

## Brief Description of the Project

### EXECUTIVE SUMMARY

Indian Oil Corporation Ltd. is having its LPG bottling plants at Balasore & Jharsugda in the state of Odisha and at Budge Budge, Kalyani, Durgapur, Maldah & Raninagar in the state of West Bengal. The LPG requirement of these bottling plants is being met from Haldia and Barauni Refineries as well as Indian Oil Petronas Private Ltd. (IPPL) through import at Haldia. The LPG to all these plants is presently transported by road.

Indian Oil is constructing a 15 MMTPA grass root refinery at Paradip in Odisha and this will provide another source of LPG in the region with targeted LPG availability of about 52 TMTPA. The latest supply demand scenario of LPG indicates that the entire LPG production of Paradip refinery would be consumed within the Eastern Region i.e. in the state of Odisha, Jharkhand and WB.

In view of the above, it has been decided to lay the Paradip – Haldia – Durgapur LPG Pipeline connecting the bottling plants of IOC at Balasore, Budge Budge, Kalyani & Durgapur.

### SYSTEM DESIGN CONSIDERATION & BROAD ACTIVITIES

The pipeline throughput requirements are as under

Section	Length(KM)	Capacity(MMTPA)	Proposed Pipe size and Grade
Paradip - Haldia	348	0.5	10.75"x0.25", API 5L- X60
Haldia - Durgapur	424	0.85	10.75"x0.25", API 5L- X60

The scheme for laying the proposed pipeline system would broadly involve the following activities

- Laying of 672 Kms Pipeline
- Installation of originating pump station at Paradip
- Installation of delivery station at Balasore
- Installation of intermediate pump station at Haldia with delivery-cum-inlet point from IPPL
- Installation of LPG delivery station facilities at Kalyani, Budge Budge & Durgapur
- Installation of T-point facilities at Mahishrekha & Belmuri for spur lines of Budge Budge & Kalyani

## CORROSION PROTECTION

To mitigate the external corrosion of mainline, impressed current cathodic protection shall be provided. The system envisages impressed current anodes with AC/DC cum DC operated cathodic protection inputs having uninterrupted power supply arrangements. Stations CP has been considered at all pump stations and delivery stations. At repeater stations, power shall be made available through State Electricity Boards with back up by DG set of adequate capacity. At pump station and terminal stations, the CP units will have features of automatic control of pipe to soil potential and will be linked with Supervisory Control and Data Acquisition system for remote monitoring of the CP parameters.

## TELECOMMUNICATION AND SCADA SYSTEM

A dedicated OFC based communication system with 99.9% availability is envisaged. CCTV based security surveillance is also envisaged using the Ethernet connectivity of STM-4/ 16 equipments at Manned and un-manned stations. A Tele-supervisory (SCADA) system is envisaged in client server mode for round-the-clock monitoring and control of pipeline from Master Control Station (MCS). In view of the complexity of pipeline network, two Master Control Station, one at Paradip and one at Haldia is envisaged.

Leak Detection system has been envisaged for detection of pipeline leakage. Sectionalizing Valve stations (SV) have been envisaged across major rivers/ high population density areas (24 nos. in Odisha sector of 238 Kms) to release LPG from pipeline in case of leakage/ pilferage/ damage of pipeline.

## INVESTMENT

The estimated total cost of the project is ₹. 913 Crores (Approx.) at March 2012 Price Level.

## TIME SCHEDULE

The completion schedule for this project is 30 months from the date of issuance of statutory clearances.



Signature of User Agency

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Countersigned



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