

### December 3, 2025

To, **BSE Limited** 

Listing Department, 1<sup>st</sup> Floor, Phiroze Jeejeebhoy Towers, Dalal Street, Fort, Mumbai - 400 001.

Sub.: Intimation of Receipt of Tariff Order from Petroleum and Natural Gas Regulatory Board

Sir/ Madam,

Pursuant to the provisions of Regulation 51(1) of the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015, we are enclosing the Tariff Order issued by Petroleum and Natural Gas Regulatory Board (PNGRB) on December 2, 2025. This Order pertains to revised levelized tariff at Rs. 74.67/MMBTU with effect from January 1, 2026, as against the current levelized tariff of Rs. 71.66/MMBTU.

Please note that the tariff order has been annexed herewith as Annexure A.

The above information is also available on the website of the Company i.e. www.pipelineinfra.com.

You are requested to kindly take the same on record. Thanking you,

For Pipeline Infrastructure Limited

Akhil Mehrotra Managing Director DIN: 07197901

**Encl.: As above** 

**CC:** IDBI Trusteeship Services Limited

Universal Insurance Building, Ground Floor, Sir Phirozshah Mehta Road, Fort, Mumbai, Maharashtra – 400001



Subject	: Tariff Review of Unit Natural Gas Pipeline Tariff of Pipeline
	Infrastructure Limited's ("PIL") East West Natural Gas
	Pipeline ("EWNGPL"), under the provisions of the Petroleum
	and Natural Gas Regulatory Board (Determination of Natural
	Gas Pipeline Tariff) Regulations, 2008 ("Tariff Regulations")
File No	• PNCRR/Com/2-NCPL Tariff (6)/2010 (F-288)

File No.

Ref. No.: TO/NGPL/25-26/10 Date: 02<sup>nd</sup> December, 2025

#### 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.

Further, 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 chan

ge 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. No adjustment shall be made by the entity with the customers for any overachievement or under-achievement in the recovery of the natural gas pipeline tariff by the entity due to the volumes actually transported in different tariff zones being different than the volumes considered by the entity for apportioning the unit natural gas pipeline tariff for each of the tariff for zones.

## 2. Authorization and Capacity:

- **2.1.** Capacity Determined: The capacity for the period 2010-11 and 2011-12 has been notified vide letter dated 10.07.2014 at 85 MMSCMD and 95 MMSCMD (95 MMSCMD is after induction of HLPL, Hazira entry point), respectively. However, the capacity for the period FY 12-13 to FY 18-19 has not been declared by PNGRB due to ongoing litigation as detailed at para 5 below.
- 2.2. <u>Amendment in Authorization Letter</u>: PNGRB amended the authorization vide letter no. Infra/NGPL/144/EWPL/PIL 18 dated 27.09.2018 in favor of East West Pipeline Limited. Further, PNGRB provisionally approved the transfer of authorization to Pipeline Infrastructure Private Limited vide letter no. Infra/NGPL/144/EWPL/PIL/19 dated 22.03.2019 and later PNGRB provided final approval for the transfer of authorization of EWNGL to Pipeline Infrastructure Limited vide letter no. PNGRB/Auth/2-NGPL(2)/2018 dated 21.06.2019.

## 2.3. Regulatory Framework:

PNGRB in November 2022 amended the Tariff Regulations, Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Regulations, 2008 ("NGPL Authorization Regulations") and Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum, Petroleum Products and Natural Gas Pipeline) Regulations, 2010 ("Capacity Determination Regulations") inter alia amending/inserting the following regulations:

**Tariff Regulations:** In Tariff Regulations, definition 2 (1) (d) has been amended. Relevant extract of the same is as under:

"capacity of natural gas pipeline" for the purpose of determining natural gas pipeline tariff under Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Regulations, 2008 shall be the authorized capacity as defined in the Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Regulations, 2008.

Provided that wherever there is any change between the authorized capacity and the capacity as already considered in the latest tariff order issued by the Board prior to the notification of this amended regulation, then such capacity as already considered in the latest tariff order shall be considered as capacity of natural gas pipeline for the purpose of determining tariff.

Provided further that entity shall submit the revised capacity of the natural gas pipeline, if any as may be necessary, in terms of clause (g) of sub regulation (5) of regulation 5 of Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum, Petroleum Products and Natural Gas Pipeline) Regulations, 2010. Such revised capacity or as modified in terms of clause (g) of sub regulation (5) of regulation 5 of Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum, Petroleum Products and Natural Gas Pipeline) Regulations, 2010, shall be considered for the tariff determination after its approval by the Board.

## **NGPL Authorisation Regulations:** In Regulation 2(1) following clause has been inserted:

(ba) "authorized capacity" means the initial design capacity of the natural gas pipeline as provided in the Letter for grant of authorization or letter of acceptance for Central Government authorization.

Provided that the Board may issue amendment in the Letter for grant of authorization or letter of acceptance for Central Government authorization in case there is any revised capacity approved by the Board in terms of clause (g) of sub regulation (5) of regulation 5 of Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum, Petroleum Products and Natural Gas Pipeline) Regulations, 2010, and such revised capacity approved by the Board shall be considered as the amended authorized capacity of the pipeline.

# **Capacity Determination Regulations:** In Regulation 5(5) following clause has been inserted:

(g) Wherever there is any change in the capacity of natural gas pipeline in the past or in future due to reason(s) as approved by the PNGRB's Board, in such cases entity shall submit the revised capacity of the natural gas pipeline, separately due to each such reasons, to PNGRB in terms of these regulations for capacity determination and approval of the Board.

**PNGRB's Comments**: PNGRB while determining the tariff of EWPL vide TO/17/2019 dated 12.03.2019 has considered the capacity of 85 MMSCMD (during the life) as per the APTEL order dated 20.11.2018.

3. **Previous Tariff Orders:** PNGRB notified a provisional tariff order no: TO/01/2010 dated 19.04.2010 ("provisional tariff order") determining the provisional initial unit natural gas pipeline tariff and final tariff order no. TO/17/2019 dated 12.03.2019 ("final tariff order") determining the final initial unit natural gas pipeline tariff under the provisions of Tariff Regulations, for EWNGPL.

The details of provisional initial unit tariff and final initial unit tariff, along with zonal apportionment as determined by PNGRB in past are as follows:

#### Rs./MMBTU

Particular	<b>Provisional Initial Unit Tariff</b>	Final Initial Unit Tariff
Period	01.04.2009 to 30.06.2019	01.07.2019 onwards
Levelized	52.23	71.66

	Zonal Apportionment of Levelized Tariff									
Ratios	<b>Ratios</b> $X\% = 43.30\%, Y\% = 180\%$ $X\% = 15\%, Y\% = 34\%$									
Zone 1	15.00	65.50								
Zone 2	42.00	75.33								
Zone 3	53.69	78.65								
Zone 4	58.75	79.77								
Zone 5	60.94	80.15								

4. Part of National Gas Grid and Unified Tariff: The methodology for determination of NGPL tariff has been specified in the relevant provisions of Tariff Regulations. Further, the methodology for determination of Unified Tariff and its applicability has been inserted in the Tariff Regulations by way of amendment, i.e., PNGRB (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2020, PNGRB (Determination of Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023, Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024, Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2025 and Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2025.

In terms of the extant regulatory provisions EWNGPL is part of national gas grid system which means, network of all such natural gas pipelines within India which are fully interconnected with each other (including those which are partly commissioned and so interconnected) and as enlisted in Schedule C to these regulations and the Board may, by order, amend the said Schedule C from time to time. Further, Unified Tariff shall be determined for the national gas grid system in accordance with regulation 5A of Tariff Regulations.

Entity will be entitled for the revenue based on the approved tariff which means zone-wise natural gas pipeline tariff determined under Regulation 4 of NGPL Tariff Regulations. However, entity will charge unified tariff and shall raise invoice towards applicable unified zonal tariff at a pre-defined ratio determined in accordance with the Settlement Mechanism to the shipper(s).

## 5. Challenge in APTEL and Supreme Court

## 5.1. Challenge in APTEL by East West Pipeline Ltd.

EWPL had challenged the Final capacity declared by PNGRB before APTEL vide Appeal No.253 of 2014. APTEL in its Order dated 08.07.2016 had set aside PNGRB's declaration and remanded the matter. Further, it directed PNGRB to pass a reasoned order within three months from the date of receipt of this Order by PNGRB.

Subsequently, PNGRB vide its Order dated 30.12.2016 declared capacity of EWNGPL of EWPL for the period from 01.04.2010 to 31.03.2011 and 01.04.2011 to 31.03.2012 as 85

MMSCMD and 95 MMSCMD respectively. EWPL challenged PNGRB's order dated 30.12.2016 pertaining to capacity of EWPL before Hon'ble APTEL through Appeal No. 39 of 2017. In the meantime during the pendency of aforesaid Appeal, PIL filed an application (IA No. 976 of 2018 in Appeal No. 39 of 2017), seeking directions, to the Board pending adjudication and final disposal of the main appeal (Appeal No. 39 of 2017) to consider the capacity, by way of an interim measure, as the capacity mentioned in the letter of Acceptance to Central Government authorization dated 19.03.2013 issued by the Board, for the purpose of determination of final initial unit natural gas pipeline tariff. Hon'ble APTEL vide its Order dated 20.11.2018 in I.A No. 976 of 2018 directed PNGRB as under:-

## Quote

a.The Petroleum and Natural Gas Regulatory Board is directed to use 85 MMSCMD as it appears in the acceptance to Central Government authorisation letter issued by the Board on 19.03.2013 for tariff determination of East West Pipeline of the Appellant for the years 2009-10, 2010-11, 2011-12, 2012-13, 2013-14, 2015-16, 2016-17 and 2017-18 pending adjudication and final disposal of Appeal no: 97 of 2017 and IA no:94 of 2017 by this tribunal. b.We make it clear that we have not expressed any opinion on the merits of the Appeal no 97 of 2017 and IA no 94 of 2017.

IA no. 976 of 2018 is disposed of in the aforesaid terms.

## Unquote

PNGRB while determining the tariff of EWPL vide TO/17/2019 dated 12.03.2019 has considered the capacity of 85 MMSCMD (during the life) as per the APTEL order dated 20.11.2018.

Further, the Hon'ble Tribunal, vide its Order dated 15.11.2019, inter alia held that, "The Board is directed to consider the change in the operating parameters, viz., inlet pressure etc., while declaring the capacity of the pipeline for the years 2010-11 and 2011-12 and declare the capacities within 03 (three) months from the date of this order. However, this is an unusual situation calling for a special approach to solve the issue. This order, therefore, should not be cited as a precedent in future."

PIL made an application to APTEL for non-compliance of the APTEL Order dated 15.11.2019 by PNGRB. Later, Hon'ble APTEL, vide Order dated 16.07.2021, inter alia directed as follows:

- 1. The Board shall within 3 months of the requisite quorum being available, declare the capacity of the PIL's EWPL from FY 2010-11 till the year EIL has submitted the report including all operation parameters.
- 2. The Board in declaring the aforesaid capacities shall take into account the objections raised by the PIL to the EIL reports. Due opportunity to be given to PIL to submit their view on the report.
- 3. Tribunal's order, dated 15.11.2019, laying down the parameters for capacity determination exercise shall be abided and the same would be applicable across the

- Board to declaration of capacities for all years and not limited to FY 2010-11 & FY 2011-12 only.
- 4. Till that time PNGRB is directed to use 85 MMSCMD, as it appears in the acceptance to the central government's authorization letter issued by the Board, for Tariff determination of the pipeline.

## 5.2. Challenge in Supreme Court

PNGRB being aggrieved by the Orders dated 15.11.2019 and 16.07.2021 of the Hon'ble APTEL, filed a Civil Appeal before the Hon'ble Supreme Court of India bearing Nos. 377-378 of 2022. In the instant appeal, it has been inter-alia pleaded that:

:

- i. Considering the change (drop) in inlet pressure while declaring capacity of the East West Pipeline for the years, FY 2010-11 and 2011-12 is against the relevant regulations.
- ii. Decrease in capacity is *ultra vires* of Capacity Regulations as well as prejudicial to interests of consumers.
- iii. The Ld. Tribunal failed to appreciate that the capacity for a pipeline is the maximum quantity a pipeline is capable of transporting and not the operating capacity.
- iv. The declaration of capacity is not only relevant for transporters and its consumers but also important for other parties especially when such pipeline is declared as common carrier.
- v. If such variations are accepted, any entity could create a bottle neck in the system through reduction in diameter of a small section of pipeline or installing compressors with lower capacity, etc., thereby making the entire pipeline network inefficient, which would result into:
  - a. Reduction in capacity
  - b. Increased tariff for consumers
  - c. Monopolistic business environment
  - d. Defeat the purpose of creating infrastructure in a competitive manner
  - e. Manipulation and misuse by entities

## 5.3. Tariff filing by PIL in March 2023

Pipeline Infrastructure Limited (PIL) vide letter dated 22.03.2023 submitted tariff filing for its East West Natural Gas pipeline (EWNGPL) authorised u/r 17 of PNGRB (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Regulations, 2008. The Tariff proposed by PIL was Rs.109.69/MMBTU w.e.f. 01.04.2023, considering the capacity of 85 MMSCMD.

**5.4.** Later, an agenda was put up for Board's approval for submission of application to Hon'ble Supreme Court for tariff review of PIL's East West Pipeline Limited. The Board approved the proposal to share the application seeking interim direction during pendency of the appeal (including the affidavit from PIL) with PIL for their comments. Joint application was sent by PNGRB to PIL for their comments. However, PIL did not respond to the same.

**5.5. PIL Letter dated 04.06.2025:** PIL vide letter dated 04.06.2025 has inter alia requested PNGRB to proceed with a proposed tariff review and consider a reasonable interim increase in the tariff. PIL's tariff was last fixed five years ago, in 2019. Due to inflation and other macroeconomic factors, the Operation and Maintenance (O&M) costs, including the cost of system use gas and other operating expenses, have significantly increased, leading to a continuous revenue shortfall for PIL.

## **Key points from the letter include:**

- Interim Capacity: PIL acknowledges that PNGRB intends to maintain the capacity at 85 MMSCMD in the interim, pending the final decision of the Supreme Court regarding the capacity matter. The Appellate Tribunal also opined in its order dated July 16, 2021, that a design capacity of 85 MMSCMD can be used provisionally for tariff determination.
- **Reason for Increase**: The increase in input costs, both already incurred and expected over the economic life of the pipeline, along with PNGRB's initiatives to boost natural gas pipeline infrastructure, anticipate an increase in PIL's tariff after the review.
- **Benefits of Tariff Increase**: An increase in tariff would be a non-discriminatory step by PNGRB, help factor costs into a unified tariff avoiding future shocks for customers, and aid PIL in sustainable operations. It will also lead to improved recoveries for PIL, ensuring the pipeline's sustainability and efficient operation.
- **Legal Context**: The request is made without prejudice to PIL's rights regarding the determination of capacity and tariff, including Civil Appeal Nos. 377-378 of 2022 pending before the Supreme Court of India.
- **5.6.** PNGRB in this regard sough the legal opinion from ASG on the following queries.
- **5.6.1.** In light of the pendency of the matter related to determination of capacity of EWPL i.e. Civil Appeal No(s). 377-378/2022 titled 'Petroleum and Natural Gas Regulatory Board vs Pipeline Infrastructure Limited', before the Hon'ble Supreme Court, whether the following process can be initiated by PNGRB.
- **5.6.2.** Whether PNGRB, without changing the capacity and keeping it intact (considering it as 85 MMSCMD on interim basis till matter is settled/disposed), conduct Public Consultation, followed by tariff determination based on capacity as 85 MMSCMD, to facilitate true-up and other aspects of tariff required in terms of regulatory framework.
- **5.6.3.** Whether such determination as per (i) above will have any adverse impact on rights and contentions of PNGRB in pending Civil Appeals in Hon'ble Supreme Court of India and if so, what steps Board should take to ensure that no adverse inference can be drawn in pending appeal pursuant to such tariff determination.
- **5.6.4.** Any other advice to PNGRB in subject issue.
- **5.7.** That pursuant to the Legal Opinion, PNGRB has filed applications i.e for seeking direction and early hearing in before Hon'ble Supreme Court Civil Appeal Nos. 377-378 of 2022, the prayers of the aforesaid I.A for direction is as under:-
  - It is therefore most respectfully prayed that this Hon'ble Court may graciously be pleased to:-
  - a. Allow the Appellant, without prejudice to its rights and contentions, to determine and declare the tariff of the East West Natural Gas Pipeline [EWPL] in the current cycle, while using 85 MMSMD as the capacity for tariff determination, during the pendency of the instant appeal; and/or

- b. Pass any order or orders which this Hon'ble Court deems fit and proper in the circumstances of the case.
- **5.8.** The Hon'ble Supreme Court of India vide order dated 06.11.2025 has *inter-alia* mentioned the following:
  - "1) The appellants have filed the application seeking the following reliefs:
  - "Allow the Appellant, without prejudice to its rights and contentions, to determine and declare the tariff of the East West Natural Gas Pipeline [EWPL] in the current cycle, while using 85 MMSMD as the capacity for tariff determination, as per the impugned judgment of APTEL dated 16.07.2022, pending adjudication of the instant Appeal"
  - 2) Learned counsel for the respondent does not have any objection to grant such relief subject to the objections.
  - 3) Considering the same, subject to final outcome and keeping all exceptions and objections available to the parties in this appeal, the prayer as made in the application is granted. Accordingly, the interlocutory application stands disposed of."
- 6. Revised Filing for Tariff Review: In response to PNGRB's email, PIL vide email dated 17.03.2025 submitted updated tariff filing for tariff review of EWNGPL where it has proposed levelized tariff of Rs.98.34/MMBTU tariff on GCV basis with effect from 01.04.2025 till the end of economic life i.e., up to 31.03.2039. Entity in its filing mentioned that tariff submitted is calculated with actual data up to FY 2023-24 and future projections from FY 2024-25 & onwards. Based on the revised submission Public Consultation Document was webhosted for comments from stakeholders. The salient features of the tariff filing submitted by PIL are as follows:

<b>Particulars</b>	Submission
Economic life (Years)	30 Years
From	01-Apr-09
То	31-Mar-39
Number of working days in a year	355/ 353.23/
	350
Annual inflation rate	4.50%
Remaining Economic Life (from 01.04.2025 to 31.03.2039)	14 years
Capex (excluding IDC) till the end of economic life (Rs. in Crore)	17,875.06
- Actual Capex 01.04.2006 to 31.03.2024 - Rs.16,601.37 Crore	
- Future Capex from 01.04.2024 to 31.03.2039 – Rs.1,273.69 Crore	
Opex till the end of economic life (Rs. in Crore)	62,143.59
- Actual Opex from 01.04.2009 to 31.03.2024 - Rs.7,505.01 Crore	
- Future Opex from 01.04.2025 to 31.03.2039 – Rs.54,638.58 Crore	
Transmission loss from 18.11.2022 till 31.03.2039 (Rs. in Crore)	2,238.80
- TL from 18.11.2022 to 31.03.2024 – Rs.57.52 Crore	
- TL from 01.04.2024 to 31.03.2039 – Rs.2,181.28 Crore	
Line Pack (Rs. in Crore) as on 01.04.2009	92.49
Capacity (MMSCMD) during the economic life	85.00
Average working capital during the economic life (Rs. in Crore)	505.95

Particulars	Submission
Terminal Value (Rs.893.65 Crore), line pack (Rs.78.14 Crore) and working	1,897.21
capital (Rs.925.41 Crore) at the end of the economic life (Rs. in Crore)	
Levelized Tariff from 01.04.2025 till 31.03.2039 (Rs./MMBTU)	98.34

**7. Details of the Public Consultation Exercise:** Based on the revised tariff filing, PNGRB issued a Public Consultation Document ("PCD") on 23.04.2025 inviting stakeholder comments/views within 15 days from the date of issue of PCD, i.e., by 08.05.2025. PIL was to submit its response on comments of other stakeholders to PNGRB within 15 days from the last date of comments to be submitted by stakeholders, i.e., by 23.05.2025.

Meanwhile PNGRB was in receipt of request from various entities for extension of timeline for submission of comments. Subsequently, the time limit for submission to comments/views by stakeholders was extended till 15.05.2025 and PIL was to submit its response on the stakeholder's comments by 30.05.2025. However, request was again received from GSPL and Enertech Energy Resources Private Limited till 30<sup>th</sup> May for further extension. However, no further extension was granted beyond 15.05.2025.

Comments were received from GAIL, AG&P Think Gas and GSPL on the PCD which was webhosted on PNGRB's website. In response to the comments, PIL vide letter dated 30.05.2025 submitted its response on the comments of the stakeholders. In this regard, to discuss the comments and response, an Open House was held on 04.06.2025 at 11:30 Hrs at PNGRB office. The minutes of meeting has been webhosted.

The comments and the response received has been summarised under respective heads. However, detailed comments, response and minutes of open house meeting may be referred on PNGRB website.

### 7.1. Stakeholder Comment Received on Tariff Review Exercise:

**Think Gas Comment:** Without prejudice to our submissions, it is submitted that PNGRB vide its Public Notice dated 21.03.2025 has introduced substantial changes in the applicability of Unified Tariff through amendments in the PNGRB (Determination of Natural Gas Pipeline Tariff) Regulations, 2008. It is suggested that PNGRB may consider deferring the EWNGPL tariff finalization until clarity is achieved on the revised Unified Tariff structure and settlement methodology.

**PIL Comment:** This being regulatory matter, PNGRB may like to respond.

PNGRB's Comment: PNGRB has notified amendments vide gazette notification dated 07.07.2025 to the PNGRB NGPL Tariff Regulations wherein major reforms are introduced with respect to Unified Tariff. The last unified tariff revision was done w.e.f. 01.07.2024. In terms of the regulatory provisions, the unified tariff is to be determined yearly at the start of each financial year. However, as major amendments were under the process of notification, PNGRB decided that the existing unified tariff be continued to avoid frequent revision of the unified tariff. The revised unified tariff order will be determined in line with the amended regulations and the approved tariff of pipelines forming part of the national gas grid (NGGS) shall be input for calculation of revised Unified Tariff. In case the Unified Tariff is determined without the tariff review of constituent pipelines of NGGS, this would result in another revision of unified tariff once the tariff review exercise of constituent pipelines is completed.

Therefore, it is prudent to synchronize the tariff review of constituent pipelines of NGGS with the determination of revised Unified Tariff.

- **7.2.** Other Comments received from various stakeholder are being dealt in following sections against which the comments were submitted.
- **8. Details of tariff filing by PIL:** The various aspects of EWNGPL's tariff filing submitted by PIL are as follows:

#### 8.1. Economic Life:

- **8.1.1. Submission Made:** PIL has considered 01.04.2009 as the date of commissioning of EWNGPL and the economic life up to 31.03.2039 based on 30 years of life for the purpose of tariff. PIL has also considered pre-construction period from FY 2006-07 to FY 2008-09 in line with the earlier tariff orders notified by PNGRB.
- **8.1.2. Applicable Regulatory Provision**: Regulation 2 (1) (e) of NGPL Authorisation Regulations and clause 7 of Schedule A of NGPL Tariff Regulations.

**Regulation 2 (1) (e) of NGPL Authorisation Regulations**: "economic life" of natural gas pipeline shall be a period of twenty-five years commencing from –

- (i) the date of grant of authorization to the entity by the Board in case an entity proposes to lay, build or expand a natural gas pipeline on or after the appointed day;
- (ii) the start-up date of the commencement of physical activities of laying, building or expanding the natural gas pipeline in case an entity started up laying, building or expanding a natural gas pipeline before the appointed day and the entity has either an authorization from the Central Government before the appointed day or an authorization from the Board under these regulations:

Provided that at the end of the aforesaid period of twenty-five years extension of the period of economic life may be considered by the Board for a block of ten years at a time depending on the satisfactory compliance of the service obligations under these regulations and on such terms and conditions, as it may deem fit at that point in time.

Clause 7 of Schedule A of NGPL Tariff Regulations: Notwithstanding anything contained in any regulations made under the Act, 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. In case, the natural gas pipeline has been authorized for more than thirty years or its authorisation has been subsequently extended beyond thirty years or is in operation beyond thirty years, the DCF model for the tariff computation may be made for the entire period of authorization or operation till the next tariff review, including the extended period.

**8.1.3. PNGRB Conclusion:** In view of the extant regulatory framework and practice being followed, the economic life of EWNGPL has been considered for 30 years i.e. from 01.04.2009 till 31.03.2039 for the purpose of tariff determination. However, the same shall be subject to the technical life in terms of extant regulatory framework.

## 8.2. Capital Expenditure (Capex)

**8.2.1. Submission Made**: Entity in its tariff filing has claimed total capex of Rs.17,875.06 Crore for EWNGPL during the entire economic life. The following are the details of the same:

Rs. in Crore

Particulars	Amount	
Actual Capex till 31.03.2024	16,601.37	
Future Capex from 01.04.2024 to 31.03.2039		1,273.69
Break up of Future Capex		
a. O&M Capex	262.69	
b. Growth Capex (PD, PE, future LMC)	1,011.00	
Total Capex	17,875.06	

# 8.2.2. Actual Capex:

8.2.2.1. **Submission Made:** Year wise capex considered in previous Tariff Order dated 12.03.2019 by PNGRB and actual capex claimed by the entity in current tariff filing are as follows:

Rs. in Crore

FY	As per previous TO	Submitted in the Tariff Filing	Difference
2006-07	4,891.25	4,891.25	-
2007-08	7,192.66	7,192.66	-
2008-09	2,499.60	2,499.60	-
2009-10	1,618.15	1,618.15	-
2010-11	213.83	213.83	-
2011-12	(47.74)	(47.74)	-
2012-13	4.97	4.97	-
2013-14	4.97	4.97	-
2014-15	(56.00)	(56.00)	-
2015-16	1.00	1.00	-
2016-17	6.00	6.00	-
2017-18	3.91	3.91	-
2018-19	-	(4.28)	(4.28)
2019-20	60.00*	85.93	25.93
2020-21	-	38.53	38.53
2021-22	-	65.29	65.29
2022-23	-	38.28	38.28
2023-24	-	45.03	45.03
Total	16,392.60	16,601.37	208.78

<sup>\*</sup>In earlier tariff order, data from 2018-19 onwards was the future capex.

## 8.2.2.2. Query and Response

8.2.2.2.1. In response to PNGRB's query, PIL submitted CA certificate in support of the Capex incurred for the period FY 2018-19 to FY 2023-24. Details of the capex are as under:

Rs. in Crore

Particulars	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Purchase of fixed assets/Increase in CWIP	9.67	40.20	52.39	69.15	46.77	56.77
Sale of Fixed Assets				(0.08)		(0.07)

Particul	lars		2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Add:	Reassessed	Inventories	-	83.35	-	-	-	-
capitaliz	ed							
Less: H	ook up charges	received as per	(13.95)	(37.62)	(13.86)	(3.78)	(8.49)	(11.67)
the CA	certificate							
Actual (	Capex		(4.28)	85.93	38.53	65.29	38.28	45.03

<u>Further, PIL provided following clarification towards reasons for capitalization of inventories of Rs.83.35 Crore in FY 2019-20:</u> As per IND AS 16 para 8, items such as spare parts, stand-by equipment and servicing equipment are recognised in accordance with this Ind AS when they meet the definition of property, plant and equipment (PPE). Hence, after discussion with Statutory Auditors, it is identified that spare items were in the nature of capital PPE and required to be capitalized in Fixed Assets and removed from inventory. Accordingly, the inventories of Rs.83.35 Crore has been capitalised in FY 2019-20.

8.2.2.2.2. In response to PNGRB's query, entity provided the following details of capex incurred during the period FY 2018-19 to FY 2023-24:

Category	18-19	19-20	20-21	21-22	22-23	23-24	Remark			
Connectivity to NGPL	6.40	9.36	_	-	-	-	Amount is towards hook up provided to GITL Pipeline.			
Connectivity to	0.18	20.99	10.74	14.33	20.58	11.98	FY 2019-20 & 2020-21: Amount is towards hook-up provided			
customers							to various CGD entities.			
							FY 2021-22: Major amount is towards various hook up			
							(including ongoing) provided to CGD entities, while appro			
							Rs.3 Crore is towards spur-line of 4.50 km to Silvassa region			
							customers.			
							<b>FY 2022-23:</b> Amount is towards various hook up (including			
							ongoing) provided to CGD entities and approx. Rs. 15 Crore			
							towards customer connectivity to Silvassa region customer			
							and Bhilosa.			
							<b>FY 2023-24:</b> Amount is towards various hook up (including			
							ongoing) provided to CGD entities and approx. Rs. 8 Crore			
							towards customer connectivity to Silvassa region customers			
							and Bhilosa			
Connectivity to gas	-	-	0.39	24.34	3.08	-	For ONGC Mallavaram connectivity			
source										
<b>Total Growth Capex</b>	6.58	30.35	11.13	38.67	23.66	11.98				
Maintenance Capex	3.09	93.2	41.26	30.48	23.11	44.79	FY 2018-19: Major amount of approx. Rs.1.50 Crore is			
							towards requirement of GEG sets at compressor station			
							<b>FY 2019-20</b> : Major amount of approx. Rs.66 Crore is towards			
							installation of HP/LP modules, welded valves, new buildings			
							at CS, etc.			
							<b>FY 2020-21</b> : Major amount of approx. Rs.27 Crore is towards			
							SCADA upgradation, new office setup, security upgradation,			
							IT system integration, etc.			

Category	18-19	19-20	20-21	21-22	22-23	23-24	Remark
							FY 2021-22: Major amount of approx. Rs.20 Crore is towards
							ambient air quality and emission monitors, POC installation at
							CS, PAS system upgradation, remotization of Manual MLV,
							installation of PIDs system, RCC porta cabin, etc.
							FY 2022-23: Amount includes major cost towards M&R
							Actuators and regulator upgradations, installations of CEMS
							and CAAQMS analyzers, gas quality analysers etc.
							<b>FY 2023-24:</b> Amount includes capex incurred towards PAS
							system upgradation, gas quality analysers, installations of
							CEMS and CAAQMS analysers, hot tapping and stoppling
							facilities, scrubber and GAC installations etc.
<b>Total Capex</b>	9.67	123.55	52.39	69.15	46.77	56.77	

8.2.2.2.3. In response to PNGRB query to provide the authorisation and impact on capacity with respect to the connectivity to GITL and Connectivity to the Mallavaram Gas Source, PIL submitted as follows:

## a. Hookup with GITL pipeline:

i. The hookup to GITL pipeline has been provided in FY 2018-19 in compliance to clause 11 of the Access Code. As per the provisions, interconnection shall be allowed subject to availability of capacity and if it is operationally and technically feasible. Further, in case interconnection request is denied, the receiving entity shall inform the Board.

As per PIL understanding, there is no specific regulatory provision under authorisation regulations to seek authorization for the providing hookup to the common carrier pipeline. As per the said regulatory provisions transporter has to allow the interconnection subject to capacity and techno-operational feasibility. Since PIL pipeline meets all these conditions, the hookup was provided to GITL as an RPO.

**Discussion During the Open House**: With regard to the connectivity to the GITL, PNGRB enquired about the approval taken by GITL for its interconnection with PIL Pipeline. PNGRB suggested that in this regard, GITL needs to take necessary action.

### b. Mallavaram Gas Source:

- i. In February 2014, PIL entered into a Hook-up agreement with GSPC for connectivity at ToP 14 with GSPC's Onshore Gas Terminal (OT) at Mallavaram to facilitate the evacuation of gas from their Deen Dayal Gas Field in the KG Basin. The connectivity was commissioned on August 4, 2014. According to the authorization regulations in effect at that time, no specific authorization was required for such a hookup facility.
- ii. In the year 2017, ONGC acquired majority interest from GSPC in the above gas block along with associated offshore facilities and Mallavaram Onshore Terminal. Subsequently, ONGC approached PIL for connectivity for evacuation of gas from their other gas fields which would be brought first to Mallavaram Onshore Terminal for processing and subsequent transportation.
- iii. Accordingly, PIL and ONGC executed MoU in January, 2019 and subsequently Hookup agreement was executed in March, 2020. As part of Hook-up agreement, after custody transfer meter at Mallavaram OT, a 24" line of ~800 Meter was also laid by PIL between ToP 14 and Mallavaram OT in view of issues in existing connectivity RoU. Therefore, as submitted earlier with PNGRB, ONGC connectivity is not creation of a new entry point in the PIL pipeline but more akin to augmentation of the existing hook up facility at Mallavaram along with pipeline of around ~800 Mtrs. Accordingly, no separate authorization was taken. During the last tariff review exercise in 2019, PIL had informed PNGRB regarding ongoing discussions with ONGC for connectivity to evacuate ONGC gas from fields in east coast, a copy of MoU with ONGC was also submitted to PNGRB.
- iv. As submitted earlier with PNGRB, ONGC connectivity is not creation of a new entry point in the PIL pipeline but more akin to augmentation of the existing hook up facility

at Mallavaram along with pipeline of around ~800 meters. Accordingly, no separate authorization was taken.

Further, it is submitted that Mallavaram terminal is located at entry of PIL Pipeline adjacent to the primary source of PIL pipeline, i.e., RIL's KG-D6 block and will not have incremental impact on the design capacity.

Further, entity vide email dated 13.06.2025 submitted the following:

- a) Regarding the ONGC Mallavaram hookup point, as already submitted this is an augmentation of the existing point. PIL would be happy to provide any further details required under any other regulations. Accordingly, it is requested to kindly consider the capex of this hook up in the tariff review exercise. PNGRB may appreciate that substantial incremental volume flow (5-7 MMSCMD) is expected through this hookup point only.
- b) With respect to interconnection point for GITL it is submitted that interconnection point was provided on the request of GITL in compliance with the Access code regulations.

It may be appropriate to mention that as mentioned in the PCD, in view of the ongoing capacity matter in SC, tariff is trued up on account of other factors excluding capacity. Therefore, it is requested that capex incurred on these connectivity /interconnection point may be considered now and any impact on the capacity can be trued up along with other part of the pipeline network.

In response to PNGRB's query for providing justification as why the capex of both the connectivity(ies) may not be considered in the current tariff review in absence of the Authorisation and the impact of the same on overall system capacity (Capacity determination matter is pending with the Hon'ble Supreme Court), PIL submitted that both hookup facilities are created in compliance to the prevalent authorization regulations and any expenditure incurred on the same is to be allowed. As mentioned above, PNGRB in last tariff review has already considered the expected capex of Rs.60 Crore towards Mallavaram augmentation. As per the regulations pending capacity determination is not an impediment to determine tariff, as tariff regulations provides for considering authorized capacity as volume denominator, which is the capacity as per the acceptance of authorization in case of PIL. Further, it is submitted that the above hookups are not having incremental impact on the design capacity.

8.2.2.2.4. In response to PNGRB's query for providing the break-up of capex incurred and hook-up charges received during FY 2022-23 and FY 2023-24, entity submitted that Year-wise Hook-up Charges received, supported by CA certificates, from all entities including CGD and considered (netted off) in the current tariff review of PIL pipeline, are as under.

Details of Hookup Charges claimed (Rs. in Crore)									
Particular	2022-23	2023-24							
Hook-up Charges	13.95	37.62	13.86	3.78	8.49	11.67			

Further in this regard, PIL submitted as follows:

- Hook-up charges from the entities are reflected in the books of accounts under other income on accrual basis (with applicable service taxes). However, the amount collected from BGL towards hook-up charges (Rs.23.60 Crore) have already been netted in the tariff computation in the year in which the same were collected i.e. FY 10-11 and FY 11-12.
- The above was also considered in the earlier tariff order and may be referred at clause 6.4.1.5 (Query: Details of Misc. Income) and Clause 6.2.1.3.4 of the PIL's final initial tariff order dated 12th March 2019.
- Accordingly, in the instant ongoing tariff review exercise, request to kindly consider the following w.r.t. the hook-up charges claimed under Capex:
  - o In FY 2018-19, FY 2019-20 & FY 2020-21, total Hookup charges as per annual reports are Rs.13.95 Cr, Rs.37.62 Cr and Rs.13.86 Cr respectively. Out of which Rs.2.46 Cr (FY 2018-19), Rs.3.27 Cr (FY 2019-20) and Rs.2.32 Cr (FY 2020-21) are on account of Bhagyanagar Gas Limited (BGL).
  - Such amount of Rs.8.05 Cr has already been considered and netted off during the earlier tariff determination exercise, similar to Rs.1.46 Cr in FY 2014 and Rs.2.91 Cr in FY 2018 (refer clause 6.4.1.5 (Query: Details of Misc. Income) of the PIL's final initial tariff order dated 12th March 2019).
  - Accordingly, you may please net off the following Hook-up Charges received by PIL during FY 2018-19 to FY 2023-24 from its shippers, in the ongoing tariff review exercise:

Details of Hookup Charges collected from shippers (Rs. in Crore)							
Particular 2018-19 2019-20 2020-21 2021-22 2022-23 2023-24							
Hook-up Charges 11.50 34.35 11.54 3.78 8.49 11.67							

8.2.2.2.5. Later, PIL submitted that there is variance in net capital employed as initially submitted due to an adjustment in hookup charges received from Bhagyanagar Gas Limited i.e. BGL. These charges were already offset in the tariff calculation during the fiscal years 2010-11 and 2011-12, when the amounts were received. However, in the financial statements, these charges are accounted for on an accrual basis. Accordingly, the total capex employed is as follows:

Category	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24
Connectivity to NGPL -GITL	6.4	9.36	-	-	-	-
Connectivity to customers	0.18	20.99	10.72	16.29	20.58	11.89
Connectivity to gas source -ONGC Mallavaram	-	-	0.41	22.38	3.08	0.09
Total Growth Capex (Rs. Crs.)	6.58	30.35	11.13	38.67	23.66	11.98
Maintenance Capex	3.09	93.2	41.26	30.48	23.11	44.79
Total Capex (Rs. Crs.)	9.67	123.55	52.39	69.15	46.77	56.77

Category	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24
Less: Hook up charges received as per the CA certificate	-11.50	-34.35	-11.54	-3.78	-8.49	-11.67
Less: Sale of Fixed Assets	-	-	-	-0.08	-	-0.07
Net Capital Employed (Rs. Crs.)	-1.83	89.20	40.85	65.29	38.28	45.03

8.2.2.2.6. **Query:** It is requested to provide the year wise details of security deposits for laying of pipelines which has been claimed as Capex in the Tariff filing.

**Response:** PIL has not received any amount, as interest free Security deposit for laying of pipelines in the current tariff review period.

- 8.2.2.3. Comments during PCD from Stakeholders and Entity's response on the same (for detailed comments and response refer PNGRB website):
- 8.2.2.3.1. **GSPL Comments:** PNGRB had allowed Rs.60 Crore towards connectivity to ONGC at Mallavaram in last tariff Order. The actual cost incurred as mentioned is Rs.24.73 Crore. PNGRB may kindly advise if this connectivity has been treated in the nature of Tie in Connectivity or inter connection and whether the amount of Rs.60 Crore was based on Work Order or Board approval of the entity.
  - PIL's Response: This facility is augmentation/modification of the existing hook up facility provided to GSPC in August 2014 and later acquired by ONGC in 2017. Estimated Rs.60 crore was provided to PNGRB for ONGC connectivity based on the PIL competent authority approval and sharing of copy of the MoU signed with ONGC. The estimated amount is subject to trueing up based on actual along with the return of excess money with 16.04% p.a.
- 8.2.2.3.2. **GSPL Comments:** The capex for FY 2019-20 includes Rs.83.35 Crore towards reassessed inventories capitalized. It is requested to provide details as to why the same was not capitalized at the time of purchase. Further it is requested to clarify whether Rs.83.35 Crore is purchase value or not.
  - **PIL's Response:** Details provided to PNGRB, Rs.83.35 Crore is the purchase value and PIL has capitalized the same in its first year of operation post-acquisition.
- 8.2.2.3.3. **GSPL Comment:** Entity has projected O&M Capex based on OEM technical manuals etc. It is our submission that PNGRB should consider the O&M Capex based on the previous FY for which the data is available. The reason is that it is essential for smooth operations. PNGRB uses previous year's volume for projecting for the future, previous year's O&M including SUG for future. By ignoring the Capex, the future tariff calculations are based on lower Cash Outflow due to missing O&M Capex and Future Capex. It is suggested that PNGRB should consider the average of past 5 years Capex & O&M Capex as base for future projection.

It has been often mentioned by PNGRB that entity is not put to any disadvantage as it will get trued up later. Precisely for this reason, by considering the average of past 5 years Capex & O&M Capex for future projection entity will have a reasonable tariff while these figures will get trued up in next tariff review.

When Capex & O&M Capex are not considered beyond 2-3 years for which PO is available, the DCF model fails to capture all the elements of tariff determination for future years and hence the model can be said to have some shortcoming.

**PIL Response:** GSPL's observation appears to be founded on their network experience, where utilization has stabilized. Wherein, future operations and maintenance capital expenditures can be planned based on historical trends.

In case of PIL, substantial Capex and O&M Capex is towards upgradations and run-hour based major maintenance of GTC units which is essential for efficient and smooth operations of Pipeline network. Hence five-year average is not the true representation in case of assets where volume is increasing and assets are ageing, especially rotating equipment.

PIL believes that importance of manuals/OEM data cannot be ignored for estimating future O&M capex. Depending upon the configuration, nature and vintage of network, historical trends, evolving regulatory & environmental standards, expansion plans and efficiency Improvements needs to be factored in projecting capex.

PIL concurs that future capex and opex in tariff calculations should be based on the entity's projections, rather than solely on the already committed capital expenditures even for period beyond 2-3 years.

8.2.2.3.4. **GSPL Query:** The future capex includes capex towards various connectivity and spurlines. It is understood that authorisation would be required for proposed Tie in connectivity to Dahej and spurline to Pharma city as it exceeds 50 kms.

There are multiple Tie in Connectivity with PLL Dahej. Further there are dedicated pipelines connected to Dahej. Any additional Tie in connectivity to Dahej would make the existing investment in infrastructure infructuous. We request the Hon'ble Board to review the need for any further Tie in Connectivity at PLL Dahej.

**PIL Response:** PLL Dahej, is around 30-35 KM away and in past faced operational issues in gas evacuation. Further, PLL is in the process of expanding their terminal, which may need additional evacuation facilities, accordingly, both parties entered an understanding to connect PIL network with PLL Dahei.

PIL has consistently emphasized that any new infrastructure must be assessed for its effects on the sustainability of existing infrastructure. Additionally, PIL submits that NGGS should be regarded as a single network during these assessments. However, pipeline entities are advocating for using NGGS on least revenue entitlement basis. In such scenarios direct connectivity to the sources would be required to protect the viability of the pipeline.

8.2.2.3.5. **Think Gas Comment:** Enforce the normative debt-equity ratio of 80:20 while computing tariff, irrespective of the actual capital structure adopted by the pipeline entity.

**PIL Response:** Regulation 3 of Schedule A of Tariff Regulation provides for 12% post tax return on capital employed with total volume risk with transporter.

Mallavaram hook-up, GITL pipeline interconnection) appear to have been implemented without specific PNGRB authorization or approved capacity revisions. Board to include only authorized and capacity-approved projects in the tariff which will

8.2.2.3.6. Think Gas Comment: Several connectivity-related capex components (e.g., ONGC

ensure that the NGPL entity shall timely complete its project so that they can include the said project Capex for determination of tariff.

PIL Comment: PIL has executed connectivity projects in line with the prevailing regulatory provisions. ONGC connectivity is an augmentation of the existing hook up facility created in August 2014 for GSPC. The hookup to GITL pipeline has been provided in FY 2018-19 in compliance to clause 11 of the Access Code. As per the provisions, interconnection shall be allowed subject to availability of capacity and if it is operationally and technically feasible. Further, in case interconnection request is denied, the receiving entity shall inform the Board. As per the said regulatory provisions transporter has to allow the interconnection subject to capacity and techno operational feasibility. Since PIL pipeline meets all these conditions, the hookup was provided to GITL as an RPO.

8.2.2.3.7. Think Gas Comment: From the investment details shared, it is ascertained that most of the new investments are pertaining to new infrastructure towards specific customers or customer segment and are not of the nature of common carrier infrastructure.

> Additionally, the details shared towards the growth capex amount have not been substantiated with firm commitments. Thus, it is requested that PNGRB may consider to work out a mechanism to separate new capex or a separate cost-recovery path for new infrastructure benefiting only specific users. This will help to keep it out of the purview of existing tariff determination process.

> **PIL** Comments: The available capital commitment details have been provided to PNGRB. PNGRB may like to respond regarding the separate cost recovery mechanism.

**Think Gas Comment:** We request that future Capex and Opex shall only be allowed after 8.2.2.3.8. approvals from PNGRB and, subject to, checks and impact validation on pipeline capacity/utilization.

**PIL Comment:** As per PIL understanding, PNGRB is already following the above checks.

GAIL Comments: While past actuals play a crucial role in tariff determination, it is 8.2.2.3.9. equally important to project future cash outflows based on realistic and probable scenarios. This minimizes discrepancies between projected and actual figures, thereby reducing financial risks. Significant variations can lead not only to undue costs due to the time value of money but also result in sharp tariff increases, which could burden customers. In this context, we appreciate the PNGRB's efforts to align gas prices with market trends. However, it is also requested that the rupee depreciation be aligned with expected trends, to ensure that tariff projections remain realistic and fair.

**PIL Comments:** This is in the benefit of customers to make the projections appropriately.

## 8.2.2.4. **Regulatory Provision:**

8.2.2.4.1. PNGRB vide amendment dated 23.11.2020, inserted following provisions in clause 6 (1) (e) of schedule A of the NGPL Tariff Regulations

"

- It is clarified that any interconnection between two natural gas pipelines shall not be considered as extension or expansion or tie in connectivity."
- 8.2.2.4.2. Later PNGRB vide amendment dated 18.11.2022, deleted the above provision and inserted following clause 6(1)(d) in the NGPL Tariff Regulations:
  - "(d) It is clarified that any new injection point on a common carrier or contract carrier natural gas pipeline due to interconnection from another common carrier or contract carrier natural gas pipeline shall not be considered as capacity expansion for determination of tariff. Provided that the entity has taken approval wherever required in terms of Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Regulations, 2008 along with the increase in capacity due to such interconnection as per Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum, Petroleum Products and Natural Gas Pipeline) Regulations, 2010."
- 8.2.2.4.3. Clause 6(1)(c) of Schedule A of Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Regulations, 2008, provides as under:
  - "(c) Notwithstanding anything contained in any other regulations, in case of addition of any new natural gas source to a natural gas pipeline which comes anytime from 01.04.2020 and onwards, any increase in the capacity of the pipeline, if any, because of such addition of such new source shall not be considered in the tariff determination for a period of five years from the date of commissioning of the pipeline connectivity due to the relevant source."
- 8.2.2.4.4. Sub-regulation 1(d) of Regulation 2 of Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Regulations, 2008, provides as under:
  - (a) "capacity of natural gas pipeline" for the purpose of determining natural gas pipeline tariff under Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Regulations, 2008 shall be the authorized capacity as defined in the Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Regulations, 2008.

Provided that wherever there is any change between the authorised capacity and the capacity as already considered in the latest tariff order issued by the Board prior to the notification of this amended regulation, then such capacity as already considered in the latest tariff order shall be considered as capacity of natural gas pipeline for the purpose of determining tariff.

Provided further that entity shall submit the revised capacity of the natural gas pipeline, if any as may be necessary, in terms of clause (g) of sub regulation (5) of regulation 5 of Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum,

Petroleum Products and Natural Gas Pipeline) Regulations, 2010. Such revised capacity or as modified in terms of clause (g) of sub regulation (5) of regulation 5 of Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum, Petroleum Products and Natural Gas Pipeline) Regulations, 2010, shall be considered for the tariff determination after its approval by the Board.

. . . . . . . . .

8.2.2.4.5. Regulation 2 (1) (ba) of Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Regulations, 2008 provides as under,

"authorized capacity" means the initial design capacity of the natural gas pipeline as provided in the Letter for grant of authorization or letter of acceptance for Central Government authorization:

Provided that the Board may issue amendment in the Letter for grant of authorization or letter of acceptance for Central Government authorization in case there is any revised capacity approved by the Board in terms of clause (g) of sub regulation (5) of regulation 5 of Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum, Petroleum Products and Natural Gas Pipeline) Regulations, 2010, and such revised capacity approved by the Board shall be considered as the amended authorized capacity of the pipeline.

8.2.2.4.6. Clause (g) of sub regulation (5) of regulation 5 of Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum, Petroleum Products and Natural Gas Pipeline) Regulations, 2010, states that:

"Wherever there is any change in the capacity of natural gas pipeline in the past or in future due to reason(s) as approved by the PNGRB's Board, in such cases entity shall submit the revised capacity of the natural gas pipeline, separately due to each such reasons, to PNGRB in terms of these regulations for capacity determination and approval of the Board."

## 8.2.2.5. PNGRB's Conclusion:

8.2.2.5.1. **For GITL Connectivity:** As per PIL's reply, the GITL connectivity was provided in FY 18-19 and 19-20 as per Regulation 11 of Access Code. However, as the capacity determination of the pipeline is challenged, the impact of the interconnection in the capacity is yet to be determined. Further, the amended provision in NGPL Tariff Regulations that "...any interconnection between two natural gas pipelines shall not be considered as extension or expansion or tie in connectivity." was incorporated vide amendment dated 20.11.2020. In view of the above, the capex pertaining to the said connectivity has not been currently considered for the purpose of tariff. However, the same shall be trued up in subsequent tariff reviews based on the extant regulatory framework, capacity updation / outcome of the pending matter with Hon'ble Supreme Court and up-dation in Schedule-H.

## 8.2.2.5.2. ONGC Mallavaram Connectivity:

8.2.2.5.3. Based on the stakeholder comments and the details provided by the entity and response, there may also be a change in the capacity of the pipeline due to the ONGC Mallavaram Connectivity. Accordingly, Capex claimed by the entity from FY 2018-19 to FY 2023-24

on account of ONGC Mallavaram connectivity is currently not being considered for the purpose of tariff review. In view of the above, the capex pertaining to the said connectivity has not been currently considered for the purpose of tariff, however, the same shall be trued up in subsequent tariff reviews based on the extant regulatory framework, capacity updation / outcome of the pending matter with Hon'ble Supreme Court and up-dation in Schedule-H.

Accordingly, the actual Capex till FY 2023-24 considered in current tariff review is as under:

Rs in Crore

	As per	Submitted in	Add back Hook	Deduc	<b>Deductions</b>		
FY	previous TO	the Tariff	Up Charges of	GITL	ONGC	Capex Considered	
	previous 10	Filing	BGL	Connectivity	Mallavaram	Considered	
2006-07	4,891.25	4,891.25	-	-	-	4,891.25	
2007-08	7,192.66	7,192.66	-	-	-	7,192.66	
2008-09	2,499.60	2,499.60	-	-	-	2,499.60	
2009-10	1,618.15	1,618.15	-	-	-	1,618.15	
2010-11	213.83	213.83	-	-	-	213.83	
2011-12	(47.74)	(47.74)	-	-	-	(47.74)	
2012-13	4.97	4.97	-	-	-	4.97	
2013-14	4.97	4.97	-	-	-	4.97	
2014-15	(56.00)	(56.00)	-	-	-	(56.00)	
2015-16	1.00	1.00	-	-	-	1.00	
2016-17	6.00	6.00	-	-	-	6.00	
2017-18	3.91	3.91	-	-	-	3.91	
2018-19	-	(4.28)	2.45	(6.40)	-	(8.23)	
2019-20	60.00	85.93	3.27	(9.36)	-	79.84	
2020-21	-	38.53	2.32	-	(0.41)	40.44	
2021-22	-	65.29	-	-	(22.38)	42.91	
2022-23	-	38.28	-	-	(3.08)	35.20	
2023-24	-	45.03	-	-	(0.09)	44.94	
Total	16,392.60	16,601.37	8.04	(15.76)	(25.96)	16,567.70	

**8.2.3. Future Capex**: Entity in its tariff filing has claimed future capex under two heads, O&M Capex and Growth Capex. Details of head wise and year wise future capex claimed are as under:

Rs. in Crore

FY	<b>Growth Capex Amount</b>	O&M Capex Amount	Total
2024-25	669.00	112.16	781.16
2025-26	242.00	109.52	351.52
2026-27	50.00	1.79	51.79
2027-28	50.00	1.40	51.40
2028-29	-	1.83	1.83
2029-30	-	1.59	1.59
2030-31	-	12.96	12.96
2031-32	-	3.00	3.00
2032-33	-	2.97	2.97
2033-34	-	2.93	2.93
2034-35	-	2.88	2.88
2035-36	-	2.82	2.82

FY	<b>Growth Capex Amount</b>	O&M Capex Amount	Total
2036-37	-	2.74	2.74
2037-38	-	2.02	2.02
2038-39	-	2.08	2.08
Total	1,011.00	262.69	1,273.69

## Entity in its tariff filing submitted as follows on future capex:

a. Growth Capex: With anticipated increase in gas availability from the KG-D6 block of RIL-BP and the ONGC 98/2 fields at eastern coast, utilization of PIL's pipeline is expected to improve substantially. To evacuate the incremental gas quantities and to cater to the rising demand from potential markets, PIL has commenced several new projects and has planned certain projects for future implementation in the next five years. These projects will provide impetus to maximize reach of gas across the country and will also help in enhancing pipeline capacity utilization.

Details of on-going and new growth projects being taken up by PIL for evacuating the incremental gas from new fields and to cater to the rising demand from potential markets are as follows:

Earlier entity in its tariff filing submitted on 22.03.2023, has claimed On-going projects Capex of Rs.47.21 Crore on account of connectivity to various entities and Rs.1,113 Crore for new growth initiatives.

- Capex on account of new growth initiatives includes Rs.315 Crore for PLL Dahej connectivity,
- Rs.342 Crore for Pharma City, Hyderabad connectivity,
- Rs.300 Crore for CGD connectivity,
- Rs.150 Crore for new connectivity and
- Rs.6 Crore for connectivity to specific customer.

Later entity in the updated tariff filing submitted on 17.03.2025, has revised the claimed for future growth capex cost to Rs.1,011 Crore.

- b. O&M Capex: Entity submitted that the O&M capex estimates for the period of FY 2024-25 till FY 2038-39 has been considered based on periodic replacements and identified upgradation of tools and equipment. O&M Capex claimed for Rs.262.69 Crore is mainly on account of Mechanical, Electrical, Instrumentation, Scada/Telecom, Pipeline Integrity and other office related expenditure.
- 8.2.3.1. **Query and Response** With regard to future growth capex claimed by the entity, in response to PNGRB's query for providing PNGRB's authorization, impact on capacity due to the connectivity and approval from PIL's board of directors for such connectivity(ies), entity vide e-mail dated 20.03.2025 informed that the expected length in km for the proposed connectivity to PLL Dahej is approx. 40-45 kms, for Pharma City Hyderabad is approx. 83 kms. As regards to future CGD/customer connectivity and new connectivity, the same are dependent upon the final discussions and assessments with the customers/shippers.

In response to PNGRB's query for providing supporting documents like purchase orders/board approvals etc. for future O&M Capex claimed, entity vide response dated 20.03.2025 informed that the actual capital expenditure up to FY 2023-24 has been included in the revised calculations. The projected capital outflow for FY 2024-25 is approximately Rs.26.70 Crore, with Rs.21.32 Crore already incurred and a commitment of Rs.5.38 Crore made. In this regard, entity submitted summary of the PO's issued. The O&M capex estimates are based on technical manuals provided with the equipment and discussions with the OEM vendors. Commitments beyond FY 25-26 will be made after obtaining the necessary approvals closer to the implementation period.

**Revised Capex for FY 24-25 and PO details:** Entity vide email dated 04.08.2025 has submitted revised future capex. The entity has submitted that the Capex incurred for FY 2024-25 is Rs.37.04 crores and the projected capital outflow form FY 2025-26 onwards is ~Rs.81 Crores. Entity also provided the details of open PO commitment as on June 25 corresponding to Rs.80.62 Crore. Entity has also submitted CA certificates for actual capex incurred in FY 24-25 and open PO commitments. Further, entity has informed the tentative plan for completion of the orders as below:

Financial Year	Open PO Commitment (Rs.)
2025-26	57,28,31,287
2026-27	21,51,11,108
2027-28	56,59,767
2028-29	75,25,000
2029-30	51,24,999
Total	80,62,52,163

**8.2.4.PNGRB's Conclusion:** Future capex is subject to due diligence and verification based on the necessary approval of entity's Board /Competent Authority, approval of PNGRB, if required, Purchase order /Work order, etc. For the future capex claimed, the entity needs to submit the necessary supporting documents, obtain necessary approvals from PNGRB and impact on capacity of the pipeline system due to such connectivity(ies), etc. It is worth mentioning that the matter of capacity determination is subject to the outcome of the matter pending with the Hon'ble Supreme Court.

Accordingly, based on the supporting documents provided by entity, the future capex considered is as per below table:

**Rs in Crore** 

FY	Claimed by Entity	Considered by PNGRB
2024-25	781.16	37.04
2025-26	351.52	57.28
2026-27	51.79	21.51
2027-28	51.40	0.57
2028-29	1.83	0.75
2029-30	1.59	0.51

FY	Claimed by Entity	Considered by PNGRB
2030-31	12.96	-
2031-32	3.00	-
2032-33	2.97	-
2033-34	2.93	-
2034-35	2.88	-
2035-36	2.82	-
2036-37	2.74	-
2037-38	2.02	-
2038-39	2.08	-
Total	1,273.69	117.67

**8.3. Operating Expenses ("Opex"):** Entity in its current tariff submission, has claimed Opex of Rs.64,382.39 Crore. The break-up of Opex claimed are as follows:

Rs. in Crore

Particulars	Amount
Actual Opex till 31.03.2024	7,562.53
Future Opex from 01.04.2024 to 31.03.2039 (inclusive of Transmission Loss)	56,819.86
Total Opex	64,382.39

## 8.3.1. Actual Opex:

8.3.1.1.**Entity's Submission:** The Opex submitted by entity in its current tariff filing upto FY 2023-24 (actual data) and as considered by PNGRB in its latest Tariff Order of EWNGPL are as follows:

Rs. in Crore

FY	As per previous TO			Subm	Submitted in the Tariff Filing			
	SUG Cost	Other Operating Expenses	Total	SUG Cost	Other Operating Expenses	Total		
2009-10	152.27	281.99	434.26	152.27	281.99	434.26		
2010-11	278.68	263.15	541.83	278.68	263.15	541.83		
2011-12	222.78	268.45	491.23	222.78	268.45	491.23		
2012-13	162.38	280.72	443.10	162.38	280.72	443.10		
2013-14	114.04	216.55	330.59	114.04	216.55	330.59		
2014-15	123.89	193.12	317.01	123.89	193.12	317.01		
2015-16	103.05	198.59	301.64	103.05	198.59	301.64		
2016-17	73.69	121.68	195.37	73.69	121.68	195.37		
2017-18	79.40	103.39	182.79	79.40	103.39	182.79		
2018-19	93.16*	118.50*	211.66*	90.48	512.92	603.40		
2019-20	106.28*	123.83*	230.11*	96.59	196.25	292.85		
2020-21	495.31*	129.40*	624.71*	49.04	193.71	242.75		
2021-22	515.20*	135.23*	650.43*	145.22	217.22	362.44		
2022-23	535.99*	141.31*	677.30*	664.36	335.90	1,000.26		
2023-24	557.72*	147.67*	705.39*	1,301.30	521.72	1,823.01		
Total	3,613.84	2,723.58	6,337.42	3,657.15	3,905.38	7,562.53		

<sup>\*</sup>Future Opex in earlier TO

In the Tariff Order dated 12.03.2019, the future Opex was considered from 2018-19 onwards. Now entity in its tariff filing submitted that, "Actual Opex incurred for the period from FY 2018-19 to FY 2023-24 has been updated in the tariff workings for this tariff review as per the extant tariff regulations." Break-up of the Opex claimed by the entity till FY 2023-24 is as follows:

Rs. in Crore

FY	<b>Fuel Cost</b>	Additional	Tpt. on	O&M	Non-O&M	Misc.	Parking	Transmission	Total
	(SUG)	<b>Fuel Cost</b>	SUG	Cost	Cost	Income	Income	Loss	
2009-10	122.66	-	29.61	161.52	120.47	-	-	-	434.26
2010-11	224.52	-	54.16	151.24	111.91	-	-	-	541.83
2011-12	181.14	-	41.63	188.06	94.04	(13.65)	-	-	491.22
2012-13	134.95	-	27.43	172.34	114.30	(5.92)	-	-	443.10
2013-14	96.06	-	17.97	113.56	135.67	(32.68)	-	-	330.58
2014-15	103.91	-	19.98	96.39	114.28	(17.55)	-	-	317.01
2015-16	87.72	-	15.33	84.75	120.74	(6.90)	-	-	301.64
2016-17	59.84	-	13.85	58.06	69.63	(6.01)	-	-	195.37
2017-18	62.77	-	16.63	49.91	56.81	(3.33)	-	-	182.79
2018-19*	73.04	-	17.44	105.05	408.50	(0.63)	-	-	603.40
2019-20	77.91	-	18.69	101.85	101.09	(6.69)	-	-	292.85
2020-21	39.44	-	9.61	126.53	105.87	(7.56)	(31.13)	-	242.76
2021-22	124.59	-	20.63	182.61	115.04	(11.11)	(69.32)	-	362.44
2022-23	345.25	275.91	43.20	191.59	131.65	-	-	12.66	1,000.26
2023-24	542.60	670.14	88.56	331.10	145.76	-	-	44.86	1,823.02
Total	2,276.40	946.05	434.71	2,114.56	1,945.76	(112.03)	(100.45)	57.52	7,562.53

<sup>\*</sup> Includes acquisition related expenditure of Rs.225 Crore and professional fee of Rs.110 Crore.

8.3.1.2. **SUG Cost (including tariff not recovered on SUG volume):** In view of the amendment brought by PNGRB during FY 2022-23 for fuel cost to be considered based on the corresponding volumes of natural gas considered as divisor for tariff determination additional fuel considered is Rs.946.09 Crore for both FY 2022-23 and FY 2023-24. The fuel cost for the review period is as under:

(Rs. in Crore)

Particulars	18-19	19-20	20-21	21-22	22-23	23-24
Actual Fuel cost	73.04	77.91	39.44	124.59	345.25	542.60
Additional Fuel cost	-	-	-	-	275.91	670.14
<b>Total Fuel cost</b>	73.04	77.91	39.44	124.59	621.16	1212.74

8.3.1.2.1. **Entity's Submission on SUG Quantity:** Entity in its tariff filing has considered Fuel on account of SUG of Rs.3,222.45 Crore (including additional fuel of Rs.946.05 Crore) during the period 2009-10 to 2023-24. The actual SUG fuel quantity consumed, metered quantity and the SUG fuel as % of actual metered quantity during the 2009-10 to 2023-24 as submitted by PIL is as under:

Year	SUG Qty (MMSCM)	SUG (MMSCMD)	Total Metered Qty (MMSCM)	Total Metered Qty (MMSCMD)	% SUG
2009-10	179.04	0.50	14478.55	40.78	1.24%
2010-11	318.44	0.90	20553.78	57.90	1.55%
2011-12	246.13	0.69	18073.51	50.91	1.36%
2012-13	160.81	0.45	12193.16	34.35	1.32%
2013-14	103.66	0.29	7371.22	20.76	1.41%
2014-15	101.42	0.29	7510.43	21.16	1.35%
2015-16	77.90	0.22	7051.73	19.86	1.10%
2016-17	69.36	0.20	5746.40	16.19	1.21%
2017-18	83.25	0.23	5932.60	16.71	1.40%
2018-19	86.08	0.24	6407.00	18.05	1.34%
2019-20	73.56	0.21	6623.00	18.66	1.11%
2020-21	35.25	0.10	4209.00	11.92	0.84%
2021-22	79.41	0.23	7092.00	20.26	1.12%
2022-23	92.49	0.26	7499.00	21.43	1.23%
2023-24	133.29	0.38	9983.00	28.52	1.34%

For the period FY 24-25, the entity in its submission has considered SUG quantity at 1.34% of the normative volume. For FY 25-26 onwards, entity has considered SUG quantity at 2% of volume divisor, which is also the ceiling for SUG quantity allowed by PNGRB.

## 8.3.1.2.2. Entity submission with respect to projected SUG quantities for FY24-25 onwards:

- a. Currently, PIL pipeline is transporting around 36 MMSCMD. However, going forward with the ramp up of ONGC new finds and new LNG connectivity and increase in CGD segment, the gas flow through the pipeline is expected to be around 45-50 MMSCMD.
- b. It is important to note that SUG consumption does not scale linearly with increase in gas volumes. As volume flow increases, additional compressor stations and GTC units must be deployed in steps, leading to a step-up increase in SUG. This is due to the fact that apart from more no. of GTC units required to handle higher volume, the pressure drops at higher rate along length of pipeline requiring more frequent pressure boosting at compressor stations.
- **c.** Based on internal workings/simulations for transporting 45-50 MMSCMD of gas, the projected SUG quantity requirement would be 0.9 MMSCMD which is commensurate to 1.8% to 2% of the expected volume.
- d. Therefore, it is requested that SUG % corresponding to volume divisor be considered based on projected volume flow, with an upper limit of 2%, in accordance with regulatory provisions. The actual SUG will be trued up during periodic review exercises.

# 8.3.1.2.3. Further entity vide email dated 13.06.2025 submitted the following with reference to the SUG variation due to change in volume profile:

"As submitted earlier, SUG quantity depends on several factors, including gas receipt, volume flow profile, the delivery pressure from into other pipeline networks connected to National Gas Grid. Accordingly, it was submitted to PNGRB that PIL is expecting volume of 45-50 MMSCMD of gas in next 1-2 years, the projected SUG quantity requirement for such volume would be in the range of 0.9 MMSCMD i.e. 1.8% to 2% considering the expected flow profile, pressure requirements, etc.

Further, the past trend to assess the future SUG requirement may not be appropriate in varying flow profile and pressure requirements. As a matter of fact, in the initial years the volume profile in PIL pipeline was different, wherein more than 20% volume was transported in Andhra Pradesh through Oduru interconnection point with GAIL network, through the spur line immediately at downstream of CS#01, which was not required to flow through other compressor stations. However, currently the Oduru interconnection point is used as Entry point for PIL pipeline and gas is delivered into the PIL pipeline for transporting and delivery and transported towards the western end of the pipeline. Presently, most of the volume is physically delivered at interconnection points of GAIL and GSPL networks in zone 4 and zone 5 of the pipeline with high pressure requirements. Further, as already submitted, in the month of May 2025, SUG used in compressor stations is 13.78 MMSCM against the metered volume of 942 MMSCM carried through these compressor stations for transportation and delivery, which works out to 1.5%.

In view of the above, it is once again submitted that projected SUG @ 2% may be considered in tariff working, which will anyhow be trued up in next review exercise."

8.3.1.2.4. PNGRB vide Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2025 dated 07.07.2025 has amended the Schedule A Clause (5) sub clause (2) (b) by incorporating the following:

"Entity to procure at least 75% of their annual gas volume for fuel requirements under the long-term contract(s) on least cost basis either domestically or internationally for a period of at least 3 years from the end of the period for which SUG volumes are already contracted. The entity shall inform PNGRB immediately but not later than three months after the notification of this amendment.

However, if the entity has surplus gas available in their portfolio at the time of procurement which can be allocated to SUG at a price lower than the above, then such cheaper gas price will be allocated for SUG. The entity shall provide the details of the gas procured to PNGRB on immediate basis after the procurement or allocation, as the case may be.

Clarification: Gas price and quantity for long term contract (formula or fixed; as the case may be) finalized on least cost basis at which procurement or allocation is done, shall be the basis for working out fuel cost for such quantity and period."

In view of the above, PNGRB had sought the details from entity regarding SUG volumes. Entity, vide email dated 11.08.2025, has submitted that they are presently procuring its entire SUG requirement through long term arrangements greater than three years the following details for existing gas procurement contracts. Entity has also provided the relevant details.

8.3.1.2.5. **SUG Gas Cost**: Entity has considered gas price as per the following table:

Particulars	H1	H2	Avg	Tax Rate	Avg with tax
Gas Price FY 22-23	9.92	12.46	11.19	24.5%	13.93
Gas Price FY 23-24	12.12	9.96	11.04	24.5%	13.74
Gas Price FY 2024-25	9.87	10.16	10.02	5%	10.52
Gas price from FY 2025-26 onwards	10.16	10.16	10.16	5%	10.67

Gas prices are considered as per PPAC prices for HP-HT gas.

Further, in addition to the above, entity has considered transmission charges of Rs.81/MMBTU from FY 2023-24 onwards for calculation of tariff not recovered on the SUG gas. Entity has considered the exchange rate of Rs.83.18/US\$ for FY 2023-24 and escalated the same @ 3.5% p.a. thereafter for future years. Further, the entity has arrived at the gas price in Rs./MMBTU by multiplying the escalated exchange rate (Rs./US\$) with gas price in US\$/MMBTU and further escalated this gas price in Rs./MMBTU at 4.5 % p.a. for future years.

In reference to the additional fuel for FY 22-23 (18.11.2022 onwards), entity has calculated normative fuel by considering the per day fuel as 0.26MMSCMD (i.e., 92.491MMSCM/350days = 0.26 MMSCMD). For period after 18.11.2022 (NGPL Second Amendment Regulations 2022), entity has calculated the normative SUG quantity by dividing the SUG quantity by actual metered volume flow and multiplying with volume divisor (i.e., 92.491 MMSCM / 7499 MMSCM\*63.75 MMSCMD = 0.79 MMSCMD). Entity has then multiplied 0.26 MMSCMD with 134 day and 0.79 MMSCMD with 231 days to arrive at total SUG Quantity for FY22-23 (i.e., (0.26\*134) + (0.79\*231) = 166.41 MMSCM). Entity has then divided the SUG cost (Rs.345.25 Crore) with actual SUG quantity (92.491 MMSCM) and multiplied with normative SUG quantity (166.41 MMSCM) and arrived at SUG cost of Rs.621.16 for FY 22-23.

For additional fuel for FY 23-24, entity has calculated the additional fuel dividing the actual fuel cost (exclusive of transportation tariff not recovered) by actual metered quantity and multiplying by the volume divisor considered for respective year (i.e., 542.60 / 9983 \* (63.75\*350)). For volume divisor, the entity has considered 75% of capacity considered, i.e., 85 MMSCMD and multiplied it with 350 (working days). Further, for tariff not recovered on SUG quantity of 0.85MMSCMD, entity has considered Rs.81/MMBTU as transportation tariff.

8.3.1.3. **Transmission Loss (TL)/ Unaccounted for Gas:** Entity in its tariff filing has considered unaccounted gas @ 0.1% of Volume Divisor, instead of actual volumes, from 18.11.2022 onwards till the end of economic life. For gas price, entity has considered the year wise gas price as per the following table

Particulars	H1	H2	Avg	Tax Rate	Avg with tax
Gas Price FY 22-23	9.92	12.46	11.19	24.5%	13.93
Gas Price FY 23-24	12.12	9.96	11.04	24.5%	13.74
Gas Price FY 2024-25	9.87	10.16	10.02	5%	10.52
Gas price from FY 2025-26 onwards	10.16	10.16	10.16	5%	10.67

Entity has considered the exchange rate for FY 22-23 at Rs.82.25/US\$ and for FY 23-24 as Rs.83.18/US\$. Subsequently it has escalated the exchange rate of Rs.83.18 @ 3.5% per annum. Further, Further, the entity has arrived at the gas price in Rs./MMBTU by multiplying the escalated exchange rate (Rs./US\$) with gas price in \$/MMBTU and further escalated this gas price in Rs./MMBTU at 4.5 % p.a. for future years. In addition to this, entity has considered transmission charges of Rs.71.66/MMBTU for FY 22-23 and Rs.81/MMBTU from FY 23-24 onwards for calculation of transportation tariff on unaccounted for gas.

## 8.3.2. Regulatory Provision:

8.3.2.1. In terms of extant regulatory framework, clause 5 of Schedule A of Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Regulations, 2008 provides that, Operating costs required in the operation and maintenance of the natural gas pipeline over its economic life shall be computed, on an actual basis or based on a normative assessment by the Board, whichever is lower, except as specified.

### 8.3.2.2. In terms of clause 5 of Schedule A,

fuel (including the cost of natural gas and the natural gas pipeline tariff thereon, corresponding to the volumes of natural gas considered as divisor for tariff determination, subject to maximum of 2% of the volumes of natural gas considered as divisor for tariff determination, of the natural gas pipeline).

**Explanation:** Actual fuel cost for the respective years shall be multiplied by the volumes considered as divisor for determining tariff and divided by actual volumes flow.

Entity to procure at least 75% of their annual gas volume for fuel requirements under the long-term contract(s) on least cost basis either domestically or internationally for a period of at least 3 years from the end of the period for which SUG volumes are already contracted. The entity shall inform PNGRB immediately but not later than three months after the notification of this amendment. However, if the entity has surplus gas available in their portfolio at the time of procurement which can be allocated to SUG at a price lower than the above, then such cheaper gas price will be allocated for SUG. The entity shall provide the details of the gas procured to PNGRB on immediate basis after the procurement or allocation, as the case may be.

**Clarification**: Gas price and quantity for long term contract (formula or fixed; as the case may be) finalized on least cost basis at which procurement or allocation is done, shall be the basis for working out fuel cost for such quantity and period.

8.3.2.3. **Regulatory Provision:** 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.;

8.3.2.4. Clause 5 (8) of Schedule A of Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Regulations, 2008 till 23.11.2020 provides that, "Miscellaneous income realizable from a fixed asset included in the return on total capital

employed or out of an expense considered as an operating cost, but not including income from imbalance management services under relevant regulations of the Board, interest income, profit or loss on sale or transfer of any fixed or other asset, shall be netted from the operating cost."

8.3.2.5. In terms of extant clause 5 (8) of Schedule A of Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Regulations, 2008, "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."

## 8.3.3. Query and Response:

8.3.3.1. **Query:** With reference to CA certificates provided for Opex i.e. O&M cost and Non-O&M cost for the years from FY 2018-19 to FY 2023-24, you are requested to kindly provide the breakup of the same in line with the heads mentioned under Clause 5. "Operating costs" of Schedule A of NGPL Tariff regulations.

**Response:** Breakup of O&M expenses (excluding SUG cost) and Non-O&M expenses for the period of FY 2018-19 to FY 2023-24 is as under:

(Rs. in Crore)

Particular	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Stores & Spares	66.57	13.78	26.24	55.65	58.87	117.65
Electricity & Power	3.11	3.17	3.43	3.73	4.10	4.68
Repairs- Machinery & Building	27.14	36.70	41.23	66.89	68.19	140.65
Other Operational Expenses	8.24	48.21	55.64	56.33	60.43	68.12
Total O&M expenses - Excl SUG	105.05	101.85	126.53	182.61	191.59	331.10
Employee benefit expense (as per Annual report)	28.42	20.13	28.13	30.74	34.56	36.01
Insurance	5.96	18.89	29.04	36.51	38.45	43.61
Rent	0.68	0.60	0.78	0.65	0.18	0.27
Repairs - Others	0.65	0.88	1.45	1.23	0.23	1.31
Rates and Taxes	6.16	0.80	1.21	1.46	2.05	2.39
Contracted and Others services	1.11	12.93	12.87	2.56	3.49	3.60
Travelling and Conveyance	5.34	5.07	4.90	6.45	9.33	9.65
Payment to Auditors	3.34	0.91	0.97	1.19	1.49	1.87
Professional Fees	112.10	5.31	5.81	6.16	7.13	8.28
Letter of credit and bank charges	0.16	4.72	1.47	3.12	3.43	3.29
Provision for doubtful debts	-	15.07	-	-	-	_

Particular	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Loss/(profit) on sale of Fixed Assets	-	0.21	1.37	0.56	0.02	0.02
Acquisition related expenses	225.00	-	-	-	-	-
General Expenses	19.55	15.57	17.86	24.41	31.29	35.46
Total Non-O&M expenses	408.50	101.09	105.87	115.04	131.65	145.76

8.3.3.2. **Query:** Kindly provide the reasons for variations in the O&M and Non O&M cost. The O&M cost incurred for FY 2023-24 is 72.82% higher than FY 2022-23. Kindly provide details of items which are non-recurring in nature that are included in Rs.191.59 crores and Rs.331.10 crores. Similarly, the Non O&M cost incurred during FY 2022-23 & FY 2023-24 are quite higher. Kindly provide details of items which are non-recurring in nature that are included in Rs.131.65 crores and Rs.145.76 crores.

Response: PIL's 48-inch gas transmission trunk pipeline spans approximately 1,480 km across five states from Kakinada to Bharuch and has been operational since 2008 with crossing more than 1750 highways, rivers, railways, etc. The pipeline infrastructure includes 10 Compressor Stations (CS), 2 Pipeline Operation Centres (POC), and a comprehensive network of metering, safety, and control systems. The key reasons contributing to the increase trend of maintenance cost are ageing infrastructure, higher run hour-based maintenance for critical machines, system obsolescence, increased cyber threat mitigation measures, increase in imported equipment costs, rupee depreciation, increase in climate related costs like Riverbank erosions and washouts, increased cost and inflation.

Ageing Assets and End of Equipment Lifecycle: A major driver of rising O&M costs is the ageing nature of the pipeline's critical machinery and control systems:

- a. Most equipment—such as Gas Turbine Compressors (GTCs), Centrifugal Compressors, and Gas Engine Generators (GEGs)—have been operating for 14–15 years and are due for major overhauls and component replacements. This is expected to continue as more and more machines clock higher run hours.
- b. GTC and GEG maintenance is conducted based on running hours as per the OEM's prescribed guidelines, considering the operational years. This equipment requires mainly two stage maintenance: minor overhauls and major overhauls, depending on the running hours. Given that the pipeline has been operational for over 15 years, most of this equipment is due for major overhauls. PIL is executing these maintenance tasks in a phased manner over the remaining economic life, based on operational plans.
- c. As per OEM guidelines, activities such as Major Inspections (MI), Hot Gas Path Inspections (HGPI), and Dry Gas Seal replacements are mandatory after certain operating hours.
- d. Battery banks, UPS systems, and alternators have reached the end of their useful life and require phased replacement to maintain operational reliability. The

Obsolescence of Control, Monitoring & Safety Systems
The pipeline was originally equipped with state-of-the-art systems in 2008–09, many of

which are now obsolete. To ensure uninterrupted operations and mitigate any cyber threat, upgrades and replacements are being carried out in a phased manner, balancing system availability and financial planning.

- e. SCADA, OT System, RTUs, ESDs, Fire & Gas Detection, and CCC control systems are based on outdated hardware/software (e.g., Windows XP), which are no longer supported by vendors. Upgradation of these equipment's are being done in phases. Any failure of such unsupported equipment's may have a major impact on system availability leading to disruptions for end customers.
- f. Similarly, control upgrades such as transitioning from Mark VI to Mark VI e, CCC controller replacements, and system-one HMI updates were done in FY 23-24 which were necessary to mitigate risks of unplanned shutdowns and to support safe operations.
- g. Likewise, in FY 23-24 upgradation of several other key activities that includes GTC Fuel Metering Valves (FMV) replacement, RTU system, Instrument Air Compressor (2), XT4 Control system and F&G system has been done in some stations.

Periodic studies are integral to asset integrity management. Several O&M activities rely on periodic reviews, ensuring asset integrity as needed.

- h. Intelligent Pigging and Cleaning Pigging are regulatory requirements as per PNGRB norms.
- i. Fitness-for-Purpose studies, Fire & Gas upgrades, and security automation (SAS) upgrades ensure continued integrity and safe operation post-design life.
- j. There are approximately 29 river crossings on the PIL pipeline. Ensuring adequate protection of the pipeline beneath the river bed is essential, as any damages in this area can disrupt pipeline operations and affect customer units. Therefore, precautionary work at these reiver crossings is critical work, accordingly, bank protection work at the Gautami Godavari River was taken in FY 23-24 and similar work in Narmada River is planned this year. This activity depends on the rains and river behaviour and the developments nearby. There is also a direction form department of irrigation of Telangana Government in this regard. More such work will be required on major rivers to prevent any major damage to the PIL pipeline.

**Cyber security:** In light of the recent surge in cyber threats targeting critical energy infrastructure worldwide, there is an urgent need to invest in robust cybersecurity measures for gas transmission pipelines. These systems, which rely on digital control and communication networks, are increasingly susceptible to cyberattacks that can disrupt operations, compromise safety, and cause financial and reputational harm. PIL has implemented cybersecurity measures in SCADA systems and other field controls, which require both annual reviews and timely updates. PNGRB may appreciate that IT systems have a short shelf life and become obsolete quickly, necessitating additional funding for upgrades.

Imported Materials and Foreign Vendor Dependency Many critical components and services used in compressor stations and control systems are sourced from international OEMs, such as Fuel Metering Valves, Servo Motor Controllers, CCC Controllers, GEG Control Units, and Mark VI/VIe HMIs are imported. Further,

overhauling and recalibration activities are also conducted at overseas vendor works. The cost of procuring these imported items has increased due to global supply chain dynamics, fluctuations in raw material prices, extended lead times, and dependency on limited OEMs. **Rupee Depreciation and Inflation Impact**: In addition to the above technical and regulatory drivers, Rupee depreciation against major foreign currencies over the past five years has significantly increased the landed cost of imported equipment and services.

**General inflation**, particularly in the engineering and construction sectors, has escalated costs of civil works, spares, specialized manpower, and logistics. For example, the cost of riverbank protection and roadwork revamps has risen in line with commodity price inflation.

Conclusion: Thus, increase in O&M costs is a multi-faceted issue driven by asset ageing, technological obsolescence, regulatory mandates, machine running hours, dependency on imported systems, rupee depreciation, and inflationary pressures. These are unavoidable and necessary expenditures to sustain the performance, safety, and compliance of a critical energy infrastructure asset like the PIL pipeline. Following are the details of some of the major such activities undertaken during last five years:

- Increased cost of goods and services has also been a major contributing factor to the overall expenditure during these years. Details of some of the major activities undertaken during FY 2020–21, FY 2021–22 and FY 2023-24, to maintain the continued safety, reliability, and operational efficiency of the pipeline system, are given in the table below.
- It is submitted that stores and spares for approx. 25-30% of the O&M cost has been used for carrying out O&M activities during these years.

Particular	2019-20	2020-21	Reason for variation	2021-22	Reason for variation	2022-23	2023-24	Reason for variation
Stores & Spares	13.78	26.24		55.65		58.87	117.65	FY 2023-24:     Critical bank
Electricity & Power	3.17	3.43		3.73	FY 2021-22: Upgradation of	4.10	4.68	protection measure at Gowthami Godavari
Repairs- Machinery & Building	36.70	41.23	FY 2020-21:    Upgradation of the Central	66.89	obsolete GTC Mark VI Human Machine Interface	68.19	140.65	pipeline crossing – ₹  38.64 Cr.  Upgradation of
Other Operational Expenses	48.21	55.64	Control Center (CCC) – ₹ 5.75 Cr.	30.33	and System1 HMI – ₹ 14.63 Cr. • Execution of	60.43	68.12	systems at CS07 & CS- 03 (GTC Fuel Metering Valves (FMV)
Total O&M expenses - Excl SUG Cost	101.86	126.54	<ul> <li>Replacement of Dry Gas Seals at compressor units –</li> <li>₹ 2.22 Cr.</li> <li>Relocation of MLV facilities and shifting of Pipeline Operations Centre to CS-10 due to COVID outbreak – ₹ 3.87 Cr.</li> </ul>	182.60		191.59	331.10	replacement, RTU system, Instrument Air Compressor (2), Mark VI upgradation HMIs, XT4 Control system and F&G system upgradation) - ₹ 45.79 Cr.  · Upgradation of Remote Terminal Unit (RTU) system across 6 CS - ₹ 12.71 Cr.  · Upgradation of GTC PGT 25+ DLE unit Fuel Metering System including overhaul and

Particular	2019-20	2020-21	Reason variation	for	2021-22	Reason variation	for	2022-23	2023-24	Reason for variation
										recalibration – ₹ 9.76
										Cr
										· Replacement of Dry
										Gas Seal of centrifugal
										compressor – ₹ 6.64
										Cr.
										· SIS and F60 PLC's
										upgradation at CS02 &
										CS06 – ₹ <b>5.45 Cr.</b>
										· Implementation of
										Integrated CCC control
										of all GTC units (5
										nos.) under single
										Master Controller at
										CS10 – ₹ <b>3.11</b> Cr.
										Upgradation of GEG
										control unit (Dine NXT
										250/450) – <b>₹ 2.3</b> Cr.

# **Submissions**:

As observed, the key drivers of operating cost variations include system upgrades, environmental compliance measures, and OEM-prescribed inspections and maintenance activities, all of which are periodic and essential in nature. In order to ensure safe, secure, and uninterrupted services to customers, these maintenance activities are strategically scheduled in a staggered manner. This approach minimizes the downtime of critical equipment and ensures continuity of operations. Accordingly, a similar trend in maintenance activities are anticipated going forward also, as these activities are necessary to maintain the pipeline's efficiency, safety, and regulatory compliance.

8.3.3.3. **Query:** Kindly provide the year wise expenses related to mergers and acquisition claimed in the tariff filing.

**Response**: As per financial statements for the FY 2018-19 to FY 2021-22, PIL has incurred an amount of Rs.225 Crore towards acquisition related expenses in FY 2018-19. Further M/s East West Pipeline Limited (EWPL - predecessor operator of the pipeline) has incurred professional fees of around Rs. 110 Crore in FY 2018-19.

8.3.3.4. **Query:** Professional expense has increased from Rs.2 Crore in 2017-18 to Rs.112 Crore in 2018-19. Kindly confirm if any acquisition related expense is included in this. Also provide details of Rs.112 Crore.

**Response**: As mentioned above, during FY 2018-19, M/s EWPL has incurred professional fees of Rs.110 Crore towards payments to consultants, advocates and advisors and other legal matters primarily in connection with transfer of pipeline from EWPL to PIPL.

8.3.3.5. **Query:** Acquisition related expenses of Rs.225 Crore in FY 2018-19, kindly provide details and reason for considering this in tariff filing. Also confirm the regulatory provision under which this cost is considered.

**Response:** Entity vide e-mail dated 20.03.2025 provided the following information: **Details of Acquisition related expenses (Rs. 225 Crore) in FY 2018-19** 

• As per the Scheme of Arrangement ("Scheme") the pipeline business was transferred from EWPL to PIPL from Appointed Date 1<sup>st</sup> July 2018. However, the sanction to the Scheme was accorded by the NCLT in December 2018. During this interim period, EWPL team facilitated PIPL (now being PIL) in supervising and managing the pipeline business pending the transfer of assets to PIPL. Hence, PIPL paid consideration of Rs. 175 Crore to EWPL for these services. Further Rs. 50 Crore was spent towards stamp duty applicable on the Scheme of arrangement.

# Regulatory Provision and reason for consideration

- As per the provisions of Regulation 9(4) & (5) of PNGRB NGPL Authorization Regulations, an entity intending to renunciate authorization in favour of another entity may submit detailed proposal along with any other information as may be required. Thereafter, the PNGRB Board after satisfying itself accept the proposal in full or with modification as it may deem fit.
- Regulations envisages and provides for such business-related expenses occurring due to renunciation of authorization in favour of another entity.
- The renunciation of authorization by EWPL in favour of PIL has been done as per the
  provisions of the Regulations and as per the NCLT sanctioned Scheme and in
  compliance to terms covered under the acceptance of transfer of authorization in
  favour of PIL.
- Thus, the expense incurred towards renunciation of authorization / acquisition by PIL in FY 2018-19 must be considered in computation of PIL's pipeline tariff.

8.3.3.6. Query: Opex amount pertaining to Lanco Kondapalli till FY 2021-22

**Response:** In view of the NCLT order regarding liquidation of Lanco Kondapalli Power Limited and the request of the entity, no gas delivery was made through the dedicated pipeline to Lanco Kondapalli for the period from FY 2018-19 to FY 2023-24, i.e., the pipeline was not in operations.

8.3.3.7. Opex amount pertaining to Lanco Kondapalli: As per reply submitted we understand that the pipeline was not in operation. However, the entity might have incurred some fixed maintenance costs. You are requested to confirm the same.

**Response:** As submitted earlier, in view of the NCLT order regarding liquidation of Lanco Kondapalli Power Limited the pipeline was not in operations from FY 2018-19 to 2023-24. Any expenses incurred on the maintenance cost on this pipeline is not separately maintained, however, for the FY 2017-18 Rs. 1.12 lakh was considered by PNGRB in previous tariff review, it is requested that Board may consider the same, copy of the CA certificate submitted in PNGRB for FY 2017-18 is attached

8.3.3.8. **Query:** Kindly confirm the reason for abnormal increase in rates and taxes, payment to auditors and professional fees over previous years. Further, also confirm whether Provision for doubtful debts and Loss/(profit) on sale of Fixed Assets have been included in the amounts mentioned in CA certificates.

(Rs. In Cr.)

	(11	5• <b>III</b> (1•)
Particular	2018-19	2019-20
Rates and Taxes	6.16	0.8
Payment to Auditors	3.34	0.91
Professional Fees	112.1	5.31
Provision for doubtful debts	-	15.07
Loss/(profit) on sale of Fixed Assets	-	0.21
Acquisition related expenses	225	-
Total Non-O&M expenses	408.5	101.09

**Response:** This is in reference to the trailing email, required information is submitted as below:

- I. <u>Rates and Taxes</u>: The increase for the fiscal year 2018-19 is primarily due to the write-off of past taxes and duties credits amounting to Rs.4.82 crore.
- II. <u>Payment to Auditor Rs. 3.34 Cr FY 2018-19</u>: The increase is primarily due to special purpose audits conducted during the first year of operation for PIL after acquisitions.
- III. <u>Professional Fee</u> Rs. 112.1 crore & Acquisition related expenses of Rs 225 crore FY 2018-19: PIL has already submitted vide email dated 20<sup>th</sup> March 2025, that the said expenses are towards renunciation of authorization / acquisition by PIL done in FY 2018-19.

Further, it is confirmed that the Provision for doubtful debts and Loss/(profit) on sale of Fixed Assets in FY 2019-20 are included in the amounts mentioned in CA certificates provided in this regard.

8.3.3.9. **Query:** Kindly provide DDS and Parking breakup FY wise. Also, why only Parking income is reduced from opex and not DDS income.

**Response:** Parking service is notified by PNGRB on 23<sup>rd</sup> November 2020, under the provisions of PNGRB (Imbalance Management Service) Regulations, 2016.

Prior to notification of these Regulations, Deferred delivery service was provided for management of imbalances to shippers and the income from DDS services were excluded from Misc. income, in terms of the extant provisions of Tariff determination Regulations. Thus, only parking income is reduced from OPEX and not DDS income. The breakup of parking and DDS services is as below:

Rs. in Crore

Particulars	FY 2020-21	FY 2021-22
Deferred Delivery Services	-33.89	-
Parking Service	-62.27	-138.64

8.3.3.10. **Query:** Kindly confirm that parking income adjusted Rs. 31.13 Crore is for the period from November 2020 to March 2021.

**Response:** It is confirmed that the parking income adjusted for Rs. 31.13 Crore is for the period from November 2020 to March 2021.

8.3.3.11. Query: Also please confirm any CSR expenses have been included in the tariff filing.

**Response:** The details of CSR expenses are covered under Social Welfare expenses in the details of general expenses are as follows:

Rs. in Crore

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Social Welfare Expenses	0.06	0.97	1.02	1	1.15

8.3.3.12. **Query:** Kindly provide details of any long term contract entered for procurement of SUG quantity i.e. contracted SUG gas price, period of contract, etc.

**Response:** PIL has provided the details of the long term GSPAs for procurement of SUG.

8.3.3.13. **Query:** Kindly provide details of Parking income earned during the period from 01.04.2022 to 18.11.2022

**Response:** The income earned by PIL through Imbalance Management Services during the period of 01st April 2022 to 18th November 2022 is Rs.112.16 cr.

8.3.3.14. **Query:** With reference to the steps undertaken to further improve efficiency of the pipeline system, details of supply points, contractual pressure, actual delivery pressure and reasons for variation vs contractual pressure if any to be provided.

**Response:** Entity has provided the details sought for domestic and RLNG sources connected with PIL pipeline.

- **8.3.4.** Stakeholder's Comments and Entity's response for reference (Detailed comments and response are webhosted on PNGRB website)
- 8.3.4.1. **GSPL's Comments:** There has been an abnormal increase in O&M cost from FY 2019-20 to FY 2023-24. (Rs.101.85 Crore to Rs.331.10 Crore). The actual Operating cost is considerably higher than projected figures for all 3 years in above table. PNGRB may please review the reasons.

Rs. In Crore

Year	Future OPEX	Actual OPEX	Difference
FY 21-22	135.23	182.61	47.38
FY 22-23	141.31	191.59	50.28
FY 23-24	147.67	331.10	183.43

**PIL's Response:** Though the details of the variation in O&M cost have already been provided to PNGRB, however PIL would like to submit the following:

Increase in O&M costs is a multi-faceted issue driven by asset ageing, technological obsolescence, regulatory mandates, machine running hours, dependency on imported systems, rupee depreciation, and inflationary pressures. These are necessary expenditures to sustain the performance, safety, and compliance of a critical energy infrastructure asset like the PIL pipeline, in absence of which reliability and availability of the pipeline will be compromised. In addition, PIL maintains a large fleet of rotating machines, and the vintage of these equipment necessitates maintenance expenses for safe operations.

- 8.3.4.2. **GSPL** and **Think Gas Comment's:** The Opex for period 2018-19 onwards includes Non-O&M cost. Other than the acquisition-related expenditure of Rs.225 Crore and professional fee of Rs.110 Crore, we request PIL to advise what are the other heads included under Non O&M Cost for the past and the future years.
  - **PIL Response:** Non-O&M expenses include, Employee related expenses, Rent, Insurance, etc. details of the same has already been provided to PNGRB.
- 8.3.4.3. **GSPL Comment:** Clarity on SUG Working. SUG for the years 22-23 and 23-24 is 81% and 132% of the actual fuel cost. A balanced approach needs to be taken to deal with such situation.

# **PIL Comments:** As per regulatory provisions

"fuel (including the cost of natural gas and the natural gas pipeline tariff thereon, corresponding to the volumes of natural gas considered as divisor for tariff determination subject to maximum of 2% of the volumes of natural gas considered as divisor for tariff determination of the natural gas pipeline); Explanation: Actual fuel cost for the respective years shall be multiplied by the volumes considered as divisor for determining tariff and divided by actual volumes flow."

PIL has considered the project fuel within the stipulated cap of 2% which is subject to truing up based on the actual cost. It may also be appropriate to mention that PNGRB while declaring the capacity of the PIL pipeline as 85 MMSCMD for FY 2009-10 has considered system use gas of 0.3 MMSCMD per compressor station. This comes to around 2.85

MMSCMD for SUG for transporting 85 MMSCMD. This also substantiate the act that with increase in capacity utilization SUG % also goes up.

PIL has submitted past SUG data and its percentage in terms of the volume handled by compressor station. SUG of 1.34% is based on the volumes handled by compressor stations in the last year excluding SoP/adjusted volume at the interconnection points. Each pipeline network is under the different stage of utilization curve. GSPL network is running above its normative capacity whereas PIL pipeline is still less than 50% utilized and expecting additional volume from ONGC and adjacent LNG terminals in next 1-2 years.

8.3.4.4. **GSPL Comments:** The SUG cost for FY 2022-23 is Rs. 621.16 crores vis-a-vis Rs. 1212.74 crores for FY 2023-24. Kindly provide the reason for increase.

#### **PIL Comments:**

- a. As submitted above, the SUG consumption does not increase linearly with gas volume. As the volume flow rises, there is a significant step-up in SUG due to several factors.
- b. Volume flow in PIL pipeline during the concerning years has increased more than 30%.
- c. Normative SUG regulations introduced from November 2022 (134 days in FY 22-23).
- 8.3.4.5. **GSPL Comment:** The total of columns of future opex is not matching. Further, the submitted future opex by the entity includes SUG cost, with a substantial increase in FY 2032-33. Kindly provide reason for such increase.

**PIL Response:** The data for FY 2031-32 under table in the PCD is missing, considering the same trend is linear in relation. Table of year wise SUG cost is reproduced below:

Financial Year	SUG Cost (Rs. in Crore)
2024-25	996.92
2025-26	1,638.58
2026-27	1,772.24
2027-28	1,916.81
2028-29	2,073.18
2029-30	2,242.30
2030-31	2,425.21
2031-32	2,623.05
2032-33	2,837.02
2033-34	3,068.45
2034-35	3,318.76
2035-36	3,589.49
2036-37	3,882.30
2037-38	4,199.00
2038-39	4,541.54
Total	41,124.85

8.3.4.6. **GSPL Comment:** The GST credit on transportation of gas may not be available since that would be dependent on the contract between the transporter and gas supplier. In case of delivered contracts such credit may not be available. Hence the view on GST credit should be taken on case-to-case basis depending on the actual gas purchase invoices.

- PIL Response: PNGRB may like to respond, decision may please be uniformly applied.
- 8.3.4.7. **GSPL Comment:** We have noted that PNGRB has considered escalation of 2% on exchange rate from FY 25-26 which is a welcome development considering the market volatility. In view of this, it is submitted that appropriate amendments may be introduced in the tariff regulations regarding exchange rate escalation for the sake of consistency and benefit of all entities. However, it is requested to consider prevailing exchange rate for purpose of escalation.
  - **PIL Response:** PNGRB may take view about amendment in tariff regulations for exchange rate escalation.
- 8.3.4.8. **GSPL Comment:** Kindly give details on line pack decapitalization. The reason for same and basis of calculation. (F&A).
  - **PIL Response:** Line pack was decapitalized due to fall in volume transported. Cost of the line pack is based on the purchase value.
- 8.3.4.9. **GSPL Comment:** In case of pipelines with compressor, currently as per regulations additional fuel cost is allowed based on the volume considered as divisor for tariff calculation. This cost is allowed though entity has not incurred the cost. Thus, the entity is compensated though the actual volumes transported are lower than normative volumes. Hence PNGRB is requested to take a view on the additional fuel cost though not incurred by the entity. It is an observation that without any huge future CAPEX, without any change in the capacity as compared to last time, with less than normative volumes flowing, the entity may end up with higher than previously declared levelised tariff. So, we feel that there is strong case of reviewing the regulations to overcome such disparity

#### **PIL Response:**

- 1. The normative System Use Gas provision under the tariff regulations is designed to ensure fairness and balance in terms of the gas required for operating the pipeline relation to the volume used to calculate the tariff. This provision does not represent a benefit or compensation. PNGRB, by considering the tariff structure outlined in the regulations, aims to establish an equilibrium between the volume divisor and the cost of system use gas necessary for such volume, thereby allowing entities to achieve the permitted return.
- 2. Tariff determination is function of capital recovery, operating expenses (including SUG in case of PIL), return and volume. Aligning of all these parameters at the same level is required to enable the entity to earn the allowed return. Any reduction in these parameters would result in a dual impact: under recoveries due to lower volumes and the consideration of lower SUG costs.
- 3. In light of the above impact, PNGRB in November 2022 had taken a holistic approach in considering SUG costs in tariff working aligning with the volume risk passed on to the transporter and enable transporter to earn the allowed rate of return. All entities including GSPL supported these regulations during the PCD on these regulations.
- 4. Further, entities are advocating for normative operating and capital expenditures. Accordingly, the principle of normativity for SUG, which constitutes a significant

component of operating expenses for pipeline networks having the compressor station transporting over 50% of the gas in NGGS, should also has to be viewed in similar manner

- 8.3.4.10. **Think Gas Comment:** As per PCD Clause 7.3.1.1.1, SUG Quantity is assured at 1.34% of actual volume flows for 2023- 24. It has been proposed that the same is increase to 2% of actual volume from FY 2024-25 onwards. However, it is suggested that the rate of 1.34% of actual volume shall continue.
  - **PIL Comment:** It may be noted that SUG consumption does not increase linearly with gas volume. As the volume flow rises, there is a significant step-up in SUG due to several factors:
  - Increased load/power on operating GTC units as volumes grow
  - Deployment of additional GTC units to manage higher volumes
  - An increase in volume results in a higher rate of pressure drop along the pipeline, necessitating more frequent pressure boosting, and leading to the deployment of additional compressor stations
  - Operating conditions such as Pressure profiles of interconnect pipelines.

PIL is expecting volume of 45-50 MMSCMD of gas in next 1-2 years, the projected SUG quantity requirement for such volume would be in the range of 1.8% to 2%.

PIL has accordingly considered the projected fuel within the stipulated cap of 2% which is subject to trueing up based on the actual cost.

It may also be appropriate to mention that PNGRB while declaring the capacity of the PIL pipeline as 85 MMSCMD for FY 2009-10 has considered system use gas of 0.3 MMSCMD per compressor station. This comes to around 2.85 MMSCMD of SUG for transporting 85 MMSCMD.

- 8.3.4.11.**Think Gas Comment:** We request to consider a constant exchange rate of Rs.86.09/US\$ (without any escalation) and a fixed gas price of US\$10.52/MMBTU from FY 2025-26 onwards. We further recommend that any variation from these assumptions may be appropriately trued up in the subsequent tariff review cycle.
  - **PIL Comment:** Considering reduced future estimates with the intention to lower the tariff and adjusting them later impact customers more due to additional costs on account of delayed adjustments and higher spike in tariffs as adjustments are made over the shorter remaining economic life. In view of the same, it is prudent and in the interest of all the stakeholders that realistic projections to be factored in for future gas price and exchange rate.
- 8.3.4.12. **Think Gas Comment:** We support the Board's proposal to reduce 50% of parking income from OPEX but further recommend that the full offset of all regulated service income (e.g., imbalance management, Deferred Delivery Services) to prevent double recovery. Further, PNGRB shall consider to reject unrelated acquisition costs as they are not incurred in public interest or service delivery.
  - **PIL Comment:** As per IMS regulations, transporter to offer imbalance management services to all the Shippers without affecting obligations under gas transmission services. For parking and lending services, the transporter may charge a fee from the shipper not exceeding Rs. 10/MMBtu. PIL is charging around 50% of the allowed charges.

Imbalance Management Services provide options to shippers to mitigate Take-or-Pay exposure and avoid imbalance penalties, thereby enhancing operational flexibility are supplemental to core transmission services and are designed to help shippers manage their gas portfolios more effectively. These services are optional and offered at marginal cost.

8.3.4.13.**GAIL Comments:** Consideration of estimations for SUG quantities and future capital cost within the regulatory caps, would ensure a more accurate and balanced approach to tariff determination.

**PIL Comment:** As submitted above appropriately projecting cash outflows would be in the benefit of customers.

# 8.3.5. PNGRB's Conclusion:

- 8.3.5.1. **Opex Other than SUG and TL**: Entity has provided CA certificates as supporting for the opex amount claimed, parking charges and misc. income.
- 8.3.5.1.1. The expenses related to mergers and acquisitions namely Rs.225 Crores on account of acquisition related expenses and Rs.110 Crores on account of professional fees have not been considered.
- 8.3.5.1.2. The parking charges received by entity for the period from 01.04.2022 to 17.11.2022 was Rs.112.16 Crore. Accordingly, 50% of the same, i.e., Rs.56.08 Crores has been reduced from the opex of FY 22-23.
- 8.3.5.1.3. PNGRB asked PIL to provide the operational expenses related to dedicated pipeline to Lanco Kondapalli plant. PIL submitted that the pipeline is not in operations. Further, PIL submitted that PNGRB had considered opex of Rs.1.12 lakh for the dedicated pipeline for the FY 2017- in previous tariff review and requested that Board may consider the same as opex for the dedicated pipeline. As exact opex for the years 2018-19 to 2023-24 is not available, PNGRB has escalated the FY 17-18 Opex of Lanco dedicated pipeline and deducted the same from entity submission.

(Rs. in Lakhs)

	18-19	19-20	20-21	21-22	22-23	23-24
Opex – Lanco	1.17	1.22	1.28	1.34	1.40	1.46

8.3.5.1.4. The following year wise CSR expenses have been deducted from the opex claimed by the entity.

Rs. in Crore

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Social Welfare Expenses	0.06	0.97	1.02	1	1.15

8.3.5.1.5. Accordingly, the summary of total actual operating expenditure (other than SUG and Transmission Loss) is presented below for the period 2018-19 to 2023-24 is as under:

Rs. in Crore

Year	Claimed By	Considered by	Deducted
	entity	PNGRB	
2009-10	281.99	281.99	-

Year	Claimed By	Considered by	Deducted
	entity	PNGRB	
2010-11	263.15	263.15	-
2011-12	268.45	268.45	-
2012-13	280.72	280.72	-
2013-14	216.55	216.55	-
2014-15	193.12	193.12	-
2015-16	198.59	198.59	-
2016-17	121.68	121.68	-
2017-18	103.39	103.39	-
2018-19	512.92	177.92	(335.00)
2019-20	196.25	196.19	(0.06)
2020-21	193.71	192.74	(0.97)
2021-22	217.22	216.20	(1.02)
2022-23	323.24	266.16*	(57.08)*
2023-24	476.86	475.71	(1.15)
Total	3,847.86	3,452.58	(395.28)

<sup>\*</sup>after deduction of parking charges of Rs.56.08 Crores for FY 22-23 up to 18.11.2022

# 8.3.5.2. System Use Gas (SUG):

8.3.5.2.1. **SUG Gas Price:** The actual SUG gas cost for the period till FY 23-24 considered by the entity is in line with the supporting provided by PIL for review period. The actual SUG amount considered by the entity in its tariff filing has been verified from books of accounts and CA certificates.

The transmission tariff not recovered on fuel quantity is considered as under:

Particulars	FY 22-23	FY 23-24
SUG Quantity (MMSCM)	92.491	133.286
Calorific Value (BTU/SCM)	36,230	36,701
PIL Tariff (Rs./MMBTU)	71.66	71.66
Transmission Tariff Not Recovered (Rs in Crore)	24.01	35.05

Accordingly, the transportation tariff not recovered on fuel quantity claimed by entity and considered by PNGRB is as under:

(Rs in Crore)

Particulars	FY 22-23	FY 23-24
Claimed by Entity	43.20	88.56
Considered by PNGRB	24.01	35.05
Difference	(19.19)	(53.51)

Accordingly, the total actual SUG cost comes out as under:

Rs. in Crore

Particulars	FY 22-23	FY 23-24
Actual SUG Cost	345.25	542.60

Particulars	FY 22-23	FY 23-24
Transportation not recovered on SUG	24.01	35.05
Total SUG Cost for the Year	369.26	577.65

Further, for the year FY 22-23, the total SUG cost inclusive of tariff not recovered thereon (Rs.345.25 Crore + Rs.24.01 Crore = Rs.369.26 Crore) is divided into two parts, namely:

- SUG cost before 18.11.2022: Rs.233.70 Crore (i.e. 369.26 / 365 \* 231)
- SUG cost 18.11.2022 onwards: Rs.135.56 Crore (i.e. 369.26 / 365 \* 134).

Further, in line with the regulatory provisions, this SUG cost after 18.11.2022 shall be multiplied by the volumes considered as divisor for determining tariff and divided by actual volumes flow. Accordingly, the normative SUG cost is calculated as Rs.342.16 Crore (i.e., 135.56/25.26\*63.75) for the period 18.11.2022 to 31.03.2023.

Accordingly, the total SUG considered for FY 22-23 and FY 23-24 for tariff determination is as follows:

Rs. in Crore

Particulars	<b>FY 22-23</b> (01.04.2022 to 18.11.2022)	<b>FY 22-23</b> (18.11.2022 to 31.03.2023)	FY 23-24
Actual SUG Cost	233.70	135.56	577.65
Additional Fuel Cost	-	206.60	476.27
Total CLIC Cost Considered by DNCDD	233.70	342.16	1053.92
Total SUG Cost Considered by PNGRB	575.8	36	1055.92

# 8.3.5.2.2. Accordingly, the total SUG cost claimed by entity and considered by PNGRB is as per below table:

Year	Claimed By E	ntity	Considered by I	PNGRB	
	(Rs in Crore)		(Rs in Crore)		
	SUG (incl. of tariff	Additional	SUG (incl. of tariff	Additional	
	not recovered)	SUG	not recovered)	SUG	
2009-10	152.27	-	152.27	-	
2010-11	278.68	-	278.68	-	
2011-12	222.78	-	222.78	-	
2012-13	162.38	-	162.38	-	
2013-14	114.04	-	114.04	-	
2014-15	123.89	-	123.89	-	
2015-16	103.05	-	103.05	-	
2016-17	73.69	-	73.69	-	
2017-18	79.40	-	79.40	-	
2018-19	90.48	-	90.48	-	
2019-20	96.59	-	96.59	-	
2020-21	49.04	-	49.04	-	

Year	Claimed By Entity		Considered by PNGRB		
	(Rs in Crore)		(Rs in Cro	re)	
	SUG (incl. of tariff   Additional		SUG (incl. of tariff	Additional	
	not recovered)	SUG	not recovered)	SUG	
2021-22	145.22	-	145.22	-	
2022-23	388.45	275.91	369.26	206.60	
2023-24	631.16	670.14	577.65	476.27	
Total	2,711.10	946.05	2,638.41	682.86	

8.3.5.3. **Transmission Loss (TL):** In response to PNGRB query, PIL has submitted the following gas price based on which actual transmission loss is booked:

Particulars	FY 22-23	FY 23-24		
<b>Actual Gas Price Booked</b>	Rs.1044.87/MMBTU	Rs.1114.96/MMBTU		
Delivered HP HT	Rs.1275.92/MMBTU	Rs.1143.29/MMBTU		
Ceiling Price	(@\$12.46/MMBTU+taxes)	(@\$11.04/MMBTU+taxes)		

Subsequently, PIL vide email dated 23.07.2025 submitted that effective Gas price from 01.10.2022 onwards is US \$12.46 plus VAT of 24.5% for SUG procured for PIL pipeline. It is requested to kindly consider the same for the tariff working for FY 2022-23 from October 2022 to March 2023. Accordingly, HP HT ceiling price has been considered for FY 22-23 and actual price of Rs.1114.96/MMBTU has been considered for FY 23-24.

In view of the regulatory provisions, transmission loss @ 0.1% of estimated actual volumes till 31.03.2039. For FY 22-23 and FY 23-24, the transmission loss at 0.1% of actual metered quantity has been considered. Further, transmission tariff not recovered on transmission loss quantity has not been considered for all the years. As the actual gas price at which transmission loss is booked by the entity is lower than the HPHT Ceiling price for FY 23-24, the actual gas price has been considered for FY 22-23 and FY 23-24.

Accordingly, the transmission loss claimed by the entity and considered by PNGRB is as under:

Rs. in Crore

Year	Claimed by Entity	Considered by PNGRB
22-23 (18.11.2022 onwards)	12.66	12.73
23-24	44.86	40.85

# 8.3.6. Future Opex:

8.3.6.1.**Submission Made:** Year wise and head wise future Opex claimed by the entity from FY 2024-25 to FY 2038-39 are as follows:

Rs. in Crore

FY	SUG	Additio nal SUG	TPT on SUG	O & M Cost	Non- O&M Cost	Transmissio n Loss	Total
2024-25	554.99	441.93	89.20	311.49	214.43	81.35	1,693.39
2025-26	951.02	687.56	133.61	303.41	228.92	88.61	2,393.13
2026-27	1,167.59	604.65	133.61	365.71	234.16	95.29	2,601.03
2027-28	1,353.04	563.77	133.61	371.21	249.54	102.52	2,773.70
2028-29	1,626.02	447.16	133.61	422.54	255.71	110.34	2,995.38
2029-30	1,934.53	307.77	133.61	469.83	272.06	118.80	3,236.59
2030-31	2,425.21	-	133.61	593.51	279.25	127.94	3,559.52
2031-32	2,623.05	-	133.61	575.99	296.65	137.83	3,767.14
2032-33	2,837.02	-	133.61	474.14	304.94	148.53	3,898.25
2033-34	3,068.45	-	133.61	415.05	323.51	160.10	4,100.73
2034-35	3,318.76	-	133.61	449.86	333.01	172.62	4,407.86
2035-36	3,589.49	-	133.61	549.84	352.83	186.16	4,811.93
2036-37	3,882.30	-	133.61	536.39	363.65	200.80	5,116.76
2037-38	4,199.00	-	133.61	600.23	384.86	216.63	5,534.33
2038-39	4,541.54	-	133.61	624.11	397.12	233.76	5,930.13
Total	38,072.02	3,052.83	1959.79	7,063.30	4,490.64	2,181.28	56,819.86

# 8.3.6.1.1. **SUG Cost:**

8.3.6.1.1.1. **SUG Quantity:** The entity in its tariff filing has considered SUG Quantity at 1.34% of volume divisor for FY 24-25. This is in line with SUG quantity as % of actual metered quantity for FY 23-24 as deliberated at para 8.3.1.2.1.

For FY 25-26 onwards, entity has considered SUG quantity at 2% of volume divisor (i.e., 75% of capacity which come to 63.75 MMSCMD). Accordingly, the year wise SUG quantity and SUG as % actual volume submitted by entity is as per below table:

	Volume Divisor	SUG Quantity Claimed	%
<b>24-25</b> 63.75		0.851	1.34%
<b>25-26 onwards</b> 63.75		1.275	2.00%

8.3.6.1.1.2. **Price:** The gas price considered by the entity for arriving at the SUG cost is as per below table:

Particulars	H1	<b>H2</b>	Avg	Tax Rate	Avg with tax
Gas Price FY 2024-25	\$9.87	\$10.16	\$10.02	5%	\$10.52
Gas price from FY 2025-26 onwards	\$10.16	\$10.16	\$10.16	5%	\$10.67

The entity has also claimed an escalation of 4.5% per year on the SUG gas cost along with and escalation of 3.5% on the exchange rate. Further, from FY 25-26 onwards, the entity has also considered Rs.81.00/MMBTU for calculation of tariff not recovered on SUG.

# 8.3.6.1.2. Electrification of Gas Based Compressors

- 8.3.6.1.2.1. In response to PNGRB query dated 28.05.2025 on conversion plan, impact analysis and other queries pertaining to the electrification of gas based compressors, PIL vide email dated 06.06.2025 has submitted the roadmap for electrification efforts at PIL.
- 8.3.6.1.2.2. Based on further discussions and deliberation, PIL had submitted revised roadmap / presentation for electrification during meeting held on 01.08.2025 which is placed at . The summary of the revised roadmap is as follows:
  - A total of 110 MW of compression capacity is planned for electrification by 2030-31, covering:
    - o 2 units of GE-10/2 (10 MW each)
    - o 3 units of PGT25+ (30 MW each)
  - The estimated capital expenditure for this conversion is approximately ₹1,600 Crore, translating to about ₹14.5 Crore per MW.
  - The electrification process will require custom-engineered, high-capacity electrical equipment and advanced control systems, with an estimated lead time for delivery of equipment's in tune of 24–30 months, however best efforts will be put to optimise the same.
  - Electricity procurement for these units will be conducted through a competitive bidding process to ensure cost efficiency. For financial modelling, landed electricity cost has been assumed as:
    - ₹7.5/unit from 2030–31 to 2033–34
    - $\circ$  ₹6.5/unit from 2034–35 onwards
  - The PNGRB-constituted committee will be consulted during the initial phase of feasibility studies.
  - Based on capital cost, operational cash flows, and electricity expenses, the estimated incremental tariff impact is as follows (*with effect from 25-26*):
    - o ₹2.10/MMBtu, if all 5 units (110 MW) are converted by 2030–31
    - o ₹1.50/MMBtu, if 3 units (50 MW)—comprising 2 x 10 MW and 1 x 30 MW—are electrified by 2030–31, and the remaining 2 x 30 MW units are electrified by 2033–34.

# 8.3.6.1.3. **PNGRB Conclusion:**

# 8.3.6.1.3.1. Electrification of Gas Based Compressor:

Entity has given its roadmap for electrification as deliberated above.

PNGRB has formed a committee to analyse the electrification efforts of PIL's EWPL. The committee is inter alia comprising of PNGRB's officials along with the members from pipeline entity and compressor OEMs. The objective of the committee are as follows-

(i) To take overview of the Natural Gas compression facilities of gas pipelines and develop a road map to accelerate de-carbonization efforts.

- (ii) Assess the extent of work involved in conversion from gas turbine driven compressors to electrical driven compressors. work of electrification involved including VFD, Electric Motors, automation etc.
- (iii) Assess the broad time frame required for the project, including planning, execution, electrical Infra upgradation for captive to grid shift and final transition to grid model
- (iv) An estimate of the capex and opex involved and cost benefit analysis on Electrification of Gas Turbine Compressors.

Electrification involves substantial capital investment towards electric drive systems, associated electrical infrastructure, and grid connectivity, the viability of which depends on site-specific conditions, power availability, and regulatory clearances. At this stage, the proposal remains at an exploratory stage, and its implementation timeline and cost implications are yet to be firmed up. Inclusion of such contingent expenditure in the tariff would not meet the prudence criteria prescribed under the regulatory framework. Accordingly, the cost of compressor electrification has not been factored into the current tariff proposal and shall be considered separately at an appropriate stage upon completion of feasibility studies and receipt of requisite approvals.

Further, in case PNGRB allows to consider electrification at this preliminary stage, then estimated future capex pertaining to electrification may also have to be allowed without any supporting documents such as entity's Board Approvals, Purchase Orders, etc. This may lead to situation where the pipeline entities may also request for allowing future estimated capex pertaining to other areas such as replacement, LMC, spur line, etc.

Therefore, currently the proposal for electrification of the compressor has not been considered in the present tariff review, as the same is subject to detailed techno-commercial feasibility assessment and receipt of necessary management/statutory approvals.

However, the entity will be required to provide regular updates on electrification to PNGRB. Further, entity will also submit to PNGRB the feasibility reports, internal assessments regarding electrification of compressors.

8.3.6.1.3.2. **Gas Quantity:** As per submission by the entity, the future expected volumes are going to increase to 45-50 MMSCMD in near future and to normative level of 63.75 MMSCMD by FY 2030-31.

The year wise expected volume flow submitted by the entity is as follows:

	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
							onwards
Actual Volume	35.49	37.00	42.00	45.00	50.00	55.00	63.75
Flow in							
MMSCMD							

As per past previous Tariff Order and also data submitted by PIL, the actual volume flow and SUG consumption for years FY 09-10 to FY 12-13 is as under:

in MMSCMD

	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13
Actual Volume Flow	41.59	60.10	52.51	35.37
Actual Metered Qty.*	39.67	56.31	49.52	33.41
Actual SUG Qty.	0.45	0.80	0.61	0.40
SUG as % of Metered	1.24%	1.55%	1.36%	1.32%
SUG as % of Volume Flow	1.07%	1.34%	1.17%	1.14%

<sup>\*</sup>converted at 365 days

In the past tariff order dated 12.03.2019, para 6.4.3.3.1 "The SUG consumption for FY 18-19 and FY 19-20 has been considered based on actual consumption period April 18 – Nov-18 i.e. 0.23 MMSCMD (2067452 MMBTU) at the APM price applicable for the period from 01.04.2018 to 31.03.2019 and from 01.10.2018 to 31.03.2019 respectively, as declared by PPAC and inflation @4.5% thereon, for FY 2019-20."

It may be noted that even though the actual data considered during the tariff determination was till 2017-18, for the purpose of SUG the latest trend was taken into consideration so as to keep the future estimates as close to realistic future as possible.

Further, as per para 6.4.3.3.2 of the previous tariff order dated 12.03.2019, "SUG Consumption from FY 20-21 till FY till FY 33-34 has been considered as 0.57 MMSCMD, (which is in proportion to actual SUG consumption in FY 11-12 i.e. 0.60 MMSCMD viz a viz actual volume flow and likely volume flow provided by EWPL) as against EWPL claim of SUG @ 1.20 MMSCMD."

Accordingly, as per past practice followed by PNGRB, for the purpose of future SUG the latest trend may be taken into consideration so as to keep the future estimates as close to realistic future as possible. As per entity submission (para 8.3.1.2.3 above), using the past trend of volume flow to assess the future SUG requirement may not be appropriate in varying flow profile and pressure requirements. As a matter of fact, in the initial years the volume profile in PIL pipeline was different, wherein more than 20% volume was transported in Andhra Pradesh through Oduru interconnection point with GAIL network, through the spur line immediately at downstream of CS#01, which was not required to flow through other compressor stations. However, currently the Oduru interconnection point is used as Entry point for PIL pipeline and gas is delivered into the PIL pipeline for transporting and delivery and transported towards the western end of the pipeline. Presently, most of the volume is physically delivered at interconnection points of GAIL and GSPL networks in zone 4 and zone 5 of the pipeline with high pressure requirements. Additionally, the entity vide email dated 29.10.2025 has informed that the SUG consumption at compressor stations corresponding to actual throughput during the first half of FY 25-26 was between 1.2% and 1.7%.

Accordingly, as per latest SUG consumption pattern as submitted by entity, the SUG quantity is in the range of 1.2% to 1.7% of the actual throughput. Therefore, it may be prudent to consider the future SUG quantity at 1.5% (approx. avg. for H1 FY 25-26) instead of 1.34% (as per FY 23-24). Therefore, total SUG quantity of 1.5% of actual volume has been considered against the entity submission of 2% from FY 25-26 onwards. For FY 24-25, SUG Quantity at 1.34% of actual volume has been considered. The same shall be trued up based on the actual in the next tariff review. Accordingly, the year wise SUG quantity considered for future SUG is as under:

In MMSCMD

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
							onwards
Actual Volume	35.49	37.00	42.00	45.00	50.00	55.00	63.75
Flow							
SUG %	1.34%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
SUQ Quantity	0.476	0.555	0.630	0.675	0.750	0.825	0.956

8.3.6.1.3.3. **Gas Price:** The gas price considered by entity is in line with the ceiling price declared by PPAC for FY 23-24 and H1 FY24-25.

Further, the Board deliberated that the market's perception of R-LNG pricing has changed as a result of new developments at liquefaction terminals in the United States. In view of the same, the estimated gas price for future has been re-considered by the Board. In view of the above, the following gas price has been considered in the current tariff determination:

Period	Delivered Gas price (in USD/MMBtu)
FY 24-25 to FY 26-27	11.00
FY 27-28 to FY 29-30	10.50
FY 30-31 to FY 32-33	10.00
FY 33-34 & onwards	9.00

Further, Rupee depreciation against the US\$ @1% has been considered. However, the same shall be considered and trued-up in the next tariff review.

Further the US\$ exchange rate for FY 2024-25 is being considered based on the average RBI reference rate, i.e., Rs.84.57/US\$ and the US\$ exchange rate for FY 2025-26 is being considered based on the average of RBI reference rate for the period H1 FY 25-26, i.e., 01.04.2025 to 30.09.2025, i.e., Rs.86.44/US\$. The 1% escalation in exchange rate has been considered each year from FY 2026-27 onwards. However, the same shall be trued up in future based on the actuals and extant regulatory framework. The escalation of 4.5% claimed by the entity on gas price for SUG cost has not been considered.

8.3.6.1.3.4. Accordingly, the details of the SUG considered for future is as per below table:

Year	Qty	Gas rate	Exchange	Basic Gas cost	Fuel Cost	Additional
	(MMSCMD)	(US\$/	rate	(INR/MMBTU)	(Rs. in Crore)	Fuel (Rs.
		MMBTU)	(INR/US\$)			in Crore)
24-25	0.476	11.00	84.57	930.27	596.90	471.40
25-26	0.555	11.00	86.44	950.84	712.00	514.76
26-27	0.630	11.00	87.30	960.30	816.26	422.71
27-28	0.675	10.50	88.17	925.79	843.13	351.31
28-29	0.750	10.50	89.05	935.03	946.16	260.20
29-30	0.825	10.50	89.94	944.37	1,051.18	167.23
30-31	0.956	10.00	90.84	908.40	1,172.01	-
31-32	0.956	10.00	91.75	917.50	1,183.75	-
32-33	0.956	10.00	92.67	926.70	1,195.62	-
33-34	0.956	9.00	93.60	842.40	1,086.86	-
34-35	0.956	9.00	94.54	850.86	1,097.77	-
35-36	0.956	9.00	95.49	859.41	1,108.80	-
36-37	0.956	9.00	96.44	867.96	1,119.83	-
37-38	0.956	9.00	97.40	876.60	1,130.98	-
38-39	0.956	9.00	98.37	885.33	1,142.24	-
Total					15,203.51	2,187.60

Based on the estimated actual volumes submitted by the entity as deliberated at subsequent para no. 8.4.4, the breakup of SUG cost considered for future is as per below table.

Rs. in Crore

	Claimed			Cons	idered by PNGR	В
FY	<b>Fuel Cost</b>	Additional Fuel Cost	Tpt on Fuel	<b>Fuel Cost</b>	Additional Fuel Cost	Tpt on Fuel
24-25	554.99	441.93	89.20	596.90	471.40	-
25-26	951.02	687.56	133.61	712.00	514.76	-
26-27	1,167.59	604.65	133.61	816.26	422.71	-
27-28	1,353.04	563.77	133.61	843.13	351.31	-
28-29	1,626.02	447.16	133.61	946.16	260.20	-
29-30	1,934.53	307.77	133.61	1,051.18	167.23	-
30-31	2,425.21	-	133.61	1,172.01	-	-
31-32	2,623.05	-	133.61	1,183.75	-	-
32-33	2,837.02	-	133.61	1,195.62	-	-
33-34	3,068.45	-	133.61	1,086.86	-	-
34-35	3,318.76	-	133.61	1,097.77	-	-
35-36	3,589.49	-	133.61	1,108.80	-	-
36-37	3,882.30	-	133.61	1,119.83	-	-
37-38	4,199.00	-	133.61	1,130.98	-	-
38-39	4,541.54	-	133.61	1,142.24	-	-
Total	38,072.02	3,052.83	1959.79	15,203.51	2,187.60	-

8.3.6.1.4. **O&M Cost and Non-O&M Cost (Opex):** The entity has provided year wise O&M and Non O&M costs from FY 2024-25 till the end of economic life based on its own estimates.

The regulation provides for the substitution of the projections made over economic life of the pipeline with the actual Capex/Opex on a prospective basis at the time of periodic tariff review. By substituting the provisional figures with the actuals, the entity is not put to any advantage/disadvantage over the economic life of the project. In effect, even if the adjustments are on a prospective basis considering the economic life of the project, the entity is still getting the benefit of prospective adjustments of the variations on account of the actual performance with respect to the Opex compared to the normative parameters identified under the Tariff Regulations. However, if considered estimates are very off from the actuals of the future, then there is a risk of major tariff fluctuations.

In view of the above and to maintain consistency and uniformity, PNGRB has been following a uniform basis for estimating the future Opex annual inflation at 4.50%. Therefore, actual O&M Cost and Non-O&M Cost considered for during FY 2023-24 has been escalated @4.5% p.a. However, the same shall be dealt in the future tariff reviews based on the extant regulatory framework. Accordingly, the cost claimed by the entity and considered by PNGRB is as under:

Rs. in Crore

	O & M Cost			Non-O&M Cost		
FY	Claimed	Considered	Difference	Claimed	Considered	Difference
	by Entity	by PNGRB	Difference	by Entity	by PNGRB	Difference
2024-25	311.49	346.00	34.50	214.43	151.12	-63.31
2025-26	303.41	361.57	58.16	228.92	157.92	-71.00
2026-27	365.71	377.84	12.13	234.16	165.02	-69.14
2027-28	371.21	394.84	23.64	249.54	172.45	-77.09
2028-29	422.54	412.61	-9.93	255.71	180.21	-75.50
2029-30	469.83	431.18	-38.65	272.06	188.32	-83.74
2030-31	593.51	450.58	-142.93	279.25	196.79	-82.45
2031-32	575.99	470.86	-105.13	296.65	205.65	-91.00
2032-33	474.14	492.05	17.90	304.94	214.90	-90.04
2033-34	415.05	514.19	99.14	323.51	224.57	-98.93
2034-35	449.86	537.33	87.47	333.01	234.68	-98.33
2035-36	549.84	561.51	11.66	352.83	245.24	-107.59
2036-37	536.39	586.77	50.38	363.65	256.28	-107.37
2037-38	600.23	613.18	12.95	384.86	267.81	-117.05
2038-39	624.11	640.77	16.67	397.12	279.86	-117.25
Total	7063.30	7191.27	127.97	4490.64	3140.83	-1349.81

#### 8.3.6.1.5. Transmission Loss (TL):

PNGRB has sought likely future volumes from the entity for calculating transmission loss quantity and its value in terms of regulations. The entity has informed that keeping in view the additional volume from ONGC Mallavaram and LNG terminals, a volume flow of approx. 45 - 50 MMSCMD is expected in the near future. Entity has further mentioned that they are confident that over next 4-5 years, the volumes transported through the pipeline

would be near normative levels. Accordingly, for the period beyond 5 years, the pipeline volume may be considered at normative levels i.e. 63.75 MMSCMD

Accordingly, PNGRB has considered transmission loss @ 0.1% estimated actual volume flow. The GST paid on transportation of gas is available as credit while providing output services, therefore, it would not be prudent to consider GST on transportation of gas as cost.

As per the existing practice for future estimates, PNGRB has considered the ceiling gas price for HP HT available till 30.09.2025, i.e., for FY 24-25 till H1 FY 25-26 for transmission loss. Further, for the HP HT gas price from FY 2025-26 onwards, the avg. HP HT declared price of H1 & H2 FY25-26 i.e., \$9.88/MMBTU has been considered. Further for future, the current HP-HT gas price (effective from Oct 2025) of \$9.7/MMBTU has been considered for transmission loss. VAT @5% has been considered from 01.04.2024 onwards and is added to the above gas price till the end of economic life (in view of notification no. GO MS/49/2024/REV01-Revenue dated 23.02.2024 issued by government of Andhra Pradesh)). The same will be trued up based on actual data and extant regulatory provision in future tariff reviews. No escalation is considered on gas price. The details are as under:

Period	Gas price (\$) excl. Taxes	Exchange rate (Rs/\$)
FY 24-25	10.015	84.57
FY 25-26	9.88	86.44 (H1 FY25-26 Avg.)
FY 2026-27 onwards	9.72	1% escalation p.a.

Accordingly, the transmission loss claimed by the entity and considered by PNGRB is as under:

Rs. in Crore

Year	Claimed by Entity	Considered by PNGRB
24-25	81.35	42.58
25-26	88.61	44.77
26-27	95.29	50.49
27-28	102.52	54.64
28-29	110.34	61.31
29-30	118.80	68.12
30-31	127.94	79.74
31-32	137.83	80.54
32-33	148.53	81.35
33-34	160.10	82.17
34-35	172.62	82.99
35-36	186.16	83.83
36-37	200.80	84.66
37-38	216.63	85.50

Year	Claimed by Entity	Considered by PNGRB
38-39	233.76	86.35
Total	2181.28	1069.04

#### **8.4.** Volume Divisor:

**8.4.1.Submission:** Year-wise normative volume considered by entity in its tariff submission for EWNGPL are as follows:

In MMSCMD

FY	Volume Divisor	Actual	Volume Adjustment as per
FI	Considered	Volume Flow	Schedule A Clause 9 Sub Clause 10
2009-10	38.25	41.59	-3.34
2010-11	44.63	60.10	-15.47
2011-12	51.00	52.51	-1.51
2012-13	57.38	35.37	22.01
2013-14	63.75	21.26	42.49
2014-15	63.75	21.50	-
2015-16	63.75	20.13	-
2016-17	63.75	17.73	-
2017-18	63.75	17.86	-
2018-19	63.75	19.07	-
2019-20	63.75	18.84	-
2020-21	63.75	12.39	-
2021-22	63.75	22.63	-
2022-23	63.75	25.26	-
2023-24	63.75	34.94	

For future years, the entity vide email dated 13.06.2025, has submitted that they are confident that over next 4-5 years, the volumes transported through the pipeline would be near normative levels. Accordingly, for the period beyond 5 years, the pipeline volume may be considered at normative levels i.e. 63.75 MMSCMD.

# 8.4.2. Regulatory Provision pertaining to Capacity of the Natural Gas Pipeline:

- 8.4.2.1. Sub-regulation 1(d) of Regulation 2 of Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Regulations, 2008, as amended on 18.11.2022 provides as under:
  - (a) "capacity of natural gas pipeline" for the purpose of determining natural gas pipeline tariff under Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Regulations, 2008 shall be the authorized capacity as defined in the Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Regulations, 2008.

Provided that wherever there is any change between the authorised capacity and the capacity as already considered in the latest tariff order issued by the Board prior to the notification of this amended regulation, then such capacity as already considered in the

latest tariff order shall be considered as capacity of natural gas pipeline for the purpose of determining tariff.

Provided further that entity shall submit the revised capacity of the natural gas pipeline, if any as may be necessary, in terms of clause (g) of sub regulation (5) of regulation 5 of Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum, Petroleum Products and Natural Gas Pipeline) Regulations, 2010. Such revised capacity or as modified in terms of clause (g) of sub regulation (5) of regulation 5 of Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum, Petroleum Products and Natural Gas Pipeline) Regulations, 2010, shall be considered for the tariff determination after its approval by the Board.

8.4.2.2. Regulation 2 (1) (ba) of Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Regulations, 2008 provides as under.

"authorized capacity" means the initial design capacity of the natural gas pipeline as provided in the Letter for grant of authorization or letter of acceptance for Central Government authorization;

Provided that the Board may issue amendment in the Letter for grant of authorization or letter of acceptance for Central Government authorization in case there is any revised capacity approved by the Board in terms of clause (g) of sub regulation (5) of regulation 5 of Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum, Petroleum Products and Natural Gas Pipeline) Regulations, 2010, and such revised capacity approved by the Board shall be considered as the amended authorized capacity of the pipeline."

8.4.2.3. Clause (g) of sub regulation (5) of regulation 5 of Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum, Petroleum Products and Natural Gas Pipeline) Regulations, 2010, as amended on 18.11.2022 states that:

"Wherever there is any change in the capacity of natural gas pipeline in the past or in future due to reason(s) as approved by the PNGRB's Board, in such cases entity shall submit the revised capacity of the natural gas pipeline, separately due to each such reasons, to PNGRB in terms of these regulations for capacity determination and approval of the Board."

# 8.4.2.4. Clause 6(1) of Schedule A of NGPL Tariff Regulations before 08.01.2016:

The volumes of natural gas to be considered as divisor in the determination of the unit natural gas pipeline tariff over the economic life of the project shall be computed on a normative basis as indicated below:-

(a) the divisor for each of the first five years of operations of the natural gas pipeline shall be arrived by multiplying the applicable percentage utilization for the year, as per the basis indicated below, with the sum of the capacity requirement of the entity and the firmed-up

contracted capacity with other entities as specified under the Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Regulations, 2008:-

Year of Natural Gas Pipeline Operation	Percentage Utilization
First	60%
Second	70%
Third	80%
Fourth	90%
Fifth	100%

- (b) the divisor for the sixth and the subsequent years of operation of the natural gas pipeline shall be equal to:
  - (i) one hundred percent of the sum of the capacity requirements of the entity and the firmed-up contracted capacity with other entities as specified under the Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Regulations, 2008; and
  - (ii) The actual volume of natural gas transported on common carrier basis against the extra capacity as specified under the Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Regulations, 2008 during the immediately preceding year of operation of the natural gas pipeline.

Explanation:- The adjustment for the difference between the actual volume transported on common carrier basis in any year and that included in the divisor under subitem (ii) to item (b) of sub-clause (1) shall be carried out on a prospective basis in the DCF calculations for unit natural gas pipeline tariff.

# 8.4.2.5. Clause 6(1) of Schedule A of NGPL Tariff Regulations w.e.f. 08.01.2016:

The volumes of natural gas to be considered as divisor in the determination of the unit natural gas pipeline tariff over the economic life of the project shall be computed on a normative or actual basis, whichever is higher. Volume on normative basis shall be calculated as indicated below:-

(a) The divisor for each of the first five years of operations of the natural gas pipeline shall be arrived by multiplying the applicable percentage utilization for the year, as per the basis indicated below, with seventy five per cent of the capacity of natural gas pipeline as declared under the Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum, Petroleum Products and Natural Gas Pipeline) Regulations, 2010:-

Year of Natural Gas Pipeline Operation	Percentage Utilization
First	60%
Second	70%
Third	80%
Fourth	90%

Fifth	100%

- (b) The divisor for the sixth and the subsequent years of operation of the natural gas pipeline shall be equal to the firmed up contract capacity and booked common carrier capacity or seventy five per cent. of the capacity of natural gas pipeline as declared under the Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum, Petroleum Products and Natural Gas Pipeline) Regulations, 2010, whichever is higher.
- (c) In case, capacity has not been declared as per capacity determination regulations, capacity as mentioned in the authorization or acceptance letter issued by the Board shall be used for tariff determination and subsequently when the capacity as per Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum, Petroleum Products and Natural Gas Pipeline) Regulations, 2010 is available, this capacity shall be replaced with the capacity declared as per capacity determination regulations at the time of next tariff review.
- (d) In case of addition of any new source to a natural gas pipeline that comes during 01.04.2015 to 31.03.2020, any increase in the design capacity of the pipeline because of this new source shall not be considered in the tariff determination for a period from 01.04.2015 to 31.03.2020.

# 8.4.2.6. Clause 6(1) of Schedule A of NGPL Tariff Regulations w.e.f. 23.11.2020:

The volumes of natural gas to be considered as divisor in the determination of the unit natural gas pipeline tariff over the economic life of the project shall be computed on a normative or actual basis, whichever is higher. Volume on normative basis shall be calculated as indicated below:-

(a) The divisor for each of the first five years of operations of the natural gas pipeline shall be arrived by multiplying the applicable percentage utilization for the year, as per the basis indicated below, with seventy five per cent of the capacity of natural gas pipeline as declared under the Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum, Petroleum Products and Natural Gas Pipeline) Regulations, 2010:-

Year of Natural Gas Pipeline Operation	Percentage Utilization
First	60%
Second	70%
Third	80%
Fourth	90%
Fifth	100%

(b) The divisor for the sixth and the subsequent years of operation of the natural gas pipeline shall be equal to the firmed-up contract capacity and booked common carrier capacity or seventy five per cent. of the capacity of natural gas pipeline as declared under

the Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum, Petroleum Products and Natural Gas Pipeline) Regulations, 2010, whichever is higher.

- (c)In case, capacity has not been declared as per capacity determination regulations, capacity as mentioned in the authorization or acceptance letter issued by the Board shall be used for tariff determination and subsequently when the capacity as per Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum, Petroleum Products and Natural Gas Pipeline) Regulations, 2010 is available, this capacity shall be replaced with the capacity declared as per capacity determination regulations at the time of next tariff review.
- (d) In case of addition of any new source to a natural gas pipeline that comes during 01.04.2015 to 31.03.2020, any increase in the design capacity of the pipeline because of this new source shall not be considered in the tariff determination for a period from 01.04.2015 to 31.03.2020.
- (e) notwithstanding anything contained in any other regulation including regulation 12 and regulation 21 of Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Regulations, 2008, in case it is proposed to expand the capacity of the natural gas pipeline by more than ten percent of that authorized by the Board, the entity shall submit a proposal for consideration of the Board and the Board may allow for expansion of the capacity in the natural gas pipeline, but the tariff of the pipeline so determined based on the capex, opex and volumes of expanded natural gas pipeline shall be capped at the levels of the applicable tariff based on the capex, opex and volumes of the pipeline before expansion.

It is clarified that any interconnection between two natural gas pipelines shall not be considered as extension or expansion or tie in connectivity.

# 8.4.2.7. Clause 6(1) of Schedule A of NGPL Tariff Regulations w.e.f. 18.11.2022:

- (1) The volumes of natural gas to be considered as divisor in the determination of the unit natural gas pipeline tariff over the economic life of the project shall be computed on a normative or actual basis, whichever is higher. Provided that in case of future years, PNGRB shall consider the volumes taking into account various factors including normative volumes and likely future volumes as provided by the entity, if higher than the normative volumes. Volume on normative basis shall be calculated as indicated below:-
- (a) The divisor for each of phase of natural gas pipeline for the first ten years of its operations or any subsequent expansion in the capacity (other than expansion to which clause 6(1)(c) is applicable) shall be arrived by multiplying the applicable percentage utilization for the year, as per the basis indicated below, with seventy five per cent of the capacity of each phase of natural gas pipeline or of natural gas pipeline or each expansion of capacity, as the case may be:

Year of Natural Gas Pipeline Operation	Percentage Utilization
First	30%
Second	35%
Third	40%
Fourth	45%
Fifth	50%
Sixth	60%
Seventh	70%
Eighth	80%
Ninth	90%
Tenth and onwards	100%

- (b) The divisor for the eleventh and the subsequent years of operation of each phase of natural gas pipeline or of natural gas pipeline or each expansion of capacity, as the case may be (other than expansion to which clause 6 (1) (c) is applicable) shall be equal to the seventy-five per cent of the capacity of natural gas pipeline or actual volumes (including ship or pay volumes)], whichever is higher.
- (c) Notwithstanding anything contained in any other regulations, in case of addition of any new natural gas source to a natural gas pipeline which comes anytime from 01.04.2020 and onwards, any increase in the capacity of the pipeline, if any, because of such addition of such new source shall not be considered in the tariff determination for a period of five years from the date of commissioning of the pipeline connectivity due to the relevant source.
- (d) It is clarified that any new injection point on a common carrier or contract carrier natural gas pipeline due to interconnection from another common carrier or contract carrier natural gas pipeline shall not be considered as capacity expansion for determination of tariff. Provided that the entity has taken approval wherever required in terms of Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Regulations, 2008 along with the increase in capacity due to such interconnection as per Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum, Petroleum Products and Natural Gas Pipeline) Regulations, 2010.

#### **8.4.3.** Entity Comments:

- 8.4.3.1. **GAIL Comments:** With the exception of one or two pipelines in the country, the average actual pipeline utilization for most of the pipelines remain below 50% leading to lower than the stipulated returns. Consideration of lowering the normative levels below 75% of pipeline capacity, besides minimizing the gap between normative and actual, would provide greater financial assurance to transporters and for sustainable operations.
  - **PIL Comments:** This was also deliberated at the time of tariff amendments. PNGRB may take view.

# 8.4.3.2. GSPL: Clause 6(1)(c) of Schedule A of the PNGRB Tariff Regulations is produced as below:

(c)In case, capacity has not been declared as per capacity determination regulations, capacity as mentioned in the authorization or acceptance letter issued by the Board shall be used for tariff determination and subsequently when the capacity as per Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum, Petroleum Products and Natural Gas Pipeline) Regulations, 2010 is available, this capacity shall be replaced with the capacity declared as per capacity determination regulations at the time of next tariff review.

This provision was replaced in November 2022 amendment with the provision mentioned at para 8.4.2 above. GSPL has requested PNGRB to restore the original Clause 6.1.c to facilitate tariff determination without capacity determination.

**PIL's Response:** As per PIL understanding, clause 6 of the tariff determination regulations, which pertains to the volume divisor is based on the capacity of natural gas pipeline, which as per the definition is further linked to the authorized capacity as defined in the Authorisation regulations.

Authorized capacity is defined in the Authorization regulations as follows:

1(ba) "authorized capacity" means the initial design capacity of the natural gas pipeline as provided in the Letter for grant of authorization or letter of acceptance for Central Government authorization.";

Provided that the Board may issue amendment in the Letter for grant of authorization or letter of acceptance for Central Government authorization in case there is any revised capacity approved by the Board in terms of clause (g) of sub regulation (5) of regulation 5 of Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum, Petroleum Products and Natural Gas Pipeline) Regulations, 2010, and such revised capacity approved by the Board shall be considered as the amended authorized capacity of the pipeline.

As per PIL understanding, capacity as mentioned in the authorization letter, as amended from time to time, is the capacity based on which the volume divisor as per clause 6 of the Tariff regulations can be determined.

8.4.3.3. **Think Gas Comments:** It is understood that the ongoing litigation on EWNGPL's capacity before the Hon'ble Supreme Court, we request PNGRB to maintain status quo on tariff (Rs. 71.66/MMBTU) until final capacity determination. Further, it is submitted that PNGRB shall ensure that any revision post-judgment is applied on a prospective basis only.

**PIL Comment:** Since the matter is sub judice PIL would not like to comment. Required explanation already provided in the PCD.

#### 8.4.4. Query and Response

**Query:** Entity to provide likely future volumes

**Response:** Keeping in view the additional volume from ONGC Mallavaram and LNG terminals, a volume flow of approx. 45 - 50 MMSCMD is expected, in the near future. Later, entity vide email dated 13.06.2025 submitted the following:

Currently, PIL Pipeline is transporting ~36 MMSCMD. Going forward over next couple of years, with ramp of volume from domestic fields at east coast, and increase of CGD segment volumes, the transportation volume through pipeline is projected to be 45-50 MMSCMD.

Over the next 3-5 years, the transportation volume in PIL pipeline expected to further increase in view of:

- a. additional connectivity with RLNG sources at east coast through upcoming pipelines from Ennore and Dhamra terminals
- b. augmentation of connectivity with new RLNG terminals at west coast
- c. ramp up of gas demand from directly connected CGDs and industrial customers along the pipeline and
- d. overall increase in gas volume through the National Gas Grid System (NGGS) as well as seamless gas flow across constituent pipelines of NGGS to enable gas reaching to new and unconnected areas.

Considering above, PIL is confident that over next 4-5 years, the volumes transported through the pipeline would be near normative levels. Accordingly, for the period beyond 5 years, the pipeline volume may be considered at normative levels i.e. 63.75 MMSCMD.

Further, entity has provided the following year wise projected volume flow

In MMSCMD

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
							onwards
Estimated Volume	35.49	37.00	42.00	45.00	50.00	55.00	63.75
Flow							

**8.4.5. PNGRB's Conclusion**: Entity has considered the capacity for all the years as 85 MMSCMD. It is pertinent to mention that as mentioned in para 5, PNGRB being aggrieved by the judgement of Hon'ble APTEL in the matter related to the determination of capacity of PIL's EWNGPL, filed an appeal before Hon'ble Supreme Court of India and same is *sub-judice*.

However, the impact on capacity due to PNGRB's capacity determination in the past, due to connectivities, etc may be factored in based on the final outcome of the Hon'ble Supreme Court. As the matter is sub-judice, the tariff of the EWPL has been trued up due to other factors, i.e., excluding Capacity issue and considering 85 MMSCMD. Based on the outcome of the Hon'ble Supreme Court decision, the capacity will be trued up in the subsequent tariff reviews.

Accordingly, the volume divisor considered in the tariff determinations as per below table: (in MMSCMD)

Year	Normative Volume	Estimated Actual	Volume
	(@ 75% of 85 MMSCMD)	Volumes	Divisor
24-25	63.75	35.49	63.75
25-26	63.75	37.00	63.75
26-27	63.75	42.00	63.75
27-28	63.75	45.00	63.75
28-29	63.75	50.00	63.75
29-30	63.75	55.00	63.75
30-31 onwards	63.75	63.75	63.75

- **8.5. Working Capital:** Entity in its tariff submission, has considered average working capital of Rs.505.95 Crore during the entire economic life. Working capital is calculated as sum of 30 days of Opex (excluding depreciation) and 18 days of revenue (tariff receivables). Entity, while calculating the 30 days of opex and 18 days of revenue, has considered 350 number of working days as divisor.
- **8.5.1. Regulatory Provision:** In terms of sub-clause 2 of clause 4 of Schedule A of Tariff Regulations, normative working capital is equal to thirty days of operating costs excluding depreciation and eighteen days natural gas pipeline tariff receivables.
- **8.5.2. PNGRB Conclusion:** In terms of the extant regulations, PNGRB has considered working capital based on 30 days of opex and 18 days of revenue. It is also observed that for calculation 30 days of opex, entity has considered number of working days (355/353.23/350) as divisor instead of number of days (365). PNGRB has considered 365 days in the year for determining part working capital based on 30 days Opex. Accordingly, after the adjustments done as per earlier para, average working capital considered in tariff determination is Rs.372.67 Crore (Rs.493.55 Crore closing working capital).
- **8.6. Line Pack:** Entity in is tariff filing has considered initial line pack cost of Rs. 92.49 Crore during FY 2009-10. In this regard entity submitted that, during the final tariff determination the opening value of Line Pack amounting to Rs.92.49 Crore was inadvertently missed during the last tariff filing and accordingly in the tariff order. However, the line pack of Rs.78.14 Crore has been considered as inflow at end of economic life of the pipeline in FY 38-39.
- **8.6.1. PNGRB's Conclusion:** Based on the review of previous tariff order, it was observed that opening value of Line Pack amounting to Rs.92.49 Crore was not considered. Further, the line pack of the line pack of Rs.78.14 Crore has been considered as inflow at end of economic life of the pipeline in FY 38-39. The actual line pack cost of Rs.92.79 Crore and the line pack decapitalization in FY 12-13 and FY 13-14 of Rs.4.20 Crore and Rs.10.15 Crore respectively has been considered along with the Rs.78.14 Crore line pack value as an inflow.

**8.7. Terminal Value:** Entity in its tariff submission has considered a terminal value of Rs.1,897.21 Crore which consist of Rs.893.65 Crore on account of residual value of NFA, Rs.78.14 Crore on account of line pack and Rs.925.41 Crore on account of Working Capital at the end of economic life. The entity has considered 5% of total capex incurred from FY 2006-07 to FY 2037-38 as residual value.

Subsequently, PNGRB vide email dated 04.08.2025 submitted that PIL is following depreciation policy wherein zero salvage value is considered for pipelines and lease hold lands. Accordingly, the expected salvage value for the other assets at the end of economic life i.e. FY 2038-39 comes to Rs. 197.21 Cr as detailed below:

GL Name	Salvage Value (INR)
Buildings	48,53,932
Electrical Installations	46,58,676
Freehold Land	-
Furniture & Fixtures	1,03,554
Leasehold Land	-
Office Equipments	2,22,26,989
Plant & Machinery	1,94,03,20,999
Software	-
Total	1,97,21,64,150.00

As per the notes regarding accounting policy in the Annual Report for FY 23-24 for the company, "Depreciation on Property, plant and equipment is provided on straight line method over the useful life as per Schedule II to the Companies Act, 2013, except in respect of following assets where useful life is as per technical evaluation:

- -Buildings 4 to 20 years
- -Plant and Machinery 4 to 20 years

Residual value of certain Plant & Machinery has been considered as Nil based on technical valuation. Any additions to above category of assets will be depreciated over balance useful life. Leasehold land is amortised over the period of lease; Line pack gas is not depreciated. In respect of additions or extensions forming an integral part of existing assets, including incremental cost arising on account of translation of foreign currency liabilities for acquisition of property, plant and equipment, depreciation is provided over the residual life of the respective assets. Freehold land is not depreciated."

**8.7.1. Regulatory Provision:** In the terminal year of the economic life, the residual value of the fixed asset, which is the difference between the original cost less the amount of accumulated depreciation shall be treated as a project inflow in the DCF calculations for natural gas pipeline tariff. In addition, working capital and line pack are also considered as cash inflow at the end of economic life of the pipeline.

- **8.7.2. PNGRB's Conclusion:** Based on the Terminal value worked out based on the adjustments made as deliberated in this document is Rs.768.91 Crore (Rs.197.22 Crore on account of residual value of NFA, Rs.78.14 Crore on account of line pack and Rs.493.55 Crore on account of closing Working Capital) and the same has been considered in determination of tariff.
- **8.8. Gross Calorific Value:** Entity in its tariff submission has submitted following Gross Calorific Value PNGRB.

in BTU/SCM

FY	Calorific Value
2009-10	35,825
2010-11	36,316
2011-12	36,639
2012-13	36,771
2013-14	37,092
2014-15	37,493
2015-16	37,608
2016-17	37,825
2017-18	38,821
2018-19	38,786
2019-20	38,026
2020-21	38,036
2021-22	36,255
2022-23	36,230
2023-24	36,701
2024-25 onwards	36,965

For future years entity has considered GCV of 36,965 BTU/SCM which is the weighted average of the actual GCV till FY 23-24 for calculating the tariff.

- **8.8.1. Regulatory Provision**: As per sub-clause 2 in Clause 6 of Schedule A of Tariff Regulations, the volume of natural gas determined as per the regulations shall be converted into its energy equivalence in MMBTU terms for the purpose of determination of final initial unit natural gas pipeline tariff by considering the weighted average heat value of natural gas delivered to customers during the initial unit natural gas pipeline tariff period.
- **8.8.2. PNGRB's Conclusion:** Based on the actual volume flow and the calorific value submitted by the entity during the past period(s), weighted average gross calorific value works out to 36,965 BTU/SCM. Therefore, the same has been considered for determination of the tariff.

- 8.9. Number of Working Days:
- **8.9.1. Submission Made:** Entity in its tariff filing has considered 355 days from 20.11.2008 to 23.11.2020 and 350 days from 24.11.2020 onwards.
- **8.9.2. Regulatory Provision**: Till 22.11.2020, there was no specific provision in NGPL Tariff Regulations for considering the number of working days in a Financial Year for the purpose of Tariff determination. Thus, Clause 14 (3) of Access Code Regulations was being referred which state that the planned maintenance period shall not exceed 10 days in a year. In view of the same, 355 working days in each financial year were being considered for every pipeline. Subsequently on 23.11.2020, PNGRB vide Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Third Amendment Regulations, 2020, in Schedule A after sub clause (2) of clause 6 inserted sub clause (3) which states that 350 working days shall be considered in a year for the purpose of tariff determination under these regulations.
- **8.9.3. PNGRB's Conclusion:** In view of the above and extant regulatory provision(s), 355 days has been considered from FY 2013-14 to FY 2019-20, 353.23 days for FY 2020-21 and thereafter 350 working days have been considered from FY 2021-22 onwards for the purpose of calculating revenue and for the purposes of Opex, 365 days has been considered in a year.
- **8.10. Return on Capital Employed:** The pre-tax return on capital employed and yearly rates of corporate income tax and pre-tax rate of return considered by the entity are as follows:

Year	FY 08-09 & FY 09-10	FY 10-11	FY 11-12 & FY 12-13	&	FY 15-16 to FY 17-18	to	From FY 22-23 onwards
Corporate Income Tax Rate	33.99%	33.22%	32.445%	33.99%	34.608%	34.944%	25.17%
Pre-Tax Rate of return	18.18%	17.97%	17.76%	18.18%	18.35%	18.45%	16.04%

**8.10.1. Regulatory Provision**: 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 the provisions of Income Tax Act, 1961. As per the amendment to explanation to clause 3, the lowest nominal rate of income tax shall be

applied with effect from the financial year of the amendment regulation, i.e., FY 2022-23 onwards.

- **8.10.2. PNGRB Conclusion:** As the submission made by the entity are in sync with the rates of the income tax and the extant regulations, therefore the same has been considered while determining the pipeline tariff.
- **8.11. Zonal Apportionment:** Since the length of the EWNGPL of PIL exceeds 300 km, the apportionment of the levelized tariffs is required to be undertaken post finalization of the levelized tariff.
  - **8.11.1. Regulatory Provision**: Clause 8 of Schedule A of Tariff regulations

Procedure for apportioning of unit natural gas pipeline tariff over the tariff zones.

- (1) The entity shall submit for the Board's approval, the calculations in respect of apportioning of the unit natural gas pipeline tariff over all the tariff zones during the economic life of the project in the form specified in Part II of Attachment 1(i), where X% shall be a single number lower than one hundred per cent and Y% shall be a single number lower than fifty per cent. In case the entity fails to submit the required information within the time determined by the Board for such purpose, the Board may apportion the unit natural gas pipeline tariff over all the tariff zones in the ratio of tariff for various tariff zones during the immediate preceding zonal tariff determination in respect of that pipeline or in any other manner as may be deemed fit by the Board.
- (2) No adjustment shall be made by the entity with the customers for any overachievement or under-achievement in the recovery of the natural gas pipeline tariff by the entity due to the volumes actually transported in different tariff zones being different than the volumes considered by the entity for apportioning the unit natural gas pipeline tariff for each of the tariff for zones during-
- (a) the period of initial unit natural gas pipeline tariff;
- (b) the first five and consecutive years after the end of the initial unit natural gas pipeline tariff; and
- (c) the period between any two consecutive tariff reviews.
- (3) Notwithstanding anything contained in any regulations, for the purpose of apportioning of the natural gas pipeline tariff over tariff zones in case of natural gas pipeline, the Board may, by order, consider to have simpler and reduced number of tariff zones after adopting public consultation process in this regard as per the provisions as specified in regulation 4 of these regulations, in a transparent manner.
- **8.11.2. PNGRB Conclusion:** PIL to submit its zonal tariff based on the approved levelized tariff.

#### 8.12. Tariff Reconciliation

**8.12.1.** Based on the above, the unit natural gas pipeline tariff for PIL's EWPL on a levelized basis is given below:

(Rs. /MMBTU on GCV basis)

Sr.	Particulars	Difference	Tariff
No.			
	<b>Entity Submission</b>		98.34
1	Actual Capex (Refer para 8.2.2)	-0.13	98.21
2	Future Capex (Refer para 8.2.3)	-2.19	96.02
3	Actual Opex (Other than SUG) (Refer para 8.3.1)	-2.18	93.84
4	Future Opex (Other than SUG) (Refer para 8.3.6)	-1.03	92.81
5	Actual SUG (Refer para 8.3.1)	-0.92	91.89
6	Future SUG (Refer para 8.3.6)	-16.54	75.35
7	Transmission Loss (Refer para 8.3.5 & 8.3.6.1.6)	-0.76	74.59
8	Working Capital / Terminal Value / Line Pack/ Working	-0.28	74.31
	Days / Discounting Factor		
9	Tariff Applicability w.e.f. 01.01.2026	0.36	74.67
	Levelized Tariff Determined by PNGRB w.e.f. 01.01.2026		74.67

**8.12.2.** Reconciliation between tariff notified by PNGRB vide tariff order TO/17/2019 dated 12.03.2019 and tariff as determined under this order is as follows:

# (Rs. /MMBTU on GCV basis)

Sr. No.	Particulars	Impact	Tariff
	Tariff as per Previous Tariff Order		71.66
1	Economic Life Extension	(2.41)	69.25
2	Actual Capex	0.23	69.48
3	Future Capex	0.25	69.73
4	Actual Opex (Other than SUG)	0.98	70.71
5	Future Opex (Other than SUG)	2.08	72.79
6	SUG	1.64	74.43
7	Transmission Loss	0.36	74.79
	Working Capital / Terminal Value / Line Pack / Working	(0.12)	74.67
8	Days / Discounting Factor / Tariff Applicability w.e.f.		
	01.01.26		
	Levelized Tariff Determined by PNGRB w.e.f. 01.01.2026		74.67

**8.12.3. Tariff determined:** The levelized tariff of PIL's East West Natural Gas Pipeline determined by this order is **Rs.74.67/MMBTU on GCV basis w.e.f. 01.01.2026**. On issuance of zonal tariff order by the Board, the same shall be applicable from the first day of the month, following the month, in which zonal tariff order is issued by the Board.

# 8.13. Schedule A Clause 9 Sub-Clause 4 of the NGPL Tariff Regulations

"(4) The adjustment on account of variation in the provisional initial unit natural gas pipeline tariff, final initial unit natural gas pipeline tariff and 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 next 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."

- **9. Decision:** The following is approved subject to the final outcome of the Hon'ble Supreme Court Civil Appeal Nos. 377-378 of 2022 w.r.t. capacity determination:
  - **9.1.** The tariff of East West Natural Gas Pipeline of PIL of **Rs.74.67**/ **MMBTU** on GCV basis w.e.f. 01.01.2026 is approved, subject to final capacity determination upon receipt of directions from Hon'ble Supreme Court. Current tariff review exercise being undertaken to ensure that in case the decision of Apex Court on the capacity matter take longer time, consumers are not subjected to any sudden impact.
  - **9.2.** The above tariff has been worked out based on the information provided by the entity 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 verifications/ audit of the information, data, method of allocation, etc. submitted by the entity.
  - **9.3.** The total length of network is more than 300 Kms. Hence, zonal apportionment of levelized tariff is required. The apportionment of levelized tariff over all the tariff zones with calculations will be submitted by entity for Board's approval within 7 days from the date of issuance of this order.

Sd/-	Sd/-	Sd/-	Sd/-	Sd/-
(Dr. Anil Kumar Jain)	(Anjani Kumar Tiwari)	(A Ramana Kumar)	(Sudha Rani Relangi)	(Jayanta Narayan Das)
Chairperson	Member (Comm.)	Member (Mon. & Infra.)	Member (Legal)	Member (Tech.)