REF No: IGX/2020-21/34 26th July 2020

To,
The Secretary,
Petroleum & Natural Gas Regulatory Board,
1st Floor, World Trade Centre, Babar Road,
New Delhi – 110 001

Subject: Determination of Natural Gas Pipeline Tariff) Regulations, 2008 ("NGPL Tariff Regulations")

Respected Madam,

This has reference to the public notice Ref No.: PNGRB/COM/2-NGPL/Tariff(3)/2019 VOL-II dated 29th June 2020, soliciting views from stakeholders on the proposed amendment (Determination of Natural Gas Pipeline Tariff) Regulations, 2008 ("NGPL Tariff Regulations")

We welcome the step taken by Petroleum and Natural Gas Regulatory Board ("PNGRB") to reform the transportation tariff methodology at a time when PNGRB has also introduced draft Gas Exchange Regulation in the country. As you are aware the tariff methodology plays a key role in creating a liquid market and development of overall Gas marketplace.

Currently, the share of natural gas in energy mix is approximately 6.5%-7%. The Government of India has a vision of increasing the share of gas to 15% by 2030. If this is to be achieved the development of a truly competitive gas market becomes a necessity to support Government's objective to increase the gas share in the primary energy mix.

As we understand, the key objective of this exercise is to transition to a mature tariff system providing access to consumers with reasonable, rationale and route-agnostic tariffs, which will help create well-functioning competitive gas market. We fully support and appreciate the objective, however, believe that the proposed tariff methodology will continue to pose issues in creating a liquid and competitive marketplace, some of which have been highlighted in Annexure-1.

Now, as a nationwide network of pipelines (national gas grid), with multiple sources and destinations for natural gas, is emerging in India, a switch should be attempted to the mature tariff system which not only provides access to the customers far away from the gas sources but also provides platform for a competitive market to develop. One of such system called "entry-exit" tariff system is prevalent in many countries including in the power sector in India.

Given the suitability to Indian gas grid network conditions and the feasibility of implementation we propose the following two options to the Board:

1) **Unified tariff (Entity-wise without any zonal distribution)**

In this model the unified tariff for Integrated Natural Gas Pipeline System of each entity can be fixed without doing any zonal distribution i.e. a single tariff for the whole system of each entity without any linkage to point of injection of gas. This will be something like a postal stamp tariff for each Integrated Natural Gas Pipeline System. In this we also propose that the pipeline system of GAIL can be split into two i.e. existing network of GAIL and the upcoming network along with the Jagdishpur-Haldia-Bokaro-Dhamra Natural Gas Pipeline network. Since the upcoming network along with the Jagdishpur-Haldia-Bokaro-Dhamra Natural Gas Pipeline network will have it own sources of gas we propose that the unified tariff for these pipelines be kept single and separate from the single unified tariff of GAIL existing network.

The advantages of this model would be:

a) Easy to implement and acceptability among the stakeholders
b) Doing away with the zonal distribution will also do away with the need to identifying the source in a transaction. This is very critical in creating markets as for efficient markets to exist the 'route agnostic and counterparty independent tariff' is a must.
c) This will also do away the pan caking effect of tariff and hence making it affordable to all.

2) **Entry Exit Tariff Model**

Second and more efficient option is to implement an entry-exit tariff model. In this system, contractual path of the transportation services will be broken into two transactions i.e. (i) entry transaction and (ii) exit transaction and both will be entered separately. Under this methodology the system user will have to pay one tariff to enter into and another one to exit from the system. Separate booking of entry and exit capacity will allow users to book capacity without any complication of contractual path. This will also enable users to buy and sell gas freely once having paid the tariff to enter into the system thus creating the conditions for an efficient gas market.

The advantages of this model would be:

a) It will completely do way with the pancaking effect of tariffs.
b) Entry-exit is the best model for a route agnostic and counterparty independent tariff.
c) Entry-exit also helps in multiple other ways including reducing complexities and bringing in efficiency in the system, increasing utilization of the network. It also induces the right conditions for the development of One Nation-One Grid-One Market.

We shall be happy to participate in the open house and discuss further on this.

Yours sincerely,
For **Indian Gas Exchange Ltd.**

Rajesh K Mediratta
Director

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Annexure-1: Comparison of tariff methodologies from Gas Exchange perspective

Area	Challenge faced in proposed Amendment by PNGRB	Benefits of Entry-Exit
Description	In the proposed model, tariff applicability will be determined based on the contractual path travelled by gas molecule from the designated injection point.	In the entry exit tariff recovery model, the tariff is fixed separately for each entry and exit point of the pipeline. The customer books the capacity for his desired entry and exit point and pays a separate tariff for the entry and for the exit.
Flexibility	Low flexibility, as Buyer is bound to the identified Entry Point	Entry–Exit regimes create the most flexibility for shippers by allowing shippers and new entrants to book capacity without specifying beforehand where this gas should go
Liquidity	Will require creation of multiple Trading Hubs since point of injection will determine the transportation cost and hence should be known before trading. Restricts liquidity as volumes get split across Physical Delivery Hubs.	Entry-exit system is considered to have a considerable advantage in the promotion of trade, liquidity as it limits the disadvantage small shippers would have in a distance-based tariff system.
Non-discriminatory	Gas producers/ marketers who are not present at the Trading Hub are disadvantaged and unable to participate on the Gas Exchange and marketplace.	An Entry–Exit system is generally regarded as most appropriate for ensuring a non-discriminatory tariff system, where the price of capacity at an entry or exit point is the same for all network users at that specific entry or exit point.
Competition	Will restrict competition as it necessitates that suppliers inject gas at Physical Trading Hub only, which may not be possible for suppliers far away from Trading Hub. Buyers closer to source of gas are advantaged and the methodology therefore impacts the penetration of gas especially in far flung areas.	Facilitate efficient gas trade and competition. Since tariffs not based on specific transactions (e.g. point-to-point), but are designed in a manner that facilitates capacity trading, exploiting short notice market opportunities and reacting quickly to market developments
Efficiency, Equity/ transparency	Will result in capacity utilisation in concentrated areas and not overall development. Gas is traded based on contract path	Ensures efficient capacity utilization. Gas is traded independently of its location in the system, i.e. gives network users the freedom to book entry and exit capacity independently
Suitability for exchange	Not suitable for Gas Exchange as identification of injection point for the purpose of transportation tariff and to participate on exchange.	Best suited model for exchange trading as it allows for the development of notional balancing points, where entry gas is brought to a virtual point in the system, from which point the same or other network users can transport to an exit point. The notional point can thus become a trading hub and serve as a balancing point in network users' portfolios, as well as for the TSO to source its balancing gas.