



## LPG & POL CROSS COUNTRY PIPELINE AT VIZAG TERMINAL

### PROJECT OWNER:

EAST INDIA PETROLEUM LIMITED

### LOCATION:

Visakhapatnam, Andhra Pradesh

### CAPACITY:

LPG Storage capacity of 8,400 Tons

### SCOPE OF SERVICES:

#### Jetty Area Scope of Work:

- Collecting/ Review of Document Pertaining to the site conditions, geological data, LPG transfer system, LPG Blending system, heat exchanger design, on line blending and other design documents of utility services
- Prepare and Finalization of layouts for the utility services required for online blending systems, jetty operations and Topsides facilities of the jetty.
- Review the basic need of the heat exchanger by considering the process requirements and safety of the pipeline and finalize the concept design of the heat exchanger
- Review and re-design of firefighting facilities for the utility services at Jetty per the regulations of OISD/NFPA or equivalent
- Review and incorporating all the recommendations of HAZOP and Risk Analysis, EIA Study,

#### The LPG cross-country pipeline process design.

- Collecting/reviewing the documents pertaining to the site humidity conditions, LPG unloading temperatures, LPG transfer system and other data pertaining to LPG heating system, heat exchanger design documents, on line blending design documents, and collecting all the engineering documents.
- Checking/reviewing of preliminary Basic Engineering Document for landside pipelines up to LPG Terminal

- Calculation of the total flow conditions and flow rate at the terminal end
- Conducting the process simulation for the various scenarios. Conducting the surge analysis for the LPG pipeline for the two phases and recommending the proper common surge arresters
- Checking/Conducting the thermal stress calculation/simulation for underground LPG pipe line

**Piping & instrumentation drawing (P&ID) and equipment Layouts**

- Review and modification of P&I Drawings
- Review the specifications of the all valves, instruments, Pipeline, equipment and make recommendations
- Review and preparation of the all the equipment layouts, piping layouts, pipeline isometric drawings

**Design of the civil and electrical works**

- Design the entire SLD of the electrical system along with requirement of emergency power.
- Prepare the detailed engineering documents, drawings and electrical equipment specifications
- Prepare the detailed engineering documents, drawings specifications of the civil structures for equipment foundations, building structures and control room interiors.

**PROJECT DESCRIPTION:**

The project involves setting up off offloading facilities of LPG from transportation vessels at the Jetty area and subsequently transferred to storage facility, through the network piping of length 8.4KM.

**Major components involved in the Project are:**

Unloading System - 2nos

Blending Unit - Propane & butane with Capacity of 650MT/H

Booster Pumps -3nos

Pig Launcher– 1 no

LPG Pipelines - 14" pipeline of 8.4KM

LPG Storage Spheres - Capacity of 8,400 Tons