



INDRAPRASTHA GAS LIMITED

IGL Bhawan, 4, Community Center,
Sector-9, R.K. Puram, New Delhi - 110022

TENDER NO. IGL/ET2/CP/CP18529
SUPPLY OF DECOMPRESSION UNITS (DCU) 450 SCMH

Replies to Bidders' Queries - 1

Sr. No.	Clause/Page	Clause/Tender Condition	Bidder's Query	IGL's Reply
1	6.2 Hazardous Area Classification (6 of 19)	Enclosure protection degree shall be min. IP65 as per IEC 60529.	Enclosures will be provided with the louvers, and there is a higher chance of water and duct entry inside the cabinet. Hence, the bidder requests that you accept IP54/IP55 for the cabinet.	The canopy requirement in DCU stands deleted. However, the successful bidder shall ensure necessary cover for field instruments like PG, PT etc. and Local control panel shall have appropriate ingress protection against water and dust.
2	6 Technical Requirements (9 of 19)	The dimensions of the DCU shall be designed in such a way that, when it is mounted on a TATA 407 vehicle, adequate clearance is available on all sides of the unit.	Kindly confirm the TATA 407 Dimension: Overall Length (mm) - 4850 mm Overall Width (mm) - 2100 mm Overall Height (mm) - 2270 mm	Tata 407 vehicle loading platform dimension may be taken: Length - 4100 mm Width - 2100 mm Height - 1600 mm
3	7.1 Mechanical Component (10 of 19)	Heating System	Bidder understand that the heating system required with electric heater i.e. Water bath heater.	Tender condition prevails . Electrically powered heating system shall be required for DCU and bidder needs to clearly specify the desired load and no. of phases required to operate it for gas heating.
4	7.2.1 Pressure Instruments (10 of 19)	Pressure transmitter shall be intrinsically safe electronic smart type transmitters compatible with Modbus / HART protocol of latest version	Normal pressure transmitter serves the purpose of sensing the pressure, hence no need smart pressure transmitter. Bidder request for accept the normal pressure transmitter.	Bidder's request is acceptable. Normal pressure transmitter and temperature transmitter may be used.
5	7.2.2 Temperature Instruments (11 of 19)	Temp transmitters shall be intrinsically safe electronic smart type transmitters compatible with Modbus / HART protocol of latest version.	Normal Temp transmitter serves the purpose of sensing the Temperature, hence no need smart temp transmitter. Bidder request for accept the normal temp transmitter.	
6	7.2.1 Pressure Instruments (11 of 19)	Pressure gauges shall be weatherproof with dial size of 150 mm	Kindly accept pressure gauge dial size 100 mm.	Tender condition prevails .
7	7.2.4 SSV and Pressure Regulators (12 of 19)	Pressure regulators shall be pilot operated with regulation accuracy of better than +/- 1% of set point.	Bidder request to accept the Accuracy is 5%	1st stage pressure regulator may be direct acting/pilot operated with accuracy +/-10% or better. Accuracy of +/- 2.5% or better shall be required for 2nd stage pressure regulator.
8	7.2.4 SSV and Pressure Regulators (12 of 19)	Pressure regulators shall be pilot operated with regulation accuracy of better than +/- 1% of set point.	Bidder request to accept spring loaded/diaphragm type Pressure regulator.	Both direct acting/pilot operated regulator with minimum accuracy +/-10% are acceptable for 1st stage. Both direct acting/pilot operated regulator with minimum accuracy +/-2.5% are acceptable for 2nd stage.

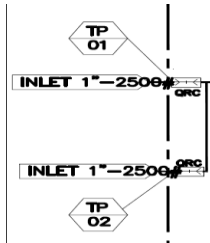
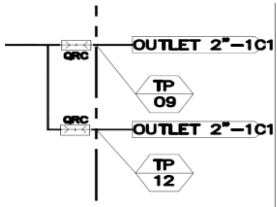


INDRAPRASTHA GAS LIMITED

IGL Bhawan, 4, Community Center,
Sector-9, R.K. Puram, New Delhi - 110022

TENDER NO. IGL/ET2/CP/CP18529
SUPPLY OF DECOMPRESSION UNITS (DCU) 450 SCMH

Replies to Bidders' Queries - 1

Sr. No.	Clause/Page	Clause/Tender Condition	Bidder's Query	IGL's Reply
9	7.2.4 SSV and Pressure Regulators (12 of 19)	Slam shut valve shall have a set point accuracy of +1% over the whole operating range.	Bidder request to accept the Accuracy is 5%	1st stage SSV shall be with accuracy +/-10% or better. Accuracy of +/- 2.5% or better shall be required for 2nd stage SSV.
10	(-)	General	Required skid is a vehicle mounted only. Please confirm.	The required DCU shall be usable while mounted on vehicle or otherwise without any hassles.
11	FORMS AND FORMATS ANNEXURE - III (83 of 86)	ANNEXURE - III BID BOND PROFORMA / PROFORMA FOR EMD	The bidder respectfully requests the corporation to permit the use of a surety bond in lieu of the Bid Bond Proforma / Proforma for EMD.	Tender conditions prevails.
12	3.1 (7 of 86)	Delivery shall be completed in a single lot within 16 weeks from the date of LOA/PO/Date of intimation from IGL	We kindly request the corporation to consider extending the delivery period to at least 18–20 weeks from the date of issuance of LOA/PO/intimation from IGL, in view of operational constraints and to ensure timely and quality execution	Tender condition prevails .
13	P & ID for 450 SCMH (19 OF 19)		For the inlet, 1" QRC is specified in the P&ID. However, 1/2" QRC size is suitable for the required flow rate. The bidder requests that the corporation accept the 1/2" size for the QRC at the inlet.	Tender conditions prevails. Please refer updated P&ID.
14	P & ID for 450 SCMH (19 OF 19)		The bidder needs to understand the purpose of providing the QRC at the outlet. Generally, PRS/DCU units are equipped with an isolation valve at the outlet.	Tender conditions prevails. Please refer updated P&ID.



INDRAPRASTHA GAS LIMITED

IGL Bhawan, 4, Community Center,
Sector-9, R.K. Puram, New Delhi - 110022

TENDER NO. IGL/ET2/CP/CP18529
SUPPLY OF DECOMPRESSION UNITS (DCU) 450 SCMH

Replies to Bidders' Queries - 1

Sr. No.	Clause/Page	Clause/Tender Condition	Bidder's Query	IGL's Reply
15	P & ID for 450 SCMH (19 OF 19)		Bidder need to understand that meaning of TP.	TP denotes Tapping Point.
16	Technical Specification; Cl. 6. TECHNICAL REQUIREMENTS; Page 8 of 19. Technical Specification; Cl. 7.2.4 SSV and Pressure Regulators; Page 12 of 19.	Inlet line size and outlet line sizes (for both outlets) should be considered taking velocity limitation to 30 m/s throughout the DCU. The Complete station shall be designed in such a way that the mean gas velocity remains within 20 m/s. Velocity in the piping upstream/downstream of Pressure Reduction Station shall be within 20 m/s.	Pl confirm velocity limitation to 20 or 30 m/s throughout the DCU.	The velocity limitation is being clarified as : The Complete DCU shall be designed in such a way that the mean gas velocity remains within 20 m/s. Velocity in the piping upstream/downstream of all regulators installed in DCU shall be within 20 m/s.
17	Technical Specification; Cl. 6. TECHNICAL REQUIREMENTS; Page 9 of 19.	Both the inlet and the outlet shall be provided with a tee with a valve on each branch in order to facilitate two connections at a time. There shall be an inlet and an outlet valve on the decompression skid.	We understand from P&ID that extream end at Inlet & Outlet require with QRC; pl suggest isolation valve after / before QRC.	Please refer the updated P&ID
18	Technical Specification; Cl. 6. TECHNICAL REQUIREMENTS; Page 9 of 19.	Vendor shall provide suitable weatherproof cabinet for the skid. The thickness shall be minimum 16 SWG (1.6mm) SS304.	We request IGL to exclude canopy, as skid would be mounted on TATA 407 and it will be difficult to maintain and operate due to size constraint within vehicle as per IGL tender requirement. Also skid include heater, the same will be suitable for open to atmosphere. Pls. also check in case of Canopy mostly SS 304 material is not aksed. We request you to kindly accept the SKID without Canopy.	The bidder's request for excluding canopy requirement in DCU is acceptable. However, the successful bidder shall ensure necessary cover for field instruments like PG, PT etc. and Local control panel shall have appropriate ingress protection against water and dust.



INDRAPRASTHA GAS LIMITED

IGL Bhawan, 4, Community Center,
Sector-9, R.K. Puram, New Delhi - 110022

TENDER NO. IGL/ET2/CP/CP18529
SUPPLY OF DECOMPRESSION UNITS (DCU) 450 SCM/H

Replies to Bidders' Queries - 1

Sr. No.	Clause/Page	Clause/Tender Condition	Bidder's Query	IGL's Reply
19	Technical Specification; Cl. 6. TECHNICAL REQUIREMENTS; Page 9 of 19.	Two stage pressure reductions with option of gas withdrawal from both first and second stage of the decompression skid.	We understand that one tapping point to be provided after first stage pressure reduction with range 20-26 Bar G as shown in P&ID - TP/07. However second stage would be as per P&ID outlet (3-4 Bar G) only. Both First and second stage (Skid outlet) outlet having capacity of 450 SCM/H. Pl confirm our understanding is correct. Also pl confirm first stage outlet required with QRC.	Bidder's understanding is correct. Both first stage and second stage outlets shall be with QRC.
20	Technical Specification; Cl. 7.2.4 SSV and Pressure Regulators; Page 12 of 19.	The materials selected for the regulators and SSV components shall be conform to the process requirements (minimum SS 316) and shall be specified in the data sheets. Vendor shall seek the approval from owner for the MOC of the parts of the valves prior to start the manufacturing. The self-actuating Pressure regulating valve shall be designed as per EN334. The Slam shut valve shall be designed as per EN 14382.	We understand that First Stage Regulator & SSV will have MOC (Body & Trim) SS316, however second stage Body MOC: CS with trim SS316 suitable as per process parameters and as per tender. Also First stage regulator & SSV will be OEM standard, however second stage will be EN 334 & EN 14382 with respective accuracy. First Stage SSV require with OPSO only and second stage SSV include UPSO & OPSO. Also Limit switch is required in second stage SSV only. Pl confirm our understanding is correct.	Bidder understanding is correct that First Stage Regulator & SSV will have MOC SS316/LTCS, however second stage Body will have MOC: CS suitable as per process parameters and as per tender. First stage SSV is required to have OPSO and Second stage SSV is required to have OPSO & UPSO. Limit switch shall be required for both stage SSV. Please refer to the attached Approved vendors list. However, vendor shall be required to submit datasheet for SSV & regulators to IGL for approval before commencement of manufacturing of DCU.
21	Technical Specification; Cl. 9 INSTALLATION / ERECTION, COMMISSIONING AND STARTUP; Page 16 of 19.	Bidder has to successfully carry out supply, physical inspection, marking, packaging, handling, commissioning and demonstration of working of DCU unit at IGL's site to client's satisfaction.	We understand bidder scope is limited to supervision of Installation, Erection and commissioning. Pl confirm our understanding is correct.	Tender condition prevails.



INDRAPRASTHA GAS LIMITED

IGL Bhawan, 4, Community Center,
Sector-9, R.K. Puram, New Delhi - 110022

TENDER NO. IGL/ET2/CP/CP18529
SUPPLY OF DECOMPRESSION UNITS (DCU) 450 SCMH

Replies to Bidders' Queries - 1

Sr. No.	Clause/Page	Clause/Tender Condition	Bidder's Query	IGL's Reply
22	Technical Specification; Cl.10 PERFORMANCE GUARANTEE, Cl. 11 COMPREHENSIVE WARRANTY; Page 17 of 19.	10 PERFORMANCE GUARANTEE Bidder shall provide performance guarantee for 3 years from the date of delivery of skid. 11 COMPREHENSIVE WARRANTY Bidder shall be solely responsible for the 3 years Comprehensive warranty including visit for preventive maintenance whenever required till the end of the warranty period of 3 years. The vendor shall be required to render maintenance services for repair/ maintenance including spares and consumable parts(if any) within 2 days from the date of intimation by IGL failing which a penalty of Rs. 1000/ day shall be applicable to the bidder with a ceiling of 5% of the total contract value.	We understand standard warranty will be as per GCC "This warranty shall remain valid for at least twelve (12) months from the date of successful commissioning of individual equipment or eighteen (18) months after the date of last shipment whichever is earlier". Also request you to Kindly accept if any defect observed in the equipment at site and the time taken in rectification and commissioning, the warranty will stand extended for at least another 3 months from the date of completion of rectification free of cost or maximum up 18 months from date of shipment. However bidder is responsible up to 3 years from date of dispatch to render services for preventive maintenance. Pl confirm our understanding is correct.	Tender condition prevails. Preventive maintenance is an integral part of warranty for the DCU supplied by the vendor and vendor shall ensure that the same is carried out as per his standard/desired practice to preserve the integrity of the supplied DCU without any breakdown. The extended warranty of 36 months is applicable after the date of expiration of 12 months of commissioning of DCU supplied by the vendor.
23	Technical Specification; Cl.10 PERFORMANCE GUARANTEE, Cl. 11 COMPREHENSIVE WARRANTY; Page 17 of 19.	Preventive Maintenance	We request IGL to provide scope of Preventive Maintenance.	
24	Technical Specification: Process Parameter; Page 10 of 19 & P&ID; Page 19 of 19.	First Stage Regulator & SSV	We understand that First stage Regulator & SSV Body rating will be 2500# only, pl confirm our understanding is correct.	The design of DCU is in bidder's scope and bidder to decide and choose the pressure ratings of equipments, pipes, fittings etc. accordingly while ensuring integrity of the offered DCU and safety of personnel operating/maintaining it.



INDRAPRASTHA GAS LIMITED

IGL Bhawan, 4, Community Center,
Sector-9, R.K. Puram, New Delhi - 110022

TENDER NO. IGL/ET2/CP/CP18529
SUPPLY OF DECOMPRESSION UNITS (DCU) 450 SCMH

Replies to Bidders' Queries - 1

Sr. No.	Clause/Page	Clause/Tender Condition	Bidder's Query	IGL's Reply
25	General	Approved Vendor List, QAP, Datasheet	We request IGL to provide Approved Vendor List, QAP, Datasheet to be considered for the said tender.	The design of skid is in bidder's scope. It is bidder's responsibility to design the offered DCU complete and safe to operate in its all respects accordingly and in line with updated P&ID specified in the tender document. The successful bidder shall get the QAP approved from IGL before the start of manufacturing of DCU. Refer Annexure for Approved vendor list.
26	NOTICE FOR INVITATION FOR BIDS (IFB), Cl. 3 DURATION OF CONTRACT / DELIVERY SCHEDULE, Pg 7 of 86	3.1 Delivery shall be completed in a single lot within 16 weeks from the date of LOA/PO/Date of intimation from IGL.	We request IGL to kindly accept delivery period of 20 weeks from the date of LOA/PO/Date of intimation from IGL. As delivery of Heter will take time of 16 weeks.	Tender condition prevails.
27	SPECIAL CONDITIONS OF CONTRACT (SCC), Cl. 11 WARRANTY; Page 54 of 86.	Bidder shall be solely responsible for 3 years Comprehensive warranty including visit for preventive maintenance whenever required till the end of the warranty period of 3 years. The vendor shall be required to render maintenance services for repair/ maintenance including spares and consumable parts (if any) within 2 days from the date of intimation by IGL failing which a penalty of Rs. 1000/ day shall be applicable to the bidder with a ceiling of 5% of the total contract value.	We understand standard warranty will be as per GCC "This warranty shall remain valid for at least twelve (12) months from the date of successful commissioning of individual equipment or eighteen (18) months after the date of last shipment whichever is earlier". Also request you to Kindly accept if any defect observed in the equipment at site and the time taken in rectification and commissioning, the warranty will stand extended for at least another 3 months from the date of completion of rectification free of cost or maximum up 18 months from date of shipment. However bidder is responsible up to 3 years from date of dispatch to render services for preventive maintenance.	Tender condition prevails. Preventive maintenance is an integral part of warranty for the DCU supplied by the vendor and vendor shall ensure that the same is carried out as per his standard/desired practice to preserve the integrity of the supplied DCU without any breakdown.
28	SPECIAL CONDITIONS OF CONTRACT (SCC), Cl. 14 PRICE REDUCTION SCHEDULE (PRS); ; Page 55 of 86.	Price Reduction will be applicable @½% of the total order value (inclusive of taxes) per week of delay or part thereof in supply/completion of work subject to a maximum (ceiling) of 5% of total order value (inclusive of taxes) for orders of goods, works and services.	We request to kindly accept below mentioned PRS: Price Reduction will be applicable @½% of the total order value (inclusive of taxes) per week of delay or part thereof in supply/completion of work subject to a maximum (ceiling) of 5% of undelivered order value (inclusive of taxes) for orders of goods, works and services.	Tender condition prevails



INDRAPRASTHA GAS LIMITED

IGL Bhawan, 4, Community Center,
Sector-9, R.K. Puram, New Delhi - 110022

TENDER NO. IGL/ET2/CP/CP18529
SUPPLY OF DECOMPRESSION UNITS (DCU) 450 SCMH

Replies to Bidders' Queries - 1

Sr. No.	Clause/Page	Clause/Tender Condition	Bidder's Query	IGL's Reply
29	SPECIAL CONDITIONS OF CONTRACT (SCC), Cl. 16 TERMS OF PAYMENTS ; Page 55 of 86.	70% of the invoice value along with taxes and duties shall be paid within 30 days 25% balance payment shall be paid after the successful commissioning/demonstration at IGL sites and certification from IGL Engineer-in-Charge. 5% balance payment shall be paid after the successful completion of warranty period of 3 years.	We request IGL to accept payment terms as per below: 90% of the invoice value along with taxes and duties shall be paid within 30 days. 10% balance payment shall be paid after the successful commissioning/demonstration at IGL sites and certification from IGL Engineer-in-Charge or 60 day from date of receipt of material at site.	Tender condition prevails
30		Approved Vendor List	AVL is missing from tender documents. Kindly provide.	Please refer Annexure for Approved Vendor List.
31	12 of 19	Pressure regulators shall be pilot operated with regulation accuracy of better than +/- 1% of set point.	No supplier provide direct Acting type pressure regulator for 2500# with 1% accuracy. It is requested to accept +/-5% accuracy for PCV of 1 st and 2 nd stage regulator.	Both direct acting/pilot operated regulator with minimum accuracy +/-10% are acceptable for 1st stage. Both direct acting/pilot operated regulator with minimum accuracy +/-2.5% are acceptable for 2nd stage.
32	09 of 19	Gas velocities in pipe work should not exceed 30 meters / second, when the maximum flow rate occurs at the lowest expected inlet pressure.	As mentioned on page no. 9 the gas velocity of 30 m/s is acceptable but on page no. 12, gas velocity limitation mentioned in 20 m/s. kindly clarify.	The velocity limitation is being clarified as : The Complete DCU shall be designed in such a way that the mean gas velocity remains within 20 m/s. Velocity in the piping upstream/downstream of all regulators installed in DCU shall be within 20 m/s.
33	12 of 19	The Complete station shall be designed in such a way that the mean gas velocity remains within 20 m/s. Velocity in the piping upstream/downstream of Pressure Reduction Station shall be within 20 m/s		
34		Ball Valves below 2" size	We understand that CS valves below 2" size shall be of socket weld type. Kindly confirm.	Bidder understanding is correct.
35		Manifold before PG	Kindly clarify if manifold is to be considered with PG or only ball valves needs to be installed.	2-valve manifold (Block+bleed) shall be used with PG.
36		TG end connection	We understand that TG with threaded type end connection is acceptable for DCU	Bidder's understanding is correct.
37		PCV End Connection	We request to accept threaded type PCV & SSV for high pressure regulator of first stage. Kindly confirm.	Bidder's request is acceptable. However, the vendor shall modify the threaded end to flanged ends by using spool pieces.



INDRAPRASTHA GAS LIMITED

IGL Bhawan, 4, Community Center,
Sector-9, R.K. Puram, New Delhi - 110022

TENDER NO. IGL/ET2/CP/CP18529
SUPPLY OF DECOMPRESSION UNITS (DCU) 450 SCMH

Replies to Bidders' Queries - 1

Sr. No.	Clause/Page	Clause/Tender Condition	Bidder's Query	IGL's Reply
38		Maximum Inlet Pressure	Kindly clarify if maximum operating pressure of DCU will be 220 barg or 250 barg.	Tender condition prevails. Inlet pressure range: 40-250 bar
39	IGL/ET2/CP/CP18529 PART – II OF II TECHNICAL VOLUME 6.Technical Requirements (9 of 19)	Vendor shall provide suitable weatherproof cabinet for the skid. The thickness shall be minimum 16 SWG (1.6mm) SS304. T	The bidder understands that the DCU will be mounted on a TATA 407 vehicle; therefore, a canopy is not required as it will increase overall height and weight of skid. We will provide necessary cover for field instruments, if any and shall ensure local control panel shall have appropriate ingress protection against water and dust. Kindly confirm bidder understanding is correct.	The bidder's request for excluding canopy requirement for DCU is acceptable. However, the successful bidder shall ensure necessary cover for field instruments like PG, PT etc. and Local control panel shall have appropriate ingress protection against water and dust.
40	IGL/ET2/CP/CP18529 PART – II OF II TECHNICAL VOLUME P&ID (19 of 19)	P&ID the outlet of 20-26 Barg shown after 1st stage and 3-4 Barg outlet shown after 2nd stage.	We propose providing both outlet options after the second stage to ensure accurate and desired output. The two available options are as follows: 1.Two separate lines with two different regulator outputs. 2.A single regulator with an optional pilot, allowing adjustment according to your specific requirements. Please confirm.	Bidder seems to be requesting for regulation with following methodology 1) Regulation from CNG cascades to intermediate pressure 2) Regulation from intermediate pressure to outlet pressure of 20-26 bar 3) Regulation from intermediate pressure to outlet pressure of 3-4 bar Bidder's above request for introducing intermediate regulation to effect desired outlet pressure of 20-26 bar as well as outlet pressure of 3-4 bar may be accepted, provided it meets corresponding technical parameters of second stage regulators cited in technical document of the tender and the rest of the conditions like space limitations, safety parameters etc. are not compromised. Notwithstanding above, acceptance for P&ID offered by bidder is at IGL discretion and vendor shall be required to get the P&ID approved from IGL before commencing manufacturing of DCU. In case, P&ID offered by vendor is not accepted by IGL, then he may be advised to follow the P&ID provided in the tender.



INDRAPRASTHA GAS LIMITED

IGL Bhawan, 4, Community Center,
Sector-9, R.K. Puram, New Delhi - 110022

TENDER NO. IGL/ET2/CP/CP18529
SUPPLY OF DECOMPRESSION UNITS (DCU) 450 SCMH

Replies to Bidders' Queries - 1

Sr. No.	Clause/Page	Clause/Tender Condition	Bidder's Query	IGL's Reply
41	IGL/ET2/CP/CP18529 PART – II OF II TECHNICAL VOLUME Technical Volume (8 of 19 12 of 19)	Page 8 of 19 - Inlet line size and outlet line sizes (for both outlets) should be considered taking velocity limitation to 30 m/s throughout the DCU. pressure set range for the SSV in the datasheet. Page 12 -19 - The Complete station shall be designed in such a way that the mean gas velocity remains within 20 m/s. Velocity in the piping upstream/downstream of Pressure Reduction Station shall be within 20 m/s. .	We understand that the velocity limitation is 30 m/s. Please confirm Bidder's understanding is correct.	The velocity limitation is being clarified as : The Complete DCU shall be designed in such a way that the mean gas velocity remains within 20 m/s. Velocity in the piping upstream/downstream of all regulators installed in DCU shall be within 20 m/s.
42	IGL/ET2/CP/CP18529 PART – II OF II TECHNICAL VOLUME Technical Volume; Clause 7.2.4 SSV and pressure regulators (Page 13 of 19)	The self-actuating Pressure regulating valve shall be designed as per EN334 or Pressure Equipment Directive PED 97/23/EC covering the production quality assurance. The Slam shut valve shall be designed as per EN 14382 or Pressure Equipment Directive PED 97/23/EC covering the production quality assurance	We understand that EN 334 and EN 14382 is applicable for PCV and SSV respectively when pressure is less than 100 Barg. Kindly confirm which standard is applicable for PCV and SSV when pressure is more than 100 Barg (Before 1st stage Reduction).	Please refer Approved vendor list.
43	IGL/ET2/CP/CP18529 PART – II OF II TECHNICAL VOLUME Technical Volume; Clause 7.2.4 SSV and pressure regulators (Page 12 of 19)	Pressure regulators shall be pilot operated with regulation accuracy of better than +/- 1% of set point.	We understand that +/-1% accuracy is applicable for 2nd stage PCV. Kindly confirm bidder understanding is correct.	1st stage pressure regulator may be direct acting/pilot operated with accuracy +/-10% or better. Accuracy of +/- 2.5% or better shall be required for 2nd stage pressure regulator/SSV.
44	IGL/ET2/CP/CP18529 PART – II OF II TECHNICAL VOLUME Technical Volume; Clause 7.2.4 SSV and pressure regulators (Page 12 of 19)	Pressure regulators shall be pilot operated with regulation accuracy of better than +/- 1% of set point.	We understand that bidder have to provide Type test certificate as proof document to ensure PCV selected is of same or better accuracy. Kindly confirm bidder understanding is correct	Both direct acting/pilot operated regulator with minimum accuracy +/-10% are acceptable for 1st stage. Both direct acting/pilot operated regulator with minimum accuracy +/-2.5% are acceptable for 2nd stage.



INDRAPRASTHA GAS LIMITED

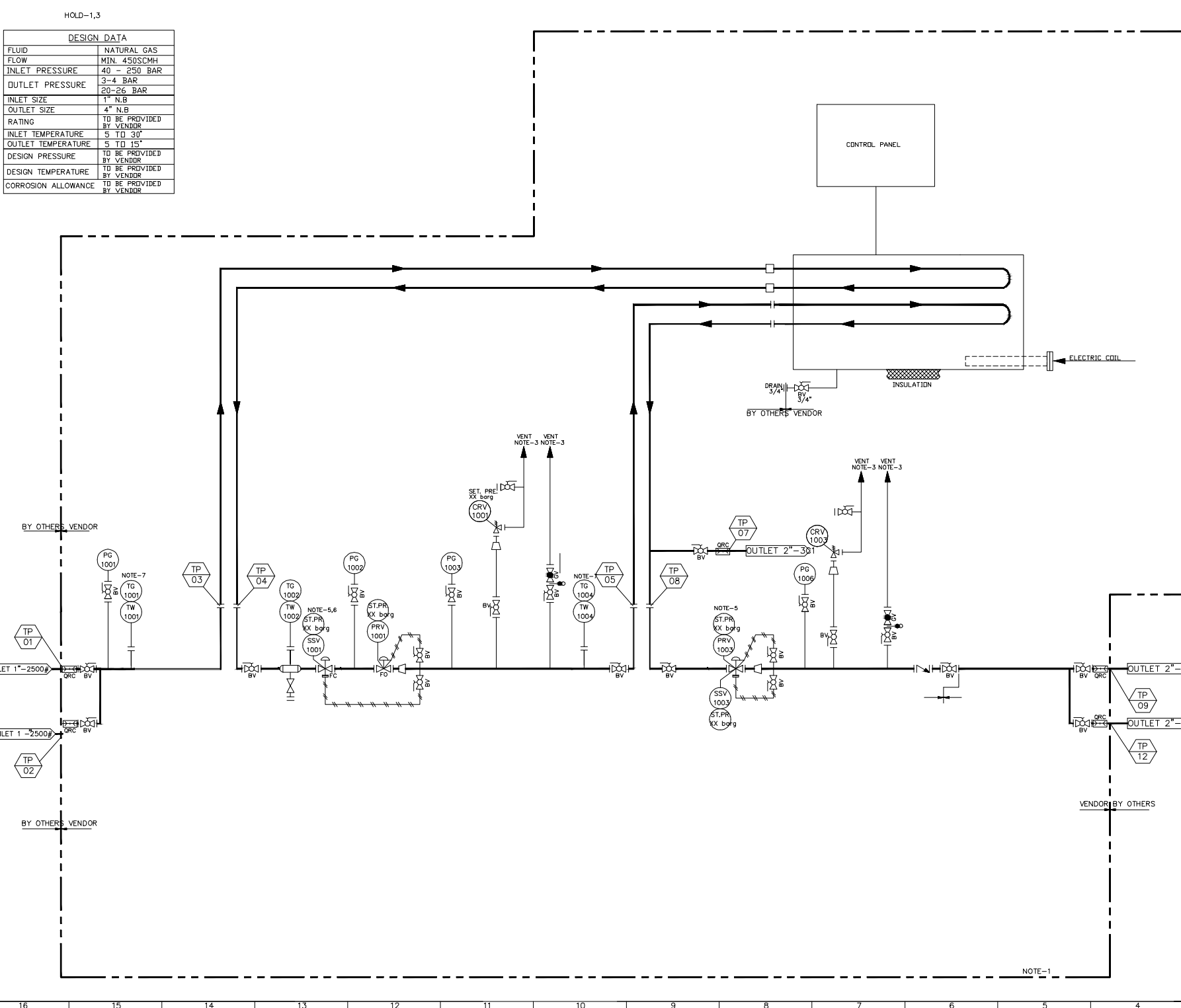
IGL Bhawan, 4, Community Center,
Sector-9, R.K. Puram, New Delhi - 110022

TENDER NO. IGL/ET2/CP/CP18529
SUPPLY OF DECOMPRESSION UNITS (DCU) 450 SCMH

Replies to Bidders' Queries - 1

Sr. No.	Clause/Page	Clause/Tender Condition	Bidder's Query	IGL's Reply
45	IGL/ET2/CP/CP18529 PART – II OF II TECHNICAL VOLUME Technical Volume; Clause 11 (Page 17 of 19)	Full para of COMPREHENSIVE WARRANTY		Preventive maintenance is an integral part of warranty for the DCU supplied by the vendor and vendor shall ensure that the same is carried out as per his standard/desired practice to preserve the integrity of the supplied DCU without any breakdown. The extended warranty of 36 months is applicable after the date of expiration of 12 months of commissioning of DCU supplied by the vendor.
46	IGL/ET2/CP/CP18529 PART – II OF II TECHNICAL VOLUME Technical Volume (--)	Approved Vendor List	Please provide approved vendor list for the subjected tender	Please refer Approved vendor list.
47	TENDER DOCUMENT NO. IGL/ET2/CP/CP18529 PART – I OF II COMMERCIAL VOLUME Payment Terms (Clause 16.3 56 of 86)	25% balance payment shall be paid after the successful commissioning/demonstration at IGL sites and certification from IGL Engineer-in-Charge.	Payment release should be capped to a pre-defined period, and payment will be released within 90 days even if commissioning is not completed within that period	Tender condition prevails

DESIGN DATA	
FLUID	NATURAL GAS
FLOW	MIN. 450SCMH
INLET PRESSURE	40 - 250 BAR
OUTLET PRESSURE	3-4 BAR
INLET SIZE	20-26 BAR
OUTLET SIZE	1" N.B
RATING	4" N.B
INLET TEMPERATURE	TO BE PROVIDED BY VENDOR
OUTLET TEMPERATURE	5 TO 30°
DESIGN PRESSURE	5 TO 15°
DESIGN TEMPERATURE	TO BE PROVIDED BY VENDOR
CORROSION ALLOWANCE	TO BE PROVIDED BY VENDOR



REFERENCE DRAWINGS

DRAWING TITLE	DRAWING NUMBER

GENERAL NOTES :-

1. ALL LINE NUMBERING & EQUIPMENT TAG NUMBERING SHALL BE PRE-FIXED WITH DS-1000.

2. ALL INSTRUMENT TAG NUMBERING SHALL BE PRE-FIXED WITH DS-1000.

NOTES :-

1. THE ITEMS GIVEN IN THIS PAID IS INDICATIVE ONLY. ALL DETAIL ENGG. / RESIDUAL ENGG. SHALL BE DONE BY VENDOR POST AWARD OF CONTRACT WITHOUT ANY COST IMPLICATIONS TOWARDS CLIENT.

2. ALL BALL VALVE SHALL BE FULL BORE TYPE.

3. VENT SHALL BE LOCATED AT MIN. HEIGHT OF 3M ABOVE THE HIGHEST WORKING PLATFORM FALLING WITHIN 15M RADIUS VENT AS PER PNGRB GUIDELINES. VENT SHALL BE WITH PLASTIC RAIN CAP (WITH CHAIN) OR ANTI STATIC FLAPPER.

4. LOW POINT DRAIN SHALL BE PROVIDED AT MINIMUM DISTANCE FROM RISER PIPE OF VENT. ADEQUATE SLOPE TO BE MAINTAINED IN HORIZONTAL SECTION OF THE PIPE FOR LOW POINT DRAIN CONNECTION.

5. SSV WILL CLOSE IN EVENT OF HIGH PRESSURE AS WELL AS LOW PRESSURE AT DOWN STREAM OF PRESSURE REGULATOR.

6. SSV OPEN/CLOSE INDICATION SHALL BE AVAILABLE IN LOCAL CONTROL PANEL.

7. TEMPERATURE INSTRUMENT FLANGE SHALL BE RATED ONE PIPING CLASS HIGHER THAN THE PIPE TO WHICH IT IS CONNECTED.

HOLD :-

1. DESIGN PARAMETERS OF SKID IS UNDER HOLD & SHALL BE CONFIRMED POST RECEIPT OF CLIENT INPUTS.

2. LINE SIZES ARE PRELIMINARY & SHALL BE FINALIZED BY VENDOR DURING DETAIL ENGINEERING.

3. OPERATING PRESSURE AND OPERATING TEMPERATURE IS BASED ON PREVIOUS PROJECT DATA.

LEGEND :-

BALL VALVE (FLANGED)

CREEP RELIEF VALVE

PRESSURE REGULATING VALVE WITH SSV

PRESSURE CONTROL VALVE

PRESSURE GAUGE

TEMPERATURE GAUGE

THERMOWELL

TEMPERATURE ELEMENT

QUICK RELEASE COUPLING (QRC)

CLIENT:

INDRAPRASTHA GAS LIMITED (IGL)
NEW DELHI

PROJECT:

DECOMPRESSION SKID
(HIGH PRESSURE TO LOW PRESSURE)

SCALE

N.T.S

TITLE:

PIPING & INSTRUMENT DIAGRAM FOR
(450 SCMH)

APPROVED VENDORS LIST			
S No	ITEM	APPROVED MAKE	APPLICATIONS
1	TWO WAY/THREE WAY VALVES	SWAGELOK	HOSE PIPES
		PARKER	
		COMPAC	
		HAMLET	
		HYLOCK	
		SEALEXCEL	
		OASIS	
		DK-LOK	
2	SS FITTINGS, QRC	SWAGELOK	HOSE PIPES, 1st STAGE REGULATORS AND SSV
		PARKER	
		HAMLET	
		HYLOCK	
		DK-LOK	
3	SS TUBINGS	SANDVIK	
		FAE	
		TUBACEX	
		RATANAMANI	
		PARKER	
4	HOSES	PARKER	HOSE PIPES
		SWAGELOK	
		EATON	
5	PRESSURE REGULATOR AND SSV	EMERSON	1st STAGE & 2nd STAGE REGULATOR/SSV
		PIETRO	
		NIRMAL	
		ANY OTHER MAKE CONFORMING TO THE FOLLOWING: The self actuating pressure regulating valve and SSV for 1st stage where the pressure is more than 100 bar , compliance of PED 97/23/EC (or updated) is mandatory. Whereas for the self actuating pressure regulating valve and SSV after 1st stage regulation where the pressure is less than 100 bar, EN 334 & PED 97/23/EC (or updated) and EN14382 & PED 97/23/EC (or updated) shall respectively be complied with mandatorily .	