

**OIL AND GAS REGULATORY AUTHORITY**  
**Request for**  
**EXPRESSION OF INTEREST**  
**Under Regulation 3(B) of The PPRA Regulations of Consultancy Services Regulation 2010**  
**SELECTION OF CONSULTANT FIRMS FOR DETERMINING**  
**UNACCOUNTED FOR GAS (UFG) LEVEL**

1. Oil & Gas Regulatory Authority (OGRA) intends to carry out a study to determine reasonable Unaccounted for Gas (UFG) benchmarks for natural gas sector, in Pakistan. Study shall include proposals for incremental improvements in all components of UFG control. Consultant firms shall complete the assignment within 90-days of the commencement of study.
2. OGRA invites reputable consultant firms having minimum of **ten years** experience in operational, technical and financial matters of natural gas utilities operations *interalia* including experience and strong knowledge of the international as well as the local factors which have an impact on UFG, its control, monitoring, measurements, gas purchase-sales reconciliations etc.
3. Interested consultant(s) must provide detailed CV(s) of member(s) of core team highlighting relevant experience.
4. Consultant firms in the business of oil and gas sector may have option to associate to complement their respective areas of expertise, strengthening the technical responsiveness of their proposals and make available bigger pool of experts who shall have knowledge of the international as well as local prospective on the issue.
5. Existing auditors of SSGCL and SNGPL are not eligible to participate in this assignment.
6. The bids shall be submitted under regulation 3(B) of the PPRA Regulation of Consultancy Services Regulation 2010 (Quality & Cost Based Selection). The Financial Bid should contain a lumpsum figure, inclusive of all charges. Conditional bids will not be accepted.
7. The Technical and Financial Proposals shall be received in separate sealed envelopes **till 11:00 AM on 30<sup>th</sup> December, 2015** and only Technical Proposal will be opened in the first instance for technical evaluation on same date at **11:30 AM** in the presence of the bidders, or their authorized representatives, who may like to present bids to the Executive Director (Gas) in OGRA office. The financial proposals of the technically responsive or highest ranked proposals, under regulation 3(B) of the PPRA Regulation of Consultancy Services Regulation 2010, shall be opened in the presence of the bidders on a date and time to be communicated to them in advance. The financial bids should be valid for six months from date of opening of technical bids.
8. The envelopes containing the technical and financial proposals shall clearly mention that bids are to be opened at the specified date and time and by the competent forum only.
9. OGRA reserves the right in its sole discretion to accept or reject any bid without justifying any reason thereof.
10. Scope of work/TORs and evaluation criteria can be obtained from the OGRA website [www.ogra.org.pk](http://www.ogra.org.pk) and PPRA website [www.ppra.org.pk](http://www.ppra.org.pk).
11. Experience of conducting similar assignments like natural gas purchase / sale reconciliation, UFG related studies, energy efficiency audits of prominent gas distribution and transmission companies, with supporting documents is essential.
12. In case bid opening date is falling on a holiday, the bid will be opened on next working day at same time.

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## SCOPE OF WORK/TERMS OF REFERENCE

### **1. INTRODUCTION:**

Unaccounted for Natural Gas (UFG) means, in respect of financial year, the difference between the total volume of metered gas received by Gas Utility Companies during that financial year and the volume of natural gas metered as having been delivered by the licensees to their consumers excluding there from metered natural gas used for self consumption by the Gas Utility Companies for the purposes of their regulated activity; and such other quantity as may be allowed by the Authority for use by the licensees in the operation and maintenance of their regulated activity. UFG is one of the major operational elements and bench marking of UFG greatly determines the operational efficiency of a transmission and distribution company. The companies in their different petitions have been arguing that following factors contribute to the UFG:-

- (i.) Leakages
- (ii.) Measurement errors
- (iii.) Size and Age of network
- (iv.) Law and order situation in different areas
- (v.) Increase in gas price
- (vi.) Increase in gas theft by consumers and non-consumers
- (vii.) Shift of gas sales from bulk to retail consumers
- (viii.) Allowance for minimum billing
- (ix.) Effect of Power outage on buried steel pipelines

Considering the importance of the issue, OGRA intends to carry out detailed evaluation in respect of its licensees i.e. Sui Northern Gas Pipelines (SNGPL) and Sui Southern Gas Company (SSGC) on various aspects of UFG components and its quantum through a Consultant firm of eminence repute in the field.

### **2. OBJECTIVES:**

To assist Oil and Gas Regulatory Authority (hereafter referred the Authority) for determining and fixing the UFG benchmark (s) for the gas utility companies i.e. SNGPL and SSGCL for next five years and thereafter development of a formula to calculate UFG on yearly basis keeping in view all the relevant factors as well as international best practices.

### **3. TASKS:**

- i. Develop rationalized overall benchmark for UFG, in natural gas sector / development of a formula to calculate UFG on yearly basis, including fixed and variable parameters, as per relevant clauses of OGRA Ordinance and UFG definition given in NGTR and applicable law.
- ii. The benchmark study must elaborate international best practices as well as appropriate discounts for local operating conditions, with specific reference to countries with similar operating environment along with details of company's network / consumers in respective countries. References on UFG Benchmarks prepared by other renowned regulators should be included along with their methodology adopted to calculate UFG disallowance if any.
- iii. Brief of some of the issues mentioned at Para 1 above which are the contributing factors raised by the gas companies in the specific socio economic conditions of Pakistan, is as follows:-

### **a) SHIFT OF BULK SALES TO RETAIL SECTOR**

Bulk sector comprises of power, fertilizer, cement, steel mills and other corporate sector Industries whereas retail sector constitutes sale to all remaining consumers.

#### **Task**

- i. Identify the bulk consumers in both gas companies with their respective volumes, inline with the international practices.
- ii. To establish a formula to calculate the impact of shift of volume from bulk to retail sector for calculation of UFG, inline with the international practices also indicate reference countries.

### **b) THEFT**

Two type of theft exist:

- i. Theft by registered consumers
- ii. Theft by non registered consumers

Presently OGRA allows theft volume against registered consumers in the deemed gas sales upon its acknowledgement, whereas for non- registered consumers, companies are required to put all out efforts which includes vigilance, identification and removal of theft points, calculation of pilferage volume and have the same acknowledged by the court of law.

#### **Task**

- i. International best practices adopted for treatment of theft by non registered consumers along with proper referencing vis-à-vis countries specific conditions.
- ii. Preparation of methodology for treatment of theft volume in the UFG computation as well as what actions would be required by the companies to qualify for such volumes.

### **c) LAW AND ORDER AFFECTED AREAS**

In view of the deteriorating law and order in certain areas of the country gas companies are pursuing to allow volumes in this account

#### **Task**

- i. Suggest appropriate way forward for quantification and treatment of such volumes as part of UFG in line with the best international practices with specific references along with legal provisions vis-à-vis local conditions.
- ii. Define prerequisites to qualify for law and order volumes.

### **d) MINIMUM BILLING**

OGRA disallows the claims of the gas companies' against minimum billing on the rationale that the same is unmeasured and is not inline with the UFG definition provided in NGTR 2002 and arises due to petitioner's own equipment fault, which is not justified and that allowance for such metering errors has already been given in the allowable UFG vis-à-vis local conditions.

#### **Task**

- i. Whether there is a justification to consider allowance in UFG for volume against minimum billing claimed by the gas companies, giving references, if any keeping in view applicable legal provisions.

### **e) FORMULA FOR UFG CALCULATION**

SNGPL has contested the methodology of calculating UFG by OGRA in the light of the definition of UFG given in the NGTR 2002.

#### **Task**

- ii. To suggest methodology of calculating UFG in the light of present practice, definition as per rules and international practices applicable.

**f) BTU EQUIVALENCE ISSUE IN CASE OF THIRD PARTY ACCESS**

As per Third Party Access Rules, the transporter of gas i.e. the gas companies, shall be paid for transportation charges for the contracted capacity in terms of volume at the entry point and shall account for this gas in terms of equivalent energy value at exit point irrespective of volume. Due to lower GCV of the commingled gas in the integrated transmission and distribution network of the gas companies, the transporter of gas i.e. the gas companies have to deliver excess volume of gas to compensate the energy value at exit point which contribute to the UFG of the companies.

**Task**

- i. To devise a mechanism to stream line the above anomaly inline with the best international practices vis-à-vis local conditions.

**g) TREATMENT OF THIRD PARTY GAS VOLUME FOR CALCULATION OF UFG**

**Task**

- i. To suggest treatment of such gas volumes as per standard norm / best international practices.
  
- v. A methodology / mechanism is to be devised for capping the volumes to be allowed (if any) as mentioned in Paras (a), (b), (c), (d) above, with a view to create a balance between consumers and the licensees and to maintain reasonable pressure on the licensees to put due efforts to control these losses.
- vi. The benchmark must also cater for anticipated development in natural gas sector, which may include increase in gas input due to indigenous gas discoveries, import of natural gas through interstate pipelines /LNG, increase / decrease in gas sales volumes, load management, and other such factors as per international best practices.
- vii. Develop framework for incremental improvement in all areas/components of UFG control.

**4. DELIVERABLES:**

- i. Present study plans, highlighting critical milestones to the Authority, prior to the commencement of the study.
- ii. Submit draft report to the Authority within 30 days of the commencement of the assignment.
- iii. Submit 2nd draft report on UFG benchmark fixation to the Authority within 60 days of the commencement of the assignment.
- iv. Submit final report on UFG benchmark fixation to the Authority by 90th day of the study period.
- v. Consultant firm will be obligated to consult all stakeholders including sui companies and to assist the Authority in presenting the findings of study to various forums.
- vi. The Consultant Firm shall be responsible to coordinate with the Sui Companies and other relevant stakeholders, for collection of relevant data required to carry out the said study under intimation to OGRA.

- vii. Any direction, order, judgment or guideline issued by any court of law relating to determination of UFG shall be binding on the consultant and shall be complied with in letter and spirit.

**5. QUALIFICATION OF THE CONSULTANT(S):**

The Consultant firms should comprise of technical personnel with a minimum of 20 years practical experience relating to UFG monitoring, gas measurements, gas purchase-sales reconciliations and strong knowledge of the international as well as the local factors which have an impact on UFG. Interested Consultant firm(s) must provide detailed resumes of their members.

**6. PRESENTATION**

All consultant firms participating in the tender may be required to give detailed presentation which as well covers the following:

- i. Expertise
- ii. Experience
- iii. Any UFG benchmark studies done for renowned regulators.
- iv. Practices adopted by the other renowned regulators
- v. Resume of their experts
- vi. Any other related information

**7. TERM/DURATION OF ASSIGNMENT:**

The study shall be completed within 90 days of the award of contract. Extension may given in special circumstances, subject to approval by the Authority.

**8. PROPRIETARY RIGHTS:**

All documents prepared by the consultant(s) shall become and remain the sole property of the Authority. Consultant(s) shall not, during the term of contract or after expiration, disclose any proprietary or confidential information relating to the services, or the Authority's business or operations.

**9. LOCATION:**

All relevant correspondence and meetings will be convened in the office of Oil and Gas Regulatory Authority, currently located at Plot No. 54-B, Fazl-e-Haq Road, Blue Area, Islamabad.

**10. COUNTER PARTS:**

Executive Director (Gas) and Executive Director (Finance & Accounts), OGRA will be the counter parts who will provide day-to-day coordination for the project.

## TECHNICAL EVALUATION CRITERIA

Description	Points
<p><b>1.0 Work Protocol</b></p> <p>1.1 A comprehensive approach, strategy or methodology along with tools and techniques, which shall be adapted to carryout UFG study as per TOR's, highlighting critical path items.</p>	<p><b>20 Points</b></p>
<p><b>2.0 General Experience of the firm</b></p> <p>2.1 No. of years in business/ consultancy</p> <p>2.2 Areas of expertise(general experience, not specific experience)</p>	<p><b>10 Points</b></p> <p>5 Points</p> <p>5 Points</p>
<p><b>3.0 Specific and relevant experience</b></p> <p>3.1 Total Work experience and competency of the consultant Firm(s) in undertaking jobs relating to similar assignments preferably in developing countries like natural gas purchase / sale reconciliation, UFG related studies, energy efficiency audits of prominent gas distribution and transmission companies, with supporting documents.</p> <p>3.2 Experience of work with similar agencies, and in similar conditions.</p>	<p><b>40 Points</b></p> <p>20 Points</p> <p>20 Points</p>
<p><b>4.0 Key staff to be deployed on the assignment on permanent basis</b></p> <p>4.1 Qualification</p> <p>4.2 Experience</p>	<p><b>20 Points</b></p> <p>10 Points</p> <p>10 Points</p>
<p><b>5.0 Financial/Technical Strength of the firm and presence in Islamabad</b></p> <p>5.1 Organizational Structure, How they handle assignments/professional supervision</p> <p>5.2 Professional presence in Islamabad</p>	<p><b>10 Points</b></p> <p>5 Points</p> <p>5 Points</p>
<p><b>TOTAL:</b></p>	<p><b>100</b></p>

**NOTE: Minimum requirements for technical pre-qualification shall be 70 points.**

**For overall evaluation following weightage will be given:-**

**Technical Proposal = 75 % weightage**

**Financial proposal = 25 % weightage**