Petroleum & Natural Gas Regulatory Board, India

Public Consultation Document

(Ref: No. PNGRB/M(C)/43-Vol V dated 13.01.2017)

Subject:	**Final initial unit natural gas pipeline tariff under the provisions of the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Regulations, 2008.**
Name of Entity:	**Gujarat State Petronet Limited [GSPL]**
Name of Pipeline:	**High Pressure Gujarat Gas Grid**

---

1. Regulatory Framework

1.1. In terms of Section 22 of the PNGRB Act, 2006, the Board is entrusted with the responsibility of determining the natural gas pipeline tariff to be charged by the entities laying, building, operating or expanding a natural gas pipeline before the appointed day.

1.2. The methodology for determination of pipeline tariff has been specified in the relevant provisions of the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Regulations, 2008 (hereinafter referred to as "Tariff Regulations") notified on 20.11.2008. Under the provisions of these regulations, PNGRB is to determine the initial unit natural gas pipeline tariff on a provisional basis first and then finalize the same considering the actual costs and data at the end of the financial year on the basis of audited accounts. The transportation tariff is determined using the Discounted Cash Flow (DCF) method using actual and projected pipeline capex and opex costs (in line with provisions of Tariff Regulations) over the entire economic life (25 years) of the pipeline thus arriving at a single levelized transportation tariff. If the length of the pipeline is more than 300 kms the recovery of the transportation tariff is apportioned across such zones of 300 kms each resulting in zonal tariff where the zonal tariff of a later zone is higher than that of an earlier zone.

2. Provisional Transportation Tariff Orders

2.1. PNGRB issued the grant of authorization for GSPL's High Pressure Gujarat Gas Grid (HP) vide communication dated 27.07.2012 under

Regulation 18 (1) of the Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Regulations, 2008. The provisional capacity and length as per the acceptance letter is 30.46 MMSCMD (including common carrier capacity of 7.615 MMSCMD) and 2239 kms respectively.

2.2. PNGRB issued a provisional tariff order no. TO/09/2012 dated 11.09.2012 determining the provisional initial unit natural gas pipeline tariff under the provisions of the Tariff Regulations for HP of GSPL. (The same is available on the PNGRB's website.) The provisional transportation tariff as proposed by GSPL and as determined by PNGRB are as follows:

Particulars	**Provisional Tariff proposed by GSPL (Rs. / MMBTU on GCV basis)**	**Provisional Tariff determined by PNGRB (Rs. / MMBTU on GCV basis)**
Levelized Provisional Transportation Tariff	39.55	23.99

2.3. Subsequently, PNGRB issued tariff order no. TO/02/2013 dated 19.02.2013 determining the zonal tariff apportionment of the provisional initial unit natural gas pipeline tariff under the provisions of the Tariff Regulations for HP of GSPL. (The same is available on the PNGRB's website.) Accordingly, based on the methodology for calculating the zonal tariffs as specified in the Tariff Regulations, the zonal apportionment of provisional tariff proposed by GSPL and that approved by PNGRB is as below:

Particulars	Proposed by GSPL (Rs. / MMBTU on GCV basis)	Approved by PNGRB (Rs. / MMBTU on GCV basis)
Zone 1	19.00	18.49
Zone 2	28.57	27.80
Zone 3	38.04	37.02

3. Revised Provisional Transportation Tariff Order to give effect to Orders of Appellate Tribunal for Electricity (APTEL)

3.1. APTEL's Orders in Appeal No. 222 of 2012: Appeal 222 of 2012 was filed by two customers (Reliance Industries Ltd. and Torrent Power Ltd.) of GSPL on the issue of date of applicability of transportation tariff order. APTEL in its Order dated 06.01.2014 held that in this case the date of applicability of the transportation tariff determined by PNGRB should be from the date of authorization of the pipeline (i.e. 27.07.2012) and not from the date of notification of the tariff regulations (i.e. 20.11.2008).

3.2. APTEL's Orders in Appeal 67 of 2013: Appeal 67 of 2013 was filed by Reliance Industries Limited (RIL) against PNGRB and GSPL regarding the order dated 19.02.2013 for zonal apportionment of the levelized tariff. APTEL in its order dated 16.01.2014 allowed the appellant (RIL) to withdraw its appeal and directed PNGRB to determine the consequential zonal apportionment of levelized tariff after determining the levelized transportation tariff as per its order in Appeal No. 222 of 2012.

3.3. To give effect to the Orders of the APTEL in Appeal No. 222 of 2012 (dated 06.01.2014) and Appeal No. 67 of 2013 (dated 16.01.2014), PNGRB issued tariff order no. TO/04/2014 dated 11.07.2014. (The same is available on the PNGRB's website.) The recomputed levelized tariff was Rs. 26.58/MMBTU (on GCV basis) instead of Rs. 23.99/MMBTU as computed in the original tariff order. Zonal apportionments of the levelized tariff proposed by GSPL were in conformity with the Tariff Regulations and were hence approved by PNGRB. The details are as follows:

Particulars	(Rs. / MMBTU on GCV basis)
Zone 1	24.21
Zone 2	28.90
Zone 3	29.84

4. Details of subsequent Order of APTEL

4.1. GSPL had challenged PNGRB's provisional tariff order in APTEL in Appeal No. 25 of 2013 & IA No. 41 of 2013 on various aspects of computation of tariff. APTEL in its order dated 25.11.2014 set aside the impugned tariff order. The matter was remanded back to PNGRB to reconsider tariff proposals and incorporate various communications/representations made by the Appellant in this connection from time to time. The Board, based on this suggested reconsideration, will then pass a final order making it clear that the provisional initial natural gas pipeline tariff fixed therein will be effective from the date of grant of authorization of the pipeline i.e. 27.07.2012.

5. Details of tariff filing submitted by GSPL

5.1. PNGRB reminded GSPL to submit updated tariff filing for HP vide communication dated 17.12.2014. In response to this, GSPL vide letter dated 06.01.2015 requested for extension of time period for submission of updated data up to 31.01.2015. PNGRB vide its letter dated 20.01.2015 accepted the request.

5.2. PNGRB vide communications dated 10.02.2015, 09.03.2015, 13.03.2015, 30.06.2015, 31.08.2016 and 26.09.2016 had requested GSPL to complete it tariff filing/submit pending information or submit updated information. GSPL had submitted various submissions vide its letters dated 03.02.2015, 24.02.2015, 17.03.2015, 13.04.2015, 02.06.2015, 21.07.2015 and 10.10.2016.

5.3. In its tariff filing (tariff model in excel sheet) GSPL has submitted the following tariff:

Final Tariff submitted by GSPL	**Rs./MMBTU (GCV basis)**
From 2012-13 to 2016-17	26.58
From 2017-18 to 2026-27	59.65

6. Issues in the Tariff Filing submitted by GSPL

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

6.1. <u>Economic Life of Pipeline</u>

As per the tariff proposal submitted by GSPL, the first segment of HP started commercial operations on 03.11.2001. Accordingly, GSPL has considered economic life of the pipeline for a period of 25 years from 03.11.2001 up to 02.11.2026.

6.2. **<u>Capital Expenditure (Capex)</u>**

GSPL in its tariff submission has claimed total capex of Rs. 8034.62 cr for the entire economic life of the pipeline. The capex is discussed below under three heads namely, net block (Rs. 3660.90 cr), actual capex outgo from 2012-13 to 2015-16 (Rs.972.35 cr) and future capex projections from 2016-17 to 2026-27 (Rs. 3401.36 cr).

6.2.1. Net Block/Net Fixed Assets (NFA)

In the tariff filing, GSPL has claimed net block of Rs. 3660.90 cr as on 26.07.2012 in line with the date of grant of authorization by PNGRB. This figure is the sum of NFA and Capital Work in Progress (CWIP). GSPL has submitted two CA certificates for net block – (a) CA - 1 dated 12.03.2015 submitted vide letter dated 17.03.2015 and (b) CA - 2 dated 09.04.2015 submitted vide letter dated 13.04.2015. GSPL has provided bifurcation of total Gross Fixed Assets (GFA) into High Pressure Network, Low Pressure Network and other business assets. However, it has not mentioned the basis of the bifurcation amongst these three heads. Details are tabulated below:

(Amount Rs. in cr)

Submission/ Particulars	As on	Net Block	CWIP	Total
Tariff Filing	26.07.2012	3317.49	343.42	3660.90
CA - 1	26.07.2012	3317.45	343.42	3660.87
CA - 2	26.07.2012	2852.96*	343.42**	3196.38
CA - 2	30.06.2012	2819.39*	373.32	3192.71

* Net fixed assets/net block as per books of accounts
** CWIP figures are mentioned as per CA certificate 1

GSPL, in the CA certificate dated 12.03.2015 submitted vide letter dated 17.03.2015, has stated that the net block is calculated based on "reworking" of depreciation on Straight Line Method (SLM) of depreciation till 26.07.2012. The depreciation rate of 3.17% has been used for 'Pipeline Assets' pursuant to approval of Ministry of Company Affairs and the depreciation rate prescribed under Schedule XIV of Companies Act 1956 for SLM has been used for 'Assets other than pipelines'.

Further, GSPL in its letter dated 13.04.2015, has mentioned that the workings are based on depreciation rate of 3.17% on SLM basis considering life of 30 years for the pipeline assets. Accordingly as the depreciation rate taken is different from the books up to 31.03.2010, reconciliation with the books may not be possible. It has also stated that NFA as per books of accounts is not relevant for the calculation of tariff.

GSPL has, thus, in its tariff filing recalculated NFA considering 3.17% depreciation rate since the inception of the pipeline instead of prospectively considering it from the date of approval sought from the Ministry of Corporate Affairs.

6.2.2. Actual Capex Outgo from 2012-13 to 2015-16

In the tariff filing, GSPL has claimed actual capex outgo of Rs. 972.35 cr from 2012-13 (27.07.2012-31.03.2013) up to 2015-16. The capex outgo in the tariff filing is calculated as the sum of net addition of assets during the year and the net additions to CWIP during the year. PNGRB vide its letter dated 17.12.2014 asked GSPL to submit details of net additions to fixed assets excluding IDC, certified by the CA, duly reconciled with the Schedule of Fixed Assets in the audited balance sheet.

In response, GSPL vide its letter dated 17.03.2015 stated that as per clause 4 of Attachment 2 to Schedule A of the Tariff Regulations, any change in the value of fixed asset due to capitalization of interest on loan during the pre-commissioning period phase of the fixed asset shall be considered. PNGRB Regulation allows the consideration of any interest during construction capitalized in the value of asset. Capital expenditure data provided by GSPL includes such interest and hence GSPL submitted that the data provided in the financial model in consonance with the PNGRB Regulations and bifurcation of IDC from the asset value is not required for the determination of tariff. Along with this letter GSPL submitted CA certificate without bifurcation of IDC.

In all, GSPL has submitted the following four CA certificates:

(a) CA Certificate 1 (CA -1): GSPL vide its letter dated 17.03.2015 submitted certificate dated 12.03.2015 for gross block of fixed assets and CWIP as per its books of accounts for 2012-13 and 2013-14.

(b) CA Certificate 2 (CA -2): GSPL vide its letter dated 13.04.2015 reiterated its comments on IDC but submitted certificate dated 09.04.2015 for net additions to fixed assets and CWIP as per its books of accounts for 2012-13 and 2013-14 bifurcating the IDC.

(c) CA Certificate 3 (CA -3): GSPL vide its letter dated 21.07.2015 submitted certificate dated 13.07.2015 for net additions to fixed assets and CWIP from 2012-13 to 2014-15 bifurcating the IDC.

(d) CA Certificate 4 (CA -4): GSPL vide its letter dated 10.10.2016 submitted certificate dated 07.10.2016 for net addition to fixed assets and CWIP for 2015-16 bifurcating the IDC.

GSPL has provided bifurcation of total fixed assets / CWIP into High Pressure Network, Low Pressure Network and other business assets. However, it has not mentioned the basis of the bifurcation amongst these three heads. Year-wise details of actual capex as per tariff filing and CA certificates are tabulated below:

Table: Actual capex from 2012-13 up to 2013-14 as per tariff filing and CA certificates

(Amount Rs. in cr)

Year	**Tariff Filing (figures include IDC)**			**CA Certificate 1 (figures include IDC)**			**CA Certificate 2 (figures exclude IDC)**		
	Net additions to assets	Net additions to CWIP	Total	Net additions to assets	Net additions to CWIP	Total	Net additions to assets	Net additions to CWIP	Total
2012-13#	164.83	159.87	324.70	164.83	159.86	324.69	204.21	116.96	321.17
2013-14	83.26	121.49	204.74	83.25	121.49	204.74	75.02	117.15	192.17

Figures for 2012-13 in tariff filing and CA certificate 1 are from 27.07.2012 to 31.03.2013 whereas in CA certificate 2 are from 01.07.2012 to 31.03.2013

Table: Actual capex from 2012-13 up to 2015-16 as per tariff filing and CA certificates

(Amount Rs. in cr)

Year	**Tariff Filing (figures include IDC)**			**CA Certificate (figures exclude IDC)**		
	Net additions to assets	Net additions to CWIP	Total	Net additions to assets	Net additions to CWIP	Total
2012-13#	164.83	159.87	324.70	204.25*	116.96*^	321.21
2013-14	83.26	121.49	204.74	82.94*	117.15*	200.09
2014-15	72.69	146.93	219.62	72.39 *	142.08*	214.47
2015-16	240.83	-17.54	223.29	236.20**	-22.88**	213.32
TOTAL	**561.61**	**410.74**	**972.35**	**595.78**	**353.31**	**949.09**

* As per CA certificate (CA -3) dated 13.07.2015

** As per CA certificate (CA – 4) dated 07.10.2016

Figures for 2012-13 in tariff filing are from 27.07.2012 to 31.03.2013 whereas in CA certificate 3 are from 01.07.2012 to 31.03.2013
^ CWIP as on 30.06.2012 is as per CA -2 as this figure was not provided in CA -3
No reason is provided for revision in the figure of net additions to assets in 2013-14 in CA-3

6.2.3. Future Capex Outgo from 2016-17 to 2026-27

GSPL, in its tariff filing, has claimed total future capex outgo of Rs. 3401.36 cr. Head-wise future capex projections from 2016-17 onwards is as follows:

(Amount Rs. in cr)

Heads/Description	Sub Head	Tariff Filing
(a) Pipeline, Compressor And Other Infrastructure	Projects Completed	44.73
	Projects under Construction	216.62
	Projects under Development	969.14
	Sub – Total	1230.49
(b) Future Capex – Spur Lines		971.59
(c) Future Capex – Other Assets		358.01
(d) Recurring Capex		841.27
(e) Replacement Of Compressor		0
TOTAL		**3401.36**

(a) Pipeline, Compressor And Other Infrastructure

GSPL has claimed Rs. 1230.49 cr from 2016-17 to 2026-27 as capex under this head. The amount claimed is the sum of investment in projects completed, projects under construction and projects under development. These are discussed in detail below.

i. ‘Projects completed’: In the tariff filing, GSPL has claimed Rs. 44.73 cr in 2016-17 and 2017-18 for 76 pipelines projects under this head. Even though listed under the head of ‘projects completed’, GSPL has not provided any supporting documents substantiating that any of these projects are still ongoing. Further, even according to the tariff filing, the expected year of completion of all but three of these pipelines is during or before 2015-16. The future capex of these three pipelines is Rs. 28.76 cr.

ii. ‘Projects under Construction’: In the tariff filing, GSPL has claimed Rs. 216.62 cr in 2016-17 and 2017-18 for 18 pipelines projects under this head. As per the details in the tariff filing, 8 projects were started before 2012-13 (i.e. before the date of grant of authorization by PNGRB) and the remaining 10 were started afterwards, but the expected year of completion of all these pipelines is either 2017 or 2018. GSPL has not provided any supporting documents of project approvals such as work orders/purchase orders etc. or documents substantiating that these projects are still ongoing.

iii. ‘Projects under Development’: GSPL has claimed Rs. 969.14 cr in 2016-17 and 2017-18 for 10 pipeline connectivites (Rs. 785.30 cr) and 17 spur lines (Rs. 183.84 cr). As per the tariff filing, these projects are expected to be completed by 2018. The total project cost under this head is Rs. 990.52 cr of which Rs. 21.37 cr is claimed from 2012-13 to 2015-16 (which is considered as actual capex incurred as per the books of accounts). While claiming that these projects will be completed by 2017-18, no supporting documents regarding approval by competent authority have been submitted by GSPL.

GSPL vide its letter dated 02.06.2015 has submitted extract from minutes of Board Meeting with in-principle approval towards capital expenditure for future pipelines and other facilities to support these claims. In Annexure II of the minutes, the total capital expenditure mentioned is Rs. 540.07 cr as against Rs. 990.52 cr claimed in the tariff filing. Individual project costs also do not match in these submissions. Further, submission vide 02.06.2015 is an in-principle approval and these capital expenditures are not substantiated by project specific approvals from competent authority/work order/purchase order/LoA etc and only extracts of the meeting are submitted instead of entire agenda note.

PNGRB in its letter dated 30.06.2015 mentioned that for future capex claimed by GSPL there are no supporting documents provided except for in-principle approval. GSPL was required to provide specific Board/competent authority approvals for incurring the capex clearly mentioning the schedule of completion. In response, GSPL vide its letter dated 21.07.2015 stated that ‘pipeline under development’ and ‘other facilities’ are future expenditure for which GSPL’s Board approval has already been submitted vide letter dated 02.06.2015 (i.e. in-principle approval). GSPL submitted the following:

- One LoA for Mandal Bechraji project stating time schedule for completion in 2015-16.

- List of details of capital expenditure already incurred on ‘Projects under development’

- Schedule for ‘under development and other facilities’ - According to the new list, the total cost of all projects listed under this head is revised to Rs. 765.41 cr instead of Rs. 990.52 cr (as given in the tariff filing). Further, only Rs. 489.43 cr is claimed in 2016-17 as future capex as against Rs. 969.14 cr in 2016-17 and 2017-18 (as given in the tariff filing). However, no supporting documents are submitted till date.

(b) Future Capex – Spur Lines

GSPL has claimed Rs. 971.59 cr from 2016-17 to 2026-27 as capex under this head. The capex considered for spur line is calculated on a normative basis taking into account the following assumptions; (i) cost of laying pipeline (8”/12”) is Rs. 1.5 cr per km, (ii) GSPL will add 50km of spur line every year from 2018-19 up to 2026-27, and (iii) costs are escalated at an inflation rate of 5.31% per annum from 2016-17 onwards. GSPL in its letter dated 02.06.2015 has mentioned that it has estimated that 50 kms spur line would be required to be laid per year for HP network for the purpose of tariff proposal submitted to PNGRB. GSPL has also stated that as per clause g of Schedule J of PNGRB Authorization Regulation, the transporter is under an obligation to provide connectivity to customers within zone (i.e. 50 kms). As per the tariff filing, GSPL has added an average of 14 kms (apprx) per year of spur lines from 2013-14 to 2015-16.

(c) Future Capex – Other Assets

GSPL has claimed Rs. 358.01 cr from 2016-17 and 2017-18 as capex under this head. In the tariff filing, GSPL has provided a list of 49 projects under this head with a total projected cost of Rs. 422.70 cr of which Rs. 64.69 cr is claimed up to 2015-16 (which is considered as actual capex incurred as per the books of accounts). Most of these projects are expected to be completed in 2016-17 and some in 2017-18. To support these claims, GSPL vide its letter dated 02.06.2015 has submitted extract from minutes of Board Meeting with in-principle approval towards capital expenditure for future pipelines and other facilities. In Annexure III of the minutes, the list is comprised of only 35 projects amounting to total capital expenditure of Rs. 343.23 cr as against 49 projects amounting to Rs. 422.70 cr as claimed in the tariff filing. Individual project costs also do not match in these submissions. Further, submission vide 02.06.2015 is only an in-principle approval and these capital expenditures are not substantiated by project specific approvals from competent authority/work order/purchase order/LoA etc. Also, the list of projects mentioned under this head may be including O&M operating expenses as well. Further, only extracts of the meeting are submitted and not the entire agenda note.

Subsequently, GSPL vide its letter dated 21.07.2015 submitted a revised list of expenditure on 'Other facilities'. The total cost is revised to Rs. 345.81 cr as against 422.70 cr in the tariff filing and the future expenditure claimed is revised to Rs. 109.13 cr in 2016-17 only as against Rs. 358.01 cr in 2016-17 and 2017-18 in tariff filing. No specific project approvals from competent authority/PO/WO etc. were provided along with this revised submission.

(d) Recurring Capex

GSPL has claimed Rs. 841.27 cr from 2018-19 to 2026-27 as capex under this head. Recurring capex for each year is claimed on a normative basis as 1.26% of gross fixed assets of the previous year. Gross fixed assets for each year from 2018-19 up to 2026-27 is considered as sum of gross fixed assets of the previous year, net additions to fixed assets during the year and net additions to CWIP during the year. GSPL has not provided any supporting documents substantiating these expenses or providing explanation for the assumptions that it has considered.

6.3. **Operating Expenses (Opex)**

GSPL in its tariff submission has claimed total opex of Rs. 6686.70 cr for the entire economic life of the pipeline. The opex is discussed below under two heads namely, actual opex outgo from 2012-13 to 2015-16 (Rs.415.01 cr) and future opex projections from 2016-17 to 2026-27 (Rs. 6271.69 cr).

6.3.1. Actual Opex Outgo from 2012-13 to 2015-16

In its tariff filing, GSPL has claimed opex of Rs. 415.01 cr from 2012-13 (27.07.2012 - 31.03.2013) up to 2015-16. The actual opex is claimed by GSPL is comprised of (a) consumables and chemicals, (b) utilities (power, fuel and water), (c) salaries, (d) repair and maintenance, (e) general administrative expenses (including bank charges on bid bond and performance bond as per grant of authorization), (f) any other expenses, and (g) insurance. The head ‘any other expenses’ includes intelligent pigging, batch pigging, R&D expenses, line loss, charges payable to PNGRB, ISO and Safety Audit (MoEF), aerial survey, software expense and CSR.

PNGRB had asked GSPL to submit details of operating expenditure certified by the CA duly reconciled with the audited profit and loss statement of each year. In response, GSPL has submitted four CA certificates for opex along with its letters dated 17.03.2015, 13.04.2015, 21.07.2015 and 10.10.2016. GSPL has provided bifurcation of total opex into High Pressure Network, Low Pressure Network and other business assets. However, it has not mentioned the basis of bifurcation amongst these three heads.

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

(Amount Rs. in cr)

Year	Tariff Filing	CA Certificate
2012-13 (27.07.2012 to 31.03.2013)	68.51	68.51*
2013-14	113.24	113.24*
2014-15	120.60	120.60**
2015-16	112.65	112.65***
TOTAL	**415.01**	**415.00**

* As per CA certificate dated 12.03.2015 submitted vide letter dated 17.03.2015

** As per CA certificate dated 13.07.2015 submitted vide letter dated 21.07.2015

*** As per CA certificate dated 07.10.2016 submitted vide letter dated 10.10.2016

It is also observed that:

i. GSPL has considered ‘Miscellaneous Income’ as nil.

ii. As per the breakup provided in the audited balance sheets, the total opex of GSPL includes certain expenses such as doubtful debts etc. which are considered by GSPL in its tariff computation.

6.3.2. Future opex projections from 2016-17 to 2026-27

GSPL has claimed future opex of Rs. 6271.69 cr from 2016-17 to 2026-27. Opex comprises of:

(a) consumables and chemicals,

(b) utilities (power, fuel and water),

(c) salaries,

(d) repair and maintenance,

(e) general administrative expenses (including bank charges on bid bond and performance bond as per grant of authorization),

(f) any other expenses (including intelligent pigging, batch pigging, R&D expenses, line loss, charges payable to PNGRB, ISO and Safety Audit (MoEF), aerial survey, software expense and CSR), and

(g) insurance.

The various assumptions considered / claimed by GSPL from FY 2016-17 to 2026-27 are as follows: (No supporting documents are provided)

i. Annual rate of inflation @ 5.31% p.a.

ii. Consumption of spares 0.10% of the Gross Fixed Assets (GFA).

iii. Additional employee required for every 8 km of pipeline added.

iv. Additional increase in salary @ 10% p.a. and 25% additional increment in 2016 due to revision.

v. System Use Gas (SUG) of Rs. 106.61 cr from FY 2016-17 to 2026-27 (Nil from FY 2012-13 to FY 2015-16).

vi. Water utility cost of Rs. 31.04 cr from FY 2016-17 to 2026-27 (Nil from FY 2012-13 to FY 2015-16).

vii. GSPL has inflated per unit (pu) power rate from Rs. 8.10 pu @ 5.31% annually to Rs. 14.31 pu in FY 2026-27 (during FY 2012-13 to FY 2015-16 power rate was flat Rs. 8.10 pu).

viii. Repair and maintenance expenses of ‘pipeline and other assets’ as 0.75% of GFA and of ‘compressor assets’ as 5% of GFA.

ix. Administrative costs as 100% of salaries -Rs. 1535.87 cr from FY 2016-17 to FY 2026-27(Rs. 73.84 cr from FY 2012-13 to 2015-16).

x. Bank charges as 0.01% of GFA -Rs. 11.32 cr from FY 2016-17 to 2026-27(Nil from FY 2012-13 to 2015-16).

xi. Intelligent pigging - Rs. 42.14 cr; batch pigging - Rs. 35.53 cr; and aerial survey - Rs. 13.29 cr respectively from FY 2016-17 to 2026-27 (Nil from FY 2012-13 to 2015-16).

xii. R&D expenses are 0.01% of GFA - Rs 7.64 cr from FY 2016-17 to 2026-27 (Rs. 0.63 cr from FY 2012-13 to 2015-16).

xiii. Software expenses are 12.5% of capex. Software AMC expenses claimed is Rs. 0.83 cr from 2016-17 to 2026-27 (Rs. 0.03 cr from FY 2012-13 to 2015-16)

xiv. Line loss of Rs 1035.25 cr from FY 2016-17 to 2026-27 (Rs. 30.34 cr from FY 2012-13 to 2015-16)

xv. CSR expenses of Rs. 208.75 cr from FY 2016-17 to 2026-27.

xvi. Charges payable to PNGRB as 0.01% of revenue Rs 2.03 cr from 2016-17 to 2026-27.

xvii. Insurance expenses as 0.1% of GFA – Rs. 113.16 cr from FY 2016-17 to 2026-27 (Rs. 10.18 cr from FY 2012-13 to 2015-16).

xviii. No ‘Miscellaneous Income’ from FY 2016-17 to 2026-27.

xix. No. of ESOPs per employee per annum 2936, ESOP starting year 2012.

xx. Life of compressors is considered as 10 years

6.4. **Unaccounted Gas Loss/Line Loss**

GSPL has considered 0.3% of the throughput as unaccounted gas loss, as a cost to be recovered through the transportation tariff and has claimed a total unaccounted gas loss of Rs. 1065.60 cr from FY 2012-13 up to the end of economic life in 02.11.2026 (actual upto 31.03.2016 Rs. 30.34 cr and projected Rs. 1035.25 cr from 01.04.2016 onwards). This is claimed under the sub-head of ‘any other expenses’ in Opex and is in addition to System Use Gas (SUG) that is claimed as a fuel expense under the sub-head ‘utilities’ in Opex.

6.5. **<u>Volume Divisor</u>**

As per the grant of authorization for HP issued by PNGRB dated 27.07.2012, the total capacity for the network is 30.46 MMSCMD (including common carrier capacity of 7.615 MMSCMD). Year-wise capacity considered by GSPL in its tariff submission is as follows:

(In MMSCMD)

Year	Capacity
2012-13	22.14
2013-14	23.32
2014-15	23.54
2015-16	24.79
2016-17 and onwards	25.31

6.6. **<u>Working Capital</u>**

Working capital is calculated as sum of 30 days of opex (excluding depreciation) and 18 days of revenue (tariff receivables), in conformity with the Tariff Regulations. GSPL, in its tariff submission, has considered total working capital of Rs. 207.53 cr for HP. However, the working capital considered by GSPL is the sum of 30 days of O&M cost, 18 days of receivables and line pack of Rs. 102.13 cr. If line pack is excluded from this, the amount of working capital considered would be Rs. 105.40 cr. (Line pack is discussed separately in para 6.8).

6.7. **<u>Number of Working Days</u>**

As per the Clause 14(3) of the Access Code Regulations, the planned maintenance period shall not exceed 10 days in a year. On this basis, there would be 355 working days for a pipeline in one financial year. GSPL has considered 248 operating days for FY 2012-13, 355 operating days for all years from 2013-14 to 2025-26 and 216 operating days in 2026-27. Further, GSPL has considered 365 operating days for compressor.

6.8. Line Pack

Line pack is the value of gas which always remains in the pipeline and as per regulations it is to be considered as cash outflow in the initial year and to be considered as cash inflow in the last year of the economic life of the pipeline. GSPL, in its tariff model, has considered line pack of Rs. 102.13 cr. Year-wise additions to line pack are as follows:

Year	**(Amount Rs. in cr)**
2012-13	62.59
2013-14	-9.68
2014-15	37.71
2015-16	8.51
2016-17	3.00
Total	**102.13**

6.9. Terminal Value

Terminal Value is the sum of the residual value of the Net Fixed Assets at the end of the economic life, working capital and line pack and is cash inflow at the end of economic life of the pipeline. The terminal value submitted by GSPL in its tariff filing is Rs. 5054.02 cr as on 02.11.2026.

6.10. Return on Capital Employed

GSPL has computed the annual rate of return using a rate of return of 12% and further grossing this up with the rates of corporate income tax applicable to each year. For this purpose, GSPL has considered year-wise income tax rates as follows:

Financial Year	2012-13	2013-14	2014-15	2015-16 and onwards
Income Tax Rate	32.45%	33.99%	33.99%	34.61%

So in order to arrive at a post tax rate of return of 12% for each year of the pipeline project, this translates to an allowable pre-tax rate of return, as claimed in the tariff filing, as follows:

Financial Year	2012-13	2013-14	2014-15	2015-16 and onwards
Rate of return	17.76%	18.18%	18.18%	18.35%

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

6.11. **Zonal Apportionment**

As discussed in para 3.3 above, HP has three zones. Further, as stated by GSPL vide its letter dated 10.10.2016, increment of zone 2 tariff over zone 1 tariff is 1% and increment of zone 3 tariff over zone 2 tariff is also 1%.

7. Views of stakeholders sought

7.1. Determination of the final initial unit natural gas pipeline tariff is a time bound exercise. PNGRB solicits the views in writing of stakeholders on

GSPL's tariff filing for the High pressure Gujarat Gas Grid within 21 days of the issue of this document at the following address:

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

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