 with latest amendments	
a	Length (in horizontal configuration)	Not exceeding 5.5 M	
b	Width (in horizontal configuration)	Not exceeding 2.0 M	
c	Height (in horizontal configuration)	Not exceeding 1.8 M	
5	Cascade frame structure should be able to withstand 4G (four time of gravity) test from any direction without any distortion	Yes, Calculation sheet to be provided along with the bid	
6	Nos. of cylinder in each bank	Vendor to specify for maximizing the recovery from cascade storage and submit the calculation along with the bid	

A	High bank	Vendor to specify	
B	Medium Bank	Vendor to specify	
C	Low Bank	Vendor to specify	
7	Cylinder		
A	Cylinder Make	Vendor to specify	
B	Compliance Code	IS 7285 - (Part2):2004 (latest Amendment)	
C	Cylinder size at 15°C (in water liter)	75 WL	
	Cylinder Outside Dia (mm)	Vendor to specify	
	Cylinder Length (mm)	Vendor to specify	
	Thickness (mm)	Vendor to specify	
D	Cylinder operating conditions	250 bar g at 15°C	
E	Cylinder testing parameters	Vendor to specify	
F	Cylinder Material	Seamless alloy steel (Cr - Mo)	
G	CCoE Approval	Yes, Must provide	
H	Gas quantity stored in the cylinder at 15°C	Vendor to specify	
8	Cylinder shutt off valve	Each cylinder shall be equipped with shut off valve. The shut off valve shall be with fusible burst disc conforming to requirements of IS:3224 and BIS certificate received from valve manufacturer or as per design approved by CCOE.	
A	Make	Vendor to specify	
B	Compliance code	IS 3224:2002	
9	Combination Bursting Disc and fusible plus	The burst disc shall rupture on excess pressure as well as excess temperature either individually or combined. Vendor shalll indicate burst pressure and temperature.	
A	Burst Pressure (in bar g)	Vendor to specify	
B	Fuse Melting Temperature (in oC)	Vendor to specify	
10	Interconnecting Tube Size	Minimum 3/4" OD	
11	Pressure drop at each bank	Vendor to specify	
A	Low Bank	Vendor to specify	

B	Medium Bank	Vendor to specify	
C	High bank	Vendor to specify	
12	Coefficient of Flow (Cv)	Vendor to specify	
13	Cascade tare Weight	Should not exceed 8.8 Tons	
14	Gas capacity at 15°C & 250 bar (Kg)	Vendor to specify	
15	Pressure Tubing	SS 316/316L of Sandvik/Tubacex/Swagelok/Parker make	
16	Fittings	SWAGELOK/ / PARKER make.	
17	Vent Manifolding	Copper 3/8" tube and their interconnection should be through nut and ferrule fittings	
18	Pressure Gauge/Isolation Valve	Each bank should be equipped with glycerin filled pressure gauge along with bank isolation and gauge isolation valve. Isolation valve should be of SS 316 material and of SWAGELOK/ / PARKER make.	
19	Frame	The cascade should be suitable for mounting on any Light Commercial Vehicle. Provisions to be made for lifting the cascade either by fork lift or by crane. Suitable guards should be provided to protect the cylinders, valves and fittings. It should be built to withstand 4G forces in any direction.	

The following are required to be submitted at the time of bid:

- 1 4G test calculations
- 2 Cylinder sequencing calculations
- 3 Gas flow calculation

SOR
(SCHEDULE OF
RATES)
SECTION-VIII