

# **PNGRB Open House**

**Final Unit Natural Gas Pipeline Tariff Determination**

**HVJ-GREP-DVPL/DVPL-GREP Upgradation**

**26.11.2018**

# **HVJ-GREP-DVPL/DVPL-GREP Upgradation Tariff**

1. GAIL has submitted its Tariff Filing for the subject Natural Gas Pipeline System.
2. On 18.10.2018, PNGRB webhosted the Public Consultation Document (PCD) soliciting comments from interested stakeholders.
3. By 02.11.2018, eight (08) entities i.e. M/s IOCL, H-Energy, GSPL, EWPL, GACL, GSFC, GNFC, and FAI have submitted their comments.
4. On 13.11.2018, GAIL submitted its response to PNGRB.
5. All the comments and the responses have been web-hosted by PNGRB.
6. Comments by stakeholders and GAIL's replies for the same are presented point-wise for discussions during this Open-house meeting.

# HVJ-GREP-DVPL /DVPL-GREP Upgradation Map



# Comments from Stakeholders and GAIL's Response

## Unaccounted Gas

### Stakeholder Comments

#### **IOCL**

In current regulations, Unaccounted Gas (UAG) loss is not considered for Tariff calculations. So GAIL's claim may be reviewed.

#### **H-Energy**

Tariff Regulations provide for consideration of only System Use Gas (SUG). Hence, Unaccounted Gas loss to be excluded.

#### **EWPL**

Considering nature of business, Unaccounted for Gas is a practical reality. Hence may be allowed with certain normative cap.

### GAIL's Response

- Due to inherent inaccuracies between custody meters at entry and exit points, some unaccounted- for-gas is inevitable.
- Practically, all gas pipeline entities in India have seen actual annual unaccounted gas loss gas in the past years, which on an average range between 0.1% to 0.3%. Individual pipelines have even seen UGL of upto 0.93% (AGCL)
- Typically entry points are limited in number and they have bulk and steady flow rates. But exit points are numerous in number and they have dynamic and fluctuating flow rates, particularly more so in the case of CGDs. Therefore, with more and more CGDs getting added to the system, actual unaccounted gas may further go up in future.
- Therefore, GAIL has consistently submitted for a 0.3% normative unaccounted gas loss for all the gas pipelines in the country.

# Comments from Stakeholders and GAIL's Response

## Number of Working Days

### Stakeholder Comments

#### **IOCL & H-Energy**

Regulation 14(3) of Access Code Regulations provide that planned maintenance should not exceed 10 days in a year.

Therefore, number of working days submitted by GAIL may be reviewed and considered in accordance with extant regulatory provisions.

### GAIL's Response

- While Access Code Regulations specify a cap of 10 days for Pipeline's planned maintenance, there is no regulatory cap for other connected (i.e. Source/Customer) facilities.
- In PNGRB Tariff Regulations, there is no specific regulation that has prescribed the number of operating days of a natural gas pipeline as 355 for tariff calculation purpose.
- In this regard, GAIL has always been submitting that, it is reasonable to take into account maintenance works of other upstream/downstream facilities connected to a pipeline (LNG facilities, Fertilizer Plants, Power Plants, LPG Plants etc.), which may independently occur as per their respective maintenance schedules. In fact, various downstream **customers** connected to GAIL's pipelines have taken annual planned shutdowns ranging from 10 days to even 55 days.
- In view of the same, and in line with past practices, a reasonable total 20 days (10 days for pipeline and 10 days for all other connected facilities) has been considered by GAIL as totally allowable maintenance period in the tariff calculations

# Comments from Stakeholders and GAIL's Response

## Inflation

### Stakeholder Comments

#### H-Energy

WPI Inflation rate @ 4.12% for Q2 2018 - Q2 2019 as per the 54<sup>th</sup> round of Report of Professional Forecasters should be allowed for escalating future CAPEX/OPEX.

#### IOCL

PNGRB has been following inflation @4.5 % for escalating Opex. The same may be taken here also.

### GAIL's Response

- GAIL has considered inflation rate based on long term CAGR for WPI as published by Gol.
- RBI disclaimer on the Professional Forecasters report states that *"The results presented here represent the views of the respondent forecasters and in no way reflect the views or forecasts of the Reserve Bank"*.

# Comments from Stakeholders and GAIL's Response

## Economic Life – Capex, Line Pack, Terminal Value; Opex

### Stakeholder Comments

#### H-Energy

- In line with regulatory definition given under PNGRB Authorization Regulations, applicable Economic Life for HVJ & HVJ Upgradation to be considered from the date of commencement of physical activities.
- Capex, Line Pack and Terminal Value to be considered accordingly.
- Future Opex is also not as per aforesaid Economic Life.
- Additional compressor fuel in HVJ Upgradation, under Opex, is claimed by GAIL at 75% of pipeline capacity from 2018-19 onwards, at a price of \$8.32 with annual escalation. It is to be supported by basis / assumptions.

### GAIL's Response

- In PNGRB Tariff Regulations, in the prescribed formats for the purpose of calculation of tariffs, the Economic Life is specified for 25 years after the 3-year construction period of pipeline.
- That is, as per Attachment 1(g), 1(h) & 1(i) of Schedule A of PNGRB Tariff Determination Regulations, the Economic Life of a pipeline is given as 25 years starting from the commissioning of the pipeline.
- Accordingly, PNGRB has also consistently taken the commencement of Economic Life period from the commissioning date only for all the pipelines for which tariffs are determined and fixed under Tariff Regulations. The same is adopted by GAIL in this tariff filing also.
- Thus Capex, Line Pack, Terminal Value and future Opex are considered as per aforesaid Economic Life only.
- Additional compressor fuel quantity is considered to enable gas flow of at least 75% of design capacity, in line with the DFR Report. The gas Price of US \$8.32/MMBTU is based on the actual gas price during the year 2017-18.

# Comments from Stakeholders and GAIL's Response

## Capex/Opex of Compressors at Jhabua and Vijaipur

### Stakeholder Comments

#### GSPL

- Compressors at Jhabua and Vijaipur are a part of HVJ-DVPL-GREP for boosting the pressure in 42" DVPL pipeline.
- However, no mention of subject compressors in PNGRB Acceptance letter dtd. 19.04.2010 for HVJ-DVPL-GREP Pipeline.
- Capacity determination of HVJ-DVPL-GREP (post 2011-12) is not yet done, and so increase in capacity of HVJ-DVPL-GREP pipeline due to installation of these compressors is pending.
- So Capex/Opex of Jhabua/Vijaipur compressors is to be excluded for Final Tariff Determination of DVPL-GREP-DVPL, in line with GSPL Tariff Order which has excluded Capex/Opex of its compressors at Gana.

### GAIL's Response

- Compressors at Jhabua and Vijaipur are installed as a part of DVPL-GREP Upgradation project and its complete details were submitted by GAIL in its Schedule-H (Authorization) filing to PNGRB.
- The said compressors have already been considered by PNGRB in the provisional tariff order itself (as a part of DVPL-GREP Upgradation), and they have also been duly accepted by PNGRB in the Schedule-H (Authorization) Acceptance letter dtd. 14.02.2011 under the DVPL-GREP Upgradation.
- Accordingly, the Capex/Opex of these compressors are included in the final tariff calculations also. In case these compressors at Jhabua and Vijaipur are not included, then the system capacity will also significantly reduce for the purpose of volume divisor.
- The case of these compressors at Jhabua and Vijaipur is not comparable to GSPL 's compressors at Gana, because from the earlier available GSPL's authorization and provisional tariff order, its compressors at Gana does not appear to be a part of them.



# Comments from Stakeholders and GAIL's Response

## JHPL/VAPPL Volumes and Phase-wise Capacity

### Stakeholder Comments

#### GSPL

- Gas into JHPL shall be injected from HVJ and VAPPL (as a part of HVJ Upgradation).
- JHPL and VAPPL volumes not considered by GAIL for HVJ/ Upgradation.
- Volumes shown are constant in HVJ & Upgradation from 2016-17 and 2017-18 onwards.
- Phase-wise capacity of HVJ Upgradation not to be considered as GSPL phase-wise capacity not considered in GSPL Final Tariff Order.

### GAIL's Response

- Anticipated JHBDPL volume from HVJ Network is already considered in the volume divisor and the resultant volume is not exceeding the normative volumes of 75% of the pipeline capacity.
- VAPPL volumes are also already accounted for while computing volume divisor.
- 54 MMSCMD Capacity as a part of Upgradation project is implemented in 2 phases, i.e., 11 MMSCMD in 1<sup>st</sup> phase and additional 43 MMSCMD in 2<sup>nd</sup> phase.
- In Tariff Determination Regulations, Attachment 1(j) specifically states that *"Implementation period of project in phases to be provided"*.
- In view of above, it is GAIL's submission that Capex/Opex as well as the corresponding volume divisor are to be considered in a phased manner in which the HVJ Upgradation project was actually executed.

# Comments from Stakeholders and GAIL's Response

## System Use Gas (SUG) & Integrated Tariff

### Stakeholder Comments

#### GSPL

- SUG cannot be netted off from pipeline capacity for computing the volume divisor.
- PNGRB has provided suitable rationale for keeping separate tariffs. Accordingly, separate final tariff for HVJ and Upgradation should be finalized.

#### EWPL

- Compressor Fuel quantity to be commensurate with the volumes considered for tariff working. Fuel price will fluctuate, hence, half-yearly/yearly adjustment formula may be given by PNGRB to help avoiding large exposure both for customers and pipelines.

### GAIL's Response

- As Clause 5 (2) (b) of Schedule A to Tariff Regulations provides for considering the natural gas pipeline tariff not recovered on System Use Gas (SUG) as part of the OPEX.
- In line with the above, compressor fuel considered as SUG is netted off from pipeline capacity for computing volume divisor.
- HVJ/HVJ Upgradation operating as a common network is already acknowledged by PNGRB in Tariff Order dtd. 19.04.2010.
- In order to equitably address capacity booking and tariff application issues, GAIL has been emphasizing for having a single tariff for the system which is actually operating as one single pipeline only.

# Comments from Stakeholders and GAIL's Response

## Volume Divisor

### Stakeholder Comments

#### IOCL

- Volume divisor not computed as per Regulations.
- As per PNGRB Regulatory Provisions, volume divisor for HVJ & HVJ Upgradation from 2014-15 onwards should be 57.3 MMSCMD and 54 MMSCMD respectively.

### GAIL's Response

- Capacity of HVJ-GREP-DVPL Pipeline up to March 2012 has been declared by PNGRB as 53 MMSCMD (*including SUG of 1.22 MMSCMD*).
- Also, extant Tariff Regulations provide for considering the natural gas pipeline tariff not recovered on SUG as part of the OPEX.
- Accordingly, SUG is reduced from the HVJ capacity and the HVJ Upgradation Capacity for volume divisor computation.
- Also, as per extant Tariff Regulations, the volumes to be taken are normative volumes for first 5 years or actual whichever is higher. Volume divisor for the 6<sup>th</sup> and the subsequent years shall be equal to the firmed up contract capacity and booked common carrier capacity or 75% of the pipeline capacity, whichever is higher
- In line with the above, since the normative volumes of 75% of the pipeline capacity is in any case higher than the contractual quantities, the volume projections are also taken at normative 75% levels only and thus it remains constant in terms of the extant regulations.

# Comments from Stakeholders and GAIL's Response

## Volume Divisor

Stakeholder Comments	GAIL's Response
<p><b>GSPL</b></p> <ul style="list-style-type: none"> <li>• Volume Divisor decreasing for HVJ while increasing for DVPL-GREP Upgradation</li> <li>• Access is being denied in HVJ and access is being provided only in Upgradation to recover higher tariffs.</li> <li>• Online portal does not mention capacity booking in HVJ</li> <li>• Volume bifurcation submitted by GAIL in HVJ and Upgradation almost equal to 75% of the pipeline capacities. Prior to tariff finalization, PNGRB may verify all the above.</li> </ul>	<ul style="list-style-type: none"> <li>• In respect of HVJ and HVJ Upgradation, as per PNGRB Tariff Order dated 19.04.2010, PNGRB has already stated that <i>“there is no contention on the two pipelines operating as a common network.”</i> Further, as per the said order, <i>“for the purpose of tariff and related contractual obligations, the Upgradation will be treated separately.”</i></li> <li>• As per the said Tariff Order, <i>“The rate of Rs.53.65/MMBtu in respect of DVPL/GREP Upgradation will be applicable only for the volumes contracted by the new customers or the incremental volumes contracted by the existing customers”.</i></li> <li>• In compliance of above, although access is being provided to the system which is actually operating as one common network, the tariff for the volumes contracted by new customers or the incremental volumes contracted by the existing customers are uniformly applied at the Upgradation rate, including the gas of third party shippers as well as to the gas marketed/sold by GAIL</li> <li>• However, going forward, if the two differential tariffs for using the same integrated HVJ pipeline system is continued, one way or another, one tariff would be significantly higher than the other tariff.</li> <li>• In view of the above, it has been the consistent submission by GAIL that since the HVJ and HVJ Upgradation are actually operating as one integrated network, only a single levelized tariff be determined and fixed for this integrated network.</li> </ul>

# Comments from Stakeholders and GAIL's Response

## Other Points

### Stakeholder Comments

### GAIL's Response

#### GSPL

- No PNGRB approval available for Rich Lean Gas Corridor modification so Capex of Rs. 33.92 Cr. may be reviewed.
- Total Opex claimed by GAIL is very high in comparison to Capex/Gross Block for HVJ/Upgradation. This may be verified.

- Extant Regulations provide for consideration of cost incurred in improvement/modifications. The present modification is being done for improving the operational flexibility and efficiency of the pipeline system.
- As per extant regulatory framework, prior approval of PNGRB is required in case of any capacity expansion beyond 10 % or spur-lines beyond its tariff zone. This instant modification does not fall in either category.
- The HVJ system entails eight (08) compressor stations. The total opex is based on actual historical and projected anticipated future expenditure over the economic life considering inflation @4.58%

#### GACL, GSFC, GNFC and FAI

- Comments are in the nature of apprehensions about the potential impacts of increased tariffs for them. Per se, these comments are not in respect of any particular tariff calculation parameter/ assumption considered under this final tariff determination exercise.

- The final tariff shall be determined and fixed by PNGRB in terms of notified tariff determination regulations only, and the same is expected to strike a balance between safeguarding the consumer interest and at the same time recovery of cost of transportation in a reasonable manner.

**Thank You**

### SHUTDOWN DETAILS OF SOME MAJOR CUSTOMERS IN GAIL PIPELINES

S.NO	CONSUMERS NAME	NATURAL GAS PIPELINE SYSTEM	FROM	TO	TOTAL DAYS	IMPACT GAS QTY MMSCMD	REASON
1	INDO GULF FERTILISERS	DVPL/GREP Upgradation	17/Mar/17	8/Apr/17	22	2.1	ANNUAL SHUTDOWN
2	ZUARI GOA	DBPL	20/Mar/17	10/Apr/17	21	1.0	ANNUAL SHUTDOWN
3	NFL BHATINDA	DBNPL	27/Mar/17	9/Apr/17	13	1.0	ANNUAL SHUTDOWN
4	CFCL 2	DVPL/GREP Upgradation	6/Apr/17	6/May/17	30	2.5	ANNUAL SHUTDOWN
5	NFL Vijaipur Unit- 1	DVPL/GREP Upgradation	19/Apr/17	29/Apr/17	10	2.0	ANNUAL SHUTDOWN
6	IFFCO Aonla-1	DVPL/GREP Upgradation	24/Apr/17	20/Jun/17	57	2.0	ANNUAL SHUTDOWN
7	KFCL-Kanpur(UNIT-2)	DVPL/GREP Upgradation	27/Apr/17	8/May/17	11	0.4	ANNUAL SHUTDOWN
8	GNVFC (BRAUCH)	DVPL/GREP Upgradation( GAIL-GSPL Interconnect)	9/May/17	14/Jun/17	36	1.4	ANNUAL SHUTDOWN
9	IFFCO Phulpur -2	DVPL/GREP Upgradation	10/May/17	28/Jun/17	49	1.5	ANNUAL SHUTDOWN
10	GSFC-BARODA	Gujarat Regional NG Pipeline Network	16/May/17	12/Jun/17	27	1.2	ANNUAL SHUTDOWN
11	JSW Salav	DUPL-DPPL	23/May/17	8/Jun/17	16	0.8	ANNUAL SHUTDOWN
12	GSFC-BARODA	Gujarat Regional NG Pipeline Network	6/Jul/17	29/Jul/17	23	1.2	EMERGENCY SHUTDOWN
13	IFFCO Aonla-2	DVPL/GREP Upgradation	17/Jul/17	10/Sep/17	55	2.0	ANNUAL SHUTDOWN
14	IFFCO PHULPUR Ph-1	DVPL/GREP Upgradation	2/Sep/17	14/Sep/17	12	1.2	EMERGENCY SHUTDOWN
15	KFCL-Kanpur(UNIT-3)	DVPL/GREP Upgradation	4/Sep/17	24/Sep/17	20	0.4	ANNUAL SHUTDOWN
16	NFL VIJAIPUR	DVPL/GREP Upgradation	4/Sep/17	22/Oct/17	48	2.1	ANNUAL SHUTDOWN
17	RCF Thal	DUPL-DPPL+ Mumbai Regional	15/Oct/17	2/Nov/17	18	1.1	ANNUAL SHUTDOWN
18	KSFL S'PUR	DVPL/GREP Upgradation	9/Sep/17	4/Oct/17	25	2	ANNUAL SHUTDOWN
19	IOCL MATHURA	DVPL/GREP Upgradation	9/Sep/17	21/Sep/17	12	1.5	PARTIAL SHUTDOWN
20	Kribhco Hazira	DUPL-DPPL	5/Nov/17	19/Nov/17	15	0.7	PARTIAL SHUTDOWN
21	RCF Thal	DUPL-DPPL+ Mumbai Regional	25/Dec/17	11/Jan/18	17	1.5	PARTIAL SHUTDOWN
22	NFL Nangal	DBNPL	27/Dec/17	6/Jan/18	11	1.0	EMERGENCY SHUTDOWN

