Welcome to

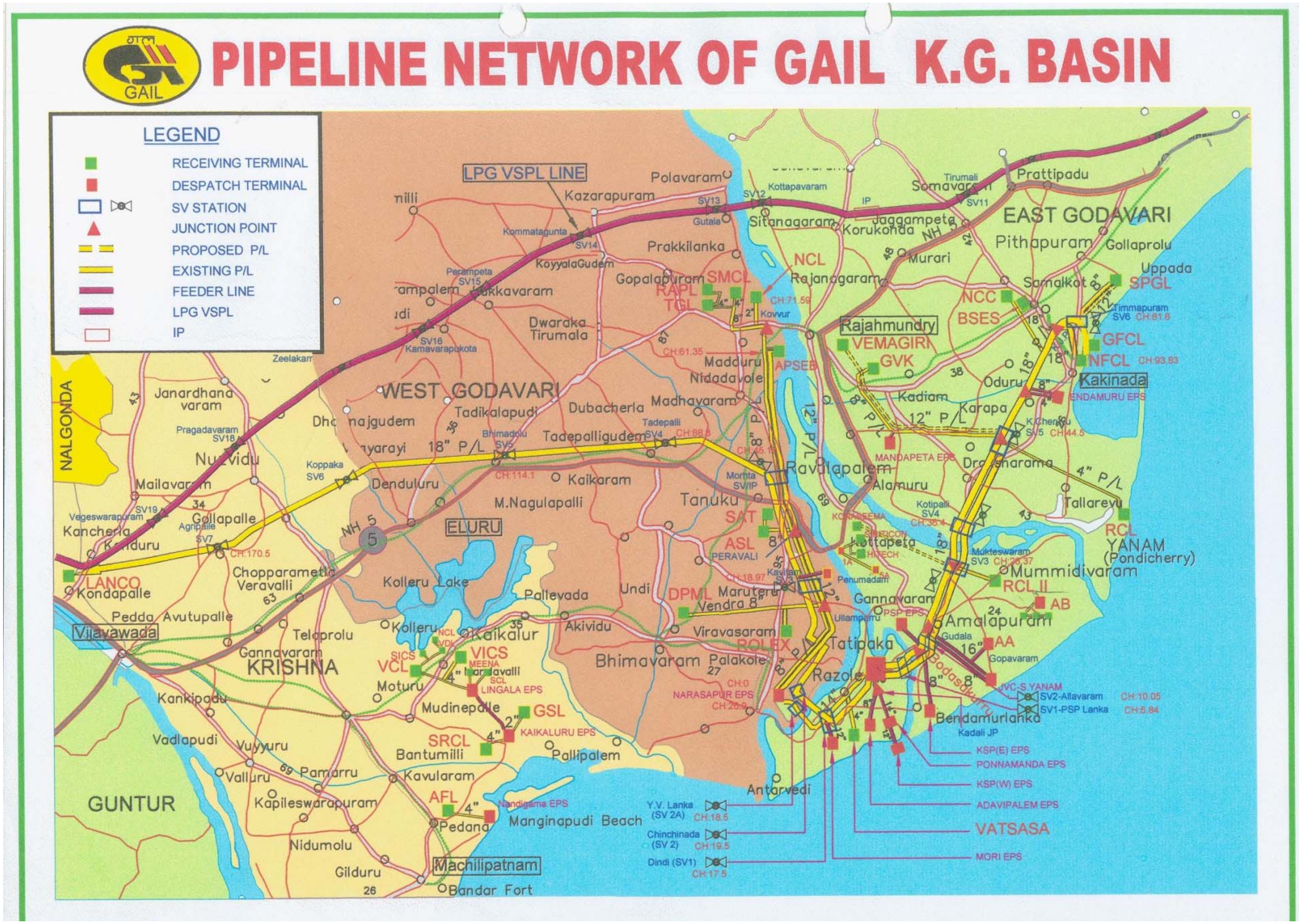
PNGRB Open House Meeting

on

Tariff Determination of KG-Basin Network

24th January, 2019

Pipeline Map



Background

- As per PNGRB Acceptance dtd. 05.04.2013, system capacity of 15.997 MMSCMD including Common Carrier Capacity of 4 MMSCMD.

- Present Tariff : Rs.45.32/MMBtu

- In response to PNGRB letter dated 25.09.18, tariff filing done by GAIL on 22.10.18 as follows

Tariff Period	Single Zone Tariff (INR/MMBTU – GCV)
1st April, 2016 to 31st March, 2019	**45.32**
1st April, 2019 to 11th February, 2027	**47.20**

- PNGRB Issued Public consultation Document on 20th December, 2018

- Comments received from three (03) entities GSPL, H-Energy & GMR Energy by 4th January, 2019

- GAIL submitted its reply on comments by the entities which is webhosted by PNGRB

H- Energy: Issues Raised and GAIL's response

Particular	Views	GAIL Response
Economic Life	• As per PNGRB Tariff Order - Economic Life is up to 11.02.2017 but GAIL's tariff filing is up to 11.02.2027. • As Economic Life Extension is under consideration by the Board, the same may be notified before finalizing tariff. • Tatipaka incident at KG-Basin: civil penalty imposed due to non-compliance of various regulatory provisions . Accordingly, PNGRB requested to notify tariff after completing due diligence process for Economic Life Extension	(i) Tatipaka incident: Committee (constituted by Board) visited the site and perused relevant records Committee recommended - since 06.11.2014, natural gas being transported in GAIL's pipeline meets requirement of Access Code Regulations Committee's recommendations accepted by the Board (i) In view of satisfactory compliance to relevant regulatory provisions, and in line with PNGRB letter dtd. 10.02.17 for continuation of economic life, GAIL, while awaiting the extension of Economic Life by the Board for a block of 10 years, has considered Economic Life till 11.02.2027
Capex/ Opex & Zonal Tariff	• Capex/Opex are based on the length of 298 km of trunk-line or 877 km including spur-line? • In the latter case, zonal apportionment of levelized tariff is required	➢ As per extant Regulations, Capex/Opex is for the total length including spur-lines. ➢ Zonal apportionment required only if the trunk-line length exceeds 300 kms.

H- Energy: Issues Raised and GAIL's response

Particular	Views	GAIL Response
CAPEX, OPEX after Extension of Economic life	• Extension of economic life to factor new Capex (including Opex) towards augmentation or laying of spur-lines only • Tariff should also lower down to pass on benefit to end customers	➢ Clause 4, 5 of Schedule A of Tariff Regulations: gross fixed assets includes cost of any subsequent replacement or improvement or modification over the pipeline's economic life to create and sustain an efficient infrastructure ➢ Treatment of Capex/Opex of pipeline, including for which economic life has been extended, would be governed by above ➢ Attachment 2 to Schedule A: cost incurred in improvements, modification, expansion or replacement of any fixed asset to be considered according to the mandatory accounting standards of the Institute of Chartered Accountants of India.
Capex Outgo	• Reasons for increase in Capex from 14-15 to 16-17. • Justification for Future Capex and O&M Capex during extension of economic life • Increase in capex from FY 14-15 to FY 16-17 is not in line with the common corporate assets for same period	➢ CAPEX increase during the FY 14-15 to FY 16-17 is mainly for replacement of pipelines. ➢ Future Capex: Mainly for replacement, execution of the tie-in connectivity pipelines authorized to GAIL and future last mile connectivity. ➢ O&M Capex is towards up-gradation of pipeline to ensure compliance with technical standards and integrity regulations ➢ Expenditure of common corporate assets is allocated on the basis of gross block and further, on the basis of volume flow in the network and has no co-relation with the site capex incurred.

H-Energy: Issues Raised and GAIL's response

Particular	Views	GAIL Response
Volume Divisor	• Various tie-in connectivity shall result in injection of additional volumes • Volume divisor of 12 MMSCMD from FY 17-18 is theoretically incorrect	Extant regulation: Increase in Design Capacity due to addition of any new source between 01.04.2015 to 31.03.2020 shall not be considered in tariff determination.

GSPL: Issues Raised and GAIL's response

Particular	Views	GAIL Response
Economic Life	• Board may provide details on treatment of economic life for network laid/ developed in 2016-17/2017-18 for pipeline replacement, tie-in lines – it shall increase economic life	➢ "Natural gas pipeline" means any pipeline including its spur-lines, all connected equipment and facilities. ➢ Spur-lines, connectivity, tie-in lines, etc., developed over different periods of time, is integral part of natural gas pipeline
Capex outgo incl. CWIP from 2008-09 to 2017-18	• Capex outgo in FY 14-15 to 16-17 is 168% of NFA (huge investment) • PNGRB may seek details of Capex outgo from FY 2014-15 to 2016-17 and webhost details of pipelines replaced including diameter and length	➢ Full details of pipeline replacement, including Capex and CA certificate, have been submitted to PNGRB ➢ Board may like to take a view on webhosting the details of above

GSPL: Issues Raised and GAIL's response

Particular	Views	GAIL Response
Future Capex	• Future capex for pipeline replacement project: PNGRB may analyze its impact on Capacity to ensure the return is cost reflective	➢ Capacity yet to be declared as per capacity determination regulation. ➢ As per Extant Regulations, Capacity as per authorization or the Acceptance letter issued by the Board be used for Tariff Determination. On capacity determination, such capacity to replace capacity considered for tariff, during next tariff review
Common Corporate Capex/ Opex during FY 2008-09 to 2017-18	• Detailed information with respect to site opex from 2014-15 to 2016-17 may be sought • Common Corporate for the period 2008-09 to 2017-18: Capex is Rs.163 Cr. and Opex is Rs.272.60 Cr. - Details may be sought	FY 2008-09 to FY 2017-18: ➢ Audited Actual Opex is considered for tariff. ➢ Total allocated common corporate Capex is Rs. 11.48 Crore. Value at para no 4.2(d) of PCD is the closing balances as on the end of respective financial years ➢ Justification for allocation of common Corporate Capex & Opex submitted in past and accepted by PNGRB while issuing final tariff orders. ➢ Same methodology followed for Tariff submission of K.G. Basin Network ➢ CA Certified is already submitted for Actual OPEX and allocated Common Corporate Capex & Opex

GSPL: Issues Raised and GAIL's response

Particular	Views	GAIL Response
Future Opex	Annual Opex of 2.5% of Capex for interconnection with APGDC – Whether to be recovered in Tariff or from shipper?	To be treated in terms of applicable regulation – costs attributable to the inter-connection to be recovered from shipper/customer who has triggered the inter-connection and not from tariff
Operational Expenditure	• PNGRB may verify total Opex of Rs.1106.59 Cr. (approximately 50% of Gross Block) • GAIL may provide details for future O&M Opex (non-recurring) of Rs.83.70 Cr. as for period from 2018-19 to 11.02.2027.	Tariff Regulations: ➢ Tariff to be computed based on the DCF methodology . ➢ DCF method considers all expected cash flows during tariff determination period (past and future). Variance between estimated and actual outflows is adjusted in these calculations. ➢ Future regular operating expenditure has been estimated based on actual Opex incurred in the past, with suitable escalation ➢ Further, anticipated operating expenditure for future connectivity @ 2.5% p.a.(which is not covered in the current Opex), and also non-recurring O&M Opex for upgradation of safety/surveillance, rectification /repairs as per ILI, pigging which likely to be incurred during the remaining economic life of the pipeline, have been considered in Tariff submission.

GSPL: Issues Raised and GAIL's response

Particular	Views	GAIL Response
Unaccounted Gas	• Board may benchmark unaccounted gas/transmission loss and allow same in tariff determination to enable earning regulated returns	GAIL has also been requesting for the same
Volume Divisor	• Gas sources being added shall lead to increase in capacity . Actual future capex & opex for such connectivity be considered with higher divisor or only after determining the capacity of the network. • GAIL may provide details of capacity of its network to ascertain/determine the capacity increase due to addition of new sources • Volume divisor for FY 14-15 and 15-16 is less than 75% of the provisional capacity of 12 MMSCMD – the minimum volume to be considered in divisor as per Clause 6(b) of Schedule A of Tariff Regulations. • PNGRB may review and clarifications may be sought from GAIL	➢ As per Tariff Regulations valid upto **07.01.2016**, volume from 6^{th} yr. onwards equal to 100% of (capacity requirements of entity + firmed-up contracted capacity with other entities) + actual common carrier volume. Volumes taken accordingly. ➢ From **08.01.2016**, volume shall be higher of firmed up contracted capacity + booked common carrier capacity or 75% of the capacity of the NG pipeline. ➢ In this case, contracted volume from 08.01.2016 is much lower than 12 MMSCMD. Accordingly, volume from 08.01.2016 taken as 12 MMSCMD.

GMR Energy: Issues Raised and GAIL's response

<table>
<tr><th>Particular</th><th>Views</th><th>GAIL Response</th></tr>
<tr><td>Economic Life</td><td>• PNGRB to determine the KG-Basin Network Capacity as volume divisor is an important factor in tariff determination</td><td rowspan="2">As per extant Regulation, if final capacity not yet determined, then Capacity as per authorization or the Acceptance letter issued by the Board be used for Tariff Determination. On capacity determination, such capacity to replace capacity considered for tariff, during next tariff review</td></tr>
<tr><td>Final Initial Transportation Tariff</td><td>• KG-Basin Capacity to be determined along with the length of the pipeline network
• GAIL has incurred Capex of around Rs. 941.55 Cr. for expansion of the network so changes need to captured to arrive at volume divisor for tariff determination.
• Provisional Capacity not to be considered.</td></tr>
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GMR Energy: Issues Raised and GAIL's response

Particular	Views	GAIL Response
Tariff Proposed by GAIL	• As PNGRB tariff of Rs. 45.32/Mmbtu approved till 11.02.2017, same should not be accepted for 2016-17 to 2018-19 and tariff to be determined retrospectively from 11.02.2017.	➢ Tariff to be computed based on the DCF methodology from later of 20.11.2008 or commissioning date up to economic life ➢ As per Amendment dtd. 08.01.2016: ▪ Variance between estimated and actual outflows for past is adjusted in DCF and derived tariff to be charged on prospective basis till next review. ▪ Tariff order issued before 30th September - tariff from 1st April of the current financial year otherwise from 1st April of the next financial year.
Actual Capex	• GAIL incurred capex of Rs.941.55 Cr. for network expansion. Request to furnish details of capacity, dia. Length. • Capex to be considered only after capacity determination	➢ CA certificate for actual Capex incurred from FY 2008-09 to FY 2017-18 submitted to PNGRB. ➢ As per extant Regulation, if final capacity not yet determined, then Capacity as per authorization or the Acceptance letter issued by the Board be used for Tariff Determination

GMR Energy: Issues Raised and GAIL's response

Particular	Views	GAIL Response
Future Capex Projections	• PNGRB should not allow Future Capex of Rs. 568.16 Cr. as existing customers will be impacted. • Future capex not throwing light on additional volumes to be considered in tariff determination.	➢ Tariff computation as per DCF methodology considers all future expected cash flows. Accordingly, future capex towards replacement, overhaul, up-keep, up-gradation or towards addition of network or equipment considered. ➢ As Capacity yet to be declared, therefore, Capacity as per PNGRB Acceptance used for Tariff Determination.
Common Corporate Assets	• Common Corporate Expenses of around Rs. 163 Cr. very high, so PNGRB to review the same before tariff determination.	➢ Total allocated common corporate Capex is Rs. 11.48 Crore. Value at para no 4.2(d) of PCD is the closing balances as on the end of respective financial years ➢ Justification for allocation of common Corporate Capex & Opex submitted in past and accepted by PNGRB while issuing final tariff orders. Same methodology followed for Tariff submission of K.G. Basin Network.
Actual Opex and future Opex	• Actual Opex of Rs. 708.28 Cr. very high and scrutiny required before tariff determination. • PNGRB to scrutinize future Opex of Rs.1106.59 Cr. & future O&M Opex of Rs.83.70 Cr. before tariff determination.	➢ Actual Opex incurred for K. G. Basin Network during the period FY 2008-09 to FY 2017-18 has been considered. CA certificate for above submitted to PNGRB. ➢ Future regular Opex estimated based on actual Opex incurred in the past, with suitable escalation. Future non-recurring O&M Opex for upgradation/safety/pigging, likely to be incurred has been considered in Tariff submission.

GMR Energy: Issues Raised and GAIL's response

Particular	Views	GAIL Response
Unaccounted Gas	• Tariff Regulations do not consider unaccounted gas and Shippers should not be made liable for this. • Unaccounted gas loss of Rs. 1333.36 Cr. and Rs. 135.68 Cr. will result in 2367 MMSCMD gas under certain price assumptions, which will have huge environmental impact. • PNGRB should take note and take corrective action.	➢ Even though absent in Tariff Regulations, Access Code Regulations defines Transmission Loss as quantity of gas unaccounted for due to whatsoever reason including blow downs, venting or releases during regular pipeline operation or due to inaccuracy of custody meter. ➢ Amount for period from 2008-09 to 2017-18 is Rs.133. 36 Crore ➢ Regulations explicitly recognizes and in line with industry submissions – to be considered on a uniform and normative basis
Volume Divisor	• PNGRB to determine capacity and arrive at Volume Divisor for tariff determination.	➢ If Capacity not declared, then, Capacity as per PNGRB Acceptance to be used for Tariff Determination.
No. of Working Days	• PNGRB should consider 355 days instead of 345 days claimed by GAIL.	➢ Access Code Regulations provide 10 days/yr. to Transporter towards planned maintenance ➢ Fertilizer, Power & other industries account for almost 80% of supply/transportation of gas, requiring planned maintenance ranging from 20 - 55 days/year. ➢ Accordingly, to take care of the requirements of downstream sector, at least 20 days of planned maintenance may be considered for tariff determination

Thank You