4. SCOPE OF WORK, TECHNICAL SPECIFICATIONS & DATA SHEETS, HSE PROTECTION PLAN INCLUDING SAFETY PROCEDURES, DRAWINGS AND GEO TECHNICAL EXPLORATION DATA

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FOR VISAT OIL TECH LTD. DIRECTOR

A. INTRODUCTION

1. Hazira Plant of ONGC is the largest of its kind in India with an installed processing capacity of 46 MMSCMD of sour gas and 8652 MT of sour condensate everyday. The plant is currently processing around 42.0 MMSCMD of sour gas and around 4900 MT of sour condensate everyday. The products are Natural gas, LPG, ARN, SKO and HSD etc. Therefore, the plant is equipped with an integrated flare system, which connects all the flare loads from process units, cogeneration and storages spread across the plant. The function of flare system is to dispose off flammable, toxic and corrosive vapors discharged by pressure relief devices of various units to less objectionable compounds by combustion. These flare network is kept continuously purged with gas injected from the dead ends spread across the complex.

   ONGC, Hazira Plant intends to install a suitable compressor system on hired basis for recovery of this flared gas by compressing and routing back into the system to achieve zero flaring.

2 BATTERY LIMIT CONDITIONS:

"Battery Limit" is the land designated for installation of compressor system and has been shown in the schematic layout placed at sl no 1 of enclosed drawings. Compressor system is to be hooked up with all the inlet process and utility streams and outlet discharge piping as shown in the P&ID for "Piping and allied works" placed at sl no 2.

The battery limit conditions of Flare Gas compressor system along with the ambient conditions are specified in the data sheets under heading "Technical Specifications and Data Sheet".

The typical composition of gas from Flare header, specified in the data sheet, is on the dry basis. However, the gas is saturated with water and the possibility of occasional entrants or carryover of process liquid (condensate, water, TEG, MDEA etc) exists, which may come along with the natural gas from the flare header. The Contractor should incorporate necessary facilities required to prevent entry of free water and process liquids in the suction of compressor. The flare gas composition indicated in the Table T-I attached in the tender document is typical and is subject to variations in gas components, H2S ppm & molecular Weight encountered due to different quality of gas being flared from different process units in different quantities from time to time.

Contractor is required to take note of the possible variations as follows:

a) Normal variations in Suction Pressure of the compressor may range from 0.08 to 0.35 Kg/cm^{2}g.

b) Variations in Back pressure of the compressor may range from 18.0 to 23.0 Kg/cm^{2}g.

c) Based on typical flare gas compositions as indicated in the Table T-I, range in the molecular weight varies from 23 to 29 on dry basis.

The Contractor is to consider these variations as enumerated above, while designing the compressor system such that it is capable of delivering the requisite quantity of gas at discharge end under the most adverse limiting conditions. No claims would be entertained for any damage to the compressor system on any account including variation in composition & molecular weight of the gas or any carryover of process liquids along with the gas, from the flare header.

FOR VISAT OIL TECH LTD. DIRECTOR