

NOTIFICATION

New Delhi, the 19th March 2008

PETROLEUM AND NATURAL GAS REGULATORY BOARD

In exercise of the powers conferred by section 61 of the Petroleum and Natural Gas Regulatory Board Act, 2006 (19 of 2006), the Petroleum and Natural Gas Regulatory Board hereby makes the following regulations, namely:-

1. **Short title and commencement.**

(1) These regulations may be called the Petroleum and Natural Gas Regulatory Board (Determination of Network Tariff for City or Local Natural Gas Distribution Networks and Compression Charge for CNG) Regulations, 2008.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. **Definitions.**

(1) In these regulations, unless the context otherwise requires,-

(a) "Act" means the Petroleum and Natural Gas Regulatory Board Act, 2006;

(b) "appointed day" means the date of October 1, 2007 when the Central Government notified the establishment of the Petroleum and Natural Gas Regulatory Board;

- (c) "Board" means the Petroleum and Natural Gas Regulatory Board established under sub-section (1) of section 3 of the Act;
- (d) "City Gate Station" means the point where custody transfer of natural gas from natural gas pipeline to the city or local natural gas distribution network (hereinafter referred as CGD Network) takes place;
- (e) "compression charge for CNG" means a charge (excluding statutory taxes and levies) in Rs./ Kg for online compression of natural gas into compressed natural gas (hereinafter referred to as CNG) for subsequent dispensing to consumers in a CNG station;
- (f) "Development of a CGD network" means laying, building, operating or expanding a CGD network;
- (g) "Network tariff" means the weighted average unit rate of tariff (excluding statutory taxes and levies) in rupees per million British Thermal Units (Rs./ MMBTU) for all the categories of consumers of natural gas in a CGD Network;

(2) Words and expressions used and not defined in these regulations, but defined in the Act or in the rules or regulations made thereunder, shall have the meanings respectively assigned to them in the Act.

3. **Application.**

(1) These regulations shall apply to an entity -

- (a) authorized by the Central Government for laying, building, operating or expanding CGD network before the appointed day;

(b) laying, building, operating or expanding CGD network before the appointed day and authorized by the Board for such activities under the Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand City or Local Natural Gas Distribution Networks) Regulations, 2008.

4. Determination of network tariff and compression charge for CNG.

The network tariff and compression charge for CNG in respect of an entity covered clause (a) or clause (b) of sub-regulation (1) of regulation 3 shall be determined as per the procedure at Schedule A.

5. Form for data submission for determination of network tariff and compression charge for CNG.

(1) An entity is obligated to submit to the Board the financial, cost and other data in the form at Attachment 1 of Schedule A:

(a) The information referred to in sub-regulation (1) shall be submitted by an entity referred to in clause (a) of sub-regulation (1) of regulation 3 within thirty days of the notification of these regulations;

(b) The information referred to in sub-regulation (1) shall be submitted by an entity referred to in clause (b) of sub-regulation (1) of regulation 3 alongwith the application seeking grant of authorization under the Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand City or Local Natural Gas Distribution Networks) Regulations, 2008.

6. Miscellaneous.

If any dispute arises with regards to the interpretation of any of the provisions of these regulations, the decision of the Board shall be final.

Schedule A
[see regulations 3 and 4]

Procedure for determination of network tariff and compression charge for CNG

The network tariff and compression charge for CNG in a CGD network shall be determined by considering a reasonable rate of return on normative level of capital employed plus a normative level of operating expenses in the CGD network.

1. Financial feasibility.

The entity to which these regulations apply shall submit all technical, operating, financial and cost data of the CGD network or CGD network project that may be required by the Board for determination of the network tariff and compression charge for CNG.

2. Methodology for determination of network tariff and compression charge for CNG.

The unit rates of network tariff and the compression charge for CNG to be charged for a period shall be the calculation based on the “Discounted Cash Flow” (DCF) methodology¹ considering the reasonable rate of return as the project’s internal rate of return as specified in clause 3. The parameters relevant to the

¹ Discounted Cash Flow refers to equating the inflows from the projected revenue earnings out of network tariff and compression charge for CNG with the outflows of capital and operating expenditures over the economic life of the project by discounting these flows at the reasonable rate of return. The volumes and outflows are estimated over the economic life which results in the determination of the network tariffs and compression charge for CNG required to be earned by the project to achieving the reasonable rate of return.

applicability of the DCF methodology have been described in detail in clause 4 to clause 6.

3. Reasonable rate of return.

The reasonable rate of return shall be the rate of return on capital employed equal to fourteen percent post-tax considering the rate of return on long-term risk-free Government securities and the need to incentivize investments in creation of CGD infrastructure. The rate of return on capital employed once applied to a CGD network shall remain fixed for the entire economic life of the project.

Note:

The pre-tax rate of return on capital employed shall be computed by grossing-up fourteen percent by the nominal applicable rate of income tax applicable for corporate assesses as per the provisions of the Income Tax, 1961.

4. Return on total capital employed for network tariff and compression charge for CNG.

(1) The return on total capital employed shall be determined separately for the capital employed in -

- (a) the common infrastructure in the CGD network (i.e., consisting of the pipeline from the tap-off point in the natural gas pipeline up to the city gate station, if any, city gate station, city gate distribution network consisting of pipelines, district regulatory station and distribution related equipments and facilities, but excluding CNG compression and dispensation related equipments and facilities) as specified in clause a)

and clause c) of Attachment 1 of Schedule A for determination of the network tariff;

(b) online compressors and related facilities as specified in clause (b) of Attachment 1 of Schedule A required for compression of natural gas into CNG for dispensation in the CNG stations in the CGD network for determination of the compression charge for CNG. Land for online compressor and all equipments and facilities beyond the discharge valve of the online compressor for CNG are related to the activity of dispensing of CNG and hence not to be considered for return on capital employed.

(2) The reasonable rate of return shall be applied on the total capital employed to determine the return on total capital employed in the project over its economic life and the authorized entity is free to leverage the financing of the project in any suitable manner.

(3) The total capital employed shall be equal to the Gross Fixed Assets in the project less accumulated depreciation ² plus Normative Working Capital (equal to twenty days of operating cost excluding depreciation).

(4) The Gross Fixed Assets shall be equal to their actual historical cost of acquisition (including the cost of any subsequent replacement or improvement or modification) or that normatively assessed by the Board, whichever is lower, as required in the CGD network or CGD network project over its economic life as per the following basis and principles³ that may be

² Depreciation shall be calculated by applying the rates of depreciation as specified in Schedule VI to the Companies Act, 1956 on the value of Gross Fixed Asset.

³ The basis and principles identified here are not exhaustive and may vary depending upon the specific CGD network or CGD network project under consideration which the Board may apply in a transparent manner.

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considered as required to create an efficient and robust CGD infrastructure, namely:-

- (a) treatment of an investment in the fixed asset in the determination of total return on capital employed shall be as per the basis indicated in Attachment 2;
- (b) capital costs in similar projects elsewhere in India benchmarked on a “like-to-like” basis;
- (c) appropriateness of the pipeline design and the operating philosophy with regards to maximum allowable operating pressure;
- (d) optimization of the equipments and facilities (online compressors for CNG compressors, metering systems, SCADA, fire fighting, etc.) required based on an assessment of the appropriate available technology;
- (e) design parameters of the equipments, like, online compressors for CNG;
- (f) assessment of the latest costs of major equipments in the CGD network - pipelines, online compressors, laying or building costs, project management consultancy, pre-operative expenditure, etc;
- (g) treatment of costs incurred in providing last mile connectivity (LMC, i.e., between the riser isolation valve before the metering unit and the Suraksha hose pipe connecting the burner in the domestic PNG customer’s premises) in the return on capital employed for network tariff shall be as per the procedure indicated in Attachment 3.

5. Operating costs.

Operating costs ⁴ required in the operation and maintenance of -

- 1) common infrastructure in the CGD network; and
- 2) online compressor facilities for compressing natural gas in to CNG

shall be computed separately for sub-clause 1) in the determination of network tariff and for sub-clause clause 2) in the determination of compression charge for CNG over the economic life, on an actual basis or based on a normative assessment by the Board, whichever is lower, over the following functional cost head, namely:-

- (i) consumables;
- (ii) utilities (power, fuel and water);
- (iii) salaries and wages;
- (iv) repairs and maintenance;
- (v) insurance premia on fixed assets (excluding on the value of loss of profit) and on line-pack volume;

⁴ Operating costs are those which are necessary for a proper upkeep and maintenance of a tangible asset created for operation of the CGD network (including online compressors for CNG) and does not include any financial cost, like, interest on loans, bad-debts, , expenditure incurred in raising or servicing of capital/ debenture/ bond/ debt, exchange variation on revenue account, sales promotion expenses, advertisement expenses (except for inviting tenders), but includes normal bank charges, bank guarantee charges, LC charges, application fee and bank charges for bid bond and performance bond required as per the terms of authorization.

(vi) administrative overheads (to the extent not classifiable under sub-clause (i) to (v), related and also commensurate to the level of operations in the CGD network);

(vii) depreciation on fixed assets based on the rates as per Schedule VI to the Companies Act, 1956;

(viii) miscellaneous income (realizable from a fixed asset included in the return on total capital employed or out of an expense considered as an operating cost, but does not include interest income, profit or loss on sale or transfer of any fixed or other asset), if any, shall be netted from the operating cost.

Note:

Since the cost of land for siting the online compressor is not considered in the determination of the total return on capital employed for compression charge for CNG, any land rentals or land lease charges for siting the online compression facilities shall not be considered as an operating cost for the determination of the compression charge for CNG.

6. Volumes to be considered in determination of unit network tariff and unit compression charge for CNG.

The volume to be used as divisor for the purpose of determination (including for subsequent review periods) of the yearly unit network tariff and unit compression charge for CNG shall be equal to -

a) the actual volume of natural gas (including the volume of natural gas transported by pipeline till the online compressor for CNG) transported in the CGD network; and

b) actual volume of natural gas compressed as CNG.

Note:

Adjustment for the volume correction required due to actual volumes in a review period being different than that considered in the divisor in the determination of unit network tariff or compression charge for CNG shall be carried out on a prospective basis in the next review period.

7. Economic life.

The economic life of the project for the purpose of determination of network tariff and compression charge for CNG shall be as specified in the Petroleum and Natural Gas Regulatory Board (Exclusivity for City or Local Natural Gas Distribution Networks) Regulations, 2008.

8. Review of network tariff and compression charge for CNG.

- a) review of network tariff and compression charge for CNG shall be carried out separately during each review period;
- b) review period shall normally be a period of five years (commencing from 1st of April and ending on 31st March of next year) from the end of the fifth year of the economic life of the project;
- c) the actual performance with respect to the capital and operating costs during the previous review period shall be monitored against the parameters identified under clauses 4 and 5 and the variations shall be adjusted in the

calculations on a prospective basis considering the remaining period of the economic life of the CGD project;

- d) The Board may, either on its own or on the entity's request, carry out review in between two tariff review periods, considering-
 - i) mandatory conversion of vehicles using MS, HSD or any other fuel into CNG fuel to the extent not envisaged earlier and necessitating incremental investments;
 - ii) changes in the applicable nominal rate of income tax used for grossing-up the rate of return on capital employed;
 - iii) sudden change in any parameter used in the determination of the network tariff or the compressed charge for CNG;

Attachment 2 to Schedule A
[see clause 4 (4) (a) of the Schedule]

Definition of a fixed asset and treatment in the determination of return on total capital
employed for network tariff and compression charge for CNG

The basis of considering fixed assets in a CGD network (including online compressors and related equipments) in the determination of the return on total capital employed shall be as per the following norms:-

- 1) A fixed asset in a CGD network is a tangible asset having a useful operating life of more than one year and is integral to the generation of revenues through network tariff and compression charge for CNG. Investment in securities, goodwill, current assets, accumulated loss not written-off, work-in-progress, etc. are not fixed assets.
- 2) Any change in the historical cost of the fixed asset due to revaluation or capitalization of losses shall not be considered. However, cost incurred in improvements, modification or replacement of any fixed asset shall be considered in line with the treatment prescribed in the mandatory accounting standards of The Institute of Chartered Accountants of India.
- 3) Cost of land purchased and used for putting the facilities essential to the CGD network (including CGS) shall only be considered. Land for siting Online CNG Compressors will not be considered. Land purchased for any future use (such as for CGD expansion requirements) shall be considered only when used.
- 4) Fixed asset declared as commissioned but not deployed in operations of the CGD network shall not be considered.

- 5) Any change in the value of the fixed asset due to capitalization of interest on loan (including foreign exchange variation in case of any loan in any foreign currency) during the pre-commissioning phase of the fixed asset shall be considered provided such loan was utilized for creation of the said fixed asset only.
- 6) A fixed asset shall be considered for return on capital employed on a “rolling basis” till the end of the economic life of the CGD project, provided it is not decommissioned on reaching 95% of its original cost. In the terminal year of the economic life, the depreciated value of the asset shall be treated as a project inflow in the DCF calculations for network tariff and compression charge for CNG.
- 7) Treatment of line-pack volume in pipelines in a CGD network shall be as per the procedure indicated below:-
 - a) Assessment of the volume of natural gas required as Line pack in the pipelines as and when commissioned in the CGD network shall be as specified in the relevant regulations for technical standards and specifications, including safety standards.
 - b) The line pack value of natural gas in pipelines in a CGD network shall be considered as a non-depreciating fixed asset and included in the total capital employed for network tariff and shall remain fixed over the economic life of the project.
 - c) The value of the line-pack volume shall be derived by multiplying the volume of line-pack by the average cost of natural gas at the CGS station at the time of commissioning of the pipelines in the CGD network.

- d) The salvage value of the line pack at the end of the economic life of the project shall be equal to its value initially assessed and shall be considered as a project inflow.

Attachment 3 to Schedule A

[see regulation 3 (2) and clause 4 (4) (g) of the Schedule]

Treatment of costs incurred in last mile connectivity (LMC) in the determination of
total return on capital employed for network tariff

1. In respect of an entity covered either under regulation 3 (1) (a) or under regulation 3 (1) (b),

a) the new PNG domestic consumers to be connected by the entity post-authorization shall not be required to pay the LMC charges upfront and in such a case, the related facilities and equipment shall be the property of the entity and eligible for return on total capital employed;

b) if such entity has already provided connectivity to some domestic PNG customers and upfront collected the LMC charges, the facilities and equipments, like, regulator, meter, pipe, valves, etc. shall be the property of the domestic consumer:

Provided that in case the actual cost of providing last mile connectivity to a PNG domestic customer exceeds the amount collected upfront by the entity from the PNG domestic customer, then the balance amount (that is, the difference between the actual cost of providing last mile connectivity and the amount so collected from the domestic PNG customer) shall be considered for return on total capital employed;

c) in order to allow differentiation in the treatment of PNG domestic customers, the network tariff shall be split over the following charge elements, namely:-

i) network tariff charge for the common CGD infrastructure before the pipe connecting the metering unit;

- ii) charge towards last mile connectivity, that is, equipments and facilities from the pipe connecting the metering unit and onwards upto and including the suraksha hose pipe connecting the burner;
 - d) domestic PNG customers who have paid the LMC charge upfront shall be required to pay only the network tariff charge for the common infrastructure specified at item i) of sub-clause c). Other domestic PNG customers shall be required to pay both the charges [that is, for the common infrastructure mentioned at item i) of sub-clause c) and for the LMC charges mentioned at item ii) of sub-clause c)] through the network tariff, in addition to paying the interest-free refundable security deposit of up to a maximum of Rs.5,000.
2. Entity may collect refundable interest free security deposit as specified under the Petroleum and Natural Gas Regulatory Board (Authorizing Entities for Laying, Building, Operating or Expanding City or Local Natural Gas Distribution Networks) Regulations, 2008. Such deposit is towards the safe-keeping of the meter and is to be refunded in full to the domestic PNG customer in case of a dis-connection. Further, since the amount collected as interest-free refundable security deposit shall exist as a liability in the books of accounts of the entity, the same shall not be reduced from the total capital employed while determining the network tariff.