

Public Consultation Document

(Ref: No. PNGRB/M(C)/92-Vol II dated 07th, September 2017)

Subject: Final initial unit natural gas pipeline tariff under the

provisions of the Petroleum and Natural Gas

Regulatory Board (Determination of Natural Gas

Pipeline Tariff) Regulations, 2008.

Name of Entity: GAIL (India) Limited [GAIL]

Name of Pipeline: Dukli-Maharajganj Natural Gas Pipeline Network

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 a 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 Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Regulations, 2008 (hereinafter referred to as "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 first and then finalize the same considering the actual costs and data at the end of the financial year on the basis of audited accounts. The transportation tariff is determined using the Discounted Cash Flow (DCF) method using actual and projected pipeline capex and opex costs (in line with provisions of Tariff Regulations) over the entire economic life (25 years) of the pipeline thus arriving at a single levelized transportation tariff. If the length of the pipeline is more than 300 km the recovery of the transportation tariff is apportioned across such zones of 300 km each resulting in zonal tariff where the zonal tariff of a later zone is higher than that of an earlier zone.

2. Provisional Transportation Tariff Orders

2.1. PNGRB issued the final terms and conditions for acceptance of Central Government Authorization for GAIL's Dukli-Maharajganj Natural Gas Pipeline Network (DMPL) vide communication dated 20.08.2014 under Regulation 17(1) of the Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas

Pipelines) Regulations, 2008. The provisional capacity and length as per the acceptance letter is 0.075 MMSCMD (including common carrier capacity of 0.019 MMSCMD) and 5.2 km respectively.

2.2. PNGRB issued a provisional tariff order no. TO/07/2014 dated 22.10.2014 determining the provisional initial unit natural gas pipeline tariff under the provisions of the Tariff Regulations for DMPL of GAIL (available on PNGRB's website). The provisional transportation tariff as proposed by GAIL and as determined by PNGRB are as follows:

Particulars	Provisional Tariff proposed by GAIL (Rs. / MMBTU on GCV basis)	Provisional Tariff determined by PNGRB (Rs. / MMBTU on GCV basis)		
Levelized Provisional Transportation Tariff	40.77	6.13		

3. Order of Appellate Tribunal for Electricity (APTEL)

3.1. GAIL had challenged PNGRB's provisional tariff order in APTEL in IA no. 191 of 2015 and Appeal no. 115 of 2015 on various aspects of computation of tariff. APTEL in its order dated 02.12.2016 has directed PNGRB to determine the final tariff by 30.06.2017, in tune with APTEL's Order dated 29.05.2015 (in appeal no. 161 of 2013 & batch). APTEL has also stated that during the pendency of the proceedings before PNGRB, the provisional tariff already fixed shall continue to apply.

4. Details of tariff filing submitted by GAIL

4.1. PNGRB reminded GAIL to submit updated tariff filing for DMPL vide letter dated 12.01.2014. In response to this, GAIL vide letter dated 04.02.2015 requested for extension for a period of one month for

- submission of final tariff. PNGRB vide its letter dated 13.02.2015 accepted the request.
- 4.2. GAIL vide letter dated 04.03.2015 submitted (a) Attachments as per Schedule in Tariff Regulations; (b) CA Certificates (CA-1) dated 07.02.2015 from FY2008-09 to FY2013-14 for Gross Block (GB), Net Block (NB), Net additions to Fixed Assets (NFA), Capital Work In Progress (CWIP), Operating Expenditure (Opex); (c) Trial Balance from FY2007-08 to FY2013-14 certified by Chartered Accountant (CA). The CA has also certified that the copies of trial balance are true copies and have been taken into consideration in preparation of audited balance sheet of GAIL.
- 4.3. PNGRB vide letter dated 13.03.2015 requested GAIL to complete its tariff filing and submit tariff model in soft copy and details of future capex. In response, GAIL again sought a time extension up to 30.04.2015 vide letter dated 31.03.2015. PNGRB vide letter dated 16.04.2015 granted the extension till 30.04.2015.
- 4.4. GAIL vide letter dated 30.04.2015 submitted (a) details of future capex considered and supporting documents for some projects; (b) CA Certificate (CA-2) dated 02.04.2015. GAIL revised CA certificate for the re-casted Net Block (NB) of the pipeline assets capitalized before 01.04.2005. Subsequently, GAIL submitted tariff filing (in excel format) via email dated 01.05.2015.
- 4.5. PNGRB vide letter dated 26.05.2015 sought clarifications from GAIL after a preliminary scrutiny of the data submitted on various aspects such as opex, capex etc. In response, GAIL vide letter dated 23.06.2015 submitted (a) CA certificate (CA-3) dated 18.06.2015 for allocation of common corporate assets and expenses from FY2008-09 to FY2013-14;

- (b) clarifications on various other queries raised by PNGRB such as non-recurring expenses, future capex, last mile connectivities (LMCs) etc. Additionally, GAIL vide letter dated 18.09.2015 (submitted to PNGRB for determination of tariff in the case of KKBMPL and other pipelines) submitted CA certificate (CA-4) dated 16.09.2015. In this submission, GAIL revised the figures of allocation of common corporate expenses from FY2008-09 to FY2013-14 and submitted certificate for allocation of common corporate assets and expenses in FY2014-15.
- 4.6. In conformity to APTEL's Order (in IA no. 191 of 2015 and Appeal no. 115 of 2015 dated 02.12.2016), PNGRB vide letter dated 15.12.2016 asked GAIL to submit updated actual data for FY2014-15 and FY2015-16 and future projections from FY2016-17 onwards. GAIL was also asked to submit list of customers alongwith year-wise tariff charged from them since 20.11.2008 (i.e. date of notification of Tariff Regulations).
- 4.7. GAIL vide letter dated 13.01.2017 submitted (a) revised Attachments as per Schedule in Tariff Regulations; (b) details of future capex/opex and supporting documents; (c) CA Certificates (CA-5) dated 25.06.2015 for FY2014-15 re-casted depreciation certificate, opex, CWIP; (d) CA Certificates (CA-6) dated 11.11.2016 for FY2015-16 re-casted depreciation certificate, net deletion to fixed assets, opex, CWIP; (e) Trial Balance for FY2014-15 and FY2015-16 certified by CA. The CA has also certified that the copies of trial balance are true copies and have been taken into consideration in preparation of audited balance sheet of GAIL.; (f) CA certificate (CA-7) dated 05.01.2017 for allocation of common corporate assets and expenses for FY2015-16; (g) Annual Reports for FY2015-16.

While GAIL has revised the tariff claimed in this submission, it has not revised the tariff filing (excel sheet). Details are discussed in para 4.9 below.

4.8. In the above mentioned letter, GAIL has also stated that "since 20.11.2008, Tripura Natural Gas Company Limited (TNGCL) is the only customer on DMPL and it is submitted that a tariff rate @ Rs. 6.13/MMBTU-GCV as per the PNGRB provisional tariff order dated 22.10.2014 for DMPL has been applied and is being charged to TNGCL)."

4.9. GAIL has submitted the following tariff:

Final tariff submitted by GAIL as per letter dated 04.03.2015 and in its tariff filing (tariff model in excel sheet)

Financial Year	Rs./MMBTU (GCV basis)
2008-09 to 2014-15	6.13
2015-16 to 2026-27	82.26

Revised final tariff submitted by GAIL as per letter dated 13.01.2017

Financial Year	Rs./MMBTU (GCV basis)
2008-09 to 2016-17	6.13
2017-18 to 2026-27	82.61

^{*} GAIL has not submitted a revised tariff filing (tariff model in excel sheet with all linkages and formulae) in line with this revised submission

5. Issues in the Tariff Filing submitted by GAIL

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

5.1. **Economic Life of Pipeline**

In the tariff filing, GAIL has considered economic life of the pipeline for a period of 25 years up to 23.03.2027.

5.2. <u>Capital Expenditure (Capex)</u>

GAIL, in its tariff submission, has considered total capex outgo of Rs. 1130.39 Lakh from 2008-09 till the end of the economic life of the pipeline in 2026-27. The head-wise breakup is as follows:

Particulars	(Rs. in Lakh)
Net block as on 30.09.2008	197.25
Actual capex outgo from 2008-09 to 2015-16	290.44
Future capex outgo projections from 2016-17 to 2026-27	642.70
Common corporate assets from 2008-09 to 2026-27	0
Total	1130.39

5.2.1. Net Block (NB) / Net Fixed Assets (NFA) as on 30.09.2008

NFA as on 30.09.2008 as per tariff filing and CA certificates submitted by GAIL is as follows:

(Rs. in Lakh)

Tariff Filing*	CA-1^	CA-2^
197.25	152.45	196.10

^{*} Recalculated by GAIL considering depreciation @ 3.17% on pipeline assets since inception

GAIL in its tariff filing has recalculated NFA considering depreciation rate of 3.17% on pipelines and related assets since inception of the pipeline. However in the books of accounts GAIL has considered depreciation of 3.17% from 01.04.2005 onwards as per the approval of Ministry of Company Affairs (MCA). This rate of depreciation has been

[^] As per books of accounts

approved by MCA for Oil and Gas pipelines vide letter dated 31.08.2005 to be effective from 01.04.2005 whereas in its tariff filing GAIL has recalculated NFA considering 3.17% depreciation rate since inception of the pipeline. Further, in CA-2 dated 02.04.2015 it is stated that the depreciation for pipeline related assets capitalized before 01.04.2005 are re-casted @3.17% of straight line basis.

5.2.2. Actual capex outgo from FY2008-09 to FY2015-16

GAIL, in its tariff filing, has claimed total actual capex outgo (including CWIP, Land & ROU) of Rs. 290.44 Lakh.

Year-wise breakup of capex claimed in tariff filing and that certified in CA certificates submitted by GAIL is as follows:

(Rs. in Lakh)

Year	Tariff Filing	CA Certificate
2008-09	0.00	0.00*
2009-10	0.42	0.00*
2010-11	0.03	0.00*
2011-12	5.22	2.58*
2012-13	4.70	2.36*
2013-14	3.94	0.00*
2014-15	11.36	0.00#
2015-16	264.77	(2.50)^
Total	290.44	2.50

^{*} As per CA-1 (details in para 4.2)

It is also observed that:

i. Capital Work in Progress (CWIP) is nil for all years in tariff filing as well as all CA certificates.

[#] As per CA-5 (details in para 4.7)

[^] As per CA-6 (details in para 4.7)

ii. Interest During Construction (IDC) is nil for all years in the CA certificates.

5.2.3. Future Capex Outgo from FY2016-17 to FY2026-27

GAIL, in its tariff filing, has claimed total actual capex outgo of Rs. 642.70 Lakh. This amount includes (a) O&M capex of Rs. 283 Lakh and (b) PD capex of Rs. 360 Lakh, as discussed below.

- a) O&M Capex: Under this head, GAIL has claimed Rs. 283 Lakh in the tariff filing. The figures are escalated at 5.61% p.a. from FY2014-15 onwards (total amount without escalation comes to Rs. 180 Lakh). To support these claims, GAIL has submitted three different submissions (discussed below), however, the figures do not reconcile with the tariff filing.
 - GAIL in its letter dated 30.04.2015 has claimed Rs. 227.63
 Lakh for 17 projects but has provided supporting documents for only five of these projects.
 - ii. GAIL in its letter dated 23.06.2015 submitted supporting document for one of the 17 projects mentioned in its previous submission dated 30.04.2015 and also submitted revised annexure of O&M future capex. In the revised annexure, there are five projects with projected capex of Rs. 116.43 Lakh. Supporting documents are attached for all these projects.
 - iii. GAIL vide its letter dated 13.01.2017 submitted the "details of future CAPEX considered and supporting documents, including preliminary cost estimate for replacement/re-routing of Maharajganj pipeline and shifting of DMPL Terminal and other expenditure". As per the revised submission, GAIL has claimed

- O&M capex of Rs. 901.67 Lakh from FY2016-17 to FY2026-27. However, GAIL not provided the details of impact on economic life and capacity of the pipeline due to this replacement/re-routing.
- b) PD Capex: Under this head, GAIL has claimed Rs. 360 Lakh in FY2016-17 and FY2017-18 in the tariff filing for future last mile connectivities (LMC) in the pipeline network. The figures are escalated at 5.61% p.a. from FY2014-15 onwards (total amount without escalation comes to Rs. 300 Lakh). GAIL has, however, not submitted any approvals by competent authority, LOA/PO etc., CA certificate stating the total capitalization cost of last mile connectivity and spur lines to customers from 2008-09 onwards. Various submissions of GAIL are discussed below:
- i. GAIL in its letter dated 30.04.2015 submitted a note stating that future capex of Rs. 5 crore has been considered (from FY2015-16 to FY2017-18) for prospective consumers connectivity and terminal upgradation for existing facilities enroute pipeline network.
- ii. GAIL in its letter dated 23.06.2015 submitted another note stating that this future capex has been calculated considering 4" pipeline of about 8-10 km length with preliminary estimate of Rs. 14 Lakh/inch-km and no escalation has been considered in the above costs.

5.2.4. Common corporate assets from FY2008-09 to FY2026-27

GAIL, in its tariff filing, has not claimed any common corporate assets during this period.

5.3. Operating Expenses (Opex)

GAIL in its tariff submission has claimed total opex of Rs. 1763.84 Lakh. Head-wise breakup of opex considered by GAIL in its tariff submission for the entire economic life of the pipeline as follows:

Particulars	(Rs. in
raruculars	Lakh)
Actual opex outgo (2008-09 to 2015-16)	282.35
Future opex projections (2016-17 to 2026-27)	1121.60
Actual common corporate expenses (2008-09 to 2015-16)	84.30
Future common corporate expenses (2016-17 to 2026-27)	275.60
Total	1763.84

5.3.1. <u>Actual Opex Outgo from FY2008-09 to FY2015-16</u>

In its tariff filing, GAIL has claimed opex of Rs. 282.35 Lakh from 20.11.2008 to 31.03.2016. Year-wise breakup of opex claimed in tariff filing and that certified in CA certificates submitted by GAIL is as follows:

(Rs. in Lakh)

Financial Year	Tariff Filing	CA Certificates
2008-09	7.56	7.56*
(20.11.2008 to 31.03.2009)	7.30	7.30
2009-10	10.18	10.18*
2010-11	15.58	15.58*
2011-12	22.36	22.36*
2012-13	27.71	27.71*
2013-14	46.97	46.97*
2014-15	66.19	48.72#
2015-16	85.79	54.33^
Total	282.35	233.41

^{*} As per CA-1 (details in para 4.2)

[#] As per CA-5 (details in para 4.7)

[^] As per CA-6 (details in para 4.7)

It is also observed that:

- i. Sum of total opex for DMPL and Agartala Network for FY2015-16 in the CA certificate does not reconcile with the trial balance.
- ii. In the CA certificate, GAIL has stated 'Miscellaneous Income' in only FY2014-15. However, GAIL has not netted off miscellaneous income from opex in tariff filling as well as in CA certificate for all years.

5.3.2. Future opex projections from FY2016-17 to FY2026-27

In its tariff filing, GAIL has claimed a future opex of Rs. 1121.60 Lakh from FY2016-17 to FY2026-27. This amount includes (a) PD future opex of Rs. 173.59 Lakh; (b) Non-recurring future opex of Rs. 138.34 Lakh; and (c) Other opex of Rs. 809.67 Lakh. GAIL has considered annual escalation rate/inflation rate of 5.61% p.a. from FY2014-15 onwards and has considered 357 operating days in the year FY2026-27.

5.3.3. Actual common corporate expenses from FY2008-09 to FY2015-16

Actual expenses claimed by GAIL during this period are Rs. 84.30 Lakh. Year-wise breakup of expenses claimed in tariff filing and that certified in CA certificates submitted by GAIL is tabulated in table below.

(Rs. in Lakh)

Financial Year	Tariff Filing	CA-3*	CA-4*	CA-7*
2008-09 (20.11.2008 to 31.03.2013)	2.06	2.06	1.98	NA
2009-10	7.08	7.08	6.91	NA
2010-11	7.64	7.64	7.57	NA
2011-12	5.68	5.55	5.97	NA
2012-13	11.13	10.85	15.73	NA

2013-14	15.99	15.60	16.00	NA
2014-15	16.89	NA	23.07	NA
2015-16	17.83	NA	NA	18.56

^{*}Details in para 4.5 and 4.7

Rationale for allocation of the actual expenses: With regards to mechanism for allocation of common corporate expenses, GAIL has stated that it has 8 offices/work centres and 11 zonal marketing offices providing services to the whole company. There are many capital expenditure and operating expenditure incurred to build, maintain and operate these offices. GAIL has calculated the total capex and opex of these offices and bifurcated them among all business segments of the company on the basis of total gross block of respective business segments. Capex and opex allocated to business segment – NG Transmission is then allocated to all the pipelines including dedicated pipelines on the basis of actual throughput in that particular pipeline system in the corresponding previous year.

PNGRB in its letter dated 07.09.2015 sought clarifications on the allocation of corporate common expenses that GAIL had submitted on 23.06.2015. It was also observed that GAIL had included marketing related expenses in the common corporate expenditure and has allocated it to NG transmission business which is not in line with PNGRB Regulations. GAIL was asked: (a) rationale of allocation of the expenses to all business segments on the basis of gross block, (b) bifurcation of these expenses (excluding all marketing and finance related expenses) into direct and indirect expenses certified by CA, (c) reconciliation of indirect expenses (excluding all marketing and finance related expenses) with un-allocable expenses appearing in the business segment information in annual report of GAIL certified by CA.

GAIL in its response to the clarifications sought by PNGRB reiterated the same rationale allocation for common corporate expenses and has not submitted the bifurcation into direct and indirect expenses and reconciliation of indirect expenses with un-allocable expenses. GAIL further stated that as corporate marketing department is providing services to Gas Transmission and all other business segments also, therefore all common expenses including marketing related expenses are allocated to all business segments.

5.3.4. Future common corporate expenses from FY2016-17 to FY2026-27

In addition to the above, GAIL has also claimed future common corporate expenses of Rs. 275.60 Lakh. In the tariff filing, expenses claimed in each year are calculated by escalating previous year expenses by 5.61% p.a.

5.4. <u>Unaccounted Gas Loss</u>

GAIL has considered 0.30% of the throughput as unaccounted gas loss, as a cost to be recovered through the transportation tariff. GAIL has claimed a total unaccounted gas loss of Rs. 85.65 Lakh - actual loss of Rs. 30.97 Lakh from FY2008-09 to FY2015-16 and future projected loss of Rs. 54.68 Lakh from FY2016-17 to FY2026-27. GAIL vide letter no. GAIL/RA/PNGRB/KKBMPL Clarification/277900/2015/1361 dated 10.08.2015 informed PNGRB that actual unaccounted gas loss for DMPL from FY2008-09 to FY2014-15 is nil.

5.5. **Volume Divisor**

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

Financial Year	Capacity (in MMSCMD)
2008-09 to 2013-14	0.0585
2014-15	0.0405
2015-16	0.0360
2016-17 to 2026-27	0.0315

5.6. Working Capital

In the tariff filing, GAIL has considered total working capital of Rs. 33.88 Lakh calculated as sum of 30 days of opex and 18 days of revenue, in conformity with the Tariff Regulations.

5.7. Number of Working Days

GAIL has considered 132 operating days in FY2008-09, 345 operating days for all years from FY2009-10 to FY2026-27.

5.8. Line Pack

Line pack is the value of gas which always remains in the pipeline and as per regulations it is to be 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 filing, has considered line pack of Rs. 0.01 Lakh as cash outflow in FY2008-09.

5.9. **Terminal Value**

Terminal Value is the sum of the residual value of the NFA, working capital and line pack and is cash inflow at the end of economic life of the pipeline. The terminal value submitted by GAIL in its tariff filing is Rs. 749.92 Lakh as on 23.03.2027.

5.10. 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. Rates of corporate income tax applicable each year to GAIL and subsequent computation of pre-tax rate of return (as submitted by GAIL) is as follows:

Financial Year	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14 and onwards
Income Tax Rate	33.99%	33.99%	33.22%	32.45%	32.45%	33.99%
Pre-tax rate of return	18.18%	18.18%	17.97%	17.76%	17.76%	18.18%

5.11. Zonal Apportionment

Since the length of the DMPL network of GAIL does not exceed 300 km, the apportionment of the levelized tariffs is not required to be undertaken.

6. Views of stakeholders sought

6.1. Determination of the final initial unit natural gas pipeline tariff is a time bound exercise. PNGRB solicits the views in writing of stakeholders on GAIL's tariff filing for the Dukli-Maharajganj Natural Gas Pipeline Network within 21 days of the issue of this document at the following address:

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

(Vandana Sharma)
Secretary
For and on behalf of the Board