

JUSTIFICATION FOR LOCATING THE PROJECT IN FOREST AREA

INTRODUCTION:-

GAIL (India) Limited (GAIL) is a **Public Sector Undertaking (PSU) company**. GAIL (India) Limited is **Maharatna company of India**. GAIL (India) Limited is 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.

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 centre 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.

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, Chhattisgarh, Maharashtra & West Bengal.

In view of this M/s 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.

The proposed Jagdishpur– Haldia/Bokaro – Dhamra Natural Gas Pipeline (JHBDPL) will be laid across Non-forest {Right of User (RoU)}, forest land, falling along / across various utilities such as roads, canals, rivers etc. and pipeline en-route the pipeline falling under your jurisdiction in U.P., Bihar, Jharkhand, West Bengal and Odisha state. We also propose to use only 10 m of Right of Use (RoU) area as compared to 30 m for the rest of the pipeline route outside forest areas. It will be worthy to state here that the pipeline will be laid 1.2 m (approx.) below the natural ground level and land shall be restored back to its normal position after laying the pipeline. .

PROJECT OVERVIEW:-


The proposed project include 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


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gas, naptha, 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 2019. 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 opportunities through contractors for the local people during construction phase.

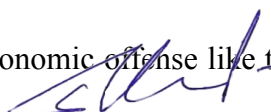
Consequent development activities due to availability of natural gas in the region shall generate employment opportunities for the population and may improve their standard of life.

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.

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 offense like theft, pilferage, adulteration will be negligible and consumers will get value for money.



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GAIL (India) Limited has proposed to laying of Natural Gas Pipeline from Jagdishpur in the State of Uttar Pradesh to Haldia/ Dhamra in the State of West Bengal/ Odisha respectively via Bihar and Jharkhand to cater the gas requirement in India.

Sl. No.	Parameters to determine benefit	Remarks
1	Increase in Productivity attributable	JHBDPL will facilitate the Natural gas to various demand centre, industries, cities for CGD network in India
2	Benefit to economic	Natural gas will help to enhance the production of various industries like Fertilizer, petrochemical industry, power generation, manufacturing steel, textile, ceramic, glass and other industrial products situated in India
3	No. of Population benefitted	Peoples and industries situated in U.P., Bihar, Jharkhand, Odisha and West Bengal
4	Employment Potential	Skilled / Semi-skilled workers will be employed during Construction phase of Natural Gas Pipeline.
5	Cost of acquisition of facility on non forest land wherever feasible	N/A
6	Loss of agricultural and animal husbandry production due to diversification of Forest Land	No loss
7	Cost of rehabilitating displaced person as different from compensatory amounts given for displacement	Does not arise
8	Cost of supply for free fuel wood to workers residing in or near forest area during the period of construction	Does not arise

JUSTIFICATION REGARDING ALTERNATIVES EXAMINED FOR LINEAR PROJECT

Alternatives Explored for Jagdishpur-Haldia-Bokaro-Dhamra Pipeline (JHBDPL) Project of GSPL GAIL (INDIA) LIMITED in Odisha State					
Description	Status of land	Length in meter	Width in meter	Area in Sqm	Area in Ha.
Alternate-1	Forest	26110.00	10	261100.00	26.11
Total		26110.00		261100.00	26.11
Alternate-2	Forest	155750.00	10	1557500.00	155.75
Total		155750.00		1557500.00	155.75
Alternate-3	Forest	97650.00	10	976500.00	97.65
Total		97650.00		976500.00	97.65


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The other alternatives (Alternative-2 & Alternative-3) are being rejected on grounds of as follows:-

1. Alternative 2 & 3 involves more forest area 155.75 and 97.65 hectares respectively to be diverted which is more than the alternative-1.
2. In Alternative -2 the pipeline will be in close proximity to the sensitive sanctuary area. Laying of natural gas pipeline in the sanctuary sensitive area is technically not feasible involving safety of the pipeline.
3. The terrain in Alternative Route-2 and 3 is hilly where laying of pipeline pose several construction challenges.
4. Alternative -2 passes near to the area where most of the lands are non-agriculture land and pipeline cannot be laid in NA lands as per P&MP Act'1962.
5. Though the overall length (Forest area and Non-forest area) of the pipeline is more in Alternative-2 which increases the project cost.
6. Alternative -3 passes in close proximity to populated areas and most of the lands are also non-agriculture land; pipeline cannot be laid in NA lands as per P&MP Act'1962.
7. Number of railway crossings in Alternative route-3 are more (3 nos) in comparison to alternative -1 and 2.
8. Number of turning points (TPs) in Alternative 2 and 3 are more that needs bends etc which will add-on to the cost of the project.

Looking into the above, it is imperative for JHDPL natural gas pipeline passing in Odisha in Alternative-1 is more apt technically and safety in comparison to the other two alternatives viz,. Alternative-2 and Alternative-3.

Date:

Place:

M/s GAIL (India) Limited



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UNDERTAKING FOR ALL DGPS MAP AUTHENTICATION BY ORSAC
(Project Authority)

It is to certify that I/We GAIL (India) Limited have submitted to ODISHA SPACE APPLICATIONS CENTRE (ORSAC) (Department of Science & Technology, Government of Odisha) Plot no. 45/48 (Part), Jayadev vihar, Near Gopabandhu Academy of Administration Unit-16, Bhubaneswar- 751 023, Odisha. However, the forest diversion area involved in various stretches in different forest divisions as well as location. Since JHBDPL project is linear project involves huge length i.e the approximate length of the JHBDPL pipeline is 700 kms (approx) in Odisha state.

I/We also hereby undertake to submit the authenticated DGPS Map by ORSAC as soon as received. However, we have submitted the self attested DGPS Map for your perusal.

Date:
Place:

M/s GAIL (India) Limited


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