

### **Justification**

#### **INTRODUCTION: -**

In line with the Hydrocarbon Vision 2030 & as per the directives of Govt. of India, a Joint Venture Company, named, **Indradhanush Gas Grid Limited (IGGL)** have been formed comprising five prestigious Public Sector Undertaking Companies i.e. IOCL, ONGC, GAIL, OIL & NRL, in order to develop, operate and maintain Natural Gas Pipeline Grid in North Eastern part of India along with associated infrastructure for supplying Natural Gas to various customers in the region. The pipeline grid would connect to State capitals of all States of North Eastern part of India i.e., Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura & Sikkim.

Aforesaid Pipeline grid would connect with GAIL's ongoing Barauni – Guwahati Natural Gas Pipeline in Guwahati (Assam) & ONGC's marginal Gas field en-route pipeline grid. This pipeline network will provide natural gas to industrial and commercial customers including Power / Fertilizers units & CGD networks in North – Eastern region. With commissioning of this Gas grid, industrial & economic growth of North Eastern region is expected to get significant boost and would also supplement efforts of Govt. of India for development of the region.

This will provide an environment friendly, energy efficient, safe and dependable alternative to the current transportation of Natural Gas through road & rail. This is an energy infrastructure project of national importance which will contribute to prosperity of the Nation.

According to the Detailed Route Survey the proposed 24/12" dia of Underground Natural Gas Pipeline along with 40 mm dia HDPE duct for Optical Fiber Cable (OFC) will lay from 24" dia Guwahati to Numaligarh in the in Assam State and 12" dia Spur pipeline to Itanagar .

#### **PROJECT OVERVIEW: -**

The proposed project include approx 550 km of underground Natural Gas pipeline network with associated facilities such as Sectionalizing Valve (SV) / Tap off / metering / receiving / dispatch / intermediate pigging / compressor stations at an estimated cost of Rs. 9265 cr.

As a consequence of rapid rate of industrialization in India, fuel needs are increasing at an equally rapid rate and the supply – demand gap is widening and steps must be taken to address the issue.

Overland transport of fuels by trucks is uneconomical, unsafe and is a contributor to environmental degradation in terms of pollutants released by vehicles in transit and by accidents and spillage.

Pipelines are internationally recognized as the preferred alternative for transport of fuel for safety, economy and environmental friendliness.

As you are kindly aware, pipeline transportation for Natural Gas is not only the safest and the most economically viable alternative for transport of energy thereby reducing strain on public transport systems but also helps curb pollution, gas being a clean fuel.

For day to day monitoring and control of Pipeline operation through supervisory control and data acquisition (SCADA) system, a dedicated communication system is being considered along the pipeline, using optical fibre cable (OFC).

This Natural Gas Pipeline Project is of National importance and is being implemented in a time bound manner. The ambitious project is being monitored closely by the highest levels in the Govt. of India and contribute to overall prosperity of North East India.

**PROJECT IMPLEMENTATION SCHEDULE: -**

The project is expected to be completed within 2 years. Pre-project activities such as detail route survey, engineering design, obtaining ROU etc. are expected to be completed by 2020. M/s Indradhanush Gas Grid Limited has already conducted pre-project activities like Detail Route Survey and Engineering Design till date. The further, obtaining RoU and Statutory permission activities is going on and at advance stage.

**JUSTIFICATION FOR ROUTE SELECTION AND JUSTIFICATION FOR LOCATING THE PROJECT IN FOREST AREA:**

The criteria for route selection are:

1. Optimum distance between source of supply and consumer location (demand points)
2. Avoidance of Wild Life Sanctuaries, Reserved Forest, Mining area and Defense establishment to the best possible.
3. Avoidance rocky marshy and low-lying areas
4. Safety of people and environment
5. Easy access to route during construction and operation.

The route was selected based on least disturbance to environment, forest, human habitation and aquatic bodies. It avoids National Parks and Wild Life Sanctuaries.

The selected route is optimized considering the above factors and connectivity between supply source and consumer location.

**FINANCIAL & SOCIAL BENEFITS OF PROJECT:**

The project will provide cleaner fuel stock for the industries and the population in the region and thus will help improve the environment considerably while inducing development.

The project would enhance employment opportunities through contractors for the local people during construction phase.

Consequent development activities due to availability of Natural Gas in the region shall generate employment opportunities for the population and may improve their standard of life.

There will not be any adverse impact on communication and transportation.

Residential and populated areas will not be acquired for this project. Hence, there will be no displacement of population.

Indradhanush Gas Grid Limited

Transportation of Natural Gas by pipeline is comparatively less expensive than other modes of transport both in capital and operating cost. This will ensure that this alternative source of energy is available to the consumers at a lower cost.

An additional advantage of transporting Natural Gas by pipeline is that the scope of economic offences like theft, pilferage, adulteration will be negligible and consumers will get value for money.

**M/s Indradhanush Gas Grid Limited**



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