



INDRAPRASTHA GAS

## INDRAPRASTHA GAS LIMITED

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TENDER NO: IGL/ET2/CP/CC18541

## SUPPLY, INSTALLATION, COMMISSIONING AND CAMC OF 02 NOS. IN-LINE TURBOEXPANDER FOR CLEAN ELECTRICITY POWER GENERATION

## REPLY TO PRE-BID QUERIES

Sl. No.	Volume/ Section/ Clause No.	Page No.	Clause No.	Clause	Bidder's Query	IGL Reply
1	Scope of Work (SOW) of Tender Document	67 of 103	1.8	Turbo Expander systems are to be deployed at city gate stations/CNG station/any other location provided by IGL. Uninterrupted operations, minimal maintenance and safety is the essence of the project.	It is requested that permission be accorded to visit the site where the installation of Turbo Expander is proposed. Accordingly, Site name and contact may kindly be shared.	The bidder may visit the proposed location, i.e., IGL CNG Station, Sector-28, Rohini, New Delhi. For any query or permission related to the site visit, the bidder may contact Mr. Deepak Singh Rana (Mob: 09958598912)
2	Scope of Work (SOW) of Tender Document	67 of 103	1.2	The scope of supply shall include In-line turbo expander, its auxiliaries such as variable speed drive (VSD) panel VSD panel cooling system, grid synchronizing panel, step up transformers as required, magnetic bearing monitoring panel, its UPS with two day battery backup, approved connectors for power output from In-line turbo expander, special purpose cables (as required) of approx. 40-45 meters length between In-line turbo expander and VSD panel along with other project materials including power cables from VSD to utility panel, signal cables, seismic protection sensor, gas detectors, flame detectors, fire control panel, PLC, local SCADA, filtration skid (As required), CS Pipeline, fittings and flanges, minimum three emergency shut downs switches etc.	Reference our query above, purchaser is requested to provide site layout with distances/dimensions for sizing of the cables and auxiliaries.	For sizing of cables and associated auxiliaries, the bidder may visit the site or refer to the tender documents
3	Scope of Work (SOW) of Tender Document	67 of 103	1.2	The scope of supply shall include In-line turbo expander, its auxiliaries such as variable speed drive (VSD) panel VSD panel cooling system, grid synchronizing panel, step up transformers as required, magnetic bearing monitoring panel, its UPS with two day battery backup, approved connectors for power output from In-line turbo expander, special purpose cables (as required) of approx. 40-45 meters length between In-line turbo expander and VSD panel along with other project materials including power cables from VSD to utility panel, signal cables, seismic protection sensor, gas detectors, flame detectors, fire control panel, PLC, local SCADA, filtration skid (As required), CS Pipeline, fittings and flanges, minimum three emergency shut downs switches etc.	Equipment and guidelines towards synchronization shall be provided. The actual synchronization and feed into the grid shall be done under supervision by Discomm. Purchaser is requested to confirm their support toward necessary documentation, application seeking permission and synchronization support from Discomms/DERC/PESO/other statutory bodies.	In line with tender document PESO , DERC and any other statutory approvals for the turboexpander equipment shall be in the bidder's scope. However any supporting documents (if required) shall be provided by IGL.
4	Scope of Work (SOW) of Tender Document	67 of 103	1.2	The scope of supply shall include In-line turbo expander, its auxiliaries such as variable speed drive (VSD) panel VSD panel cooling system, grid synchronizing panel, step up transformers as required, magnetic bearing monitoring panel, its UPS with two day battery backup, approved connectors for power output from In-line turbo expander, special purpose cables (as required) of approx. 40-45 meters length between In-line turbo expander and VSD panel along with other project materials including power cables from VSD to utility panel, signal cables, seismic protection sensor, gas detectors, flame detectors, fire control panel, PLC, local SCADA, filtration skid (As required), CS Pipeline, fittings and flanges, minimum three emergency shut downs switches etc.	We understand bidder has to supply and install the Turboexpander at the nominated site. However, modification of pipeline and coordination with GAIL (as required) to accommodate the turboexpander in the existing infrastructure shall be in purchase scope.	IGL has already provided the pipeline provision at CGS/IGL Station, Sector-28, Rohini, New Delhi. Inline with tender documents, any piping modifications required for installation of the turboexpander shall be in the bidder's scope.

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5	Special Conditions of Contract (SCC) of Tender Document	59 of 103	14.1	<p>14.1 Payment towards supply, installation and commissioning (Inline Turboexpander- ITE)</p> <p>Payment shall be released within 45 days from date of receipt of invoice along with supporting documents as follows:</p> <p>i. 25% payment shall be released after receipt of materials at site on submission of dispatch documents, manufacturer's certificates, invoice, packing list, guarantee/warranty certificate, inspection release note &amp; dispatch clearance issued by the Owner.</p> <p>ii. 25% payment shall be released after successful commissioning of ITE, synchronization with the grid and net metering billing for first month as per guaranteed parameters.</p> <p>iii. Rest 50% Payment will be released in equal quarterly installments over a span of 1 year (4 equal installments) based on the actual energy generation performance of the system as per below formula:</p> $\begin{aligned} \text{% payment to be released} &= \frac{50\%}{4} & \text{if} & \frac{\text{Actual capacity}}{\text{Installed capacity}} & \geq 0.98 \\ &= \frac{\text{Actual capacity} * 50\%}{\text{Installed capacity} * 4} & \text{if} & 0.5 \leq \frac{\text{Actual capacity}}{\text{Installed capacity}} & < 0.98 \\ &= 0 & \text{if} & \frac{\text{Actual capacity}}{\text{Installed capacity}} & < 0.5 \end{aligned}$ <p>In case energy generation performance is affected due to reasons attributable to IGL (site conditions), then that period will not be considered for payment deduction.</p> <p>If the vendor wants additional payment after 02 quarterly instalments and successful operation, IGL may release the balance payment against submission of equivalent amount of additional bank guarantee.</p>	<p>Turboexpander qualifies as capital equipment.</p> <p>In order to effect the supply and install the same at site, the cost of the equipment, freight from US to site, Custom duty etc will have to be paid by us.</p> <p>The Offered model of Turbo expander has a PTR of successful operational hours which may be verified during POC. Since both PTR and POC are part of the tender requirement and the equipment cleared for dispatch/supply post verification of both, it is requested that payment terms for bidders qualifying both PTR and POC be permitted as below:</p> <p>i. 90% payment shall be released within 15 days after receipt of materials at site on submission of dispatch documents, manufacturer's certificates, invoice, packing list, guarantee/warranty certificate, inspection release note &amp; dispatch clearance issued by the Owner.</p> <p>ii. 10% payment shall be released after successful commissioning of ITE, synchronization with the grid and net metering billing for first month as per guaranteed parameters.</p> <p>iii. If the installation and Commissioning of Turboexpander is delayed beyond 90 days from date of supply at site/store, due to reasons attributable to IGL/Government bodies/Discomm then the balance 10% at (ii) above will be released against bank guarantee valid for 6 months. Since the payment terms have a major impact on bid price, purchaser is requested to accord their to above.</p>	<p>Tender conditions shall prevail.</p>
6	Invitation for Bid (IFB)of Tender Document & General Conditions of Contract (GCC) Invitation for Bid (IFB)of Tender Document	8 of 103 & 67 of 103	7 & 26	<p>7.1 (1) The bidder should be OEM / Authorized Packager of In-line turbo expander system for generating clean electricity at natural gas pressure let down stations.</p> <p>7.1 (2) OEM should have manufactured, packaged, supplied, installed and successfully commissioned minimum one number of 150 kWh in-line turbo expander system of proposed technology for generating electricity at natural gas pressure let down station in last 7 years preceding the date of floating of tender.</p> <p>7.1 (3) At least one in- line turboexpander system of the model proposed for supply should have minimum 8000 operational hours (operation hours refers to actual running hours of equipment) preceding the date of floating of tender for at least 90% of installed capacity.</p> <p>7.1 (4) The bidder should have provided operation and maintenance services for at least one in-line turbo expander system for generating electricity at natural gas pressure let down stations / gas turbine / gas generators / compressors for a period of minimum 1 year in last 7 years from the date of floating of tender, to the owner of equipment. Participation of Authorized Packager on behalf of Foreign/Indian OEM of In-line Turbo expander system:</p> <p>26.0 SUB-CONTRACTING</p> <p>26.1 The Supplier shall notify the Owner in writing of all subcontracts awarded under this Agreement if not already notified in the Supplier's bid and incorporated in the Agreement. Such notification and incorporation shall not relieve the Supplier from any liability or obligation under the Agreement. Such sub-contract shall be limited to certain bought-out items and sub-assemblies, which are not in line of Supplier's manufacturing or proposed manufacturing unit of authorized Supplier.</p> <p>26.2 Such purchases and subcontracted items shall have to be necessarily in full compliance with the terms and conditions of the Agreement and do not relieve the Supplier of any of his contractual obligations. The Supplier shall be solely responsible for any action, deficiency or negligence of his sub-contractors.</p> <p>26.3 For any subcontract, the Purchaser is entitled to demand from the Supplier, for approval of the list sub contractors the Supplier intends to involve and of the orders he may entrust to them. The Purchaser may further demand that proposals of competitors be produced for him to examine. Approval by the Owner cannot give rise to any legal bond between the Purchaser and the sub-contractors and leaves full responsibility only to the Supplier.</p> <p>26.4 In the event where the warranty agreed between the Supplier and his sub-Suppliers exceeds in scope or in period those required under the Agreement, the Supplier undertakes to make the Purchaser the full and direct beneficiary of such warranty.</p>	<p>1. We are authorized representatives of CeH4 Technologies GMBH- a German Manufacturer of Pipeline Turbo Expanders</p> <p>2. Our Authorization Letter is attached herewith for reference</p> <p>3. CeH4 manufactures In- Line Turbo Expanders with Active Magnetic Bearings and meet the technical specifications of the tender.</p> <p>Reference clause 7.0 of Page 8 of 103, we intend to Participate in the tender as Authorized Packager on behalf of the foreign OEM of the Turbo Expander.</p> <p>We qualify the Bid in terms of Product and also meet the Financial Criteria on our own.</p> <p>Reference Clause 26.0 ( 1,2,3,4) , 39 of 103, we intend to engage a sub-contractor who has the requisite experience as mentioned in clause 7.1 (4) on page 9 of 103 of the tender.</p> <p>We shall be responsible for all the contractual obligation of the tender as highlighted in sub clauses of Clause 26.0.</p> <p>We request IGL to allow us to bid in accordance with above</p>	<p>Bidder has to meet clause 7.1 (4) on its own.</p> <p>Tender conditions shall prevail.</p>

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