## REPLY TO PRE BID QUERIES DATED: 24.03.2025

## TENDER FOR SUPPLY OF DOMESTIC DIAPHRAGM GAS METERS AT KOLHAPUR GA

HOGPL/2024-25/C&P/022 DATE: 11-03-2025

| SI. No. | Ref Clause No.   | Ref Clause Description  | Bidders Query  | HOGPL Reply  |
|---------|--|---|--|--|
| 1       | CONTRACT PERIOD & DELIVERY SCHEDULE<br>Cl. No. 4       | 100% of Total Order quantity- Total ordered quantity shall be delivered within Six (06) weeks from the date of issuance of LOI/PO or as instructed by EIC.  | Bidder request to amned the Delivery schedule as 100% of Total Order quantity-<br>Total ordered quantity shall be delivered within Six (06) weeks in one lot only<br>from the date of issuance of LOI/PO or as instructed by EIC. Also request to<br>reducte the contract period accordingly.  | Tender conditions shall prevail  |
| 2       | TECHNICAL REQUIREMENTS<br>Cl. No. 4                    | Pressure drop across the meter shall be less than 2 mbar at Qmax. Ingress protection of the meter shall be IP 54 or better.   | As per EN 1359 Pressure drop accepable limit is maximum 2 mbar, kindly accept for the same   | Tender conditions shall prevail  |
| 3       | TECHNICAL REQUIREMENTS  Cl. No. 4                      | along with restriction orifice.   | confirm.   | Provided 3/4"NPTM is provided, which shall fit with fittings(including low pressure regulator) of same size without requirement of any additional brass adaptors, bidder's understanding is correct  |
| 4       | Data Sheet<br>Cl. No. 23                               | End Connections: 3/4"MPTM at both inlet and outlet conforming to ANSI B1.20.1.  | Hope that 3/4" MPTM is mentioned by mistake and same can be read as 3/4" NPTF.   | Refer Corrigendum#1  |
|         | MATERIAL SPECIFICATION<br>Cl. No. 4                    | TECHNICAL REQUIREMENTS  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 100% calibration report with disptach, kindly accept for the same.   | Tender conditions shall prevail  |
| 6       | MATERIAL SPECIFICATION<br>Cl. No. 5                    | MATERIALS  Vendor shall use suitable material parts, provide proper surface finish, hardness and clearances, wherever possibilities of galling exists. For corrosion service, the material selected shall be in compliance with the requirements of NACE MR-0175 / ISO-15156 latest editions.     | We are providing powder coated steel casing (inside and outside). Kindly accept the same   | Bidder is requested to refer clause no. 19 of "DATA SHEET FOR DOMESTIC DIAPHRAGM METER TYPE-G 1.6", Body casing shall be Steel/Aluminum alloy with suitable coating on inside and outside for corrosion protection of casing. Body casing shall comply with requirements of EN 1359:2017 or latest editions. |
| 7       | DATA SHEET FOR DOMESTIC DIAPHRAGM<br>METER TYPE- G 1.6 | 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).   | Globally, Calibration and Accuracy Testing is not done at 0.1 Qmax as it the point where the accuracy of error curve changes from +/- 1.5% to +/- 3%. Hence the better testing point is the next test point which is 0.2 Qmax, at which Globally all labs do the calibration and accuracy testing.  Hence we request the CGD/PMC to consider the below points for calibration and accuracy test: -  Qmin 0.2 Qmax Qmax | Tender conditions shall prevail  |
| 8       | End Connections  | 3/4"MPTM at both inlet and outlet conforming to ANSI B1.20.1. In case and connections are different, bidder to provide suitable adaptor (Free Loose Nut type) to meet the required connection size. (Note 2) & (Note-5).  | We understand that the material for end connection is Mild steel  Requesting HPOIL to confirm the same.  | Refer Corrigendum#1  |
| 9       | 12. QUALITY ASSURANCE PLAN                             | Body Hydro test   | We understand that this is referred at External leak tightness as mentioned in EN 1359 standard.  Requesting HPOIL to confirm the same.  | Tender conditions shall prevail  |
| 10      | 12. QUALITY ASSURANCE PLAN                             | Degree of protection- Extent of check 10%   | We understand that, Degree of Protection (IP 54/IP65) is a type test and Extent of check can not be 10%.   | Refer Corrigendum#1  |
| 11      | 4. TECHNICAL REQUIREMENTS                              | Meter shall be provided with a device in the outlet to prevent reverse flow.  Overflow protection device (Restriction Orifice) shall be provided at the downstream of the meter. Material of construction of restriction orifice shall be PTFE and shall be suitable for natural gas application. | Requesting HPOIL to confirm the same.  As the meter requirement is for a G1.6 diaphragm gas meter intended for domestic applications, a restriction orifice (RO) is not required.  We kindly request HPOIL to confirm the same.  | Refer Corrigendum#1  |
| 12      | 4. TECHNICAL REQUIREMENTS                              | Vendor shall provide brass adaptor with 3/4" (NPT) inlet/outlet   | We understand that if the bidder provides a 3/4" MPTM at both the inlet and  | Provided 3/4"NPTM is provided, which shall fit with fittings(including low pressure regulator) of same size without requirement of any additional brass adaptors, bidder's understanding is correct  |
| 13      | 4. TECHNICAL REQUIREMENTS                              | The end connection of the meters shall be protected with plastic caps. In case of flange ends, companion flanges with bolts shall be provided at each end.  | We understand the requirement is for G1.6 domestic Diaphragm Gas Meter and it comes with standard 3/4" MPTM at both the inlet and outlet and it does not have flange end. So, there is no requirement of companion flanges with bolts.  We kindly request HPOIL to confirm the same.   |  |

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| 14 | 4. TECHNICAL REQUIREMENTS   | ATEX Marking shall comply with Directive 94/9/EC for the certified electrical/electronic device or module.  | We understand that this tender pertains to a standard mechanical diaphragm Gas Meter G1.6, and as such, ATEX marking is not applicable.  | Bidder's understanding is correct.   |
|    |   |   | We kindly request HPOIL to confirm the same.   |  |
| 15 | DATA SHEET FOR DOMESTIC DIAPHRAGM METER TYPE- G 1.6 (Notes Point No. 5) | Meters shall be provided with brass adaptors with free loose nut & PTFE washer (2mm) for converting the port size for inlet / outlet end connection. Spare washer (5 pairs) shall be provided with each meter.  | The bidder understands that if the Domestic gas meter has end connections with 3/4" NPTM at both the inlet and outlet, conforming to ANSI B1.20.1, then an adaptor is not required.  | Bidder's understanding is correct  |
| 16 | DATA SHEET FOR DOMESTIC DIAPHRAGM<br>METER TYPE- G 1.6                  | Meter shall be provided with a device in the outlet to prevent reverse flow.  | We kindly request HPOIL to confirm the same.  The bidder understands that the meter shall be equipped with a mechanism to prevent the reverse rotation of the index only, as specified in the datasheet (Page 14/19, Point No. 35).  We kindly request HPOIL to confirm the same. If there are any additional specific | Refer Corrigendum#1  |
|    |   |   | requirements, please provide further clarification.  |  |
| 17 | MATERIAL SPECIFICATION 3. DESIGN CRITERIA                               | 3.1 General - Ease of operation and maintenance - 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. However, In case of meter is faulty (within the warranty) due to manufacturing defect same can be replaced. Pl. Confirm   | Tender conditions shall prevail  |
| 18 | MATERIAL SPECIFICATION 3. DESIGN CRITERIA                               | 3.2 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 Ambient temperature range as per EN 1359:2017. Kindly Confirm  | Tender conditions shall prevail  |
| 19 | MATERIAL SPECIFICATION 3. DESIGN CRITERIA                               | 3.3 EMC COMPLIANCE All gas meters and accessories shall be immune to Radio Frequency Interference (RFI) and Electromagnetic Interference (EMI). The design and installation of all electrical / electronic equipment shall meet the RFI/EMI 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, PI. Confirm  | Refer Corrigendum#1  |
| 20 | MATERIAL SPECIFICATION 3. DESIGN CRITERIA                               | 3.4 HAZARDOUS AREA CLASSIFICATION 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's understanding is correct  |
| 21 | MATERIAL SPECIFICATION 4. TECHNICAL REQUIREMENTS                        | Diaphragm meter shall be suitable for measurement of low gas flows in domestic and light commercial metering applications.  | We understand that the tender is for G1.6 domestic diaphragm gas meter and hence gas meters will be used for domestic application with Maximum flow of 2.5 cubic meter/Hr and not for commercial or industrial application, kindly Confirm   | Bidder's understanding is correct  |
| 22 | MATERIAL SPECIFICATION 4. TECHNICAL REQUIREMENTS                        | - Back-run stop is to be provided to prevent the meter from running backwards in case of tampering or backflow conditions.  | We will provide in-built reverse restrictor which will provided to stop the reverse rotation of meter index in case of tampering condition & will comply EN 1359:2017 clause no. 6.6.4 requirement. Kindly confirm.  | Bidder's understanding is correct  |
| 23 | MATERIAL SPECIFICATION 4. TECHNICAL REQUIREMENTS                        | - Meter shall be provided with a device in the outlet to prevent reverse flow. Overflow protection device   | Overflow protection device is not applicable in this meter, However, we will provide the meter as per 11. Inspection data sheet point no. 35. Reverse Flow Conditions (Meter shall be equipped with prevention of reverse rotation of index). Kindly confirm.  | Bidder's understanding is correct  |
| 24 | MATERIAL SPECIFICATION 4. TECHNICAL REQUIREMENTS                        | (Restriction Orifice) shall be provided at the downstream of the meter.  Material of construction of restriction orifice shall be PTFE and shall be suitable for natural gas application.   | As this is mechanical Gas meter G1.6 with AMR compatibility, No need of Restriction Orifice. Kindly Confirm  | Refer Corrigendum#1  |
| 25 | MATERIAL SPECIFICATION 4. TECHNICAL REQUIREMENTS                        | Vendor shall provide brass adaptor with 3/4" (NPT) inlet/outlet connection.   | We will provide the MS end connection with Zn-plated (08 to 10 micron) 3/4" NPT as per 11. Inspection data sheet point no. 23. (End Connections). Kindly confirm   | Both Inlet and outlet connections of the meter shall conform to ANSI B1.20.1 |
| 26 | MATERIAL SPECIFICATION 4. TECHNICAL REQUIREMENTS                        | Washer shall be of PTFE material of construction and provided along with restriction orifice.  11. INSTRUMENT DATA SHEET  Note:5 - Meters shall be provided with brass adaptors with free loose nut & PTFE washer (2mm) for converting the port size for inlet / outlet end connection. Spare washer (5 pairs) shall be provided with each meter.   | We understand that 3/4"NPT end connection with plastic end cap is required, hence no brass adaptor & washer required with these end connections. Kindly confirm  | Bidder's understanding is correct  |
| 27 | MATERIAL SPECIFICATION 4. TECHNICAL REQUIREMENTS                        | 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.  11. INSTRUMENT DATA SHEET  Note:4 - 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 copy during customer inspection. Kindly accept   | Tender conditions shall prevail  |

| 28 | MATERIAL SPECIFICATION 4. TECHNICAL REQUIREMENTS                               | Other Internal parts shall be non – metallic to prevent from tampering like magnet. Vendor shall use suitable material parts, provide proper surface finish, hardness and clearances, wherever possibilities of galling exists. For corrosion service, the material selected shall be in compliance with the requirements of NACE MR-0175 / ISO-15156 latest editions.           | We will comply as per EN 1359:2017, the body is made up of EDD CRCA / MS with inside & outside powder coating. Kindly confirm   | Bidder is requested to refer clause no. 19 of "DATA SHEET FOR DOMESTIC DIAPHRAGM METER TYPE-G 1.6", Body casing shall be Steel/Aluminum alloy with suitable coating on inside and outside for corrosion protection of casing. Body casing shall comply with requirements of EN 1359:2017 or latest editions. |
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| 29 | MATERIAL SPECIFICATION  6. Name plate  | ATEX Marking shall comply with Directive 94/9/EC for the certified electrical/electronic device or module.   | As this is mechanical Gas meter G1.6 with AMR compatibility, ATEX marking on name plate is not applicable. Kindly Confirm   | Bidder's understanding is correct  |
| 30 | MATERIAL SPECIFICATION<br>8. INSPECTION & TESTING                              | Vendor shall submit the test certificates to the Company for the tests conducted during the manufacturing process hazardous area certification test and calibration test.  | As this is mechanical Gas meter G1.6 with AMR compatibility, Hazardous area certification test is not applicable. Kindly Confirm  | Refer Corrigendum#1  |
| 31 | MATERIAL SPECIFICATION<br>8. INSPECTION & TESTING                              | The Supplier shall provide calibration certificate and accuracy at MAOP of the diaphragm meter for the following flow rates: QMIN 0.1QMAX QMAX   | We will test the meters as per EB1359:2017, However External leakage testing is performed on MAOP, where as leak testing will be done at 1.5 times of MAOP - Max allowable operating pressure (0.5 bar X 1.5= 0.75 bar), Pl.confirm   | Tender conditions shall prevail  |
| 32 | MATERIAL SPECIFICATION 8. INSPECTION & TESTING                                 | <b>8.1 VISUAL INSPECTION</b> Verify that each component has a tag of corrosion resistant material permanently fastened to the unit and stamped with information  | A tag of corrosion resistant material permanently fastened to the unit and stamped with information is not possible on meter. However all meters will comply EN 1359:2017 requirement . Pl. confirm   | Meter shall be suitable for out Door / Indoor Installation, tamper proof and corrosion resistance for a life period of 20 years.   |
| 33 | MATERIAL SPECIFICATION<br>8. INSPECTION & TESTING                              | 8.1 VISUAL INSPECTION  Verify that all terminals for interconnecting wiring between units are accessible for connecting and checking. Terminal blocks should be numbered and where 2 or more are present, should have block identification. Interconnecting cables shall be colour coded or numbered. All electrical wiring shall be checked for continuity and insulation test. | As this is mechanical Gas meter G1.6 with AMR compatibility, the wiring & terminal is not applicable. Kindly confirm  | Bidder understanding is correct.   |
| 34 | MATERIAL SPECIFICATION<br>8. INSPECTION & TESTING                              | 8.2 FUNCTIONAL TESTING  Each gas meter shall be accurately calibrated and tested by the Manufacturer at the normal working conditions specified in the attached data sheet. All test equipment used for testing shall have traceability to national standards.   | All G1.6 mechanical Gas Meters will be tested as per Laboratory temperature (20 $\pm$ 1 $^{\circ}$ C) & Instrument present in the lab is traceable to national standards. Kindly confirm.   | Tender conditions shall prevail  |
| 35 | MATERIAL SPECIFICATION 11. INSTRUMENT DATA SHEET                               | 19 Body Casing "Steel/Alum mum alloy with suitable coating on inside and outside for corrosion protection of casing."  | We will comply with G1.6 domestic diaphragm gas meter made up of EDD CRCA/MS with inside & outside powder coating which meets requirements of EN 1359:2017. Please confirm  | Bidder is requested to refer clause no. 19 of "DATA SHEET FOR DOMESTIC DIAPHRAGM METER TYPE-G 1.6", Body casing shall be Steel/Aluminum alloy with suitable coating on inside and outside for corrosion protection of casing. Body casing shall comply with requirements of EN 1359:2017 or latest editions. |
| 36 | MATERIAL SPECIFICATION 12. QUALITY ASSURANCE PLAN                              | 1. Body & Internal Parts "Extent of Check" - 1 sample per heat Inspection - Manufacturer: P  | We will Provide raw material test certificate as provided by the our body casing vendor and the same has to be reviewed (R) by manufacturer. Please accept  | Tender conditions shall prevail  |
| 37 | MATERIAL SPECIFICATION   | 2. Assembly  | The body hydro test will be perform as per EN 1359:2017 clause no. 6.3.3  | Tender conditions shall prevail  |
| 38 | 12. QUALITY ASSURANCE PLAN  MATERIAL SPECIFICATION  12. QUALITY ASSURANCE PLAN | Description of Test - Body Hydro Test  2. Assembly Degree of Protection Extent of Check - 10%  | (External Leak tightness). Kindly confirm  The degree of protection "Extent of check is 10%", we understand that degree of protection as per IEC 60529 is a type test. We will provide type test report during TPI. Kindly confirm  | Refer Corrigendum#1  |
| 39 |  |  | To further reinforce trust in the quality of the products procured, we recommend the inclusion of NABL accreditation as a requirement. This accreditation signifies that the manufacturer operates testing laboratories in compliance with NABL standards, providing an additional layer of assurance on product quality. | Tender conditions shall prevail  |
| 40 |  |  | we propose the inclusion of "BIS certification" as a mandatory criterion in future tender terms for domestic diaphragm gas meters. This certification will enable the participation of manufacturers with proven quality standards, facilitating the procurement of robust products.                                      | Tender conditions shall prevail  |