

ADDENDUM-01

Sl.no.	Vol & Section	Page no	Clause /Description	To be read as
1	Vol I of I, BEC, Clause – C 2.2.	Page no. 18 of 150	In case of Indian subsidiary, manufacturing facility of their foreign Manufacturer from which the quoted Natural Gas Meters proposed to be supplied, shall be certified by a reputed Inspection / testing agency such as CEIL/ Lloyds/ BV/ DNV/ TUV/ ABS/ Moody/SGS/ GLI/ Velosi / FCRI / DVGW or equivalent, for fabrication, assembly and testing and same facility should be for minimum 500 nos quantity of meters per annum.	In case of Indian subsidiary, manufacturing facility of their foreign Manufacturer from which the quoted Natural Gas Meters proposed to be supplied, shall be certified by a reputed Inspection / testing agency such as CEIL/ Lloyds/ BV/ DNV/ TUV/ ABS/ Moody/SGS/ GLI/ Velosi / FCRI / DVGW or equivalent, for fabrication, assembly and testing and same facility should be for minimum 500 nos quantity of meters per annum. (OR) Bidder may provide MID approval along with PO/PO's for minimum supplied quantity of 500 nos. of meters per annum with completion certificate/certificates duly attested/ certified by Chartered Engineer and notary public.
2	Vol II of II , Time Schedule	Page no. 18 of 42	1. 25% Ordered Quantity to be delivered -Within 2 Months for the date of FOA for all items; For items less than 04 nos. Qty in SOR, minimum 01 no. to be supplied at each site. 2. For Remaining 75% Requirement Ordered Quantity to be delivered - Intended Quantity to be supplied within 02 months from the date of intimation by BGL in different Lots.	1st lot i.e.25% of ordered qty shall be delivered with in 12 weeks from the date of FOA & for remaining 75% requirement, intended qty to be supplied with in 12 weeks from the date of intimation by BGL in (2 to 4) different lots.
3	Vol I of I	Page No 37 of 150	Bid security/EMD in accordance with Clause 16 of “ITB” shall be furnished in Original in the form of Banker’s Cheque /Bank Draft payable to Bhagyanagar Gas Limited at Hyderabad or Bank Guarantee as per FORM F-3. –Not Applicable	Bid security/EMD in accordance with Clause 16 of “ITB” shall be furnished in Original in the form of Banker’s Cheque /Bank Draft payable to Bhagyanagar Gas Limited at Hyderabad or Bank Guarantee as per FORM F-3.
4	Vol I of II, Section 7, GPC, clause 38	Page No 149 of 150	The price charged for the materials supplied under the order by the supplier shall in no event exceed the lowest price at which the supplier or his agent/principal/dealer, as the case may be, sells the materials of identical description to any Persons/Organizations including the Purchaser or any Department of the Central Govt. or any Department of a State Govt. or any Statutory Undertaking of the Central or State Govt. as the case may be, during the currency of the order.	FALL CLAUSE - NOT APPLICABLE
5	Vol II of II, Section 11, Technical specification of Gas meter Marking, clause 7.0	Page No 27 of 42	Month and year of manufacture	To be read as "Year of manufacture"
6	Vol II of II, Section 11, Technical specification of Gas meter, Clause 13,Data sheet of commercial gas meter, End Connections (Two pipe version)	Page No 30 of 42	1½"NPT (M) inlet and out let confirming to ANSI B1.20.1 (In case the end Connection size are differing, bidder to provide suitable adapters of Brass to meet the specified end connections)	02 nos of Brass adaptors fixed on each meter of suitable sizes as follows : For G4/G6 meters - 1" NPT (F) and For G10/G16/G25 meters - 1 1/2 " NPT (F) on open ends respectively and the other end to be fitted with meter inlet/outlet NPT (M) end connections.
7	Vol II of II, Section 11, Technical specification of Gas meter, Clause 13, Max. Index reading	Page No 31 of 42	999999.99 Index with auto reset facility	For G4/ G6 - 99999.999 index For G10/ G16/ G25 - 999999.999 index
8	Vol II of II, Section 11, Technical specification of Gas meter, Clause 13, Ingress protection	Page No 31 of 42	IP 54 or better	IP 65
9	Vol II of II, Section 11, Technical specification of Gas meter, Clause 11, Inspection plan, x) i)	Page No 29 of 42	Statutory Approvals:Fire resistance type approvals, W&M approval, PESO approval	Statutory Approvals:Fire resistance type approvals, W&M approval
10	VOLUME – II OF II, Section 11, Technical specification of Gas meter, Clause 13,Data sheet of commercial gas meter, Operating temperature	Page No. 30 of 42	0°C to 45°C Design 60°C	0°C to 55°C
11	VOLUME – II OF II, Section 8, Material Requisition, II- SOR GROUP-B, Note	Page 7 of 42	Bidders to note that, Third Party Inspection is to be included in the quoted prices. Arranging Third Party Internationally recognized Inspection agencies like Lloyds, ABS, SGS, TUV, DNV, BV,Engineers India Limited, or any other Third Party Inspection agency only with prior approval of BGL / its PMC, for witnessing inspection and testing at the works of the manufacturer is in the scope of the bidder.	Bidders to note that, Third Party Inspection is to be included in the quoted prices.100% inspection by manufacturer as per approved QAP. Third Party Inspection (TPI) and Client/PMC inspection shall be as per the IS 2500 latest of approved QAP. However TPI shall review and verify all the test reports of inspection done by manufacturer.



M/s. Bhagyanagar Gas Ltd.

Quality Plan for Inspection of Commercial Diaphragm Gas Meter (By Customer / Third Party)

Department	Projects and O&M	Product	Commercial Diaphragm Gas Meter	Issue Date	31/08/2023
Rev.	00	Doc.No	BGL/QAP/CM/2023/01	Page No	1 of 5

Customer: M/s. Bhagyanagar Gas Limited

Consultant : PMC

Contract Reference : BGL/588/2023-24

Meter Type: Commercial Diaphragm Gas Meters G-4/G-6/G-10/G-16/G-25 (Quantity as per FOA/ PO)

Sr. No.	Test Parameter	Test specification	Acceptance Criteria	Manufacturer's Testing		Customer/TPIA Testing		
				Test	Records	Sampling Plan	Records	TPIA Scope
1	Fascia Plate / Sticker / Marking	Fascia Plate Marking	As per Customer's Approval	100%	As per OEM Procedure	Sampling Inspection: As per Approved QAP	Joint Inspection report / Statement of compliance	Witness
2	End Connection / Threads	As per Data Sheet	Acceptance by Thread Ring Gauge	100%	As per OEM Procedure	Sampling Inspection: As per Approved QAP	Joint Inspection report / Statement of compliance	Witness
3	Seal, Construction & Workmanship, Color & Appearance	Data Sheet / Product catalogue	As per approved data sheet/ Product Catalogue	100%	As per OEM Procedure	Sampling Inspection: As per Approved QAP	Joint Inspection report / Statement of compliance	Witness
4	Arrow marking	Left to right	Visual inspection	100%	As per OEM Procedure	Sampling Inspection: As per Approved QAP	Joint Inspection report / Statement of compliance	Witness



M/s. Bhagyanagar Gas Ltd.

Quality Plan for Inspection of Commercial Diaphragm Gas Meter (By Customer / Third Party)

Department	Projects and O&M	Product	Commercial Diaphragm Gas Meter	Issue Date	31/08/2023
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Sr. No.	Test Parameter	Test specification	Acceptance Criteria	Manufacturer's Testing		Customer/TPIA Testing		
				Test	Records	Sampling Plan	Records	TPIA Scope
5	Fitting & Alignment	Data Sheet / Product catalogue	As per approved data sheet/ Product Catalogue	100%	As per OEM Procedure	Sampling Inspection: As per Approved QAP	Joint Inspection report / Statement of compliance	Witness
6	Centre to Centre Distance	Data Sheet / Product catalogue	Acceptance by gauge	100%	As per OEM Procedure	Sampling Inspection: As per Approved QAP	Joint Inspection report / Statement of compliance	Witness
7	Visual Inspection	Powder Coating Thickness	As per EN 1359, Thickness at any location > 40 microns	100%	Compliance Certificate by manufacturer	Sampling Inspection: As per Approved QAP	Joint Inspection report / statement of compliance	Witness
8	Visual Inspection – Index Reading	Data Sheet / Product catalogue	± 0.10 m3 except meters tested during third party inspection	100%	Compliance Certificate by manufacturer	Sampling Inspection: As per Approved QAP	Joint Inspection report / statement of compliance	Witness
9	Accuracy testing at Qmin Flow Rate	Test Medium – Air (Ref.std. BS EN 1359:1999+A1 2006)	Error $\leq \pm 3\%$	100%	As per OEM Procedure	Sampling Inspection: As per Approved QAP	Joint Inspection report / Statement of compliance	Witness/ Review



M/s. Bhagyanagar Gas Ltd.

Quality Plan for Inspection of Commercial Diaphragm Gas Meter (By Customer / Third Party)

Department	Projects and O&M	Product	Commercial Diaphragm Gas Meter	Issue Date	31/08/2023
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Sr. No.	Test Parameter	Test specification	Acceptance Criteria	Manufacturer's Testing		Customer/TPIA Testing		
				Test	Records	Sampling Plan	Records	TPIA Scope
10	Accuracy testing at 0.2 Qmax Flow Rate	Test Medium – Air (Ref.std. BS EN 1359:1999+A1 2006)	Error \leq +/- 1.5%	100%	As per OEM Procedure	Sampling Inspection: As per Approved QAP	Joint Inspection report / Statement of compliance	Witness/ Review
11	Accuracy testing at Qmax Flow Rate	Test Medium – Air (Ref.std. BS EN 1359:1999+A1 2006)	Error \leq +/- 1.5%	100%	As per OEM Procedure	Sampling Inspection: As per Approved QAP	Joint Inspection report / Statement of compliance	Witness/ Review
12	External Leak Tightness/ External Soundness Test	Test Pressure : 0.75 Bar (MAOP 0.5 Bar) Test Duration : 30 sec	No Air Bubbles	100%	As per OEM Procedure	Sampling Inspection: As per Approved QAP	Joint Inspection report / Statement of compliance	Witness
13	Total Mean pressure absorption	At Qmax and room Temperature : 25 ± 5 degree centigrade	G-4/6 \leq 2 mbar G-10/16/25 \leq 3 mbar	100%	As per OEM Procedure	Sampling Inspection: As per Approved QAP	Joint Inspection report / Statement of compliance	Witness/ Review
14	Ingress Protection (IP)	Certificate	IP 65	Review	IP Certificate	Review of test Certificate	Joint Inspection report / Statement of compliance	Review



M/s. Bhagyanagar Gas Ltd.

Quality Plan for Inspection of Commercial Diaphragm Gas Meter (By Customer / Third Party)

Department	Projects and O&M	Product	Commercial Diaphragm Gas Meter	Issue Date	31/08/2023
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Sr. No.	Test Parameter	Test specification	Acceptance Criteria	Manufacturer's Testing		Customer/TPIA Testing		
				Test	Records	Sampling Plan	Records	TPIA Scope
15	Dimensional Check	Data Sheet / Product catalogue	As per approved data sheet/ Product Catalogue	100%	As per OEM Procedure	Sampling Inspection: As per Approved QAP	Joint Inspection report / Statement of compliance	Witness
16	Body & Internal Parts	Test Report	Review of Test Report	Per Lot Supplier TC	Supplier TC/ OEM Test Certificate	Review of test Certificate	Joint Inspection report / Statement of compliance	Review
17	EN Approval & Fire resistance type Certificate	Type Approval Certificate	BS EN 1359:1999 + A1 2006	100 %	EN type Approval Certificate	Review of test Certificate	Joint Inspection report / Statement of compliance	Review
18	Weights & Measurement Approval	Certificate	Legal Metrology, W&M Approval certificate	100 %	Legal Metrology, W&M Approval certificate	Review of test Certificate	Joint Inspection report / Statement of compliance	Review
19	AMR Compatibility Test	AMR Compatibility Test	Pulse Generation on AMR Module device	100%	As per OEM Procedure	Sampling Inspection: As per Approved QAP	Joint Inspection report / Statement of compliance	Witness

All mentioned documents – Calibration reports of instruments shall be reviewed by TPIA.



M/s. Bhagyanagar Gas Ltd.

Quality Plan for Inspection of Commercial Diaphragm Gas Meter (By Customer / Third Party)

Department	Projects and O&M	Product	Commercial Diaphragm Gas Meter	Issue Date	31/08/2023
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Notes:-

1	The above mention testing in acceptance criteria are minimum requirements, however, supplier shall ensure that the product also complies the additional requirements as per technical specifications and data sheets.
2	The supplier shall submit their own detailed QAP prepared on the basis of the above for approval of owner/owner's representative and indicate name of approved TPIA
3	TPIA/PMC/Client shall have right to inspect minimum 10% of all manufacturing activities or as specified above
4	TPIA along with owner/owner's representative shall review, approve all the documents related to QAP/quality manuals drawing etc. submitted for approval
5	TPIA shall also review the test certificates submitted by the manufacturer
6	Supplier shall in coordination with sub vendor shall issue detailed production and inspection schedule, with the dates and the locations to facilitate Owner/Owner's representative to organize inspection.
7	Supplier shall submit meter index format duly signed and stamped
8	TPIA shall review all reports 100%
9	All measuring instruments Shall be duly calibrated at the time of inspection.
10	Calibration certificates of all measuring instruments shall be reviewed by TPIA at the time of inspection, along with master calibration certificate (from NABL for India or similar lab from outside India) of the measuring instruments from which the instrument is celebrated. the same shall be submitted along with submission of inspection report, and the same shall be traceable to National/international standards. The master calibration certificate shall be checked as a must at the time of inspection and submitted along with the inspection report.
11	After satisfactory inspection TPIA/Manufacturer to apply their mark (stamp/sticker/embossing etc.) on each gas meter for testing. TPIA/Manufacturer has also to apply their mark with unique identification (e.g. stickers which cannot be removed / embossing/ stamp along with detail such as batch number date of Manufacturer, serial number) on the outer box/ gunny bags carrying the inspected materials after the information mentioned in the Technical Tender Specification.

Explanation:

Number of samples inspected will be equal to the sample size given by the approved QAP plan.

Prepared by: Manufacturer / Supplier	Approved by: BGL / PMC/ TPI
Name:	Name:
Signature:	Signature:
Date:	Date:
Stamp:	Stamp:

 M/s. Bhagyanagar Gas Ltd.		Quality Plan For Inspection of Commercial Gas Regulator (By Customer / Third Party)			
Department	Projects and O&M	Product	Commercial Regulator 6/ 10/16/ 25/ 40 m3 at 300 mbar	Issue Date	31/08/2023
Rev.		Doc. No.	BGL/QAP/CR/2023/01	Page No	1 of 4

Customer: M/s. Bhagyanagar Gas Limited

Consultant: PMC

Contract Reference : BGL/588/2023-24

Meter Type: Commercial Natural Gas Regulators 6/10/16/25/40 SCMH (Quality s per FOA/ PO)

Inspection Location -- Manufacturer's Works

Sr. No	Test Parameter	Test Specification	Inspection Procedure	Inspection Frequency & Sample Size		Ref Document/ Standard / Drawing No	Document of Record	Inspection		
				Manufacturer	TPI			Manufacturer	TPI	PMC / BGL
1	Body & Internal Parts	Chemical Composition of Regulator Body and Cover made of Aluminium alloy LM2 (ENAC46100) / LM6/LM24	Review of Material Test Certificate from other reputed international Laboratory authorized to do testing as per standard.	Material Test Certificate with each heat		Applicable Standard/ Approved Data Sheet / BGL TS	Test Reports and certificate	P	R	R
		Chemical Composition of Brass Part (End Connection)						P	R	R
		Chemical Composition of Springs, POM						P	R	R
2	Test On Elastomeric (Rubber) Components	Mechanical / Chemical Properties	Vendor Inspection Report	Each Lot				P	R	R



M/s. Bhagyanagar Gas Ltd.

Quality Plan For Inspection of Commercial Gas Regulator (By Customer / Third Party)

Department	Projects and O&M	Product	Commercial Regulator 6/ 10/16/ 25/ 40 m3 at 300 mbar	Issue Date	31/08/2023
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3	Torsion & Bending	Torsion & Bending shall confirm to EN 13611:2007 7.4	Review of Type test Certificate	Type Test Certification should be shown by the vendor at the time of inspection		EN 13611:2007 7.4	Test Reports and certificates	P	R	R
4	Flow Performance Lock UP Pressure Relief Pressure Over Pressure Shut Off Under Pressure Shut Off	Sound less Test @ 6 bar (g)	Checking the Leakage	100%	5%	EN334/ BGL TS / Approved data sheet	Test Reports and certificates	P	W	R
		Outlet Pressure @ 6 bar (g) Inlet Pressure & Max Flow in Cum/Hr	Tuning outlet Pressure @ 300 mbar (g)	100%	5%			P	W	R
		Outlet Pressure @ 1 bar (g) Inlet Pressure & Max Flow in Cum/Hr	Tuning outlet Pressure @ 300 mbar (g)	100%	5%			P	W	R
		Lockup Pressure @ 6 bar (g) Inlet Pressure & Max Flow (In SCMH)	Checking the Lock-up Pr. At Test Bench should be ≤330 mbar (g)	100%	5%			P	W	R
		Lockup Pressure @ 1 bar (g) Inlet Pressure & Max Flow (In SCMH)	Checking the Lock-up Pr. At Test Bench should be ≤330 mbar (g)	100%	5%			P	W	R
		Relief Pressure @ Inlet pressure 1 & 6 bar (g)	Checking the Relief Pr. At Test Bench	100%	5%			P	W	R
		Over Pr.-Shut-Off @ Inlet 1 & 6 bar (g)	Checking the Over Pr. At Test Bench	100%	5%			P	W	R
		Under Pr.-Shut-Off @ Inlet 1 & 6 bar (g)	Checking the Under Pr. At Test Bench	100%	5%			P	W	R



M/s. Bhagyanagar Gas Ltd.

Quality Plan For Inspection of Commercial Gas Regulator (By Customer / Third Party)

Department	Projects and O&M	Product	Commercial Regulator 6/ 10/16/ 25/ 40 m3 at 300 mbar	Issue Date	31/08/2023
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5	Pneumatic leak test of regulator	Pneumatic Leak Test at Specified Inlet Before Regulating and After Regulating at Outlet Pressure	No Leakage	100%	5%	EN334/ BGL TS / Approved data sheet	Test Report	P	W	R
6	Inspection of Final Regulator	Dimension	As per Approved Dwg.	100%	5%	EN334/ BGL TS / Approved data sheet/ Approved Drawing	Test Reports	P	W	R
		Checking of Marking & Label for Visibility	As per Approved Dwg.	100%	5%			P	W	R
		Surface finish & Workmanship	**Visual, as per BGL Tech Specs	100%	5%			P	W	R
		Checking of seals on regulator, Protection and Packing	Visual	100%	5%					
		Inlet & Outlet Connection	As per Approved Dwg.	100%	5%			P	W	R

LEGEND: -

P : Perform

W: Witness

R: Review

Notes:-

1	The above mention testing in acceptance criteria are minimum requirements, however, supplier shall ensure that the product also complies the additional requirements as per technical specifications and data sheets.
2	The supplier shall submit their own detailed QAP prepared on the basis of the above for approval of owner/owner's representative and indicate name of approved TPIA
3	TPIA/PMC/Client shall have right to inspect minimum 10% of all manufacturing activities or as specified above
4	TPIA along with owner/owner's representative shall review, approve all the documents related to QAP/quality manuals drawing etc. submitted for approval
5	TPIA shall also review the test certificates submitted by the manufacturer



M/s. Bhagyanagar Gas Ltd.

Quality Plan For Inspection of Commercial Gas Regulator (By Customer / Third Party)

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6	Supplier shall in coordination with sub vendor shall issue detailed production and inspection schedule, with the dates and the locations to facilitate Owner/Owner's representative to organize inspection
7	TPIA shall review all reports 100%
8	After satisfactory inspection TPIA to apply their mark (stamp/sticker/embossing etc.) on each gas meter for testing. TPIA has also to apply their mark with unique identification (e.g. stickers which cannot be removed / embossing/ stamp along with detail such as batch number date of Manufacturer, serial number) on the outer box/ gunny bags carrying the inspected materials after the information mentioned in the Technical Tender Specification.

Prepared by: Manufacturer / Supplier

Name:
Signature:
Date:
Stamp:

Approved by: BGL / PMC/ TPI

Name:
Signature:
Date:
Stamp: