GAS UTILITIES

Unified improvement in tariff norms to result in profitability of pipeline operators

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Highlights

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The Petroleum and Natural Gas Regulatory Board has revised the natural gas pipeline tariff regulations, which should benefit capacity expansion and accelerate completion of pending projects. This is expected to be a positive for gas transmission companies as it allows elongated ramp-up of new pipelines, transmission losses and favourable norms for capacity expansion.

- PNGRB typically regulates the transmission tariffs, for natural gas pipelines and these are fixed to provide a 12% normative return on capital employed.
- These tariffs are apportioned along the length of the pipeline and increase as we move away from the gas source, thereby resulting in higher tariffs for consumers located at a longer distance from the source.
- Thus, PNGRB came up with a guideline for a unified tariff regime for all the consumers connected to the natural gas grid in November 2020 and the same has been recently amended. This is to become applicable from April 2023.
- This allows for more relaxed capacity ramp up, exemption of new capacity from tariff calculations for 5 years, allowance of transmission loss @ 0.1%, annual tariff revisions, and integrated tariffs for inter-connected pipelines, amongst other measures.
- These measures are likely to be revenue neutral for the gas pipeline operators, however, some measures will result in better profitability for these players. In addition, these will also fast-track completion of pending projects and expansions.
- Better zonal classification and annual tariff revisions will also benefit customers, especially located away from the gas source.
- Overall, these were long due and present a balance regime for the transmission companies as well as consumers.

Unified Tariff Regime - Background

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The transmission tariffs are regulated by the PNGRB for the natural gas pipelines in India and are based on a normative return of 12% on capital employed.

The tariffs undergo periodic review and are apportioned along the length of the pipeline as per the zonal classification. Each zone comprises 300 KM of length. The transmission tariff for successive zones is higher than the previous as per the regulations.

With distance-based tariff being charged, natural gas consumers located away from the natural gas sources were at an inherent disadvantage in terms of higher input costs even though they might be located closer to the end-user market

Thus, in order to resolve this issue of distance-related dislocation in the pricing of natural gas, a unified tariff for all the consumers connected to the natural gas grid was proposed in November 2020.

PNGRB proposed a simplified approach for the unified tariff, under which the approved zonal transmission tariffs will be pooled, weighted by actual volumes flows along with ship or pay volumes for all the pipelines forming part of the integrated network

After a hiatus of almost 2 years, the unified tariff regulations were revived with a few amendments

The implementation of the unified transmission tariff will be revenue neutral for the natural gas pipeline operators and will result in decline in transmission tariffs for players located at a long distance from the natural gas source

Unified Tariff Regime – Key Amendments from Nov 2020

Tariff Escalations

In place of a levelised tariff for a longer tenure, a gradual annual increase in the levelised tariff at a pre-specified rate has been allowed

Ramp-up Extension

New norms allow relaxed capacity utilisation/normative volume requirement for pipelines and permit a 10-year ramp up starting from 30% to 100% of the nominal pipeline capacity vs 60% to 100% over 5 years in previous recommendation

Set-off of Volumes

Set-off of volumes is allowed when actual volume flows are higher than normative volumes, such that the set-off does not exceed maximum credit available, and adjustment in any year should not surpass the difference in actual volume and the normative volume

Tariff Zones

Instead of successive tariff zones of 300 km earlier, the new guideline divides the pipeline in 3 tariff zones – 1) Up to 300 Km; 2) 300-1200 Km; and 3) More than 1200 Km

Transmission Loss

Transmission Loss @0.1% of the actual volumes has been allowed as a deduction for tariff calculation

Capacity Expansion for New Gas Sources

Capacity expansion of pipelines will be exempted from tariff calculations for 5 years, if it caters to new gas sources

Natural Gas Pipelines Network in India

Details	Length (Km)
Authorised Natural Gas Pipelines	33,603
Operational Natural Gas Pipelines	22,306
Under Construction Natural Gas Pipelines	13,029

Major Fully Operational Natural Gas Pipelines				
Name	**Entity**	**Authorized Length (Km)**	**Authorized Capacity (mmscmd)**	**Operating Length (Km)**
Hazira-Dahez-Vijaipur	GAIL	5,502	107	6,030
Kakinada-Hyderabad-Uran-Ahmedabad (East West Pipeline)	PIL	1,459	85	1,479
Dahej-Uran-Panvel-Dhabhol	GAIL	815	20	942
High Pressure Gujarat Gas Grid	GSPL	2,207	31	2,638
KG Basin Network	GAIL	878	16	874
Gujarat Regional Network	GAIL	609	8	615
Shahdol-Phulpur	RGPL	312	4	304
Mumbai Regional Network	GAIL	129	7	125

Source: PNGRB, ICRA Research

Comparison Between Existing Tariff Regime and Unified Tariff Regime

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	Existing Tariff Regime	New Tariff Regime effective from April 1, 2023	Impact
Capacity utilisation	Ramp up to occur over a period of 5 years	Ramp up to occur over a period of 10 years	As actual volumes are lower than normative volumes, a longer ramp up allows for tariff close to actual volumes
Set-off of actual volumes against normative volume	No set-off was allowed	In case actual volumes are higher than normative volumes, volume adjustment set-off is allowed	Flexibility to adjust normative volumes is a positive, as it compensates for lower volumes in some of the years
Number of Zones	Every incremental 300 km of pipeline from the gas injection point classified as the successive zone with successively higher tariffs	Total 3 Zones; up to 300 km, from 300 km to 1200 km and more than 1200 kms, with tariffs of 40% of unified tariff for Zone 1 and 75% for Zone 2	More equitable arrangement for customers along the pipeline route and will benefit customers located at a long distance from the gas source
Exemption for tariff calculation on capacity expansion	Not applicable	Capacity expansion of pipelines from new gas sources would be exempted for tariff calculations for 5 years	For newer pipelines and pipeline expansions, this change will allow seamless progress as the tariff will allow for additional investment in the same
Transmission loss	Transmission loss not allowed	Transmission loss allowed @ 0.1% of actual volumes	Improvement in the profitability for the players
Tariff revisions	Levelised tariffs for 5 years	Annual tariff escalations	This will be beneficial for both customers (avoidance of higher tariffs during initial years) as well as transmission players (takes care of volume volatility)

Impact Assessment

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Fertilisers

Any increase in transmission tariffs will result in increase in landed pooled gas cost for the fertilisers, however, since this is pass-through, this will increase the subsidy burden for the Government

Power

Any increase in transmission tariffs will increase the delivered cost of gas for power projects. With "cost plus PPAs" with distribution companies, this fuel cost increase will become a pass-through

City Gas Distribution

For pipeline sourced gas, the increase in transmission tariffs will result in increase in delivered costs. The CGD companies will largely increase the prices and pass on the same to the end consumers, thereby keeping their profit/scm or profit/kg at similar levels

- To reduce distance-based tariff dislocation in natural gas pricing, the PNGRB implemented the unified tariff regime
- Tariff policy based on the pooling of the approved tariffs for the pipelines forming the national gas grid
- Pipeline network divided in three zones; Zone-1 as first 300 km from unified entry point; Zone-2 from 300 km to 1200 km; and Zone 3 being the remaining length
- Zone-1 tariff to be 40% of Zone-3; and Zone-2 tariff to be 75% of Zone-3
- **ICRA's view:**
  - Transmission tariff for majority of the players utilising single pipeline to witness increase in ~~the~~ transportation costs
  - Consumers located in Zone-2/3 and receiving gas which flows through multiple pipelines to benefit with significant moderation in tariffs

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Thank You!