

TERMS OF REFERENCE

SELECTION OF CONSULTANT FIRM TO CARRY OUT DESIGN REVIEW AND TECHNICAL EVALUATION OF PIPELINE INFRASTRUCTURE DEVELOPMENT PROJECTS FOR UPCOMING LNG AND ANTICIPATED INDIGENOUS SUPPLIES, FOR ASSISTING THE AUTHORITY IN DETERMINING THE PRUDENCE OF INVESTMENT / PROJECTS

1. BACKGROUND:

- a) The Government of Pakistan established the Oil & Gas Regulatory Authority (OGRA) in pursuant to the OGRA Ordinance, 2002 as a part of its policy for regulating the mid-stream and down-stream petroleum sectors of the country.
- b) To meet the energy demand, the country is now moving ahead towards import of Liquefied Natural Gas (LNG) and expected LNG receiving nodes are Gawadar/ Karachi ports. In order to take RLNG and additional indigenous gas supplies into national transmission grid, both the gas utility companies plan to augment the existing network for supply of gas to the various consumption nodes on their network.
- c) OGRA intends to invite the participation of the consultant firms of related experience who shall assist the Authority (OGRA) in determining the technical viability, design analysis and prudence of investment in accordance with project implementation plan as proposed by both gas utility companies i.e. SNGPL and SSGCL.

2. OBJECTIVES:

The consultant firm will review the design plan submitted by both the utility companies; analyse, technically evaluate the segmental capacity through the application of latest and internationally proven technology / tools in the oil and gas sector and evaluate the addition/possible relocation of existing compressors etc. The consultant firm will also assist the Authority in determining the prudence of investment.

3. TASKS:

The following tasks will be required to be performed by the consultant firm while carrying out detailed evaluation of the Gas Infrastructure Development Projects:

- a- Justification/ need assessment of the Projects.
- b- Prudence in terms of design and technical features of the Projects.
- c- Prepare last three year actual gas input and ten year projected input gas supplies based on updated contractual schedules.
- d- Design analysis of project plans submitted by gas companies keeping in view optimization analysis of the existing transmission network.
- e- Analyze segmental capacities to establish available/existing capacities based on peak, average and lean gas loads in the network. Identify and provide remedial actions regarding operational constraints in the segment/network, if any.
- f- Optimization of the existing network with progressive laying of additional looplines to meet the intended gas flows in the network. Technical viability and prudence of each additional loop line will be assessed on maximum allowable operating conditions (MAOP). The consultant firm shall critically analyze the diameter of additional loop lines required and

suggest alternative/technically & financially more feasible options, if any, e.g. selection of line pipes of smaller diameters, rerouting of gas pipelines and lateral pipelines etc.

- g- Detailed analysis of gas flow/pressure on the network/ hydraulic simulations etc.
- h- Performance analysis of gas compressor stations considering the existing horsepower (HP) installed and requirement of additional compressors (HP) keeping in view MAOP and any possibility of relocating the existing compressors.

4. DELIVERABLES:

The consultant firm shall submit a consolidated report with clear recommendation based on technical analysis, viability and prudence of investment being made by utility companies indicating segment wise pipelines of specified diameter, compression to be added/ relocated, allied infrastructure details and individual estimated costing alongwith overall cost.

5. EXPERT'S QUALIFICATIONS:

- a) The Consultant Firm is required to be reputable in the relevant field with at least 10 years experience of evaluation and design of transmission pipelines projects and having carried out at least two similar assignments.
- b) All consultant firms participating in the tender would be required to give detailed presentation, for technical evaluation of their bids, covering the followings:
 - Expertise in the field of technical evaluation and design analysis of pipeline projects.
 - Relevant Experience
 - Methodology to evaluate the design
 - Any other relevant information

6. TERM OF ASSIGNMENT/ DURATION:

The timeline for the assignment completion is 45 days from date of signing of the formal contract, with first draft report in 30 days. If desired by the Authority, the consultant will be required to give presentations on the final report.

7. PROPRIETARY RIGHTS:

All documents prepared by the consultant shall become and remain the sole property of the Authority. Consultant Firm 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.

8. LOCATION:

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

9. COUNTER PARTS:

Executive Director (Gas) or any other officer as nominated by the Authority from time to time shall be the counter part during the assignment.

EVALUATION CRITERIA

EVALUATION OF EXPRESSION OF INTEREST SUBMITTED BY CONSULTANT FIRMS TO CARRY OUT TECHNICAL EVALUATION OF GAS PIPELINE INFRASTRUCTURE DEVELOPMENT PROJECTS FOR UPCOMING LNG AND ANTICIPATED INDIGENOUS SUPPLIES

<u>Description</u>	<u>Points</u>
1.0 General Experience of the Firm:	10 Points
1.1 No. of years in business consultancy	5 Points
1.2 Areas of expertise (general experience, not specific experience)	5 Points
2.0 Specific and Relevant Experience:	40 Points
2.1 Experience as Lead firm	5 Points
2.2 Experience of work with similar agencies, and in similar conditions.	10 Points
2.3 Experience of similar assignments	25 Points
3.0 Key Staff on Permanent Basis:	20 Points
3.1 Qualification	10 Points
3.2 Experience	10 Points
4.0 Financial/Technical Strength of the Firm:	30 Points
4.1 Organizational Structure	5 Points
4.2 Methodology to handle assignments/ professional supervision	5 Points
4.3 Software/technical tools to perform simulation performance, latest version (compatible with pipe line studio/TGNET)	20 Points
TOTAL	100 Points

Note: The minimum score required to pass is: 70 points