

# SUPPLY OF DOMESTIC (G-1.6) DIAPHRAGM METERS (NORMAL) - AMR COMPATIBLE

### TENDER DOCUMENT NO. IGL/ET2/CP/CP17374, Dated 13.02.2023

VCS REFRENCE NO. VCS/C&P/17028/PC/DIAPHRAGM METERS/06

Owner: Indraprastha Gas Ltd.

Consultant: VCS Quality Services Pvt Ltd.

Pre-bid meeting held on 20.02.2023

SI. No.	Reference & Cl No.	Section Description	Subject Description	Bidder's Query/Clarification	IGL/VCS Reply			
	Commercial							
1	Clause No. 21.0 of SCC Commercial Vol. I of II	Page No. 72-73 of 104		We have our standard packing of 6 meters in one box which is divided in separate sections and each meter will be properly bubble wrapped for safe handling.  Request to please accept the same.	Refer Clause No. 21.0 of SCC (Tender Conditions shall prevail)			
2	Clause No. 7.6 of IFB Commercial Vol. I of II	Page No. 11 of 104	Bid Submission date and time	Our request to kindly extend the bid due date for atleast 2 weeks.	Due date extended till 06.03.2023 Refer Corrigendum-1, Dated 27.02.2023			
			Delivery	Bidder requests that the delivery period for the first lot should be 12 weeks from the date of PO and 6 weeks for subsequent lots.	Tender Conditions shall prevail			
3	Clause No. 4.0 of IFB Commercial Vol. I of II			Bidder requests that PO quantity should be in multiples of 7200 units.	Tender Conditions shall prevail (Refer Clause No. 4.1 of IFB)			
				Bidder requests that a single PO issued by CGD should be specific to one location to avoid higher transportation charges.	Locations are tentative and may be changed during the validity of the contract as per project requirement.			
					Tender Conditions shall prevail			
4	Clause No. 4.0 of GCC Commercial Vol. I of II	Page No. 37 of 104	Scope of contract	Bidder would like to confirm whether any accessories are to be supplied with the meter.	Accessories for meter shall be supplied as specified in the datasheet attached with the material requisition Refer Technical Vol. II of II			
5	Clause No. 13.0 of GCC Commercial Vol. I of II	Page No. 41 of 104	Contract-cum-equipment performance bank guarantee	Bidder requests that the value of CPBG to be submitted should be excluding taxes.	Tender Conditions shall prevail			
6	Clause No. 4.0 of SCC	Dogo No. 65 of 104	Terms of payment	Bidder requests that 100% payment should be released within 30 days.	Tondor Conditions shall provide			
0	Commercial Vol. I of II	Page No. 65 of 104		In case of change in delivery locations as mentioned in tender, freight should be reimbursed to the bidder on actual basis.	Tender Conditions shall prevail			
	Clause No. 29 0 of	Clause No. 29.0 of GCC Page No. 49 of 104 mmercial Vol. I of II	PRICE REDUCTION SCHEDULE (PRS)	Bidder requests that PRS should not be deducted on GST component, as the benefit of GST will be available to the CGD.	Tender Conditions shall prevail			
7	GCC Commercial Vol. I of II			In case of inability to receive material after giving call out order and dispatch clearance CGD should not delay the store receipt of material and if due to any reason there is a delay IGL should reimburse the bidder for the storage of	PRS shall not be applicable in case any delay is attributable to IGL.			
				material till the store accepts the same	Tender Conditions shall prevail			





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8	Clause No. 8.0 of IFB Commercial Vol. I of II	Page No. 12-13 of 104	BIDDER EVALUATION CRITERIA (BEC): The bidder must have manufactured & supplied at least 25,000 nos. of domestic diaphragm gas meter (G 1.6) AMR compatible in compliance with applicable codes and standards to a natural gas distribution entity across the globe, in single order, in previous seven (7) years reckoned from the date of issue of tender document. OR The bidder must have manufactured & supplied at least 25,000 nos. of domestic diaphragm gas meter (G 1.6) AMR compatible in compliance with applicable codes and standards to a natural gas distribution entity across the globe, in multiple orders in any one year including at least one order for supply of 15,000 nos. meters, in previous seven (7) years reckoned from the date of issue of tender document.  Minimum Turnover-INR 6,01,21,000/-Net worth - Positive Working Capital- INR 1,20,24,200/-	Since PFDB India has been incorporated with the MCA GoI as recently as 25th October 2021 and could have negligible commercial activity in FY 2021, as a standalone 'start-up' registered legal entity, PFDB India does not obviously have any audited financial statements for our previous years. We therefore sincerely request you to accept submissions of previous years financials and technical experience of our promoting company M/s Pietro Fiorentini S.p.A. Italy which easily qualifies the requirement of the technical and Commercial BEC of referred tender. This will enhance the confidence of M/s IGL on the execution of the supply.  We request M/s IGL to extend complete provision of the start-up clause as defined in the GAZETTE NOTIFICATION NO. D.L-33004/99 DATED 18.02.2016 AND 23.05.2017 OF MINISTRY OF COMMERCE AND INDUSTRY, over the complete tender where "Bid Security/EMD and Prior turnover and prior experience shall not be required for all Start-ups" provision is also mentioned to GoI initiatives.  Along with the start-up certificate and financials and technical BEC from parent company, PFDB India will also submit solvency certificate from our bankers (ICICI Bank and HDFC Bank) stating that we have sufficient or more working capital in bank account than the requirement of working capital in the IGL's referred tender.  We would humbly appeal to you to support our initiative efforts and investments towards making India self-reliant in high-quality G1.6 gas meter manufacturing.  Grateful if you could help us in accepting the above request and allow us to participate in this tender.	Refer Clause No. 8.0 of IFB Tender Conditions shall prevail
9	Clause No. 22.0 of GCC Commercial Vol. I of II	Page No. 45 of 104	Payment Terms	We request you to amend the payment term as per below:  " 100% payment within 15 days of receipt of material along with all dispatch related documents."	Tender Conditions shall prevail
10	-	-	New Clause	We request M/s IGL to include "Land-Border" clause in tender as this create a fair competition and reduce the chances of Chinese dumping in India.	Not Applicable Tender Conditions shall prevail
11	Clause No. 21.4 of SCC Commercial Vol. I of II	Page No. 73 of 104	Each domestic diaphragm meters (along with the instruction manual) with its accessories is to be individually packed in corrugated cardboard boxes with polythene sheet & (bubble sheet should be there if packing more than single piece in a box), Description, qty, serial no. of each meter should be mentioned on box. All boxes should be packed in a Pallet. The quantity of the domestic diaphragm meter in the larger box shall be such that the box can be easily handled and stored, and it does not get damaged during the same.	We understand that no additional accessories are required for satisfactory working of meter. The meter will be with proper packing with sealing cap at inlet and outlet of the meter.  Please confirm that bidder understanding is difference from requirement.	Accessories for meter shall be supplied as specified in the datasheet attached with the material requisition Refer Technical Vol. II of II
12	Clause No. 4.1 of IFB Commercial Vol. I of II	Page No. 10 of 104	Delivery of 1st lot of Domestic Diaphragm meter shall be completed within 06 (Six) weeks from the date of LOA/PO. Delivery of subsequent lot of Domestic Diaphragm meter shall be completed within 04 (Four) weeks from the date of LOA/PO.	As QAP approval, PO processing and transit time for factory to desired location is approx. 3 to 6 days. We request to kindly consider the delivery period of 8 wks. for commencement of supply and further 8wks for the consecutive delivery of orders.	Tender Conditions shall prevail





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SI. No.	Reference & Cl No.	Section Description	Subject Description	Bidder's Query/Clarification	IGL/VCS Reply
13	General	-	Make In India	We understand that there are sufficient manufacturer in India for the required product, we request IGL to promote and prefer only meters that are manufacturer in India and support towards Indian economy by reducing the imports. This is also supported by DPIIT in several Govt./PSU tenders	Not Applicable Tender Condition shall prevail
			Tecl	nnical	
1	DATASHEET OF DOMESTIC DIAPHRAGM GAS METER TYPE G1.6	PAGE 24 OF 26	10 CALIBRATION 3 POINTS COVERING QMIN, 0.1 QMAX & QMAX AS PER EN 1359: 2006/EN 1359:2017 / OR LATEST EDITION IN FORCE/OIML R137 (LATEST).	IN PAGE NO. 21 UNDER "10.0 INSPECTION AND TESTING" THE CALIBRATION POINT IS MENTIONED "Q MAX. Q MIN. 0.2 Q MAX." WHICH IS CONFLICTED WITH THE DATASHEET OF METER. REQUEST YOU TO CLARIFY THE CALIBRATION	CALIBRATION POINT SHALL BE AS PER DATASHEET OF THE METER.
2	CI. 5.1 OF PTS DOMESTIC DIAPHRAGM METERS OF TECHNICAL TENDER	PAGE 18 OF 26	DOMESTIC GAS METERS MUST BE SUITABLE FOR RETROFITTING OF AMR IN FUTURE AND COMMUNICATION WITH ANY TECHNOLOGY SUCH AS RF (WALK BY/FIXED)/GPRS/LORA/LPRF OR SIMILAR MEETING THE REQUIREMENT	BIDDER UNDERSTAND THAT MECHANICAL GAS METER IS REQUIRED IN THIS TENDER AND THE SAID CLAUSE OF COMMUNICATION IS A FEATURE OF SMART MODULE WHICH CAN BE CONNECTED TO MECHANICAL GAS METER TO CONVERT IT INTO SMART GAS METER, HENCE THIS CLAUSE IS NOT APPLICABLE.	KINDLY NOTE THAT METER SHALL BE SUITABLE FOR RETROFITTING OF AMR IF CLIENT REQUIRED TO UPGRADE THE SAME METER WITH AMR IN FUTURE.
3	CI. 4.4 OF PTS DOMESTIC DIAPHRAGM METERS OF TECHNICAL TENDER	PAGE 18 OF 26	4.4 HAZARDOUS AREA CERTIFICATION GAS METERS SHALL BE CERTIFIED FOR USE IN DESIGNATED AREAS WHEN INSTALLED IN HAZARDOUS AREA CLASSIFIED ZONES AS PER EC 60079.	THIS REQUIREMENT IS FOR ATEX. BIDDER UNDERSTAND THAT IT IS NOT APPLICABLE ON NORMAL DIAPHRAGM GAS METER	BIDDER UNDERSTANDING IS CORRECT.
4	QUALITY ASSURANCE PLAN OF TECHNICAL TENDER	PAGE 25 OF 26	EXTERNAL LEAK TIGHT TEST	EXTERNAL LEAK TEST ON FINISHED GOODS WILL BE DIFFICULT, HOWEVER WE CAN SHOW THE TEST REPORTS DURING INSPECTION. KINDLY CONFIRM	TENDER CONDITION SHALL BE PREVAIL
5	QUALITY ASSURANCE PLAN OF TECHNICAL TENDER	PAGE 25 OF 26	TEMPER ALARM TEST	TEMPER ALARM GENERATION IS THE FEATURE OF AMR AND NOT FOR THE MECHANICAL METER, AS THE REQUIREMENT IS FOR MECHANICAL DIAPHRAGM GAS METER THUS THIS CLAUSE IS NOT APPLICABLE. KINDLY CONFIRM	TENDER CONDITION SHALL BE PREVAIL
6	DATASHEET FOR DOMESTIC DIAPHRAGM GAS METER TYPE G1.6	PAGE 24 OF 26	REVERSE FLOW RESTRICTION	FROM ABOVE POINT AND AS PER EN 1359: 2017 CLAUSE NO 6.6.4 OUR UNDERSTANDING IS:  EACH METER SHALL HAVE IN-BUILT DEVICE TO PREVENT THE REGISTRATION OF REVERSE FLOW. REVERSE ROTATION OF INDEX SHALL NOT BE ALLOWED. METER SHALL BE PROVIDED WITH A DEVICE TO PREVENT REVERSE FLOW OF THE INDEX.	BIDDER UNDERSTANDING IS CORRECT.





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:	SI. No.	Reference & Cl No.	Section Description	Subject Description	Bidder's Query/Clarification	IGL/VCS Reply
	7	DATASHEET FOR DOMESTIC DIAPHRAGM GAS METER TYPE G1.6	PAGE 24 of 26	CYCLIC VOLUME	CYCLIC VOLUME – WE REQUEST IGL TO CONSIDER THE CYCLIC VOLUME OF THE G1.6 DIAPHRAGM GAS METER AS "1.2 LITRE OR HIGHER" SINCE A 1.2 LITRE DESION HAS MUCH BETTER "METROLOGICAL STABILITY" WITH REPEATABILITY RESULTS (ACCURACY ERROR) WELL WITHIN THE SPECIFIED RANGE SPECIFIED IN EN 1359. THIS ASPECT IS PROGRESSIVELY CRITICAL AS THE GAS METER INSTALLATION GETS OLDER DURING ITS LIFETIME.  CYCLIC VOLUME OF A GAS METER IS THE VOLUME OF GAS CORRESPONDING TO ONE FULL REVOLUTION OF THE MOVING PART(S) INSIDE THE METER (WORKING CYCLE).  IT IS EVIDENT FROM THE DESIGN AND SIZE OF GAS METERS WITH DIFFERENT CYCLIC VOLUMES THAT THE "WEAR AND TEAR OF MOVING PARTS (CRITICAL TO ACCURACY OF MEASUREMENT)" IN GAS METERS WITH LOWER CYCLIC VOLUME LIKE 0.52 LTR OR 0.8 LTR OR 0.9 LTR IS MUCH HIGHER IN COMPARISON TO GAS METERS WITH CYCLIC VOLUMENT OF 1.2 LITRE SINCE THE NUMBER OF REVOLUTIONS IS MUCH HIGHER IN LOWER CYCLIC VOLUME SIGN FOR AN EQUAL VOLUME OF GAS PASSED. WITH DURATION OF TIME, AS THE GAS METERS MEASURES CUMMULATIVELY INCREASING GAS VOLUMES AND THE NUMBER OF CUMMULATIVE REVOLUTIONS ALSO INCREASES RESULTING IN A MUCH HIGHER WEAR AND TEAR OF THE MOVING PARTS. THIS RESULTS IN HIGHER ERROR VALUES (MORE THAN THE LIMITS PRESCRIBED IN THE EN1359 STANDARD) AND LOWER METROLOGICAL STABILITY, LOWER ACCURACY, LOWER RELIABILITY AND INCREASED PROBLEMS IN REPEATABILITY OF ACCURATE READINGS THEREBY RESULTING IN HIGHER GAS LOSSES AND LOSS OF REVENUE TO THE CGD. WITH IGL REQUIREMENT OF 20 YEARS METER LIFE, GAS METERS WITH LOWER CYCLIC VOLUME WILL GIVE HIGHER ERRORS VALUES IN METER READING AFTER FEW YEARS OF THEIR INSTALLATION RESULTING IN INCREASED GAS LOSSES AND LOSS OF REVENUE TO THE CGD. WITH IGL REQUIREMENT OF 20 YEARS METER LIFE, GAS METERS WITH LOWER CYCLIC VOLUME WILL GIVE HIGHER ERRORS OF THE INSTALLATION RESULTING IN INCREASED GAS LOSSES AND LOSS OF THE SAME GAS METERS FOR THE SAME GAS VOLUME PASSED. THE MOVING PARTS OF THE INTERNAL GAS MEASURING MECHANISM MAKE HIGHER NOISE WHICH INCREASES WITH INCREASE IN WEAR AND TEAR OF THESE PARTS. SA	SHALL BE AS PER TERMS & CONDITIONS OF TENDER AND GOVERNING STANDARD
	8	DATASHEET FOR DOMESTIC DIAPHRAGM GAS METER TYPE G1.6	PAGE 24 OF 26	DATASHEET: CYCLE VOLUME	WE REQUEST VCS/IGL TO GET ALL THE MANUFACTURER ON THE SAME PLATFORM AND UPDATE THE CYCLIC VOLUME TO BE 1.2 LITRE	SHALL BE AS PER TERMS & CONDITIONS OF TENDER AND GOVERNING STANDARD
	9	CI. 4.0 OF MR DOCUMENTS & DATA REQUIREMENTS OF TECHNICAL TENDER	PAGE 10	INSTALLATION, OPERATION AND MAINTENANCE MANUALS, CATALOGUES WITH PART LIST FOR METERS ALONG WITH SOFTWARE CD AND CALIBRATION REPORTS.	WE UNDERSTAND THAT THIS IS PURELY MECHANICAL DIAPHRAGM GAS METER AND HENCE SOFTWARE CD IS NOT APPLICABLE	BIDDER UNDERSTANDING IS CORRECT.





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10	CI. 4.0 OF MR DOCUMENTS & DATA REQUIREMENTS OF TECHNICAL TENDER	PAGE 10 OF 26	SIZING CALCULATION	WE UNDERSTAND THAT THIS IS PURELY G1.6 MECHANICAL DIAPHRAGM GAS METER (FOR QMAX = 2.5M3 WITH 3/4 INCH NPT CONNECTION AND 110MM CENTRE TO CENTRE DISTANCE BETWEEN CONNECTION), KINDLY CONFIRM	TENDER CONDITION SHALL BE PREVAIL
11	CI. 4.0 OF MR DOCUMENTS & DATA REQUIREMENTS OF TECHNICAL TENDER	PAGE 10 OF 26	PACKING / SHIPPING LIST WITH WEIGHTS AND DIMENSIONS. (NOTE-6)	WE UNDERSTAND THAT PACKING BOX WEIGHT AND DIMENSION WILL BE PROVIDE ALONG WITH PACKING LIST AT THE TIME OF DISPATCH, KINDLY CONFIRM	YES, IT SHALL BE MENTIONED AND PACKING SHALL BE FOR SAFELY TRANSPORTABLE AND SMOOTH LOADING AND UNLOADING AT CLIENT STORES/SITES AS PER REQUIREMENT
12	CI. 4.0 OF MR DOCUMENTS & DATA REQUIREMENTS OF TECHNICAL TENDER	PAGE 11 OF 26	ATEX APPROVAL CERTIFICATES FOR METER	WE UNDERSTAND THAT THIS IS PURELY MECHANICAL DIAPHRAGM GAS METER AND HENCE ATEX CERTIFICATES IS NOT APPLICABLE.	BIDDER UNDERSTANDING IS CORRECT.
13	CI. 4.0 OF MR DOCUMENTS & DATA REQUIREMENTS OF TECHNICAL TENDER	PAGE 11 OF 26	INSPECTION AND TEST PROCEDURES	WE UNDERSTAND THAT INSPECTION AND TESTING PROCEDURE WILL BE IN LINE WITH APPROVED QAP, KINDLY ACCEPT	BIDDER UNDERSTANDING IS CORRECT. QAP SHALL BE APPROVED BY THE CLIENT AND INSPECTION AND TESTING WILL BE DONE ACCORDINGLY.
14	CI. 4.0 OF MR DOCUMENTS & DATA REQUIREMENTS OF TECHNICAL TENDER	PAGE 11 OF 26	THE SELECTED VENDOR SHALL PROVIDE CALIBRATION CERTIFICATES OF EACH METER.	WE WILL PROVIDE CONSOLIDATED CALIBRATION CERTIFICATE/REPORT IN SOFT COPY DURING DISPATCH & HARD/SCANNED COPY DURING CUSTOMER INSPECTION , KINDLY ACCEPT	PLEASE NOTE THAT HARD COPY OF THE CALIBRATION REPORT SHALL BE REQUIRED DURING INSPECTION AND DISPATCH OF THE METER AND SOFT COPY WILL BE PROVIDED BY THE VENDOR TO THE CLIENT AS PER THE REQUIREMENT.
15	3.1 OF PTS CODES & STANDARDS OF TECHINCAL TENDER	PAGE 17 OF 26	ATEX - 94/9/EC DIRECTIVE	WE UNDERSTAND THAT AS THIS IS THE REQUIREMENT OF MECHANICAL G1.6 DIAPHRAGM GAS METERS, THE CODES & STANDARDS LIKE ATEX, IS NOT APPLICABLE, KINDLY CONFIRM	BIDDER UNDERSTANDING IS CORRECT.
16	3.1 OF PTS CODES & STANDARDS OF TECHINCAL TENDER	PAGE 17 OF 26	ISO 27001 - INFORMATION SECURITY STANDARDS	WE UNDERSTAND THAT AS THIS IS THE REQUIREMENT OF MECHANICAL G1.6 DIAPHRAGM GAS METERS, THE CODES & STANDARDS LIKE ISO 27001, IS NOT APPLICABLE, KINDLY CONFIRM	TENDER CONDITION SHALL BE PREVAIL





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17	3.1 OF PTS CODES & STANDARDS OF TECHINCAL TENDER	PAGE 17 OF 26	BS 4161 - SPECIFICATION FOR DIAPHRAGM METERS OF 6 CUBIC METERS	NOT APPLICABLE BECAUSE AS OUR GAS METER COMPLY WITH EN 1359:2017, KINDLY CONFIRM	BIDDER UNDERSTANDING IS CORRECT.
18	3.1 OF PTS CODES & STANDARDS OF TECHINCAL TENDER	PAGE 17 OF 26	IEC 60079 - ELECTRICAL APPARATUS FOR EXPLOSIVE GAS ATMOSPHERES	WE UNDERSTAND THAT AS THIS IS THE REQUIREMENT OF MECHANICAL G1.6 DIAPHRAGM GAS METERS, THE CODES & STANDARDS LIKE IEC 60079, IS NOT APPLICABLE, KINDLY CONFIRM	BIDDER UNDERSTANDING IS CORRECT.
19	4.0 OF PTS DESIGN CRITERIA OF TECHINCAL TENDER	PAGE 17 OF 26	EASE OF OPERATION AND MAINTENANCE;	AS G1.6 DIAPHRAGM GAS METER IS MAINTENANCE FREE AND HENCE THE MAINTENANCE IS NOT APPLICABLE, PL. CONFIRM	TENDER CONDITION SHALL BE PREVAIL
20	4.0 OF PTS DESIGN CRITERIA OF TECHINCAL TENDER	PAGE 17 OF 26	SUITABILITY FOR APPLICABLE ENVIRONMENTAL CONDITIONS;	WE WILL PROVIDE -25 TO 55°C & GAS METER COVERED TO PROTECT FROM DIRECT RAIN/WATER FLOW, KINDLY CONFIRM	TENDER CONDITION SHALL BE PREVAIL
21	4.0 OF PTS DESIGN CRITERIA OF TECHINCAL TENDER	PAGE 17 OF 26	SUITABILITY FOR OPERATION IN THE DESIGNATED CLASSIFICATION OF HAZARDOUS AREAS;	AS THE G1.6 DIAPHRAGM GAS METER IS PURELY MECHANICAL METER HENCE ATEX OR ZONE CLASSIFICATION IS NOT REQUIRED, KINDLY CONFIRM	BIDDER UNDERSTANDING IS CORRECT.
22	4.0 OF PTS DESIGN CRITERIA OF TECHINCAL TENDER	PAGE 17 OF 26	HIGH REDUNDANCY WITH HIGH RELIABILITY (HIGH MTBF AND LOW MTTR) AND NO SINGLE POINT OF FAILURE;	AS G1.6 DIAPHRAGM GAS METER IS MAINTENANCE FREE AND HENCE THE MAINTENANCE IS NOT APPLICABLE, KINDLY CONFIRM	TENDER CONDITION SHALL BE PREVAIL
23	4.0 OF PTS DESIGN CRITERIA OF TECHINCAL TENDER	PAGE 18 OF 26	ENVIRONMENTAL CONDITIONS THE EQUIPMENT CONSIDERED AND THE COMPLETE INSTALLATION SHALL BE SUITABLE FOR CONTINUOUS OPERATION UNDER THE AMBIENT CONDITIONS PREVAILING AT SITE.	WE WILL PROVIDE -25 TO 55°C & GAS METER COVERED TO PROTECT FROM DIRECT RAIN/WATER FLOW, KINDLY CONFIRM	TENDER CONDITION SHALL BE PREVAIL
24	4.0 OF PTS DESIGN CRITERIA OF TECHINCAL TENDER	PAGE 18 OF 26	EMC COMPLIANCE ALL GAS METERS AND ACCESSORIES SHALL BE IMMUNE TO RADIO FREQUENCY INTERFERENCE (RFI) AND ELECTRO MAGNETIC INTERFERENCE (EMI). THE DESIGN AND INSTALLATION OF ALL ELECTRICAL / ELECTRONIC EQUIPMENT SHALL MEET THE RFIJEMI REQUIREMENTS ACCORDING TO IEC 61000, EMISSION (IEC61000-6-4) AND IMMUNITY (IEC-61000-6-2) REQUIREMENTS FOR AN INDUSTRIAL ENVIRONMENT.	AS THE G1.6 DIAPHRAGM GAS METER IS PURELY MECHANICAL METER HENCE EMI/RFI IS NOT REQUIRED, PL. CONFIRM	BIDDER UNDERSTANDING IS CORRECT.





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25	4.0 OF PTS DESIGN CRITERIA OF TECHINCAL TENDER	PAGE 18 OF 26	HAZARDOUS AREA CERTIFICATION GAS METERS SHALL BE CERTIFIED FOR USE IN DESIGNATED AREAS WHEN INSTALLED IN HAZARDOUS AREA CLASSIFIED ZONES AS PER IEC 60079.	AS THE G1.6 DIAPHRAGM GAS METER IS PURELY MECHANICAL METER HENCE HAZARDOUS AREA CLASSIFICATION IS NOT REQUIRED, PL. CONFIRM	BIDDER UNDERSTANDING IS CORRECT.
26	5.0 OF PTS TECHNICAL REQUIRMENT OF TECHINCAL TENDER	PAGE 18 OF 26	GAS METERS SHALL BE INSTALLED AT DOMESTIC INSTALLATION APPLICATIONS IN ORDER TO METER THE GAS CONSUMED BY THE CUSTOMERS. GAS METER TYPE SHALL BE DECIDED BASED ON FLOW CAPACITY, PRESSURE RATING AND ACCURACY REQUIREMENTS. METERS SHALL BE DESIGNED TO OPERATE ON CLEAN AND DRY NATURAL GAS. HOWEVER, THE EXACT REQUIREMENT SHALL BE AS DEFINED IN MATERIAL REQUISITION AND DATASHEETS.	WE UNDERSTAND THAT G1.6 METER HAVING PMAX-500MBAR, QMAX-2.5 CUB M, QMIN-0.016 CUB M & ACCURACY CLASS 1.5 AS PER EN 1359:2017, KINDLY CONFIRM	TENDER CONDITION SHALL BE PREVAIL
27	CI. 5.1 OF PTS DOMESTIC DIAPHRAGM METERS OF TECHNICAL TENDER	PAGE 18 OF 26	DOMESTIC DIAPHRAGM METER SHALL BE SUITABLE FOR MEASUREMENT OF LOW GAS FLOWS IN DOMESTIC AND LIGHT COMMERCIAL METERING APPLICATIONS. DOMESTIC GAS METERS SHALL BE OF DIAPHRAGM TYPE MECHANISM (G1.6) FOR NATURAL GAS APPLICATION	WE UNDERSTAND THAT THE TENDER IS FOR G1.6 DOMESTIC DIAPHRAGM GAS METER AND HENCE GAS METERS WILL BE USED FOR DOMESTIC APPLICATION (21-25 MBAR WITH MAXIMUM FLOW OF 2.5 CUBIC METER/HR) AND NOT FOR COMMERCIAL OR INDUSTRIAL APPLICATION, KINDLY CONFIRM	TENDER CONDITION SHALL BE PREVAIL
28	CI. 5.1 OF PTS DOMESTIC DIAPHRAGM METERS OF TECHNICAL TENDER	PAGE 19 OF 26	CALIBRATION CERTIFICATE (ORIGINAL + SOFT COPY) SHALL BE PROVIDED TO CLIENT. ONE COPY OF THE CERTIFICATE SHALL BE PROVIDED WITHIN THE PACKING BOX OF EACH METER. INSPECTION OF THE GAS METERS AT THE WORKS OF THE MANUFACTURER BY OWNER/ OWNER'S REPRESENTATIVE AND THE VENDOR SHALL CARRY OUT TESTS TO DEMONSTRATE THAT THE GAS METERS ARE CAPABLE OF GENERATING PULSES AND ARE COMPATIBLE WITH AN AMR SYSTEM. FOR DEMONSTRATION, NECESSARY ARRANGEMENT SHALL BE MADE BY THE SUPPLIER DURING INSPECTION.	WE WILL PROVIDE CONSOLIDATED CALIBRATION CERTIFICATE/REPORT IN SOFT COPY DURING DISPATCH & HARD/SCANNED COPY DURING CUSTOMER INSPECTION, KINDLY ACCEPT	PLEASE NOTE THAT HARD COPY OF THE CALIBRATION REPORT SHALL BE REQUIRED DURING INSPECTION AND DISPATCH OF THE METER AND SOFT COPY WILL BE PROVIDED BY THE VENDOR TO THE CLIENT AS PER THE REQUIREMENT.
29	CI. 7.0 PTS DOMESTIC DIAPHRAGM METERS OF TECHNICAL TENDER	PAGE 19 OF 26	THE DOMESTIC DIAPHRAGM METERS SHALL BE PAINTED WITH ELECTROSTATIC SPRAY EPOXY PAINT OR POLYESTER POWDER COATING AND THE PAINT SHALL BE OF APPROVED COLOUR AND QUALITY	OUR G1.6 GAS METER IS MADE FROM CRCA/MS STEEL WITH INSIDE AND OUTSIDE POWDER COATING OF SMOKE GREY - RAL NO. P6N00662S5, PL. ACCEPT	TENDER CONDITION SHALL BE PREVAIL
30	CI. 8.0 PTS DOMESTIC DIAPHRAGM METERS OF TECHNICAL TENDER	PAGE 20 OF 26	THE NUMBER AND DATE OF THIS STANDARD I.E EN 1359:199X	AS PER STANDARD WE WILL PRINT EN1359:2017. THERE IS NO DATE MENTIONED BUT WE PROVIDE MANUFACTURING MONTH AND YEAR ON METER NAME PLATE, KINDLY ACCEPT	ACCEPTED
31	CI. 8.0 PTS DOMESTIC DIAPHRAGM METERS OF TECHNICAL TENDER	PAGE 20 OF 26	DIRECTION OF FLOW EITHER ON FRONT OF TOPCASE OF METER B/W INLET OR OUTLET	DIRECTION OF FLOW WILL BE MARKED WITH ARROW EMBOSSED AT TOP SIDE OF THE TOP CASE (IN BETWEEN CONNECTION), PL ACCEPT	ACCEPTED AND TENDER CONDITION SHALL BE PREVAIL





# SUPPLY OF DOMESTIC (G-1.6) DIAPHRAGM METERS (NORMAL) - AMR COMPATIBLE

# TENDER DOCUMENT NO. IGL/ET2/CP/CP17374, Dated 13.02.2023

VCS REFRENCE NO. VCS/C&P/17028/PC/DIAPHRAGM METERS/06

Owner: Indraprastha Gas Ltd.

Consultant: VCS Quality Services Pvt Ltd.

Pre-bid meeting held on 20.02.2023

SI. No.	Reference & Cl No.	Section Description	Subject Description	Bidder's Query/Clarification	IGL/VCS Reply
32	CI. 8.3 PTS DOMESTIC DIAPHRAGM METERS OF TECHNICAL TENDER	PAGE 20 OF 26	THE MANUFACTURER HAS TO ENSURE THAT THE INSPECTION AGENCY APPLY THEIR MARK (STAMP / STICKER/ EMBOSSING APPLICABLE AS PER INSPECTION CUM DISPATCH RELEASED CERTIFICATE) ON EACH BOX ENSURING ABOVE MENTIONED INFORMATION BEFORE DISPATCH.	WE UNDERSTAND THE MARKING OR STAMPING TO BE DONE BY TPIA ON SAMPLE METER BOX, KINDLY CONFIRM	TENDER CONDITION SHALL BE PREVAIL
33	CI. 9.0 PTS DOMESTIC DIAPHRAGM METERS OF TECHNICAL TENDER	PAGE 21 OF 26	THE CALIBRATION CERTIFICATES OF EACH ITEM SHALL BE ENCLOSED WITHIN THE PACKAGE BOX.	WE WILL PROVIDE CONSOLIDATED CALIBRATION CERTIFICATE/REPORT IN SOFT COPY DURING DISPATCH & HARD/SCANNED COPY DURING CUSTOMER INSPECTION, KINDLY ACCEPT	PLEASE NOTE THAT HARD COPY OF THE CALIBRATION REPORT SHALL BE REQUIRED DURING INSPECTION AND DISPATCH OF THE METER AND SOFT COPY WILL BE PROVIDED BY THE VENDOR TO THE CLIENT AS PER THE REQUIREMENT.
34	CI. 9.0 PTS DOMESTIC DIAPHRAGM METERS OF TECHNICAL TENDER	PAGE 21 OF 26	THE MANUFACTURER/VENDOR HAS TO ENSURE THAT THE INSPECTION AGENCY(TPIA) APPLY THEIR MARK (STAMP /STICKER/EMBOSSING APPLICABLE AS PER INSPECTION CUM DISPATCH RELEASED CERTIFICATE) ON EACH BOX ENSURING ABOVE MENTIONED INFORMATION BEFORE DISPATCH.	WE UNDERSTAND THE MARKING OR STAMPING TO BE DONE BY TPIA ON SAMPLE METER BOX, KINDLY CONFIRM	BIDDER UNDERSTANDING IS CORRECT
35	CI. 10.5 PTS DOMESTIC DIAPHRAGM METERS OF TECHNICAL TENDER	PAGE 22 OF 26	TESTING AND INSPECTION SHALL BE PERFORMED ON ALL ASSEMBLIES, SUBASSEMBLIES AND COMPONENT EQUIPMENT/MATERIALS IN ACCORDANCE WITH BUT NOT BE LIMITED TO THE FOLLOWING LIST OF ACTIVITIES:	AS PER OUR UNDERSTANDING TESTING AND INSPECTION SHALL BE PERFORMED ON COMPLETE GAS METER AS PER EN 1359:2017, KINDLY CONFIRM	TENDER CONDITION SHALL BE PREVAIL
36	CI. 10.5 PTS DOMESTIC DIAPHRAGM METERS OF TECHNICAL TENDER	PAGE 22 OF 26	RESISTANCE TO INTERNAL PRESSURE TESTING, METERS SHALL HAVE COMPLIANCE TO THE TEST REQUIREMENTS OF EN 1359: 1999+A1:2006 OR EN 1359-2017 OR THE LATEST EDITION IN FORCE FOR DOMESTIC DIAGRAM GAS METER FOR OTHER TYPE OF GAS METERS AS PER PNGRB REGULATORY REQUIREMENT	AS PER OUR UNDERSTANDING, IT IS A TYPE TEST AND WE WILL PROVIDE TYPE TEST REPORT, PLEASE ACCEPT	BIDDER SHALL ENSURE THE TESTING OF METERS AS PER THE GOVERNING STANDARD & TENDER QAP AT STAGE OF MAUNFACTURING AND INSPECTION
37	CI. 11 PTS DOMESTIC DIAPHRAGM METERS OF TECHNICAL TENDER	PAGE 22 OF 26	NOTE: THE RFID TAGS SHALL BE SELF-ADHESIVE, AND CHIP SHALL BE METALLIC IN WHITE SYNTHETIC LABEL AND PASTED BEHIND THE NAME PLATE OR INDEX COVER.	WE REQUEST APPROVAL BEFORE PRODUCTION AND PLACEMENT OF RFID TAG AS SUITABLE PLACE, KINDLY CONFIRM	CONFIRMED AND TENDER CONDITION SHALL BE PREVAIL
38	DATASHEET OF DOMESTIC DIAPHRAGM GAS METER TYPE G1.6	PAGE 24 OF 26	STEEL/ALUMINIUM ALLOY WITH SUITABLE COATING ON INSIDE AND OUTSIDE FOR CORROSION PROTECTION OF CASING.	WE WILL PROVIDE CRCA CASING AND SMOKE GREY MATT FINISH (RAL-P6N00662S5) POWDER COATING INSIDE AND OUTSIDE OF CASING, PL. ACCEPT	TENDER CONDITION SHALL BE PREVAIL





# SUPPLY OF DOMESTIC (G-1.6) DIAPHRAGM METERS (NORMAL) - AMR COMPATIBLE

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	SI. No.	Reference & Cl No.	Section Description	Subject Description	Bidder's Query/Clarification	IGL/VCS Reply
	39	DATASHEET OF DOMESTIC DIAPHRAGM GAS METER TYPE G1.6	PAGE 24 OF 26	CALIBRATION CERTIFICATE (ORIGINAL + SOFT COPY) SHALL BE PROVIDED TO CLIENT. ONE COPY OF THE CERTIFICATE SHALL BE PROVIDED WITHIN THE PACKING BOX OF EACH METER.	WE WILL PROVIDE CONSOLIDATED CALIBRATION CERTIFICATE/REPORT IN SOFT COPY DURING DISPATCH & HARD/SCANNED COPY DURING CUSTOMER INSPECTION, KINDLY ACCEPT	PLEASE NOTE THAT HARD COPY OF THE CALIBRATION REPORT SHALL BE REQUIRED DURING INSPECTION AND DISPATCH OF THE METER AND SOFT COPY WILL BE PROVIDED BY THE VENDOR TO THE CLIENT AS PER THE REQUIREMENT.
		BODY & INTERNAL PARTS MATERIAL OF BODY OF QAP	PAGE 25 OF 26	TESTING PROCEDURE FOR MANUFACTURER IS P (PERFORM)	WE WILL PROVIDE RAW MATERIAL TEST CERTIFICATE AS PROVIDED BY THE VENDOR AND SAME HAS TO BE REVIEWED (R) BY MANUFACTURER, PL. ACCEPT	ACCEPTED AND SHALL BE AS THE TENDER QAP
	41	CI. 11 PTS DOMESTIC DIAPHRAGM METERS OF TECHNICAL TENDER	PAGE 22 OF 26	RADIO FREQUENCY IDENTIFICATION (RFID) CHIP SHALL BE INSTALLED ON EACH GAS METER FOR RFID CONTROLLED INVENTORY MANAGEMENT BY IGL	WE WOULD LIKE TO KNOW THAT ONLY RF ID TAG IS REQUIRED OR RF RECEIVER ALSO REQUIRED WITH RF ID TAG TO READ THE RF ID TAG. IF RF RECEIVER IS ALSO REQUIRED THEN PL. SHARE THE SPECIFICATION OF SAME AND ALSO QUANTITY OF SAME, PL. CLARIFY	RFID RECEIVER IS AVAILABLE AT IGL STORE, BIDDER NEED TO PROVIDE THE RFID TAG AS THE PER TENDER AND FULL SERIAL NO. OF MATERIAL IS TO BE "WRITE" IN EPC MEMORY SEGMENT OF RFID TAG WITHOUT "HEX" FORMAT.

