

Scope of Work and Technical Specifications:

This Tender is floated for supply and Installation of Public Address System and FLP Megaphone at UCSPL Chakan LPG Receiving Station of Uran Chakan Shikrapur LPG Pipeline.

1.1 Public Address System:

PA (Public Address) system to be provided as per details given below:

1) Structure with amplifier rack and supply of complete panel structure. Scope includes glanding of all Cables.

2) Supply of One nos. of 25-watt (or more) FLP Speakers:

Supply of Flame Proof Speaker 25 Watts for LPG License Area under Hazardous Area. FLP certificates to be submitted.

Specifications:

Power: 25W or more

Freq Response: 250-10000 Hz

Material of Enclosure: MS

Approvals: PESO / CCOE, ERTL / CMRI TESTED

3) Supply of Five nos. of 25 watt (or more) Non FLP speakers:

Non-Flameproof Speaker 25 Watts, however these should be weather proof (IP-65)

Power: 25 W or more

Freq Response: 275-10000 Hz

Material of Enclosure: ABS

4) **Supply and installation of One no. of Amplifier** for connecting with EPBAX INTERFACE HARDWARE or IP Based Master Control Desk :150 watt or more. Power supply: 230 V Ac Approved **Make: Ahuja/Roxi/Bosch/Philips/Sony/Eqv**

Power Output: 150W RMS or more at 10% THD .

Output Regulation: < 2 dB, no load to full load at 1 kHz

Frequency Response :50-15,000Hz 3dB

Signal to Noise Ratio: 60dB

Tone Controls: Bass: -10dB at 100Hz,

Treble: -10dB at 10kHz .

Power Supply: AC: 220-240V 50/60Hz

5) Supply of Flame Proof Junction Box for each FLP speaker.

Vendor to ensure size of JB is sufficient to house the components/cables required for the purpose (along with double compression FLP glands). Certification of JB is to be submitted.

6) Supply of Mike/Microphone with accessories and interfacing system

Supply of microphone with interfacing driver unit connects amplifier system.

Frequency Response :50-10,000Hz .

Sensitivity: 2.0mV/Pa
Impedance: 600 ohms

7) **EPABX interfacing hardware (IP/Analog based):**

Supply of Interfacing unit to integrate with existing EPABX network. Any hardware interfacing unit to be supplied by party. Assistance to be provided by party while integrating the PA system with Telecom network with existing Telecom Vendor.

8) **Supply of Cable** - Supply of Armoured Copper speaker cable 1.5 sq mm x 2 Core
Make: Polycab/Finolex/Belden/Delton/ Eqv.

9) **25 mm PVC HMS Conduit**

Smooth Surface, Corrosion Proof 25mm PVC Heavy HMS Conduit to be supplied.

10) Testing & commissioning of whole system: All the components/equipment supplied by the tenderer shall be installed, tested and commissioned and handed over. All necessary special tools required for service/maintenance to be supplied by the tenderer free of cost. All tools and tackles required to be supplied by the tenderer. Installation and commissioning of PA includes all misc. works in completion of job which is not mentioned elsewhere but required for complete functioning of the system. Installation of updated OEM software, drivers updates, software patches etc.included. Installation of all the supplied equipment mentioned in this tender its supports structures, mounting structures etc. are included. Termination, Testing & Commissioning of the system (**Excavated trench will be provided by M/S HPCL**). Termination of cables is to be carried out. After installation of all the items, system shall be tested in whole. Testing includes loop checking of cables, checking working of system (speakers, phones, announcement through different modes (phones, etc.) Supply of misc. connectors, adaptors etc. also included in this scope of installation and commissioning.

11) Vendor to arrange one day training for demonstration of PA system at UCSPL-Chakan on date advised by HPCL after receiving material at UCSPL-Chakan after successful commissioning.

12) The material shall be supplied on door delivery basis at the following address one each at:

Hindustan Petroleum Corporation Limited, Uran-Chakan-Shikrapur LPG pipeline, C/o Chakan LPG bottling plant, Chakan, Pune – 410501, Maharashtra

13) Supply, installation and commissioning to be completed in 16 weeks from the date of LOI /PO.

14) The Model No. and Data Sheet of the Public Addressing system to be submitted along with unpriced bid, failing which the bid shall be rejected in the technical evaluation.

15) To understand actual work to be carried at site, party can carry out site visit. No payment will be made for site visit. The bidder is advised to visit and examine the site of work and their surrounding and obtain for himself on his own responsibility all information that may be necessary for preparing of the bid and entering into the contract. The cost of visiting the sites shall be at bidder's own expenses.

1.2 Supply of Flame proof Megaphone:

- Hand held FLP Megaphone required for announcement in Public areas during Emergency viz. Gas leakage or any other disaster.
- Megaphone should have microphone and Speaker for announcement and should be Battery operated.

Technical Specifications:

Functions: Megaphone, Alarm, Light

Maximum Power: $\geq 20W$

Voltage: 7.2-9.0 V

Lighting Power: 1.2W LED

Output Sound: >115 dB

Range: 500 meters

Frequency: 300 Hz-20 kHz

Battery: Battery capacity atleast 4 hrs

Approvals: PESO certified Intrinsically safe suitable for use in gas Group IIA Hazardous Environment. Higher Certification acceptable.