



## Public Consultation Document (PCD)

(Ref: No. PNGRB/M(C)/73-Vol IV dated 03.06.2019)

Subject	Tariff review, under the provisions of the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Regulations, 2008.
Entity	GAIL (India) Limited (“GAIL”)
Pipeline	Dabhol Bangalore Natural Gas Pipeline (“DBPL”)
Authorisation	Under Regulation 17(1) of PNGRB (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Regulations, 2008
Provisional Capacity	16 MMSCMD, including capacity of 4 MMSCMD for use on common carrier basis.
Length	1414 kms
Commissioned on	18.02.2013
Economic life	25 years i.e. up to 17.02.2038

## **1. Regulatory Framework**

- 1.1. In terms of Section 22 of the PNGRB Act, 2006, the Board is entrusted with the responsibility of determining the natural gas pipeline tariff to be charged by the entities laying, building, operating or expanding natural gas pipeline before the appointed day.
- 1.2. The methodology for determination of pipeline tariff has been specified in the relevant provisions of the PNGRB (Determination of Natural Gas Pipeline Tariff) Regulations, 2008 ("Tariff Regulations") notified on 20.11.2008. Under the provisions of these regulations, PNGRB is to determine the initial unit natural gas pipeline tariff on a provisional basis ("provisional tariff") and then finalize the same ("final tariff") considering the actual costs and data at the end of the financial year on the basis of audited accounts. Tariff review is to be done by the Board, in terms of Regulation 2 (h) of Tariff Regulations.
- 1.3. The transportation tariff is determined using the Discounted Cash Flow ("DCF") method, based on actual and projected pipeline Capital Expenditure ("Capex") and Operating expenditure ("Opex"), in line with provisions of Tariff Regulations, over the entire economic life of the pipeline thus arriving at a single levelized transportation tariff. If the length of the pipeline is more than 300 kms, the recovery of the transportation tariff is apportioned across such zones of 300 kms each, resulting in zonal tariff, where the zonal tariff of a later zone is higher than that of an earlier zone.

## **2. Final Initial Transportation Order**

- 2.1. PNGRB vide Tariff Order No. TO/04/2016 dated 01.07.2016 passed the final tariff order for DBPL, based on submission made by GAIL with effect from date of commissioning (18.02.2013) applicable till the end of economic life (i.e. 17.02.2038) after following the due process and conducting three open houses as directed by Hon'ble APTEL.

2.2. As per the final terms and conditions of acceptance to Central Government Authorization for DBPL, issued vide PNGRB's communication dated 14.11.2011, the provisional capacity is 16 MMSCMD including common carrier capacity of 4 MMSCMD and the length of the pipeline is approx. 1414 kms.

2.3. The levelized final tariff and its apportionment in zonal tariff as proposed by GAIL and as determined by PNGRB are as follows:

2.3.1. Levelized Tariff

Particulars	Rs. / MMBTU on GCV basis	
	Final Tariff proposed by GAIL	Final Tariff determined by PNGRB
Tariff w.e.f 18.02.2013 to 31.03.2016	44.65	44.65
Tariff w.e.f 01.04.2016 onwards	73.51	40.83

2.3.2. Zonal Tariff

Particulars	Rs. / MMBTU on GCV basis		
	Zonal Tariff submitted by GAIL and approved by PNGRB For levelized tariff of Rs. 44.65 (FY 2012-13 to 2015-16)	Zonal Tariff submitted by GAIL For levelized tariff of Rs.73.51 w.e.f 01.04.2016 onwards	Zonal Tariff approved by PNGRB For levelized tariff of Rs. 40.83 w.e.f 01.04.2016 onwards
Zone-1	44.63	73.48	40.82
Zone-2	44.66	73.56	40.86
Zone-3	44.67	73.56	40.86

3. GAIL filed its proposal for transportation tariff for DBPL Natural Gas Pipeline vide letter dated 29.10.2018, based on actual data upto FY 2017-18. Salient features of levelized tariff submitted by GAIL are as follows:

Economic life	25 years
Levelized tariff from 01.04.2018 onwards (Rs MMBTU/GCV)	71.65
Number of working days in a year:	345
Annual inflation rate	4.58%
Capex from 18.02.2013 to FY 2037-38 (Rs. In Crore)	3,848.84
Opex from 18.02.2013 to FY 2037-38 (Rs. In Crore)	3,171.99
Unaccounted gas loss included in Opex from FY 2012-13 to FY 2037-38 (Rs. In Crore)	974.84
Line Pack (Rs. In Crore)	148.66
Terminal Value including Working Capital & Line Pack (Rs. In Crore)	1,653.51

Note: Salient Features are based on actual data submitted by GAIL upto 2017-18. PNGRB vide letter dated 08.05.2019 has asked GAIL to submit its updated tariff based on data for FY 2018-19 and tariff review shall be processed accordingly.

#### 4. **Important aspects of tariff filing by GAIL**

The various aspects of tariff filing submitted by GAIL are as follows:

##### 4.1. **Economic Life of Pipeline:**

GAIL in its tariff submission has considered economic life of DBPL Network from 18.02.2013 to 17.02.2038.

##### 4.2. **Capex**

In its tariff filing, GAIL has claimed a total Capex of Rs. 3,848.84 Crore from 2009-10 till the end of its economic life in 2037-38. This is discussed below under three heads: Actual Capex outgo including CWIP from FY 2009-10 to FY 2017-18, future Capex projections and common corporate assets.

##### 4.2.1. **Actual Capex Outgo including CWIP from FY 2009-10 to FY 2017-18**

GAIL in its tariff filing has claimed a total Capex outgo excluding IDC (sum of net additions to fixed assets and net additions to CWIP each year) of Rs. 2,541.95 Crore from FY 2009-10 to FY 2017-18. Year-wise breakup of Capex claimed in tariff filing by GAIL is as follows:

<b>Rs. in Crore</b>			
<b>Year</b>	<b>Site Capex</b>	<b>Corporate assets</b>	<b>Capex</b>
2009-10	10.81	0.00	10.81
2010-11	488.97	0.00	488.97
2011-12	1,201.37	0.00	1,201.37
2012-13	607.50	0.00	607.50
2013-14	202.91	0.15	203.06
2014-15	107.81	2.80	110.61
2015-16	-63.76	-0.25	-64.01
2016-17	-48.64	0.52	-48.12
2017-18	30.77	0.98	31.75
<b>TOTAL</b>	<b>2537.75</b>	<b>4.20</b>	<b>2,541.95</b>

#### 4.2.2 Future Capex Projections

GAIL in its submission has claimed total future Capex of Rs. 1,306.88 Crore (considering inflation @4.58%) from FY 2018-19 till end of economic life in 2037-38. Future Capex claimed by GAIL are as under:

<b>Rs. in Crore</b>		
<b>S.No.</b>	<b>Description</b>	<b>Amount</b>
1	Project Execution (PE)	352.68
2	O&M capex	494.37
3	PD (LMC)	459.83
	<b>Total</b>	<b>1,306.88</b>

##### (i) Project Execution (PE) Capex

Under the head PE, GAIL in its tariff filing has claimed total future Capex of Rs. 352.68 Crore for additional connectivity to KFCL Yelanka, Binani Glass Goa, Murudeshwar ceramics Ltd – Sira Bidadi etc from FY 2018-19 till the end of economic life i.e., 2037-38.

##### (ii) Non-recurring O&M Capex

Under the head non-recurring O&M Capex head, GAIL has claimed a total future Capex of Rs. 494.37 Crore, for Pigging-ILI of DBP, CP Integrity Survey, Installation of PIDS/Pipeline Leak Detection system, Development of RGMC

Building including Cost of Land etc from FY 2018-19 till the end of economic life i.e., 2037-38.

**(iii) PD Capex**

Under PD head, GAIL has claimed a total future Capex of Rs. 459.83 Crore on account of last mile connectivity from FY 2018-19 till the end of economic life i.e., 2037-38.

**4.3. Line Pack**

Line pack is the value of gas which always remains in the pipeline and as per regulations. It is considered as cash outflow in the initial year and to be considered as cash inflow in the last year of the economic life of the pipeline.

GAIL, in its tariff submission, has considered the following:

<b>Year</b>	<b>Line Pack (MMSCM)</b>	<b>Rs. In Crore</b>
2012-13	34.58	137.17
2015-16	0.46	0.96
2017-18	0.05	0.09
2018-19	0.90	2.08
2019-20	0.51	1.22
2020-21	0.05	0.12
2022-23	2.55	7.02

**4.4. Operating Expenses (“Opex”)**

In its tariff filing, GAIL has claimed a total Opex of Rs. 3,171.99 Crore from 2012-13 till the end of its economic life in FY 2037-38. This is discussed below under as actual Opex outgo (including common corporate expenses) from FY 2012-13 to 2017-18 and future Opex projections (FY 2018-19 to 2037-38).

**4.4.1. Actual Opex from 2012-13 to 2017-18**

GAIL in its tariff filing has claimed total Opex of Rs. 199.47 Crore from FY 2012-13 to 2017-18 including common corporate expense of Rs. 17.94 Crore. Year- wise

breakup of Opex claimed in tariff filing submitted by GAIL is as follows:

<b>Rs. in Crore</b>			
<b>Year</b>	<b>Site Opex</b>	<b>Corporate Expenses</b>	<b>Opex</b>
2012-13	5.16	0.00	5.16
2013-14	19.71	0.22	19.92
2014-15	22.82	4.11	26.94
2015-16	36.37	3.90	40.27
2016-17	40.18	4.56	44.74
2017-18	57.29	5.15	62.44
<b>Total</b>	<b>181.53</b>	<b>17.94</b>	<b>199.47</b>

#### 4.4.2. Future Opex

GAIL in its tariff filing has claimed future Opex of Rs. 2,972.52 Crore from FY 2018-19 till 17.02.2038. GAIL has inflated actual Opex of FY 2017-18 with the inflation rate of 4.58%. Further, annual Opex of 2.5% of the Capex incurred on account of additional connectivity to KFCL Yelanka, Binani Glass Goa, Murudeshwar ceramics Ltd – Sira Bidadi etc and Capex on account of last mile connectivity (“LMC”) to be laid has been considered for Opex. Further, this amount has also been inflated @4.58%.

Non-recurring O&M Opex -GAIL has also claimed a total future O&M Opex (non-recurring) of Rs. 187.03 Crore for rectification of casing pipe, ac interference mitigation, soil resistivity survey etc from FY 2018-19 till 17.02.2038.

#### 4.5. Unaccounted Gas

In addition to the Opex, GAIL has considered 0.3% of the throughput as unaccounted gas loss, as a cost to be recovered through the transportation tariff.

GAIL in its tariff filing has claimed a total unaccounted gas loss of Rs. 974.84 Crore from FY 2012-13 to 2037-38.

#### 4.6. Volume Divisor

Year-wise volume divisor considered by GAIL in its tariff submission is as follows:

**In MMSCMD**

<b>Year</b>	<b>Capacity</b>
2012-13	6.32
2013-14	6.44
2014-15	7.50
2015-16	8.65
2016-17	9.71
2017-18	10.67
2018-19	10.86
2019-20	10.98
2020-21	11.03
2021-22	11.07
2022-23	11.62
2023-24	11.69
2024-25	11.79
2025-26	11.87
2026-27	11.95
2027-28 onwards	12.00

**4.7. Working Capital**

Working capital is calculated as sum of 30 days of Opex (excluding depreciation) and 18 days of revenue (tariff receivables), in conformity with the Tariff Regulations.

GAIL, in its tariff submission, has considered average working capital of Rs.3.36 Crore.

**4.8. Number of Working Days**

As per the Clause 14(3) of the Access Code Regulations, the planned maintenance period shall not exceed 10 days in a year.

On this basis, there would be 355 working days for a pipeline in one financial year.

GAIL has considered 345 days as operating days in a year.

**4.9. Terminal Value:**

Terminal Value is the sum of the residual value of the assets at the end of the economic life, working capital and line pack. It is considered as cash inflow at the end of economic life of the pipeline.



GAIL, in its tariff submission, has considered a terminal value of Rs. 1,653.51 Crore

#### 4.10. **Return on Capital Employed:**

As per Clause 2 of Schedule A of the Tariff Regulations, natural gas pipeline tariff shall be calculated based on the DCF methodology after considering the reasonable rate of return (i.e. "twelve percent post-tax" as per clause 3 to Schedule A) to be the projects internal rate of return.

The pre-tax rate of return on capital employed shall be computed by grossing-up twelve percent by the nominal rate of income tax applicable for corporate assesses. As per GAIL's submissions, rates of corporate income tax applicable each year to GAIL and subsequent computation of pre-tax rate of return are as follows:

Year(s)	2008-09 & 2009-10	2010-11	2011-12 & 2012-13	2013-14 & 2014-15	2015-16 to 2017-18	2018-19 & Onwards
Income Tax Rate	33.99%	33.22%	32.45%	33.99%	34.61%	34.94%
Pre-tax rate of return	18.17%	17.97%	17.76%	18.18%	18.35%	18.45%

#### 4.11. **Zonal Apportionment**

Since the length of the DBPL network of GAIL exceeds 300 km, the apportionment of the levelized tariffs is required to be undertaken post determination of tariff.

### 5. **Comments of stakeholders sought**

5.1. Determination of the natural gas pipeline tariff is a time bound exercise. PNGRB solicits the views of all the stakeholders in writing on GAIL's tariff filing for the DBPL Network within 15 days of issue of this document i.e. by 20.06.2019 at the following address:

*Secretary,  
Petroleum and Natural Gas Regulatory Board,  
1st Floor, World Trade Centre,  
Babar Road, New Delhi-110001.*

Email: - [secretary@pngrb.gov.in](mailto:secretary@pngrb.gov.in)

- 5.2. Stakeholders other than GAIL to mark copy of all comments to GAIL at following address:

*Chief General/ Manager (Mktg. -RA)*  
*GAIL (India) Limited*  
*GAIL Bhawan,*  
*16, Bhikaiji Cama Place,*  
*New Delhi-110066*  
Email: [cragroup@gail.co.in](mailto:cragroup@gail.co.in)

- 5.3. GAIL to submit its response on comments of other stakeholders to PNGRB within 10 days from the last date of comments to be submitted by stakeholders as mentioned at point no. 5.1 above i.e. by 01.07.2019.
- 5.4. Open house to discuss the comments of all the stakeholders shall be held at 1100 Hrs on 11.07.2019 at PNGRB office as per address mentioned at para 5.1 above.

(Vandana Sharma)  
Secretary