

Concept Paper

Determination of Transportation rate for CGD Network and Transportation rate for CNG

1. CGD networks authorized by PNGRB under regulation 17 or 18 of PNGRB (Authorizing entities to lay, build, operate or expand city or local natural gas distribution network) Regulations, 2008 have reached the end of specified time period prescribed for exemption from the purview of common or contract carrier. It is imperative for PNGRB to determine the transportation rate for CGD Network and transportation rate for CNG for such CGD Networks, after following due process, in order to operationalize third party access in consumer interest.
2. The processes finalized consequent to this public consultation would also apply to CGD networks authorized by PNGRB under section 42 of the Act at the appropriate time.
3. In the context of the order of Hon'ble Supreme Court dated July 1, 2015, the extant regulatory framework needs to be revisited. In order to determine the Transportation Rate for CGD Network and Transportation rate for CNG and simplify the process various options that merit consideration are:

I. Option-I:

Cost of Service¹ (to be determined by PNGRB)

- a. Compute Normative Operating Cost + Depreciation+ Return on Capital employed consisting of Net Fixed Assets (NFA)² and Normative Working

1 Cost-of-service may be defined as the amount of revenue a regulated CGD entity must collect from rates charged to users of the network to recover the cost of doing business. These costs include operating cost, depreciation expense, and a reasonable return on its investment. A cost-of-service is a measure of a CGD entity's annual "revenue requirement" that will provide opportunity to operate profitably and attract capital for future growth.

2 Depreciation on fixed assets other than Pipelines and Compressor shall be as per the audited books of accounts and for Pipeline and Compressors, depreciation shall be based on the useful life as specified in the Regulations.

Capital (NWC) employed in the Regulated Business of City Gas Distribution. The financing of the Capital Employed will be on a normative basis at 30% out of Equity (including Free Reserves) and balance 70% out of Borrowed Funds.

- b. The Normative Rate of return on Equity shall be 14% post-tax. The pre-tax rate of return shall be computed by grossing-up 14% by the nominal rate of income tax applicable for Domestic Companies as per the provisions of the Income Tax, 1961. The Borrowing Rate will also be allowed on a normative basis, i.e., Average SBI MCLR for 3 years plus 3%, to be applied for each year on normative borrowings.
- c. It is proposed to consider the cost of Land for siting online compressor as per approved drawings (based on minimum statutory separation distance) and 15% additional land for related equipment and facilities for CNG Stations.
- d. The volume to be used as divisor for determining the transportation rate for CGD Network shall be equal to the actual volume for all categories of consumers (including CNG). For determining the transportation charge for CNG, the volume to be used as divisor shall be equal to actual volume of natural gas compressed as CNG.
- e. Review period shall normally be a period of three financial years, except for the initial fixation or for exceptional factors, which period and the factors will be decided by PNGRB.
- f. The actual performance with respect to the capital expenditure, operating costs and volumes during the previous review period shall be monitored against the identified parameters and the variations may be adjusted in the calculations on a prospective basis in the next review period.

- g. Formats for submission of information by the entity would be prescribed by PNGRB.
- h. PNGRB shall determine Transportation rate for CGD Network and Transportation rate for CNG in advance, i.e., prior to the commencement of the applicability for usage of Regulated facilities on common or contract carrier basis.

II. Option-II:

Through Online bidding

Variante-I: Auction Common or Contract carrier capacity based on Reserve price determined by PNGRB

Reserve price will be set by PNGRB at Rs 30 per MMBtu for Transportation rate for CGD Network and Rs.2 per Kg for Transportation rate for CNG. WPI escalations as applicable will adjust reserve price on a year to year basis i.e. annual escalation shall be considered based on the "Wholesale Price Index (WPI) Data (2011-12 = 100)" for "All Group / Commodity", as normally available on the website of the Office of the Economic Adviser, Government of India, Ministry of Commerce and Industry, Department of Industrial Policy and Promotion (DIPP)

Variante-II: Auction Common or Contract carrier capacity based on Reserve price self-determined by CGD Entity

Entities will self-determine the reserve prices for Transportation rate for CGD Network and Transportation rate for CNG in accordance with the cost of service approach prescribed by PNGRB (broad contours mentioned under Option-I) after extracting financial data from the most recently available audited accounts. This reserve price will be self-certified and duly audited by statutory auditors. Formats of audit certificates shall be specified

by the PNGRB. The authorized entity shall web-host the calculations in the form and manner specified by the PNGRB in the interests of transparency.

4. Process of Bidding under Option II:

- a. Entities seeking access to common or contract carrier capacity will submit Bids to the Authorized entities on their online portal in a transparent manner for:
 - i) Transportation rate for CGD Network
 - ii) Transportation rate for CNG
 - iii) Volume proposed to be transported on common or contract carrier basis
 - iv) Time period applicable for the volumes proposed to be transported on common or contract carrier basis

- b. The Authorized Entity shall evaluate the bids by using weights (to be specified in the Regulations) for calculating the composite score. The common or contract carrier capacity will be assigned in descending order of magnitude of the composite score which will be computed as a sum and product of the score for each bidding criterion and the respective weights assigned to them. Step wise process for ranking the bidders is mentioned below:

Bidding Parameters:

- i) Highness of Transportation rate for CGD/ CNG
- ii) Highness of Volume Per Day
- iii) Highness of Number of Days for which capacity is requested

Step 1:

Based on bidding by different entities, percentile will be calculated for each parameter mentioned above. Best bid in each parameter will get 100

percentile and remaining bids will be assigned percentile relative to the best bid.

Step 2:

Percentile score calculated for each parameter under step 1 will be multiplied with the respective weight assigned to it.

Step 3:

Composite score will be calculated after Step 2 and bidders will be ranked based on their composite scores.

An illustration in this regard is placed as **Annexure-I**.

- c. Bidder with highest composite score will get the first priority and will get the capacity at the transportation rate bid by it followed by the next highest composite score and so on and so forth. Process will be repeated till common or contract carrier capacity is exhausted.
5. Options and Variants suggested above are briefly summarized as follows:
- a. Option-I: Transportation rate to be determined by PNGRB using cost of service methodology.
 - b. Option-II: Discovery of transportation rate through transparent web-based bidding with following Variants to determine the reserve price:
 - Variant-I: Reserve price will be set by PNGRB at Rs 30 per/ MMBtu for Transportation rate for CGD Network and Rs.2 per Kg for Transportation rate for CNG with annual escalation.
 - Variant-II: Self-determined reserve prices for Transportation rate for CGD Network and Transportation rate for CNG in accordance with the cost of service approach prescribed by PNGRB.
6. While in case of Option I, the common or contract carrier capacity at any given point of time could either be assigned in accordance with the principle of First-Come-First-

Served on a transparent and non-discriminatory basis or any other methodology for allocation of capacity amongst the interested stakeholders, under Option II, the common or contract carrier capacity will be assigned on the basis explained in detail under para 4.c above.

7. A web-based portal would be developed by the authorized entity for obtaining bids and ensuring allocation on a transparent basis. PNGRB shall monitor the process through regular reports and third party system audits etc.

8. PNGRB solicits views and comments of entities, experts, stakeholders etc. on this Concept Paper within 21 days of the webhosting of the notice based on which an appropriate decision shall be taken on the way forward in the matter. The comments may be forwarded to Secretary, PNGRB.

Illustration showing the basis of determining the composite score for ranking the bidders:

Let there be three entities whose bids need to be compared for determining the composite score over the bidding criteria described below-

(A) Transportation rate for CGD/CNG

Let,

A1 = Transportation rate for CGD/CNG bid by 1st entity

A2 = Transportation rate for CGD/CNG bid by 2nd entity

A3 = Transportation rate for CGD/CNG bid by 3rd entity

Assume that A1 is higher than A2 and A2 is higher than A3.

The highest value of transportation rate for CGD (HA1) shall be given a score of 100% and the bid value of other transportation rates for CGD shall be given a score in relation to HA1 on a prorated basis, as under: -

$$HA1 = 100\%$$

$$HA2 = 100\% \times (A2/A1)$$

$$HA3 = 100\% \times (A3/A1)$$

(B) Volume Per Day:

Let,

B1 = Volume per day bid by the 1st entity.

B2= Volume per day bid by the 2nd entity.

B3= Volume per day bid by the 3rd entity.

Assume that B1 is higher than B2 and B2 is higher than B3.

The highest volume per day bid (HB1) shall be given a score of 100% and the volume per day of the other bids shall be given a score in relation to HB1 on a pro-rata basis as under:-

$$HB1 = 100\%$$

$$HB2 = 100\% \times (B2/B1)$$

$$HB3= 100 \% \times (B3/B1)$$

(C) Number of days for which capacity is requested:

Let,

C1= Number of days for which capacity is requested by 1st entity.

C2= Number of days for which capacity is requested by 2nd entity.

C3= Number of days for which capacity is requested by the 3rd entity.

Assume that C1 is higher than C2 and C2 is higher than C3.

The highest number of days bid (HC1) shall be given a score of 100% and the value of the other number of days bids shall be given a score in relation to HIK3 on a pro-rata basis as under –

$$HC1= 100 \%$$

$$HC2= 100 \% \times (C2/C1)$$

$$HC3= 100 \% \times (C3/C1)$$

Assume weightage for transportation rate is 'X', weightage for Volume per day is 'Y' and weightage for Number of days is 'Z'.

Now, the composite score of three entities shall be computed by assigning the respective weights assigned to each of the bidding parameter as indicated below:

$$\text{Entity 1} = X*HA1 + Y*HB1 + Z*HC1$$

$$\text{Entity 2} = X*HA2 + Y*HB2 + Z*HC2$$

$$\text{Entity 3} = X*HA3 + Y*HB3 + Z*HC3$$

Entities will be ranked in order of their composite score with entity with highest score to be ranked 1.