

E-TENDER-581294



GUJARAT GAS

---

# SCOPE OF WORK TESTING OF METERS

**Document No.: GGL/TS/2022/DEC/06**

Previous Document Ref. No. GGL/TS/2022/MAY/01

**TABLE OF CONTENTS****Table of Contents**

1. Overview:.....	3
2. Definition .....	3
3. Bidder's scope of work: .....	4
4. Owner's scope of work:.....	7
5. Service level agreement and penalty clause: .....	8

Approved

## 1. Overview:

Gujarat Gas Limited (GGL) is India's largest City Gas Distribution (CGD) Company in terms of sales volume, with 27 CGD licenses spread across 43 districts in 6 states and 1 Union territory in the states of Gujarat, Maharashtra, Rajasthan, Haryana, Punjab and Madhya Pradesh and Union Territory of Dadra & Nagar Haveli.

GGL continues to hold the leadership position in CGD industry in terms of size and scale of operation, with more than 16.50 lakhs households, over 13,500 commercial customers, ~700 CNG stations, close to 4,300 industrial units and over 32,000 kilometre of natural gas pipeline network. The Company flows total gas volume close to 11.40 mmscmd (*\*As on 31st December 2021*).

This document summarizes the technical requirement and the specification for the job to be executed by the bidder.

## 2. Definition

- a. The **"GGL or Company or Owner"** shall mean Gujarat Gas Limited (GGL)
- b. The **"Supervisor or work in charge"** shall mean the person deployed by the Bidder for control and supervision of the work of his work force, as per the scope of work mentioned and to receive instructions from GGL's Engineer in Charge or his representative
- c. The **"GGL Engineer In charge or GGL's representative"** shall mean the person designated as such by the Gujarat Gas Limited and shall include his authorised nominee or agent , provided however that the GGL's representative to be so designated by GGL may be one person for certain aspects of his agreement and another person for other aspects of work covered by this Bid/Contract
- d. **"Stores"** shall mean the companies stores located at GGL authorised GA's
- e. **"GGL's premises or owner's premises"** shall mean company's premise.
- f. **"Site"** shall mean the locations to be designated by GGL or any other place on under , in or through which the Work or any part of work to be performed and other obligations under this Contract

### 3. Bidder's scope of work:

#### 3.1 General scope of work

- 3.1.1 This scope of work shall be read in conjunction with the conditions of all specifications/scope of work included in this document.
- 3.1.2 Bidder shall execute the work with due care and diligence and in compliance with all the laws, by laws, ordinances, regulations etc and provide all services, works and labour inclusive of supervision thereof
- 3.1.3 Bidder shall be deemed to have obtained all necessary information on subject as above mentioned as to risks, contingencies and all other specifications, which may influence the work
- 3.1.4 Bidder shall have deemed to have inspected and examined the work in totality.
- 3.1.5 Bidder shall carry out the testing of meters provided by GGL.
- 3.1.6 Meter's inspection and packaging shall be done by respective GGL location representative. Meters shall be packed in the Wooden boxes or Tin Boxes. Packaging material shall be arranged by GGL. Check list with regard to Inspection and Packaging shall be mutually discussed and finalized with the successful bidder post award of order. Bidder's representative shall co-ordinate with GGL (remotely or in person) on a case to case basis to ensure meters are inspected and packed in a desirable manner before lifting the meters. Bidder shall not hold GGL responsible for any missing quantity, packaging quality, malfunctioning or physical damages thereafter.
- 3.1.7 Loading & unloading, both sides transportation, in-transit insurance shall be in the scope of Bidder.
- 3.1.8
- 3.1.9 No additional transportation charges/miscellaneous charges shall be paid apart from rates agreed in the contract.
- 3.1.10 All the persons engaged by the bidder shall be bidder's own employee and they will not claim any privileges to GGL under any circumstances.
- 3.1.11 Bidder shall not assign sub-contract for Testing part of the Meters assigned to them without prior written permission from GGL.
- 3.1.12 Bidder shall provide the complete details about the testing facility along with their proposal.
- 3.1.13 Bidder is liable for the security, safety of meters while in transit. In case of any damage or loss of meter/equipment/spares/parts, GGL reserves the rights to recover cost as per terms specified separately under SLA & Penalties section of this document.
- 3.1.14 If the job is not carried out as per the requirement, then GGL may ask bidder to do necessary re-work. Cost involved in rework shall be recovered from the Bidder as per terms specified separately under SLA & Penalties section of this document.

#### 3.2 Meter Packaging and loading

- 3.2.1.1 Upon receipt of email notification from GGL to pickup the meter(s), Bidder shall arrange to inspect the meter(s) at GGL location for its condition and if any meter found damaged /blocked /tempered /non-working etc. – same shall be intimated to GGL team and not picked up for the testing purpose.
- 3.2.1.2 Bidder shall perform loading of the meters from GGL location(s).
- 3.2.1.3 Bidder shall provide adequate packing to make sure that meters do not get damaged during transportation from Bidder's location to GGL location.
- 3.2.1.4 Bidder shall put necessary details on the packed boxes as mentioned below
  - Complete address of the bidder
  - Serial no of Meters

- Marking in term of position of the Packing boxes (i.e. Up-side down, fragile material, No-Impact etc.)
- 3.2.1.5 Bidder shall prepare the packing list before lifting the meters. Format for the same shall be prepared by the Bidder and duly approved from GGL post award of order.
- 3.2.1.6 Bidder shall appoint reliable courier service provider for pick-up and drop of the meters.
- 3.2.1.7 Bidder shall ensure that courier staff follows the compliance of safety while pick up and drop of meter consignments.
- 3.2.1.8 Bidder shall follow GGL procedure for material Inward and Outward while picking up and dropping back the meters at GGL premises.
- 3.2.1.9 Bidder shall also record the inward/outward movement of the material at their works.

### 3.3 Meter transportation and insurance

- 3.3.1.1 Bidder shall arrange the pickup of meters from GGL destined locations.
- 3.3.1.2 Bidder shall arrange transportation of meters from GGL destined location to Bidder's location.
- 3.3.1.3 Bidder shall arrange necessary insurance to protect against all unforeseen circumstances which might cause damage to the meter(s) in-transit.
- 3.3.1.4 Required insurance shall be arranged and claimed by the Bidder to protect against any incident which results in the damage of meters (In transit).
- 3.3.1.5 Bidder shall ensure that the meter transported at their premises shall not be damaged. In case of any damage to meters observed, Bidder shall immediately inform to GGL with proper evidences.
- 3.3.1.6 In case of any incident which results in the damage of meters, owner reserves the rights to impose the penalty as per terms specified separately under SLA & Penalties section of this document.
- 3.3.1.7 Bidder shall provide required road permit / any other documents of the local state.
- 3.3.1.8 Bidder shall follow GGL procedure for material Inward and Outward while picking up and dropping back the meters at GGL premises.
- 3.3.1.9 Bidder shall also record the inward/outward movement of the material at their works.
- 3.3.1.10 Bidder shall intimate the GGL representative regarding the dispatch (as well as receipt at Bidder's location) of meter(s).

### 3.4 Technical scope of Testing Activity

The meter shall be tested with Air (Dry calibration/testing) at atmospheric pressure at NABL approved/certified laboratory as per the following broad activity but not limited to:

#### 3.4.1 General

- 3.4.1.1 Bidder shall test the meters with Air (Dry Calibration/testing) at atmospheric pressure.
- 3.4.1.2 Bidder shall ensure that testing shall be carried out by calibrated equipment/master meters having national/international traceability (NABL approved lab).
- 3.4.1.3 Bidder shall submit the master equipment/prover calibration/testing certificate with National / International traceability (as applicable) as and when requested by Owner and at the time of re-calibration/testing of master meters and renewal of validation of Lab.
- 3.4.1.4 Bidder shall provide the valid and latest NABL certification along with the Bid and as and when renewed or requested by GGL on time to time basis.
- 3.4.1.5 Bidder shall inform GGL three months in advance regarding planned testing of master meters / other instruments of test lab/or closure of lab more than 5 days because of any reason.

- 3.4.1.6 In case of non-availability of NABL approved lab at bidder's premise (for more than 5 days), bidder shall get it calibrated through other NABL approved lab(s) at their own cost with prior written permission from GGL.

### 3.4.2 Before Testing

- 3.4.2.1 Bidder shall prepare the physical / visual inspection report of the meter(s) received at their facility. Clear photographs shall be captured for the received material as evidence including the damage part of the meter (if any). Meter internals shall be inspected for any damage/erosion or other damage / dirt or any foreign particle ingress that may affect the performance of the meter(s).
- 3.4.2.2 Bidder shall submit the physical / visual inspection report (along with photographs) of meters received at their premises to GGL before commencing testing of the meter.
- 3.4.2.3 After go-ahead from client, bidder shall clean the internal and external surface of the meter and their body parts before carrying out the testing.
- 3.4.2.4 Bidder shall inform to GGL in well advance before carrying out the testing of meter. GGL may plan for the witness of testing of meter by GGL in charge. Cost of such visit shall be borne by GGL.
- 3.4.2.5 Based on confirmation from GGL, bidder will proceed for following test:
- Testing of meters with error curve.
  - Pressure loss test.
  - Leakage test.
- 3.4.2.6 In case of any leakage found in the meter, bidder will inform to GGL and seek further decision of GGL to proceed.

### 3.4.3 During Testing

- 3.4.3.1 The Bidder shall use methods for testing the meter(s) which are suggested by NABL standard (as applicable) in its report.
- 3.4.3.2 Bidder shall carry out the testing with EVC if demanded by GGL as and when required. *NOTE - There is no requirement of EVC Testing separately. Some meters do not have mechanical totalizers for which it is essential to connect EVC with the meter to perform testing. So, in those specific cases only, meter shall be tested along with the EVC connected. EVC for this purpose shall be provided by GGL.*
- 3.4.3.3 Bidder shall ensure that the meter shall be tested at flow rates as defined here below. Qmin and Qmax as mentioned on meter's name plate.

**Qmin, 0.2Qmax, 0.5Qmax, 0.75Qmax and Qmax.**

- 3.4.3.4 Bidder will generate the Test report (refer section 3.5) and shall provide suitable identification sticker on tested meters.

### 3.4.4 After Testing

- 3.4.4.1 Bidder shall inform to GGL for the completion of testing activity and shall submit test results to GGL for review purpose and seek dispatch clearance for the completed meters.
- 3.4.4.2 Bidder will provide original copy of Test certificate along with dispatch documents along with invoice to client and one copy of test certificate along with each meter.
- 3.4.4.3 Bidder shall also submit SLA compliance report along with the Invoice. Format for the same shall be prepared by the Bidder and duly approved from GGL post award of order.

## 3.5 Test Report

- 3.5.1 The date (DD/MM/YY), laboratory name, Registration no. and location of testing facility with reference to NABL accreditation certificate shall be properly mentioned on certificate.
- 3.5.2 Serial number & the brief specification of the meter under test like type of meters, manufacturer of the meter, rangeability, accuracy, traceability (National or International).
- 3.5.3 Initial and final reading of mechanical counter of meter shall be mentioned on test report. (if testing carried out with EVC, readings of EVC shall also be captured in test report)
- 3.5.4 The nature and condition (pressure and temperature) of the test medium.
- 3.5.5 Details of testing setup (Test bench), instruments used and methodology adopted shall be mentioned in the test report. Validity of NABL accreditation, validity of calibration of Master meters and all other test instruments shall be specified in the Test certificate.
- 3.5.6 Accuracy of meter at each test point as identified under clause No. 3.4.3.3 above.
- 3.5.7 The format of test report shall be approved by Gujarat Gas Limited post award of contract and the final test report shall be as per approved format only.
- 3.5.8 The estimated uncertainty of method with reference to the standard followed & to be mentioned. Serial number of the master meters/prover used.
- 3.5.9 Bidder shall clearly mention whether the Tested meter is within maximum permissible error limits as per applicable EN standard (identified in PNGRB T4S document).

**3.6 Meters packaging, loading/unloading, return transportation and in-transit insurance**

- 3.6.1 All steps as mentioned in sections “Meter Packaging and loading” and “Meter transportation and insurance” above as applicable for return of meters to GGL.
- 3.6.2 Bidder shall dispatch the meters back to GGL along with all necessary documents for seamless transportation of meters.
- 3.6.3 TPI is not applicable for dispatch of meters back to GGL, however, Bidder shall take consent from respective GGL location team for dispatch of meters (refer section 3.4.4).

**4. Owner’s scope of work:**

- 4.1 GGL shall provide tentative schedule of meter’s calibration on quarterly basis. Meter schedule shall be shared separately post award of Order.
- 4.2 GGL shall provide meters (along with all necessary documents for seamless transportation of meters) at their designated stores for collection.
- 4.3 GGL will intimate Bidder by written communication (e-mail) to initiate pickup of meters.

## 5. Service level agreement and penalty clause:

Time is the essence of the contract. In case the Bidder fails to complete the work within the stipulated period, then, unless such failure is due to Force Majeure as defined in contract or due to EMPLOYER's fault, penalties as outlined in the table below shall be payable by the Bidder.

The following critical parameters describes the system performance and service level expectations and requirements during the contract period. The service level includes target performance measures, unacceptable measures and the related penalties.

Sr No	Parameter	Service Level agreement	Penalty
5. 1	Pickup of Meters	Within 7 days from the date of first intimation email from GGL.	INR 100 per meter per day delay
5. 2	Testing of meters	Within 30 days from the date when meter is received at Lab/facility	INR 1000 per meter per day delay
5. 3	Delivery of Tested meters	Within 15 days after the completion of the activity and GGL go ahead as per clause 3.4.4.1	INR 100 per meter per day delay.
5. 4	Error in carrying out testing or error in testing report	Zero deviation	INR 5000 per instance
5. 5	Meter damaged during transportation	Zero deviation	INR 8000 per instance per meter or actual depreciated value (cost) of the meter or total repair cost as per GGL, whichever is higher.
5. 6	Meter found faulty after testing/receipt at GGL premises	Zero deviation	INR 8000 per instance per meter or actual depreciated value (cost) of the meter or total repair cost as per GGL, whichever is higher.

**\*\* Days considered above are working days**

The cumulative penalties arising out of Service Level Agreements detailed above shall not exceed 10% of the overall contract value. (Except penalty clause 5.5 and 5.6 above).