

NOTE ON PROJECT

INTRODUCTION: -

GAIL (India) Limited, India's principal Gas Transmission and Marketing Company, was set up by the Government of India in August 1984 to create gas sector infrastructure for sustained development of the Natural gas sector in the country. The 1800-km Hazira-Vijaipur-Jagdishpur (HVJ) pipeline became operational in 1989. During 1991-93, three LPG plants were constructed and some regional pipelines acquired, enabling GAIL to begin its regional gas distribution in various parts of India.

GAIL (India) Limited, is India's flagship Natural Gas company, integrating all aspects of the Natural Gas value chain (including Exploration & Production, Processing, Transmission, Distribution and Marketing) and its related services. In a rapidly changing scenario, GAIL is spearheading the move to a new era of clean fuel industrialization, creating a quadrilateral of green energy corridors that connect major consumption center in India with major Gas Fields, LNG terminals and other cross border gas sourcing points. GAIL is also expanding its business to become a player in the International Market.

M/s. GAIL (India) Limited envisages to strengthen local gas grid network in any state / U.T. of India via authorization by MoPNG. GAIL (India) Limited (GAIL), a Public Sector Undertaking (PSU) company is also one of the leading companies in the field of Natural Gas transmission pipeline. GAIL has taken a lead in developing energy transportation infrastructure and connecting major natural gas supply sources and demand markets. GAIL is first company in India to transport natural gas on open access basis and is a pure natural gas transmission company. The company has developed requisite expertise and confidence with proven project management competencies.

GAIL has been awarded authorization by Ministry of Petroleum and Natural Gas to lay a network of gas pipeline and associated facilities for the transportation of natural gas to fulfill the requirement of various consumers in the states of Eastern UP, Bihar, Jharkhand, Odisha, & West Bengal.

In view of this M/s GAIL (India) Limited, is planning to lay a pipeline for transportation of natural gas from Jagdishpur to Haldia and Dhamra along with various spur pipelines through the Jagdishpur-Haldia-Bokaro-Dhamra Gas pipeline (JHBDPL).

Gail (India) Limited (GAIL) has proposed to lay Jagdishpur– Haldia-Bokaro – Dhamra Natural Gas Pipeline (JHBDPL) Project under Authorization from MoPNG (Ministry of Petroleum and Natural Gas), Govt. of India. The Jagdishpur-Haldia-Bokaro-Dhamra Pipeline (JHBDPL)

Project of GAIL is a part of the Prime Minister Urja Ganga Project. The approximate length of the JHBDPL pipeline is 2600 kms and passes through the various parts of Eastern UP, Bihar, Jharkhand, Odisha & West Bengal.

GAIL (India) Limited has been authorized by Govt. of India vide letter dated 14.03.2016 to lay, Build and Operate a cross country Gas pipeline from Jagdishpur to Haldia(WestBengal) / Dhamra (Odisha) including associated Spur Pipe lines. The said pipeline shall be passing through the states of U.P., Bihar, Jharkhand, West Bengal and Odisha for supply and distribution of Natural Gas / RLNG to various industries and City Gas Distribution networks. Accordingly, GAIL has to start pre-project activities immediately and pipeline is scheduled to be completed by 2021.

The proposed Jagdishpur-Haldia-Bokaro-Dhamra Pipeline alongwithspurlines will be laid across forest land falling along / across the ROU (Right of Use) and various utilities such as roads, canals, rivers etc. The said pipeline shall be laid at the minimum depth of 1.2 mts. below NGL (Natural ground level) .

The Jagdishpur-Haldia-Bokaro-Dhamra Pipeline (JHBDPL) Project is being executed in Odisha in two parts.

Part-1: Dhamra- Angul Pipeline (DAPL).

Part-2: Bokaro- Angul Pipeline (BAPL) Odisha Section.

1) The DhamraAngul Pipeline (DAPL) is a part of Jagdishpur-Haldia-Bokaro-Dhamara Pipeline (JHBDPL). The JHBDPL is the part of Pradhan MantriUrja Ganga Project being executed by GAIL (India) Ltd., a Central Government Maharatna Company for uninterrupted supply of the environment friendly natural gas to various Industries, domestic consumption and CNG fuel for vehicle etc. The Dhamra-Angul underground pipeline which is a linear project will pass through various villages in eight districts of Odisha involving 12.2282 ha forest land and 1051.8811 ha of non- forest land. The stage-I/in principal approval for DhamraAngul Pipeline (DAPL) Section is already obtained.

2) The present proposal is for laying of underground natural gas pipeline along with Optical Fiber Cable (OFC) fromBokaro to Angul (Odisha section). The Bokaro-Angul Natural gas pipeline (BAPL) Odisha Section by GAIL (India) Ltd. involves 65.4036 ha of forest land and 657.0659 ha of non- forest land passing through 212 villages in Odisha section.This BAPL Odisha section involves 07 forest divisions namely Rourkela, Sundargarh, Jharsuguda, Rairakhol, Bamara, Deogarh and Angul and 05 Districts namely Sundergarh,Jharsuguda, Sambalpur, Deogarh and Angul. The starting point of Bokaro-Angul Pipeline (BAPL) Odisha section is village Bankuba, Tehsil Biramitrapur District Sundargarh latitude N 22°26' 51.7673'' and Longitude E 84°46'12.0843'' and end point is village BudhapankhaTehsil Banarpal district Angul latitude N 20°52' 54.286'' and Longitude E 85°15'7.687'' length of pipeline is 296.105 km.

Forest and Non forest area Details

Sl. No.	Division	Forest land involved (Ha)						Non Forest Land Area (Ha.)	Grand Total (Ha.)
		RF	PF	Revenue Forest	Sabik kisam Forest	DLC Forest	Total Area (Ha.)		
1	Rourkela	0.3219	-	3.0843	-	-	3.4062	135.6194	139.0256
2	Sundargarh			1.0933		0.0015	1.0948	123.7449	124.8397
3	Jharsuguda			0.4191		0.3514	0.7705	70.5849	71.3554
4	Bamra	2.1357		2.1152	5.8462	4.4696	14.5667	90.4574	105.0241
5	Rairakhol			3.495	3.6673	0.0975	7.2598	20.8062	28.066
6	Deogarh	1.0226		19.1754	7.3350		27.5330	66.1490	93.6820
7	Angul	4.9043	2.1053	2.3325	0.9091	0.5214	10.7726	151.1815	161.9541
	Grand Total	8.3845	2.1053	31.7148	17.7576	5.4414	65.4036	658.5433	723.9469

Division/District wise Break-up

Sl No.	District	Division	Village Details			Length of Pipeline (Km)	Forest Area (Ha.)	Non Forest Area (Ha.)
			No. of Villages	Start Village	End village			
				Village / Tehsil	Village / Tehsil			
1	Sundargarh	Rourkela	28	Bankuba (Biramitrapur)	Laing (Rajgangapur)	50.09	3.4062	135.6194
2		Sundargarh	27	Langibirana (Kutra)	Siamal (Sundargarh)	43.16	1.0948	123.7449
3	Jharsuguda	Jharsuguda	13	Baijapale (Kirmira)	Lariapali (Kolabira)	24.05	0.7705	70.5849
4	Sambalpur	Bamara	37	Gumadumal (Bamara)	Ghosaragoda (Jamankira)	45.36	14.5667	90.4574
5		Rairakhol	10	Jamukhol(Nutan), (Nakatideula)	Baghabar (Nakatideula)	14.84	7.2598	20.8062
6	Deoagarh	Deoagarh	41	Gundeimara (Deogarh)	Juradanga (Reamal)	51.42	27.5330	66.1490
7	Angul	Angul	56	Sundarpal (Chhendipada)	Budhapanka (Angul)	67.18	10.7726	151.1815
	Grand Total		212			296.10	65.4036	658.5433

PROJECT OVERVIEW: -

The proposed project includes approx. 2600 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.1294000 Lacs.

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.

Natural gas is used in a variety of applications such as feed stock in fertilizer, petrochemical industry and as fuel in power generation, manufacturing steel, textile, ceramic, glass and other industrial products. As a fuel natural gas competes with alternative products such as coal, lignite and petroleum products such as liquefied petroleum gas, naphtha, high speed diesel, light diesel oil and fuel oil. However due to lower fuel operating cost and better combustion characteristics, natural gas has distinct economic advantage over other sources of energy. In addition, natural gas has substantial environmental advantage over other energy sources due to lower emissions.

PROJECT IMPLEMENTATION SCHEDULE: -

The project is expected to be completed within 3 years. Pre-project activities such as detail route survey, engineering design, obtaining ROU etc. are expected to be completed by 2021. M/s GAIL (India) 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

The criteria for route selection are

- Optimum distance between source of supply and consumer location (demand points)
- Avoidance of Wild Life Sanctuaries, Reserved Forest, Mining area and Defense establishment to the best possible.
- Avoidance rocky marshy and low-lying areas
- Safety of people and environment
- 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 300 to 400 People opportunities through contractors for the local people during construction phase approximate.

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.

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.

Place: Bhubneshwar

Date: 21.01.2021

M/s GAIL (India) Limited



Gadadhar Kandhapani

General Manager (Construction)

गदधर कंधपानी / Gadadhar Kandhapani
महानिर्देशक (निर्माण) / General Manager (Const.)
गैल (इंडिया) लिमिटेड / GAIL (India) Limited.
610-612, उत्कल सिग्नेचर, पाहला, इनएच-5
610-612, Utkal Signature, Pahala, NH-5
भुवनेश्वर-752101, Bhubaneswar-752101