



Petroleum and Natural Gas Regulatory Board

New Delhi

Tariff Order

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|-------------------------|---|
| Subject | Review of tariff under the provisions of the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Regulations, 2008 as per the PNGRB's Legal Order dated 30.05.2023 |
| Name of entity | GAIL (India) Limited ("GAIL") |
| Name of Pipeline | Agartala Regional Natural Gas Pipeline ("ARNGPL") |
| File No. | PNGRB/COM/2-NGPL Tariff (2)/2011-Vol.III (P-2141) |

Ref No. : TO/ 2023-24/ 02

Date : 31/05/2023

1. Regulatory Framework

- 1.1. In terms of Section 22 of the Petroleum and Natural Gas Regulatory Board Act, 2006 ("PNGRB Act"), 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 ("NGPL").
- 1.2. The methodology for determination of NGPL 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 NGPL tariff on a provisional basis ("provisional tariff") first 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 of the NGPL is to be done by Board in terms of Clause 2(1) (h) of Tariff Regulations, which inter-alia provides that first tariff review to be done after the end of five consecutive years after the end of the initial unit natural gas pipeline tariff period and the unit natural gas pipeline tariff so determined at the time of any tariff review shall apply for the period upto next tariff review and further the gap between two tariff reviews shall not be less than two consecutive financial years after the end of the financial year in which last tariff fixation occurred. The tariff review can be done earlier also in terms of provisions of sub-clause (9) of clause 9 of Schedule A of Tariff Regulations which inter-alia states that Board can review the tariff in case of sudden change in any parameter used in the determination of the unit natural gas pipeline tariff. The transportation tariff is determined using the Discounted Cash Flow (DCF) method using 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. Authorisation, Capacity Determination and final tariff order.

- 2.1. PNGRB issued final terms and conditions for acceptance of Central Government authorization for ARNGPL vide letter dated 13.12.2010 under Regulation 17 (1) of the PNGRB (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Regulations, 2008 (“Authorization Regulations”). The provisional capacity and length as per the Authorization letter for ARNGPL is equal to 2.00 MMSCMD (including common carrier 0.50 MMSCMD) and 55.40 Kms respectively. As per the acceptance of Central Government Authorization dated 13.12.2010, economic life of the network was considered from 1997-98 to 2032. Subsequently, Board issued an amendment to the acceptance to authorization vide no. Infra/PL/Exis/17/AGAR-REG-AMEND/GAIL/01/12 dated 13.02.2012 to consider the economic life of ARNGPL network as 25 years from 1997-98 to 2022 with consideration for extension of economic life before the expiry. Vide amendment dated 23.11.2020 in Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Regulations, the economic life of the pipeline shall be considered as thirty years from the date of commissioning for the purpose of tariff determination under these regulations. Accordingly, in the last Tariff order TO/ 2022-23/ 04 dated 28.07.2022, economic life of pipeline was considered as 30 years from 26.12.1997 i.e. till 25.12.2027.
- 2.2. PNGRB vide Order no. TO/ 2022-23/ 04 dated 28.07.2022 reviewed the tariff of ARNGPL which was applicable from 01.08.2022 onwards. The levelized tariffs as approved by PNGRB are as follows:

(Rs. /MMBTU on GCV basis)

| Particulars | Tariff proposed by GAIL | Tariff determined by PNGRB |
|--------------------------------------|-------------------------|----------------------------|
| Tariff from 20.11.2008 to 31.03.2018 | 11.51 | 5.80 |
| Tariff from 01.04.2018 to 31.03.2021 | 76.40 | 45.89 |
| Tariff from 01.04.2021 to 31.07.2022 | 38.56 | 45.89 |
| Tariff from 01.08.2022 onwards | 38.56 | 1.02 |

3. Legal Proceedings

- 3.1. GAIL preferred a review petition against the PNGRB’s Tariff Order TO/ 2022-23/ 04 dated 28.07.2022 at PNGRB. The entity inter alia raised following major grounds for review petition –
- 3.1.1. Date of applicability of the nominal tax rate from FY 2022-23 instead of FY 2019-20. Reviewing tariff under Clause 9(9)(i) of the schedule A of NGPL tariff regulation

- Post amendment dated 27.03.2020, the Board was unable to re-determine the tariff of pipelines and the existing tariffs were to continue despite the provision for suo-moto tariff review by the Hon'ble Board in place, the tariff of ARNGPL underwent a drastic reduction.
- The entity should not be made to suffer the consequences of a lesser nominal tax rate being applied retrospectively instead of prospectively from FY 2022-23.

3.1.2. The computation of volume divisor for the period 20.11.2008 to 07.01.2016 in terms of the NGPL Tariff Regulations

- The "Volume of gas to be transported.", should be considered for computation of the volume Divisor and not the "pipeline design capacity".

3.1.3. Disallowance of Unaccounted Gas (Transmission Loss) as per the Regulation 2(1)(u) of the NGPL Access Code Regulations" and Clause 5(2)(b) of Schedule-A of the NGPL Tariff Regulations

- There are some gas losses which are inevitable due to venting/purging of gas (safety and technical requirements) and also due to inherent inaccuracies between two custody meters.
- No two custody meters read alike, and inherent inaccuracies do remain, resulting in gas remaining unaccounted.
- PNGRB Access Code Regulation 2(u)-Transmission Loss is defined as "transmission loss" (TL) means the quantity of gas which is unaccounted for whatsoever reason including blow downs, venting or releases during regular operation and maintenance of pipeline system or due to inaccuracy of custody meter.
- PNGRB Access code regulation recognizes that a shipper shall sell or provide the gas, if required by the transporter, for SUG, line pack and transmission loss at prevailing market prices in proportion to its capacity booking in the pipeline.
- Ministry of Petroleum and Natural Gas, prior to the PNGRB coming into existence, based on recommendation of Tariff Commission Report has approved the tariff for HVJ and DVPL pipeline of GAIL, where in the tariff commission had inter alia considered unaccounted gas losses @0.3% of throughput.

3.1.4. The drastic reduction from existing tariff of Rs 45.89/MMBTU to Rs 1.02/MMBTU w.e.f. 01.08.2022 onwards in 2022 Tariff Order makes the operation and maintenance of ARNGPL unviable from a financial perspective for the remaining economic life of the ARNGPL and recovery of cost to transporter in a reasonable manner so as to protect the interest of entity as well as the consumers.

3.2. On hearing the Review Petitioner, the Board taking note of the contents of the Review Petition and in terms of Section 22(2)(b) of the PNGRB Act, 2006, passed an interim order on 22.09.2022. Board, in its order, inter alia mentioned that the Board feel just and proper in larger interest of consumer and the authorized entity, that the authorized pipeline entity should also get minimum return to run the operational cost and if not the reasonable return.

Since, the Board is still in process of deliberations through Public Consultation Document and, therefore, the Board deems fits to stay the operation of the Impugned Order Tariff No. TO/2022-2023/04 dated 28.07.2022 issued for the Agartala Regional Natural Gas Pipeline, as an interim arrangement and as regard to tariff-in-issue, the Tariff Order No. TO/06/2012 dated 01.05.2012 i.e. Rs. 5.80 per MMBTU, shall be in operation till further decision.

- 3.3. Subsequently, after adjudication the Board vide its judgement dated 30.05.2023 has allowed the said review petition partially and observed that the tariff determined in TO /2022-23/04 dated 28.07.2022 be revised to the extent of the amendment dated 17.11.2022, i.e., Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2022. The relevant extract of the order dated 20.05.2023 as under:

“In view of the above, we deem fit that the review sought by the way of this petition stands on merit based on the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2022 dated 17th November, 2022 and, accordingly the review petition is allowed to that extent. Further, the Secretary, PNGRB, will put up a revised Tariff Order re-determining the Tariff for ARNGPL as per PNGRB Act and relevant extant regulations.”

- 3.4. **PNGRB Conclusion:** In light of direction received under Review Petition 19/2022 (arising out of Tariff Order No. TO/2022-2023/04) vide Legal order dated 30.05.2023 (“PNGRB Legal Order”), the tariff determined vide tariff order dated 28.07.2022 of ARNGPL has been reviewed only on the basis of the recent amendments in NGPL Tariff Regulations dated 17.11.2022.

4. Recent amendments in NGPL Tariff Regulations

On 17.11.2022, PNGRB notified Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2022. Following are the relevant amendments which will have an impact on the tariff of the ARNGPL:

- i) **Transmission Loss:** Sub-clause (2)(d) of Clause 5 of Schedule A -
“(d) transmission loss @ 0.1% of the actual volume, multiplied by the gas price plus applicable transmission charges.

Provided that for the future years, likely future volumes of the pipeline shall be considered for calculating the transmission loss.

Provided further that the gas price used for calculation of transmission loss shall be the gas price ceiling issued by Petroleum Planning & Analysis Cell in accordance with Ministry of Petroleum and Natural Gas, Govt of India, Notification No.O-22013/27/2012-ONG-D-V (Vol-II) dated 21.03.2016 for marketing including pricing freedom for gas being produced from discoveries in Deepwater, Ultra Deepwater and High Pressure-High Temperature areas or actual gas price, whichever is lower for the respective period.”

- ii) **Miscellaneous Income:** sub-clause (8) of of Clause 5 of Schedule A, –
“(8) *Adjustment of Miscellaneous income against Operating Costs: Financial Year-wise actual revenue earned by the entity from the regulated asset base, including Miscellaneous income realizable from a fixed asset included in the capital employed or out of an expense considered as an operating cost, including income from imbalance management services in accordance with the provisions of Petroleum and Natural Gas Regulatory Board (Imbalance Management Services) Regulations, 2016, but excluding interest income, profit or loss on sale or transfer of any fixed or other asset, shall be worked out. If considering such actual revenue, return earned by the entity on the date of review results in more than the allowed rate of return as per clause 3 of Schedule A, then adjustment would be made in the tariff to make the return earned by the entity on the date of review equals to the allowed rate of return as per clause 3 of Schedule A*”
- iii) **Return on Capital employed:** Clause 3 of Schedule A –
“*The rate of return on capital employed shall be the rate of return on capital employed equal to twelve percent post-tax. The rate of return on capital employed once applied to a natural gas pipeline project shall remain fixed for the entire economic life of the project. Such lowest nominal rate of income tax shall be applied with effect from the financial year of this amendment regulation.*
Note: 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 the provisions of the income Tax Act, 1961, as amended from time to time.
[Explanation- For removal of doubt, it is clarified that in case more than one nominal rates of income tax are available as an option to the entity under the law relating to income tax, the lowest of such nominal rates of income tax shall be considered for the purpose of grossing-up the post-tax rate of return of twelve per cent for computing pre-tax rate of return on capital employed.]”

5. Details of Current Tariff review:

- 5.1 In view of the PNGRB Legal Order dated 30.05.2023, the TO/2022-2023/04 dated 28.07.2022 which was based on actual data upto 31.03.2020 is being reviewed based on the above-mentioned amendment(s). Further other relevant data will be updated/trued-up in the next tariff review in terms of the extant regulatory framework:

- i) **Transmission Loss per Sub clause 2(d) of Clause 5 of Schedule A:** Transmission loss is considered @ 0.1% of actual volumes or likely future volumes as provided by the entity multiplied by the gas price plus applicable transmission charges.

In this regard, GAIL provided its likely future volumes as 0.92 MMSCMD from FY 2020-21 onwards in its tariff filing corresponding to TO/2022-2023/04. These volumes of 0.92 MMSCMD have been converted into MMBTU based on calorific value considered in tariff determination as per Para 4.8 of TO/2022-2023/04 i.e. 9,176.83 Kcal/SM3 and proportionate working days.

Gas price considered in determination of the transmission loss is APM gas price and its basis are as follows:

| Period | Gas Price (US\$/MMBTU) | Remarks |
|---|------------------------|---|
| 17.11.2022 till 31.03.2023 | 8.57 | PPAC notification dated 30.09.2022 |
| 1 st to 7 th April 2023 | 9.16 | PPAC notification dated 07.04.2023 |
| 8 th April 2023 onwards | 6.50 – 7.25 | Ceiling price as per MOP&NG gazette notification dated 7 th April 2023 |

For the period 17.11.2022 till 31.03.2023, the gas price issued by Petroleum Planning & Analysis Cell (PPAC) for the period October 2022-March 2023 for domestic natural gas, i.e., US\$8.57/MMBTU, is considered.

From 1st to 7th April 2023, US\$ 9.16/ MMBTU gas price issued by Petroleum Planning & Analysis Cell (PPAC) on 7th April 2023 is considered. From 8th April 2023 onwards, ceiling price of US\$ 6.50/ MMBTU escalated by US\$ 0.25/ MMBtu p.a. from FY 2025-26 as per MOP&NG gazette notification dated 7th April 2023 has been considered. Further, Tripura VAT @ 4.5% on natural gas and Road Development cess @19.5% is also considered.

Exchange Rate: For FY 2022-2023, average exchange rate as per RBI from 17.11.2022 to 31.03.2023 i.e. Rs.82.25/ US\$ has been considered. From FY 2023-24 onwards, Rs.82.70/US\$, being the prevailing exchange rate, has been considered in computation of transmission loss.

Accordingly, based on above explanations, Rs. 4.21 Crore is considered as transmission loss from 17.11.2022 till the end of economic life. The same shall be trued up in terms of extant regulatory framework in the next tariff review exercise.

| Particulars | Previous Tariff Order | Current Tariff determination |
|---|-----------------------|------------------------------|
| Transmission Loss till end of economic life | NIL | Rs. 4.21 Crore |

- ii) **Miscellaneous Income as per Sub clause 8 of Clause 5 of Schedule A:** In TO/2022-2023/04, refer Para 4.5.2.2 (iv), for computation of future opex, recurring Opex of FY 2019-20 i.e. Rs. 16.94 Crore has been escalated on annual basis @ 4.5% till the end of economic life i.e 25.12.2027. This opex considered is net of miscellaneous income of FY 2019-20 as Rs. 0.21 Crore.

Pursuant to amendment, from 17.11.2022, the miscellaneous income is not to be adjusted from opex, if considering such actual revenue, return earned by the entity on the date of review results is less than the allowed rate of return. As the return earned by the entity based on the actual volume flow is far below the allowed rate of return, therefore, for FY 2022-23, the escalated miscellaneous income for 135 days (17.11.2022 to 31.03.2023) has

been added back to Opex of FY 2022-23 and after addition of misc. income, opex of Rs. 19.42 Crore has been considered for FY 2022-23.

For FY 2023-24, Rs. 20.45 Crore has been considered as opex (without netting miscellaneous income) and the same has been escalated @ 4.5% p.a for considering opex of future years.

Total future opex considered from FY 2020-21 till the end of economic life is Rs. 164.54 Crore.

| Particulars | Previous Tariff Order | Current Tariff determination |
|-------------|-----------------------|------------------------------|
| Future Opex | Rs. 163.18 Crore | Rs. 164.54 Crore |

iii) Return on Capital Employed per Clause 3 of Schedule A:

Clause 2 of Schedule A of the Tariff Regulations mandates that natural gas pipeline tariff shall be calculated based on the DCF methodology after considering the reasonable rate of return. In terms of Clause 3 of Schedule A of the Tariff Regulations, twelve percent post tax will be grossed-up by nominal rate of income tax applicable for corporate assesses as per the provisions of Income Tax Act, 1961. Pursuant to the said amendments, the following tax rates shall be applied.

| Year | FY 2008-09 & 2009-10 | FY 2010-11 | FY 2011-12 & 2012-13 | FY 2013-14 & 2014-15 | FY 2015-16 to 2017-18 | FY 2018-19 | 2019-20 to 2021-22 | FY 2022-23 & onwards |
|-------------------------------------|-------------------------------|---------------|-------------------------------|-------------------------------|--------------------------------|---------------|--------------------------|-------------------------------|
| Current Tariff Determination | | | | | | | | |
| Income Tax Rate | 33.99% | 33.22% | 32.45% | 33.99% | 34.61% | 34.94% | 34.94% | 25.17% |
| Pre-tax rate of return | 18.18% | 17.97% | 17.76% | 18.18% | 18.35% | 18.45% | 18.45% | 16.04% |
| Previous Tariff Order | | | | | | | | |
| Income Tax Rate | 33.99% | 33.22% | 32.45% | 33.99% | 34.61% | 34.94% | 25.17% | 25.17% |
| Pre-tax rate of return | 18.18% | 17.97% | 17.76% | 18.18% | 18.35% | 18.45% | 16.04% | 16.04% |

5.2 Other than above mentioned amendments, all other parameters for calculation of tariff remains the same as considered in TO/2022-2023/04 dated 28.07.2022.

6. **Applicability of Tariff:** GAIL has charged tariff as follows:

| (Rs./MMBTU on GCV basis) | |
|---|-----------------------------------|
| Particulars | Tariff determined by PNGRB |
| Tariff w.e.f 20.11.2008 to FY 2017-18 | 5.80 |
| Tariff from FY 2018-19 to FY 2020-21 | 45.89 |
| Tariff from 01.08.2022 to 21.09.2022 | 1.02 |
| From 22.09.2022 onwards as per direction under said review petition | 5.80 |

PNGRB Conclusion: As per clause 9(4) of the amended PNGRB Tariff Regulations notified on 27.05.2019, “The adjustment on account of variation in the provisional initial unit natural gas pipeline tariff, final initial unit natural gas pipeline tariff and the tariff determined under tariff review shall be made in the DCF calculations and the derived tariff shall be charged from the customers on prospective basis till the next tariff review, that is the tariff shall be applicable from the first day of the month, following the month, in which the tariff order (zonal tariff in case of applicability of zonal tariff) is issued by the Board.” *In view of above, the tariff shall be applicable from the 1st day following the month in which tariff order is issued by PNGRB. Therefore, tariff has been calculated considering applicability of tariff w.e.f. 01.06.2023.*

7. **Tariff Review:** The final tariff of ARNGPL was notified on 22.07.2022 which was determined based on the actual data up to FY 2019-20.

In respect of tariff review, clause 2(1)(h) of Tariff Regulations read with sub- clause (9) of clause 9 of schedule A, inter alia states as under:

“"tariff review" means the review of the unit natural gas pipeline tariff after every five consecutive years by the Board with the first tariff review to be done after the end of five consecutive years after the end of the initial unit natural gas pipeline tariff period.

Provided also that the tariff review can be done earlier in terms of provisions of sub-clause (9) of clause 9 of Schedule A;”

Sub-clause (9) of clause 9 of Schedule A provides that,

“The Board may, either on its own or on the entity’s request, carry out a review of the unit natural gas pipeline tariff any time between two tariff reviews, as the case may be, considering-

(i) applicable nominal rate of income tax used for grossing-up the rate of return on capital employed;

(ii) sudden change in any parameter used in the determination of the unit natural gas pipeline tariff.

PNGRB Conclusion: *In view of the PNGRB Legal Order dated 30.05.2023, the Board is carrying on a review of unit natural gas pipeline tariff.*

The current tariff is being redetermined based on the PNGRB Legal Order dated 30.05.2023. Therefore, the next tariff review becomes due from 01.04.2025 based on the earlier tariff order dated 22.07.2022. Accordingly, entity is advised to submit the data well in time for review of tariff and issue tariff order.

| Tariff | Due Date of Tariff Review | Actual Tariff Order date |
|--------------------|---------------------------|--------------------------|
| Provisional Tariff | 01.04.2009 | 02.05.2012 |
| Final Tariff | 01.04.2011 | 27.09.2018 |
| Tariff Review | 01.04.2021 | 28.07.2022 |
| Tariff review | 01.04.2025 | To be determined |

8. Tariff Reconciliation

8.1. Reconciliation between final tariff notified by PNGRB vide order no. TO/2022-2023/04 dated 28.07.2022 and tariff as determined under this order is as follows:

(Rs. /MMBTU on GCV basis)

| S. No. | Particulars | Impact | Tariff |
|---|---|--------|-------------|
| | Tariff determined by PNGRB vide TO/2022-2023/04 | | 1.02 |
| 1 | Transmission Loss @ 0.1% | 0.40 | 1.42 |
| 2 | Change in Future Opex due to Miscellaneous income | 0.13 | 1.55 |
| 3 | Implementation of revised tax rate w.e.f. FY 22-23 | 1.11 | 2.66 |
| 4 | Prospective application of tariff @ Rs 1.02/MMBTU from 01.08.2022 to 21.09.2023 and @ Rs 5.80/MMBTU from 22.09.2022 to 30.05.2023 | (0.60) | 2.06 |
| Levelized Tariff Determined by PNGRB w.e.f. 01.06.2023 | | | 2.06 |

9. Decision

9.1. The tariff of ARNGPL w.e.f. 01.06.2023 shall be Rs. 2.06/ MMBTU on GCV basis.

9.2. The above tariff has been worked out based on information provided by the entity, recent amendments, directions in the PNGRB Legal Order for Review Petition 19/2022 dated 30.05.2023 and deliberations above. However, PNGRB may verify/audit the information provided for tariff determination and method of cost allocation, etc. by internal team of PNGRB or by an external agency. Accordingly, tariff as determined above will be subject to revision based on aforesaid verification/audit of the information, data, method of allocation, etc. submitted by the entity.

Sd/-
(Dr. Anil Kumar Jain)
Chairperson

Sd/-
(Gajendra Singh)
Member- I

Sd/-
(Anjani Kumar Tiwari)
Member- II

Sd/-
(Ajit Kumar Pande)
Member (Legal)