

# PETROLEUM AND NATURAL GAS REGULATORY BOARD

## NOTIFICATION

New Delhi, the ----November, 2020

**F.No. -----:-** 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 (Access Code for City or Local Natural Gas Distribution Networks) Regulations, 2020.
- (2) These regulations 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) **“access arrangement”** means a contract between the authorised entity and the shipper, complying with the provisions specified in Schedule-I and defining the terms and conditions for access to entry point capacity, exit point capacity and CNG exit point capacity on the city or local natural gas distribution network. Authorised entity shall publish its standard format of such arrangement on its website.
  - (b) **“Act”** means the Petroleum and Natural Gas Regulatory Board established under the Petroleum and Natural Gas Regulatory Board Act, 2006 Act, 2006 (19 of 2006);
  - (c) **“allocated capacity”** means the scheduled maximum daily capacity in MMBTU at entry point agreed between the authorised entity and the shipper for delivery at exit point or CNG exit point;
  - (d) **“Board”** means the Petroleum and Natural Gas Regulatory Board;
  - (e) **“CNG exit point”** means the point at which the CNG is off taken from a CNG compressor outlet point for delivery to the shipper with proper arrangement for metering at outlet of the CNG compressor by the authorised entity:

Provided that the CNG exit point shall terminate at tubing connection or union

where compressor exit is connected to dispenser and at filling nozzle in case it is connected to CNG cascade of the shipper or any other point available in the high pressure pipeline;

- (f) **“CNG exit point capacity”** means the maximum quantity of CNG for open access, which the authorised entity shall deliver to the shipper at the relevant CNG exit point in a day:

Provided that the authorised entity shall from time to time define a homogenous zone upfront and the same shall be displayed on its website;

- (g) **“CNG exit point maximum daily quantity or “CNG exit point MDQ”** means the maximum quantity of natural gas available for open access, measured in kilogram (kg), which can be off-taken by the shipper at the relevant CNG exit point in a day;

- (h) **“day”** means a period of twenty-four consecutive hours beginning at 0600 hours on a day and ending at 0600 hours on the following day;

- (i) **“designated exit point”** means the exit point for which gas delivery has been mutually agreed between the shipper and the authorised entity;

- (j) **“delivered quantity”** means the quantity of gas delivered by the authorised entity at designated exit point of the shipper;

- (k) **“entry point”** means the point at which the natural gas delivered by a shipper is injected into the city or local natural gas distribution network

Entry point may be at CGS, Sub-transmission pipeline (STPL) or any pipeline connecting main trunk pipeline to the CGS.

- (l) **“entry point capacity”** means the maximum quantity of natural gas in MMBTU available for open access, which the authorised entity shall receive from shipper at the relevant entry point in a day so as to deliver at designated exit point;

- (m) **“entry point maximum daily quantity” or “entry point MDQ”** means the maximum daily quantity of natural gas for which capacity has been allocated by the authorised entity to the shipper on open access basis at the relevant entry point as agreed in the access arrangement;

- (n) **“exit point”** means the point at which the natural gas is off taken from city or local natural gas distribution network by the shipper as agreed between the authorised entity and the shipper in the access arrangement and such exit point

shall be at all the metering stations, CNG exit point and all such other points mutually agreed between the shipper and authorised entity in the access arrangement:

Provided that-

- (i) for domestic piped natural gas (PNG), the exit point shall be the suraksha hose of the individual consumer;
- (ii) any new exit point shall be decided mutually on technical and safety ground.
- (o) **“exit point capacity”** means the maximum quantity of natural gas in MMBTU available for open access up to which the authorised entity shall deliver to the shipper at the relevant exit point in a day;
- (p) **“exit point maximum daily quantity” or “exit point MDQ”** means the maximum quantity of natural gas on open access basis up to which can be off taken by the shipper at specific metering station and CNG exit point in a day;
- (q) **“imbalance quantity”** on a day means the positive imbalance quantity or the negative imbalance quantity as specified in regulation 16;
- (r) **“line pack” or “LP”** means the volume of gas that must be maintained in the city or local natural gas distribution network at all times in order to maintain pressure and enable uninterrupted transportation and supply of natural gas through the network;
- (s) **“lost and unaccounted for gas” or “LUAG”** means the quantity of natural gas which is unaccounted for whatsoever reason including, but not limited to blow downs, venting or release during regular operation or maintenance of the city or local natural gas distribution network and mismatch of meter readings at the entry and exit point;
- (t) **“marketer”** means an entity dealing with marketing or trading of natural gas;
- (u) **“marketing exclusivity period”** means the period of exclusivity from the purview of common carrier or contract carrier as per the Petroleum and Natural Gas Regulatory Board (Exclusivity for City or Local Natural Gas Distribution Network) Regulations, 2008;
- (v) **“maximum daily quantity” (“MDQ”)** means the maximum quantity of natural gas, contracted, booked, scheduled for delivery in a particular day;
- (w) **“maximum delivery rate” (“MDR”)** means the maximum per hour rate, up to

which the authorised entity shall deliver natural gas to the shipper at the relevant exit point as specified in the access arrangement;

- (x) **“maximum off-take rate” or “MOR”** means the maximum per hour rate, up to which the shipper shall off-take natural gas at the relevant exit point as specified in the access arrangement and MOR shall be the same in value as the MDR;
- (y) **“maximum receipt rate” or “MRR”** means the maximum per hour rate, up to which the authorised entity shall receive natural gas at the relevant entry point as specified in the access arrangement;
- (z) **“MMBTU”** means one Million British Thermal Units on the basis of Gross Calorific Value (GCV) and shall be the unit for energy content of natural gas as defined in ISO 6976;
- (za) **“nominated quantity”** means the quantity of natural gas, confirmed by the shipper to the authorised entity for delivery at the designated entry point with details of off takes at the relevant exit point on daily basis for distribution or for own use:
- (zb) **“off-spec gas”** means the natural gas delivered by the shipper at the entry point or delivered by the an authorised entity at the exit point which does not conform to the gas parameters referred to in sub-regulation (1) of regulation 9;
- (zc) **“operating pressure”** means the pressure corresponding to a particular flow rate at which the relevant section of the city or local natural gas distribution network is operated:  
  
Provided that at no point of time the operating pressure for the network shall exceed the design pressure or maximum allowable operating pressure (MAOP) as specified in the relevant technical standards and specifications including safety standards regulations;
- (zd) **“scheduled quantity”** means the quantity of natural gas, scheduled for a shipper by the authorised entity at the designated entry point or exit point for distribution or own requirement based on the nominated capacity and in accordance with the provisions of the access arrangement;
- (ze) **“shipper”** means a consumer or a marketer or any other entity who intends to utilize the capacity in the CGD Network;
- (zf) **“Standard Cubic Metre” or “SCM”** shall mean the quantity of Gas that occupies a volume of one (1) cubic meter at a temperature of fifteen Celsius

(15°C) under an absolute pressure of one decimal zero one three two five bar (1.01325 Bar).

(zg). **“system use gas” or “SUG”** means the quantity of natural gas, used by the authorised entity for operation and maintenance of the city or local natural gas distribution network including, but not limited to, general use of gas for compressors, prime movers, gas heaters and venting or flaring for safety requirements;

(zh) **“Unit of Measurement”** means unit for measurement of quantity of gas. Unit of measurement shall be in million British Thermal Units (MMBTU).

Provided however that CNG exit point quantity shall be measured in kilogram (kgm) but shall be converted into MMBTU for the purpose of natural gas quantity reconciliation.

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

### **3. Application:**

These regulations shall apply to an authorised entity in a geographic area on being declared as common carrier or contract carrier in terms of Petroleum and Natural Gas Regulatory Board (Guiding Principles for Declaring City or Local Natural Gas Distribution Networks as Common Carrier or Contract Carrier) Regulations, 2020 and Petroleum and Natural Gas Regulatory Board (Exclusivity for City or Local Natural Gas Distribution Network) Regulations, 2008 and to any shipper who intends to utilise the capacity in the CGD Network of such geographical area.

Provided that-

(a) the authorised entity shall allow access to shippers on non- discriminatory basis to a city or local natural gas distribution network in an authorised area;

(b) the development of the infrastructure shall be governed by the Petroleum and Natural Gas Regulatory Board (Authorising Entities to Lay, Build, Operate or Expand City or Local Natural Gas Distribution Networks) Regulations, 2008 and the shippers shall get their gas transported or delivered by the authorised entity-

(i) up to the suraksha hose connecting to the burner of the domestic

connections;

(ii) up to the metering point in case of commercial and industrial connections;

(iii) up to compressor exit point in case of CNG stations. However, if CNG compressor is installed by the shipper, then shipper shall receive the gas at CNG Compressor entry point.

Provided further that

(i) the authorised entity shall maintain its entire assets up to suraksha hose for all times in conformity with the Petroleum and Natural Gas Regulatory Board (Technical Standards and Specifications Including Safety Standards for City or Local Natural Gas Distribution Networks) Regulations, 2008.

(ii) the metering point means the location where gas measurement is carried out which will include metering device, equipment and pressure reduction up to desired pressure at exit point.

(iii) compressor exit point shall include the filling nozzle and CNG measurement facilities.

#### **4. Capacity declaration:**

- (1) Authorised entity shall, within 90 days of declaration of its CGD network, as common carrier or contract carrier, determine in accordance with applicable regulations and declare by publishing on its website the entry point capacity, the exit point capacity, the CNG exit point capacity for open access at all entry points and exit points and the capacity at DPRS level for PNG and capacity at mother stations (Cascade filling capacity) for CNG in accordance with the provisions of these regulations: The authorised entity shall similarly declare the aforesaid information as on the end of each calendar month by tenth of the succeeding month.
- (2) The capacity in a CGD network for open access on cumulative basis at all entry points shall be at least twenty percent of the capacity of the CGD network or the maximum quantity of gas that has flowed in the CGD network even for a period of one day in the past whichever is higher. If such open access capacity in the CGD network falls below ten percent, the authorised entity shall increase the capacity of the CGD network so as to restore the open access capacity to at least twenty percent within a period of six months from the date it has fallen below ten percent.

- (3) The Board may on a suo motu basis and notwithstanding the provisions of sub regulation (2) but after following the due process of public consultation, may by order direct an authorised entity to expand the capacity of the CGD network within such period and on terms and conditions as it may deem fit.
- (4) An authorised entity shall not utilise open access capacity in its CGD network for own requirement except with respect to such part of extra capacity for which booking has not been received from any shipper for a consecutive period of ninety days.

#### **5. Capacity booking:**

- (1) The authorised entity shall, within 21 days of declaration of its city or local natural gas distribution network as common carrier or contract carrier, publish information in the format specified in Schedule-II on its website and a short advertisement referring to such publication on the website in a national daily and a vernacular daily newspaper, seeking capacity booking for the entry points and exit points capacity on its CGD network and thereafter take similar action within twenty one days of when extra capacity is available in its CGD network.
- (2) Interested shippers shall submit in format specified in Schedule-III, their offers to the authorised entity for booking the capacity (“MDQ”) within ninety days from the date of commencement of the public notice for capacity booking.
- (3) The sum of the requested entry points MDQ shall not be less than 500 MMBTU, and the off take at any exit point shall not be less than 50 MMBTU per day.

Provided that the shipper and the authorised entity may agree in the access arrangement to achieve the booked quantities over an agreed period.

- (4) The allotment of capacity shall be decided by the authorised entity in a transparent and non-discriminatory manner. If the available common carrier capacity is more than total booking quantity by all shippers then the booked capacity will be allotted to all the shippers and in cases where the booking for capacity received on a particular day is more than the available common carrier capacity, such common carrier capacity shall be allotted to the entities from whom booking has been received based on the highness of the product of the sum of the entry points MDQ and the period of capacity booking.
- (5) Capacity booking shall be finalised within thirty days of the end of the period as specified under sub-regulation 2 at all entry points and exit points and other relevant terms and conditions through an access arrangement.

- (6) The authorised entity shall publish information on entry points capacity, exit points capacity and CNG exit points capacity on the city or local natural gas distribution network of an authorised area, on its website by 15<sup>th</sup> of each month for the succeeding month on a continuous basis and schedule the capacity in such a manner that the capacity can be utilised effectively from the first working day of every month. However, such data may be verified by the Board at any time or at such intervals as may be decided by the Board from time to time.
- (7) Capacity booking shall be finalised in terms of entry points MDQ and exit points MDQ and other relevant terms and conditions through an access arrangement.
- (8) An authorised entity whose CGD network has been declared as a common carrier or contract carrier shall establish within ninety days of such declaration, a portal for receiving offers for booking common carrier or contract carrier capacity and allocation the capacity against such offers in an open, transparent and non-discriminatory manner. The process flow that would be followed on such portal shall conform to the guidelines specified in Schedule-V.
- (9) The relevant authorised entity shall accept application in a transparent manner on its website and allocate online the common or contract carrier capacity available on a transparent basis by maintaining an online record of the applications received as specified in Schedule-VI and also publish the information on its website.

**6. Expansion of Availability of Natural Gas in Authorised Area whose City or Local Natural Gas Distribution Network has been Declared as Common Carrier:**

- (1) As per the provisions of the Regulation 8 (1) (a) (iii) and Regulation 8 (1) (b) (ii) of Petroleum and Natural Gas Regulatory Board (Exclusivity for City or Local Natural Gas Distribution Network) Regulations, 2008, authorised entities are required to reach all charge areas or wards in the authorised area through pipelines of adequate size to meet the demand of the consumers in these charge areas or wards. In case authorised entity fails to meet the requirement as per the provisions of the exclusivity Regulations, Board shall cancel the infrastructure exclusivity either for the full area or part area as the case may be, as per the provisions and procedures under Petroleum and Natural Gas Regulatory Board (Exclusivity for City or Local Natural Gas Distribution Network) Regulations, 2008.

Provided that cancellation of such exclusivity shall not alter the other terms and conditions of the authorisation such as work program, Performance Bank Guarantee, Service obligations etc.

- (2) Post cancellation of exclusivity, if an entity having the qualifying criteria specified in sub-clauses (b), (c) and (e) of sub-regulation (6) of regulation 5 of the Petroleum and Natural Gas Regulatory Board (Authorising Entities to Lay, Build, Operate or Expand City or Local Natural Gas Distribution Networks) Regulations, 2008 for the entire authorised area, intends to sell gas to consumers in an area that is not connected to the common carrier CGD network of the relevant authorised area, then such shipper may either supply through cascade/truck mode or may submit an application to the Board for laying the required pipeline or associated facilities together with a performance bank guarantee (PBG) for a value of twenty percent of the PBG submitted by authorised entity for the Geographical Area or Rs. Ten crore whichever is less, subject to a minimum PBG of Rs. One crore. An application under this clause will be submitted with documents to show that the applicant is satisfying the qualifying criteria specified in sub-clauses (b), (c) and (e) of sub-regulation (6) of regulation 5 of the Petroleum and Natural Gas Regulatory Board (Authorising Entities to Lay, Build, Operate or Expand City or Local Natural Gas Distribution Networks) Regulations, 2008. On receipt of one or more such applications:
- i. The Board shall review the application (including its technical and financial capabilities and may call for public consultation on the application and decide the application within a period of sixty (60) days from completion of the public consultation.
  - ii. If the Board approves the application submitted under this clause, then the applicant shall be the entity having such specific permission to lay the specified CGD pipeline network and shall be required to comply with the regulations governing CGD networks under the Act including providing such information and reports as required to be submitted by authorised entities to the Board, and the existing authorised entity shall provide interconnection with such approved applicant's pipeline or associated facilities with the common carrier or contract carrier CGD network. Such additional pipeline or associated facilities that are interconnected with the existing CGD network shall also be deemed to be common carrier or contract carrier and open to use by third parties including the authorised entity.
- (3) In case the Board receives more than one application for laying the required pipeline or associated facilities under sub-clause (b) of sub-regulation (1) of regulation 6 above, the Board shall follow the procedure prescribed for bidding under regulations 4, 5 and 7 of the Petroleum and Natural Gas Regulatory Board

(Authorising Entities to Lay, Build, Operate or Expand City or Local Natural Gas Distribution Networks) Regulations, 2008.

- (4) It is further clarified that in authorised area where infrastructure exclusivity continues to vest with the authorised entity, no shipper can lay, build, operate or expand any infrastructure for supply of natural gas to consumers within the authorised area except in accordance with the provisions of sub-regulation (1) above.

**7. Provision of Access to third party CNG/L-CNG stations:**

- (1) An authorised entity whose CGD network has been declared as a common carrier, shall allow any shipper to install CNG/L-CNG Station within the authorised area of its CGD network and provide access to the shipper. If the online compressor forming part of the authorised entity's CGD network is unable to meet the requirements of the third party CNG/L-CNG station installed by shipper within the authorised area, then such third party entity establishing the CNG station may request the authorised entity to install additional compressor facilities to meet the requirements of the third party CNG/L-CNG station(s). If the authorised entity is unable to establish and commence operation of such additional compressor facilities within a period of one hundred and eighty days from the date of request for such additional compressor facilities, then the concerned shipper may install its own compressor facilities which shall also be deemed to be common carrier or contract carrier and open to use by third parties including the authorised entity.

**8. Obligations of shippers and authorised entity:**

- (1) The authorised entity shall be responsible to comply with all the applicable regulations for the CGD network from gas receipt to delivery point.
- (2) Authorised entity shall transport gas received at entry point through CGD network and shall deliver gas at exit point.
- (3) Authorised entity shall be responsible for the overall management of CGD network and its related services.
- (4) Authorised entity shall act as supplier of last resort for the domestic customers in case of any default by any shipper.
- (5) Shipper shall be responsible for compliance with all the applicable regulations for the CGD network before the gas receipt by the authorised entity and after gas is delivered to the shipper.

- (6) Shipper shall provide gas at entry point and receive gas at exit point.
- (7) Shipper shall ensure that all gas entering CGD network shall conform to gas specifications and shall be within operational range of pressure and temperature to flow in CGD network. The entry pressure and temperature at all entry points shall be the mutually agreed pressure between the shipper and the authorised entity.
- (8) Shipper shall pay all dues and provide such guarantee, surety and security as may be required to meet its commercial obligations under the access arrangement.
- (9) Shipper shall be responsible for billing and collection of dues from its customers for natural gas, while for applicable charges the authorised entity shall raise bills on the shipper. As meter reading is the responsibility of the authorised entity except for PNG domestic consumers, the authorised entity shall have right to charge meter reading charges from the shipper as may be mutually agreed. In case of PNG domestic connection, shipper shall be responsible for meter reading and shall pay the meter reading charges to the authorized entity. Shipper shall also be responsible for any complaints from its customers in relation to billing and collection for natural gas and shall be dealt as per the Petroleum and Natural Gas Regulatory Board (Code of Practice for quality of Service for City or Local Natural Gas Distribution Networks) Regulations, 2010
- (10) Both authorised entity and shipper shall comply with the Petroleum and Natural Gas Regulatory Board (Code of Practice for Quality of Service for City or Local Natural Gas Distribution Networks) Regulations, 2010.

#### **9. Gas parameters:**

- (1) The authorised entity shall, on a non-discriminatory basis, specify the threshold limits for gas parameters at the entry point, such as the acceptable ranges of pressure, temperature and calorific value and the acceptable threshold limits for other elements in gas, such as carbon dioxide (CO<sub>2</sub>), nitrogen (N<sub>2</sub>) and oxygen (O<sub>2</sub>) in the access arrangement:

Provided that the aforesaid ranges or the threshold limits shall be in conformity with those specified in Schedule-VI.

Provided further that in case the CGD network has been established largely based on Coal Bed Methane (CBM) gas, or Coal Mine Methane (CMM) gas from open cast mining, the Board may on an application from the authorised entity allow deviation from the specifications given in Schedule-VI.

- (2) If the gas delivered by the shipper at the entry points does not meet the requirements of gas parameters as specified in the access arrangement and as specified in these regulations, the authorised entity may-

- (a) refuse to accept it; or

- (b) accept it and charge on a non-discriminatory basis, a cost of service (“off-spec gas charges”) from the shipper, as mutually agreed in the access arrangement, for any additional facilities or treatment for upgrading the gas to the network requirements.

Provided that such off-spec gas does not adversely affect the quality-specifications committed by the authorised entity at the exit points to the existing customers.

- (3) The authorised entity may deliver commingled gas at the exit points, and the quality of gas at the exit points shall be within the acceptable band agreed in the access arrangement.
- (4) The authorised entity shall odourise the entire gas as per the provisions of relevant standards notified by the Petroleum and Natural Gas Regulatory Board before delivering to the shipper.

#### **10. Facilities at the entry points and exit points:**

- (1) The shipper shall arrange to deliver natural gas at the entry points. The authorised entity shall provide facilities for transfer of custody and delivery of natural gas at the entry points at the cost of the shipper including measuring equipment:

Provided that the shipper may install its check meter at the entry points at its own cost in case it desires so.

- (2) The shipper shall ensure that the authorised entity has ready access to the measuring equipment installed in his premise.
- (3) The authorised entity shall provide CGD network and CNG compression facility to shipper in consideration of payment of transportation rates for CGD and transportation rate for CNG determined in accordance with Petroleum and Natural Gas Regulatory Board (Determination of Transportation Rate for CGD and Transportation Rate for CNG) Regulations, 2020 to be notified by Board.
- (4) The authorised entity shall provide at its own cost facilities, including measuring equipment, pressure reduction and control facilities, odourisation facilities, gas

chromatography or any other system as agreed between the authorised entity and the shipper, required for transfer of custody and delivery of natural gas to the shipper at all the exit points. Provided that the shipper may install its check meter at the exit points at its own cost in case it desires so.

- (5) The maintenance of the facilities at the entry points and exit points shall respectively be carried out by the shipper and the authorised entity unless otherwise agreed in the access arrangement.

**11. Nomination, scheduling, metering, allocation and billing:**

- (1) The nomination, scheduling, metering, allocation and billing procedure shall be specified in the access arrangement and the shipper shall nominate the quantity for the following day by 10:00 hours of the previous day and for weekly nomination by 10:00 hours on Friday of the previous week. The nomination and scheduling for each entry point and exit point shall be made for each hour of the following day on a best endeavor basis for system operation purpose;
- (2) The authorised entity shall regularly measure the quality of gas by the gas chromatograph unless otherwise agreed between the authorised entity and the shipper in the access arrangement.
- (3) Total error limit and accuracy of the measuring equipment shall be as agreed to between the authorised entity and the shipper subject to any mandatory specifications, if any, laid down by the Board through regulations.
- (4) The authorised entity shall carry out verification, calibration or proving of measuring equipment as per relevant codes and standards.

**12. Gas accounting and reconciliation:**

- (1) Gas accounting shall be done on a daily basis in energy terms, that is in MMBTU, and shall be based on Gross Calorific Value as defined in ISO 6976-1:1983(E) as amended or modified from time to time:

Provided that -

- (a) the daily gas delivered at the relevant entry points shall be directly measured through system as agreed between the authorised entity and the shipper;
- (b) for industrial and commercial customers, the daily off take at the relevant exit points shall be measured through system as agreed between the

authorised entity and the shipper;

(c) for PNG domestic customers, the daily off-take for gas accounting shall be assumed based on the average consumption of gas by the relevant PNG domestic customers and reconciliation shall be done within seven days of the end of every billing cycle as per the methodology agreed in access arrangement;

(d) for CNG, the daily off take of gas shall be measured in kilogram (kgm) on the meter at the outlet of the online compressor and shall be converted to MMBTU for gas accounting based on the average quality parameters of the gas in the network on the relevant day, measured at CGS in the event gas quality measurement are not available at CNG station. For this purpose, a homogenous zone has to be defined by the authorised entity upfront from time to time and the same has to be informed to the shipper. It may not be possible that gas chromatograph is available at every CNG station. On the basis of the point of chromatography at, CGS it will be assumed that same quality of gas is available in a particular zone of the network and accordingly, gas quality parameters will be considered for CNG station.)

(2) The detailed measurement and gas accounting procedure shall be specified in the access arrangement.

### **13. Charges:**

(1) The shipper shall pay to the authorised entity the following charges for using its CGD network or compression facility, namely:–

a) “transportation rate for CGD” in accordance with Petroleum and Natural Gas Regulatory Board (Determination of Transportation Rate for CGD and Transportation Rate for CNG) Regulations, 2020 to be notified by Board.

b) “transportation rate for CNG” in accordance with Petroleum and Natural Gas Regulatory Board (Determination of Transportation Rate for CGD and Transportation Rate for CNG) Regulations, 2020 to be notified by Board.█

c) overrun charges, if applicable;

d) system imbalance charges, if applicable;

e) off-spec gas charges, if applicable, as agreed in access arrangement;

- f) applicable taxes and duties;
- g) any other charges mutually agreed in the access arrangement such as –
  - i. ship or pay;
  - ii. transport or pay;
  - iii. technical upgradation of system;
  - iv. R&D;
- h) any other charges as approved by the Board from time to time.

Charges specified in clauses (c) to (g) shall be in accordance with provisions of Schedule-I and charges given in regulations 14, 15 and 16.

**14. Authorised entity's shortfall charges:**

The authorised entity shall have an obligation to provide capacity to the shipper up to the scheduled quantity unless there is a planned maintenance as specified in regulation 21 or a *force majeure* as specified in regulation 22 or an emergency as specified in regulation 23.

**15. Overrun charges:**

- (1) The methodology for calculation of the overrun quantity for a shipper at each entry point, in MMBTU, on a day shall be specified in the access arrangement on a non-discriminatory manner.
- (2) The shippers shall not have to pay any overrun charges for overruns up to five percent of the scheduled quantity. Overruns beyond five percent of the scheduled quantity shall attract overrun charges.
- (3) Overrun charges for overruns greater than five percent of the scheduled quantity shall be reasonable, transparent and non-discriminatory and shall be specified in the access arrangement.
- (4) Overrun charges payable by the shipper in respect of a day shall be equal to the sum of the overrun charges payable in respect of each entry point on that day.

**16. System imbalance charges:**

- (1) Positive imbalance quantity on a day, in MMBTU, shall be the excess of the aggregate of the shipper's quantities delivered at all the entry points over the

aggregate of the shipper's quantities off taken at all the exit points.

- (2) Negative imbalance quantity on a day, in MMBTU, shall be the excess of the aggregate of the shipper's off taken quantities at all the exit points over the aggregate of the shipper's delivered quantities at the all entry points.
- (3) The cumulative imbalance at the start of a day shall be equal to the cumulative imbalance at the end of the previous day. At the start of the first day when natural gas is delivered by the shipper, the cumulative imbalance shall be zero.
- (4) The cumulative imbalance at the end of a day shall be equal to the sum of the cumulative imbalance at the start of the day and the imbalance for the day.
- (5) The shipper shall not have to pay any imbalance charges up to a cumulative positive or negative imbalance of five percent of sum of MDQ at all the entry points. Authorised entity shall notify the imbalance quantity to shipper on daily basis so as to provide an opportunity to shipper to cure imbalances while submitting nominated quantity for subsequent period. In case the shipper is unable to cure such imbalances in a period of fifteen days, then, the authorised entity shall have the right to adjust daily nomination at the entry points and exit points to cure such imbalances to ensure safety and integrity of the CGD network. Imbalance charge for cumulative positive imbalance and cumulative negative imbalance in excess of these limits shall be reasonable, transparent and non-discriminatory.
- (6) The imbalance charges payable by the shipper for any particular day shall be equal to the product of the cumulative imbalance quantity calculated as stipulated in sub-regulation 4 and the imbalance charge per MMBTU specified in the access arrangement.
- (7) The daily imbalance gas quantities shall be settled between the shipper and the authorised entity every fortnight considering actual daily metered amounts for industrial, commercial and CNG segments and assuming a mutually agreed daily consumption quantity of gas for domestic segment; the methodology for the settlement shall be specified in the access arrangement. The reconciliation with actual metered quantity for the domestic segment shall be as agreed in the access arrangement between the shipper and the authorised entity.
- (8) Maintenance of escrow account
  - (a) There shall be established an escrow account to be maintained by the Board from the date of the commencement of Petroleum and Natural Gas Regulatory Board (Access Code for City or Local Natural Gas Distribution

Networks) Regulations, 2020, in which there shall be credited all charges received by the authorized entity on account of imbalances and overruns.

(b) The authorized entity shall raise a separate invoice towards imbalance and overrun charges, including applicable taxes and levies. The authorized entity shall deposit the taxes and levies with the concerned authorities.

(c) The authorized entity shall make all reasonable efforts for recovering the imbalance and overruns charges referred to in regulation 16 (6) from the shipper within the period it allows shipper to pay its transportation charges.

(d) The authorized entity shall deposit the amounts received by it from the shipper on account of the charges referred to in regulation 16(6) (excluding taxes and levies) into the escrow account maintained by the Board within a period of fifteen days from the end of the calendar quarter during which such amounts were received by it along with such details thereof as the Board may require from time to time. Authorized entity is not allowed to retain or deduct any amount (except for taxes and levies) received by it except the claim approved by the Board under clause (h).

(e) The authorized entity shall submit to the Board month-wise, pipeline-wise and shipper-wise details of such charges as are recoverable from each shipper, amounts received from the shippers and the amounts due from shippers and its reconciliation with the amount deposited in accordance with provisions of clause (d), quarterly within a period of sixty days from the end of each quarter along with a certificate from a Chartered Accountant certifying such details and further, at the end of each financial year, an annual certificate containing the said details shall be submitted by the authorized entity to the Board along with the certificate for the fourth quarter.

(f) The authorized entity may claim from the escrow account maintained by the Board the amounts incurred by it towards its contractual obligations with reference to supply or pay and extra efforts to compress gas in case of negative imbalances and system management of the CGD network due to such imbalances created by the shippers:

(g) Provided that such claim shall not exceed the amount deposited by him in the escrow account.

(h) The claim under clause (d) may be submitted annually by the authorized entity to the Board within 60 days of the end of each financial year with details such as details of amounts incurred by it, its bank account details, Permanent Account Number and detailed rationale of such claim, along with a certificate from a Chartered Accountant certifying such details.

(i) The Board shall consider such claims on merits and may seek such further information as it may deem fit and the Board shall communicate shall communicate the amount of claim approved to the authorized entity within 60 days from receipt of complete information, which may be deducted by the authorized entity from the subsequent deposits to be made by it into the escrow account.

(j) The balance amount available in the escrow account, after the eligible withdrawal by the authorized entity, under clause (i) may be utilized in such a manner and for such purposes as may be specified by the Board.

(k) Authorized entity shall provide, under the relevant regulations of the Board, Imbalance Management Services to the extent it is technically and operationally feasible.

**17. Hourly delivery, off take and receipt rates:**

- (1) The MDR, MOR and the MRR, as well as the authorised deviations from the hourly scheduled rates for which the shipper shall not have to pay any charges, shall be specified in the access arrangement so as to ensure the safety and integrity of the CGD network.
- (2) The charges for deviations in hourly delivery and off take rates that exceed these limits shall be specified in the access arrangement:

Provided that the shipper shall not be required to pay any charges for deviations in hourly delivery and off take rates that exceed the limits specified in the access arrangement for the first sixty days of commencement of its access to the entry and exit points capacity on the CGD network if the shipper has booked capacity under regulation 5.

**18. System Use Gas (SUG), Lost and Unaccounted for Gas (LUAG):**

The authorised entity shall absorb SUG and LUAG, if any, and shall not pass on any liability on this account to the shipper:

Provided that the authorised entity shall be free to arrange the SUG and LUAG from any source.

**19. Line Pack (LP):**

The authorised entity shall arrange and absorb the LP on its own and shall not pass on any liability on this account to the shipper.

**20. Planned maintenance:**

- (1) The authorised entity shall intimate the shipper on non-discriminatory basis of its maintenance plan for a defined period well ahead of time, as agreed in the access arrangement, identifying those entry and exit points where natural gas flows may be restricted by such maintenance, the extent of the restrictions and the time of occurrence. The authorised entity shall plan such maintenance so as to minimize disruption to regular gas supply.
- (2) The planned maintenance shut down period for any customer, in all the segments, except domestic PNG, shall not exceed the cumulative period of ten days in any calendar year. The service obligations specified in the Petroleum and Natural Gas Regulatory Board (Authorising Entities to Lay, Build, Operate or Expand City or Local Natural Gas Distribution Networks) Regulations, 2008 and other relevant regulations shall prevail in respect of domestic PNG customers.

**21. Force majeure:**

Force majeure shall be governed by the contract between the authorized entity and shipper.

**22. Operating procedures and emergencies:**

- (1) The operating procedures to be followed by the authorised entity and the shipper during regular operations as well as in the event of an emergency shall be included in the access arrangement.
- (2) An emergency may exist -
  - (a) by reason of a leakage, or a suspected leakage, of gas; or

(b) in following circumstances, namely: -

- (i) the safety of the network is at risk;
- (ii) the safe conveyance of gas through the network is at risk;
- (iii) gas conveyed by the network is at such a pressure or of such a quality as to constitute, when supplied to the customer's premises, a danger to life or property; or
- (iv) any other circumstances reasonably believed by the authorised entity to constitute an emergency which, for the avoidance of doubt, may include circumstances upstream of an entry point, and, where the context requires, a reference to an emergency includes the event or circumstance which may give rise to such emergency.

(3) The authorised entity shall take steps to restore normal operations of the network as soon as reasonably possible after an emergency. Restoration of services to the various customer segments in case of emergencies or disruptions or interruptions in the CGD network shall be carried out in the following order of priority, namely: -

- (a) domestic PNG customers;
- (b) essential services, like hospitals, clinics, milk supplies;
- (c) CNG customers;
- (d) Others.

**23. Confidentiality of information:**

All documentation, information, data, submissions, comments, etc. disclosed, delivered or exchanged whether in writing or otherwise by or between any entity, authorised entity, shipper or any other party either in connection with or in consequence of the requirements of these regulations shall be regarded and treated as confidential and shall not be disclosed either in full or part, including the contents and copies thereof in any form except in connection with any proceedings in any court, Board or other regulatory authorities, or as may be required under any law, unless such documentation, information, data, submissions, comments, etc. is already in public domain.

**24. Miscellaneous:**

- (1) The Board shall have power to issue clarifications with regard to these

regulations and in case of any dispute, the clarification given by the Board shall be final and binding.

- (2) If any question arises as to the interpretation of these regulations, the same shall be decided by the Board.

**25. Repeal:**

- (1) Petroleum and Natural Gas Regulatory Board (Access Code for City or Local Natural Gas Distribution Networks) Regulations, 2011 shall stand repealed.
- (2) Notwithstanding the repeal under sub-regulation (1), anything done or any action taken or purported to have been done or taken, shall, insofar as it is not inconsistent with the provisions of these regulations, be deemed to have been done or taken under the corresponding provisions of these regulations.
- (3) Sub-regulation (2) shall not be held to prejudice the general application of section 6 of the General Clauses Act, 1897 (10 of 1897) with regard to the effect of repeal of the repealed regulations.

**Schedule-I**  
**Access Arrangement Guidelines**  
(See Regulation 2(1)(a))

**1.0 Access arrangement guidelines.**

These guidelines provide the guiding principles for facilitating access arrangement between the authorised entity and the shippers.

**2.0 Services.**

The access arrangement shall contain the following services to be provided by the authorised entity to the shipper: -

- a) Receipt of gas at entry point;
- b) Transportation of gas from entry point to exit point;
- c) Delivery of gas at exit point;
- d) Measurement of gas quantity, quality, pressure, temperature and any other parameter for the purpose of metering, billing, operational and safety requirements of CGD network;
- e) Maintenance of city or local natural gas distribution network including all associated material, equipment and devices installed to service the customers;
  
- f) Managing shipper's gas inventory in the CGD network as mutually agreed between authorised entity and shipper.

Authorised entity may provide such other services to shipper as may be agreed in writing between authorised entity and shipper in relation to CGD network.

**3.0 Shipper's registration with authorised entity and guarantees.**

- a) Shipper will be required to register with authorised entity. However, if any shipper is an authorised entity for any CGD network under the Act and the regulations made thereunder, the requirement of the registration shall be dispensed with.

Provided that any such authorisation has not been terminated or cancelled by the Board.

- b) An entity may provide such other services to shipper as may be agreed in writing between authorised entity and shipper in relation to CGD network.

- c) Conditions precedent for registration as a shipper shall include –
- i. Shipper is a consumer, a marketeer or any other entity who intends to utilise the capacity in the CGD Network in accordance with sub-regulation (ze) of sub-regulation (1) of regulation 2;
  - ii. Authorised entity shall webhost the standard application form for registration of the shipper and standard provisions of access arrangement to be signed between shipper and authorised entity containing the standard terms and conditions of service, any other terms and conditions which may be mutually agreed but not in violation of these guidelines. Authorised entity shall acknowledge receipt of such application submitted by the applicant within seven days of receipt thereof. If all the necessary requirements as listed in the standard application form webhosted by the authorised entity are met, the authorised entity shall notify a successful applicant within thirty days of the date of receipt of the application form and shall complete all other requirements and formalities including signing of agreement for access arrangement to facilitate first gas-in within sixty days from the date of receipt of such application. In the event of rejection of application authorised entity shall inform the applicant along with the reason for rejection before the expiry of thirty days from the date of receipt of application. The applicant, if not declared successful, may approach the Board for redressal. Decision of the Board in the matter shall be final and binding on both the parties;
  - iii. Shipper shall provide and maintain payment guarantees equivalent to sixty days maximum daily quantity (MDQ) to the authorised entity in form of irrevocable revolving unconditional standby letter of credit or any other instrument as per mutual agreement. In case of gas supply to domestic consumers, the shipper shall provide payment security of one hundred twenty days of average gas consumption in the form of mutually agreed financial instrument in order to avoid any disconnection of supply to this segment in case of failure to supply gas by the shipper. Apart from the same, shipper shall also provide the necessary security deposit to the authorised entity corresponding to the last Mile connectivity in case of domestic PNG connections.

#### **4.0 Obligations of shipper and authorised entity.**

- (a) Shipper shall provide gas at entry point and receive gas at exit point.
- (b) Shipper shall ensure that all gas entering city or local natural gas distribution network shall conform to gas specification and shall be within operational range

of pressure and temperature to flow in city or local natural gas distribution network. The entry pressure and temperature at all entry point shall be the mutually agreed pressure between the shipper and the authorised entity.

- (c) Shipper shall pay all dues in time and provide such guarantee, surety and security as may be required to meet its commercial obligations under the access arrangement.
- (d) Authorised entity shall transport gas received at entry point through city or local natural gas distribution network and shall deliver gas at exit point.
- (e) Authorised entity shall be responsible for the overall management of CGD network and its related services.
- (f) Authorised entity shall act as a supplier of last resort for the domestic PNG customers in case of any default by the shipper.

#### **5.0 Facilities at the entry point and exit point.**

- a) The access arrangement shall list out the facilities provided by the authorised entity to the shipper.
- b) The access arrangement shall indicate if the authorised entity or the shipper owns, maintains and operates all facilities at the entry point and exit point.
- c) Authorised entity shall have unrestricted access as per regulation 10 for implementing the provisions of the access arrangement and other relevant notified Regulations under the Act and the Shipper, upon reasonable notice, as the case may be, may inspect entry point and exit point facilities at its own costs.
- d) Authorised entity and shipper shall adhere to one standard time at the respective locations for the purpose of measurement, as specified in access arrangement.
- e) The maintenance of the facilities, whether owned by the shipper or by the authorised entity, shall be done periodically in accordance with the relevant provisions of regulation 20 and other relevant regulations notified under the Act.
- f) The charges borne by the shipper for additional facilities as may be necessary including automation at entry or exit point and domestic PNG meters provided by authorised entity to the shipper shall be actual cost incurred by the authorised entity for providing such facility.

- g) In case of acts of pilferage or misconduct by the shipper or shipper's customers, the authorised entity shall have the right to suspend or disconnect the supply of natural gas under intimation to the shipper citing valid reasons for the same. The shipper shall thereafter ensure that the required penalties and gas reconciliation differences are paid to the authorised entity before reinstating the supply of gas. Further, the shipper shall contribute in proportion to its share of gas supplies in the network of authorised entity of gas loss due to third party damage.

## **6.0 Service obligations.**

### **(a) Metering.**

The rights, interest, covenants and obligations of shipper and authorised entity in respect of the measurement and analysis of gas transported in city or local natural gas distribution network by authorised entity shall be as set out in authorised entities code of practice for metering in accordance with regulation 6 of the Petroleum and Natural Gas Regulatory Board (Code of Practice for quality of Service for city or local Natural Gas Distribution Networks) Regulations, 2010.

The authorised entity shall provide metering facilities at entry point at the cost of shipper or as agreed in the access arrangement. The measuring equipment shall be installed and maintained by authorised entity to measure the quantity of gas –

- i. received into CGD network at each entry point; and
- ii. delivered through each exit point.

Authorised entity shall make provisions for the quality of gas at each entry point or use the facility provided by the upstream pipeline service provider or gas supplier and in case of any dispute on the quality of gas at the exit point, measure the same through mutually acceptable methodology. In case of any fault in the meter of authorised entity, the expenses on this account shall be borne by the authorised entity and in case no fault is found in the matter, the expenses shall be borne by the shipper. The design of the metering facility shall comply with all applicable laws and regulations as well as with authorised entity's code of practice for metering and as specified in Petroleum and Natural Gas Regulatory Board (Technical standard and Specifications including Safety standards for City or local Natural Gas Distribution Networks) Regulations, 2008.

**(b) Alternative ownership of measuring equipment.**

Alternative ownership of the measuring equipment, if required, shall be mutually agreed between authorised entity and the shipper in the access arrangement.

**(c) Validation and calibration.**

The Process and procedure of the validation and calibration to be carried out on the measuring equipment shall be in accordance with the authorised entity's code of practice for metering and complying with regulations on technical standards.

The party responsible for the operation and maintenance of measuring equipment shall do it at their own expense-

- i. Validate said measuring equipment; and
- ii. Calibrate said measuring equipment as and when deemed necessary and as may be prescribed in authorised entity's code of practice for metering.

Authorised entity may, where necessary, undertake additional checks on the measuring equipment owned by shippers.

When carrying out validation or calibration, as the case may be, on its measuring equipment, authorised entity shall invite relevant shippers to witness the process. However, such validation or calibration shall not be stopped or withheld or postponed due to non-availability of the shipper.

In the event there is a dispute on the result of the validation of measuring equipment, the disputing party shall notify the other party within seven days from the date of validation.

Authorised entity may instruct an independent expert to verify the validation. If the expert finds the validation to be accurate, then, the disputing party shall bear the cost of said validation and the cost of the independent expert. In case, the validation of measuring equipment is found inaccurate, the authorised entity shall not only bear the entire cost of the exercise but shall also compensate the shipper towards losses to the extent of error from the date of dispute), if any, arising due to faulty measurement in the following billing cycle.

**(d) Operation and maintenance of the measuring equipment.**

Entity owning the measuring instrument shall be responsible for the operation and maintenance of all measuring equipment in accordance with the code of practice for metering of the authorised entity and complying with technical standards. However, in case of entry point and in case of industrial and commercial customers, wherein the cost of measuring equipment is borne by the shipper, the authorised entity shall charge for the installation, operation and maintenance (including necessary replacements if any) of the measurement facility as per mutual agreement.

## **7.0 Gas quality.**

### **(a) Gas specification and pressure.**

All gas delivered or to be delivered by shipper at entry point for distribution through city or local natural gas distribution network by authorised entity shall confirm to gas parameters as per regulations and as well as range of gas composition as declared by authorised entity.

All gas entering CGD network shall be within the range of CGD operating pressure and temperature for it to flow in CGD network. The entry pressure and temperature at all entry point shall be the mutually agreed between the shipper and the authorised entity.

### **(b) Off-specification gas.**

- (i) In the event that gas to be delivered at any entry point does not comply with gas specification (Off-specification gas), shipper shall inform authorised entity promptly of a deviation from gas specification.
- (ii) Authorised entity shall have the right to refuse off-specification gas at entry point, but otherwise may accept such off-specification gas.
- (iii) If gas received at entry point is off-specification gas, authorised entity shall have the right to suspend (completely or partially) receipt of gas from shipper with immediate effect until authorised entity is satisfied that gas which shipper is able to deliver to city or local natural gas distribution network is within gas specification.
- (iv) Notwithstanding the above, in the event off-specification gas has entered into CGD network, authorised entity may make enquires to shipper as to whether the shipper or its end-user and customer is willing to accept the off-specification gas.

- (v) Shipper shall use reasonable endeavour to accept but other may refuse to take delivery of off-specification gas at exit point.
- (vi) Authorised entity may dispose of off-specification gas that has entered into CGD network if it is unsafe for the integrity of the network, in a manner deemed fit by authorised entity, in order to protect CGD network and other facilities.
- (vii) The cost incurred to manage the off-specification gas shall be borne by shipper who injected such gas into CGD network. The off-specification gas charges so determined by the authorised entity shall be cost neutral.

**8.0 System integrity, discipline and grid management.**

**(a) Nomination.**

- (i) Shipper shall notify authorised entity of quantities of gas which shipper intends to deliver at each entry point and receive at each exit point of the CGD network on a day (D).
- (ii) Shipper may also re-submit nomination on the day, in case, there be any changes to shipper’s gas delivery requirements (intra-day nomination) and the same may be considered by the authorised entity on reasonable endeavour basis.
- (iii) Shipper shall comply with detailed nomination procedure which is as per the access arrangement. A nomination shall –
  - A. specify day or days to which it relates;
  - B. specify nominated quantity;
  - C. identify the end-user which shall off-take the corresponding quantity of gas from the CGD network; and
  - D. specify the entry point and exit point.
- (iv) The table below illustrates the proposed daily nomination timeline under the access arrangement.

Day	Time	Nomination Schedule	Remarks
-----	------	---------------------	---------

D-1 (Booking day for next day nomination)	1000 hrs	Deadline for initial nomination for day D	
D (Balancing of positive / Negative imbalance)	0600 hrs	Start of balancing period (between D+1 and D i.e. next day of nomination)	
D+1 (Curing of imbalance)	0600 hrs	End of balancing period (next to next day of nomination)	

- (v) In addition to the above, shipper needs to provide annual estimates and weekly nomination in line with authorised entity’s operating practice.
- (vi) In the long term, the nomination process shall be as flexible for shippers as is physically possible. There shall be a balance in the principle of flexibility against the cost of introducing new nomination procedures (both in terms of initial systems and set-up costs and any increase in on-going administrative costs or complexity).

**(b) Allocation and scheduling.**

Allocation is a mathematical arrangement whereby authorised entity allocates capacity to each shipper in a CGD network to transport natural gas from a single or a combination of entry point to a single or combination of exit points

and schedule the proper share of the quantity of gas measured from the relevant entry point or exit point.

**(i) Allocation process.**

Authorised entity shall allocate entry point capacity and exit point capacity among shippers measured in Million British Thermal Unit (MMBTU).

**(ii) Scheduling process.**

Authorised entity shall allocate entry point quantities, based on the actual quantity of gas received at the entry point for the shipper and exit point quantities, among shippers after actual gas transport day.

Shipper acknowledges that receipt of gas at entry point or delivery of gas at exit point may not exactly match the nomination of intra-day nomination made in respect of it and consequently under delivers and over delivers of gas may occur.

All of entry quantity at entry point and exit quantity at each exit point shall be allocated to shippers regardless of the reason for any such under delivers or over delivers with respect to nominations.

**(iii) Allocation and scheduling data.**

Authorised entity shall process the data and inform shippers; allocated quantity including overrun, variance and imbalance. Authorised entity shall not disclose such data to other shippers.

Under normal operations, the allocated data shall be based on confirmed nomination, but when capacity curtailment occurs, the allocated data shall be based on the confirmed curtailment quantity imposed by authorised entity.

Authorised entity shall make available the data to relevant shipper on a daily basis.

**(iv) Calculation of Scheduled quantity.**

Scheduled exit quantity shall be calculated by authorised entity in accordance with the regulation 5 (4)

**(c) over-runs.**

**(i) Overruns philosophy and principles.**

An overrun occurs when a shipper takes gas transportation quantities in excess of scheduled capacity. All overruns shall be treated as unauthorised and attract unauthorised overrun charges.

Overruns may be authorised in advance if they cause no operational constraints for the authorised entity, e.g. if a shipper requested excess gas transportation quantities for a day, the authorised entity shall authorise the shipper to take such quantities if sufficient capacity were available.

The price of transporting the authorised overrun quantity shall be set beforehand at a rate that shall be –

- A. high enough, but not more than one point five times the regulated applicable charges so that shippers are not incentivised to rely on overrun service, rather than contracting for firm transmission service; but
- B. not so high as to be economically inefficient.

The above shall be applied on a uniform, transparent and non -discriminatory basis by the authorised entity.

However, unauthorised overruns shall carry unauthorised overrun charges. Penalising shippers that flow an unauthorised overrun helps to ensure that the market for capacity rights is not disrupted by routine violation of transportation rights.

Capacity overruns, whether authorised or unauthorised, shall in general be discouraged because –

- (i) the ability to obtain capacity at short notice from the authorised entity at non penal prices shall tend to underline the value of holding firm capacity rights; and
- (ii) Overruns may impose costs, and therefore shippers shall not rely on the use of overruns.

Following principles need to be followed between authorised entity and shippers, namely:-

- (a) no charges up to overrun of five per cent of the allocated quantity.
- (b) unauthorised capacity overruns attract a significant charge;

- (c) when there is spare physical capacity on the network, capacity overruns are authorised by the authorised entity (so long as it imposes no operational constraints and is on best endeavour basis) for a period of one day at a time;
- (d) capacity overruns shall not be authorised when there is a shortage of physical capacity; and
- (e) authorised capacity overruns are priced so as to discourage shippers from persistently seeking authorisation rather than purchasing capacity in secondary market when such trading is allowed.

**(b) Unauthorised overrun charges.**

Shipper must ensure that quantities of gas received at entry point and delivered at exit point in any day do not exceed the maximum daily quantity of the transportation path.

Unauthorised overrun charges = unauthorised overrun quantity x unauthorised overrun rate

Unauthorised overrun rate = two hundred per cent. X applicable charge

Unauthorised overrun charges shall be calculated independently for each entry and exit point and aggregated.

**(4) Balancing**

**(a) Balancing principles.**

An imbalance arises whenever a shippers' deliveries at the entry point in any balancing period differ from the off- takes of the customers that the shipper serves at the exit point. This may occur either because demand is higher or lower than expected or because deliveries are higher or lower than expected, or both. Clear objective and efficient arrangement to address imbalances are required.

**(b) Imbalance charges.**

- i. As specified in sub-regulation (6) of regulation 16, the imbalance charges payable by the shipper for any particular day shall be equal to the product of the cumulative imbalance quantity calculated as stipulated in sub-regulation (4) of that regulation and the imbalance rates specified in the access arrangement.
- ii. As specified in sub-regulation (7) of regulation 16, the daily imbalance of gas quantities shall be settled between the shipper and the authorised entity every

fortnight considering actual daily metered amounts for industrial, commercial and transport segments and assuming a mutually agreed daily consumption quantity of gas for domestic PNG segment; the methodology for the settlement shall be specified in the access arrangement. The reconciliation with actual metered quantity for the domestic PNG segment shall be as agreed in the access arrangement between the shipper and the authorised entity.

- iii. Imbalance charge is calculated on the allocated quantity by applying the percentages as specified in sub-regulation (5) of regulation 16 on the following formula.

Daily imbalance charge = cumulative imbalance quantity x imbalance rate

Wherein, cumulative imbalance quantity = cumulative imbalance at the end of a day as specified in sub-regulation (4) of regulation 16.

**(c) Imbalance rate.**

- i. The negative imbalance rate.

The negative imbalance quantities in excess of percentages as specified in sub-regulation (5) of regulation 16 shall be calculated at the rate of one hundred twenty percent of the highest cost of gas in the authorised entities network on the day of imbalance occurrence:

Provided for the negative imbalance quantities up to the percentages as specified in sub-regulation (5) of regulation 16 shall be set-off as per provisions of curing specified in sub-regulation (5) of regulation 16.

- ii. The positive imbalance rate.

The Positive imbalance quantities in excess of percentages as specified in sub-regulation (5) of regulation 16 shall be calculated at the rate of one hundred per cent. Of the lowest cost of gas in the authorised entities network on the day of imbalance occurrence:

Provided that the Positive imbalance quantities up to the percentages as specified in sub-regulation (5) of regulation 16 shall be set-off as per provisions of curing specified in sub-regulation (5) of regulation 16.

**(d) Variance charges.**

The variance charges are the charges against the deviations in hourly delivery schedule rate of gas.

Allowable limits with respect to the variance and the corresponding charges shall be paid by the shipper to the authorised entity as per the mutually agreed terms and conditions and rates in access arrangement.

## **9.0 Statutory levies**

All statutory levies incurred by the authorised entity during the provision of any service for shipper shall be borne by the shipper.

## **10.0 Other charges**

### **Authorised entity's shortfall charges**

The authorised entity shall pay adequate compensation to the shipper in case the authorised entity is unable to provide capacity up to eighty percent of the nominated quantity calculated on a monthly basis unless there is a planned maintenance, breakdown, system or network failure, third party damage, force majeure or any emergency or any other issues as specified in the access arrangement between the shipper and the authorised entity.

The compensation shall be equivalent to a minimum charges of product of the less capacity provided by authorised entity and Rupees fifteen only for the PNG, Industrial and commercial capacity booking shall be paid and in case of CNG capacity booking, in addition to above charges, product of the less capacity provided and Rupees one and paise only shall be paid by the authorised entity.

The total liability of the authorised entity shall be capped as per other provisions of these guidelines.

## **11.0 Invoicing and payment**

### **(a) Submission of invoice**

Authorised entity shall, as soon as reasonably practicable and in any event not later than seven days after the end of the billing period, submit an invoice to each shipper for the service rendered.

### **(b) Payment instructions**

Parties shall notify each other of the account number, the name, address and other necessary payment details of the bank account to which payments are to be made by such shipper to authorised entity within fourteen days after the

effective date of access agreement or in the event of any change to such details not less than thirty days before such change is effective.

**(c) Set-off**

Shipper shall pay in full all amounts due for payment by shipper to authorised entity and shall not make any set-off or deduction against any amounts.

Authorised entity may deduct or set-off from any amount due to shipper any amount owed by shipper to authorised entity.

**(d) Full settlement of invoice**

Shipper shall settle the full amount of each invoice within four banking days following the date of receipt by shipper of the invoice. The invoice shall be sent by authorised entity through fax or email during the normal business hours and shall be deemed to have been received by shipper on the date of the dispatch of the fax and email.

**(e) Adjustments to invoice**

Any adjustment to invoice as per billing cycle as agreed to between authorised entity and shipper shall be done by authorised entity or shipper through an issuance of debit note or credit note.

The credit note or debit note shall be sent by the authorised entity or shipper through fax or email.

**(f) Dispute**

If shipper wishes to raise dispute of any amount in an invoice or debit note or credit note, shipper shall first settle the full amount shown as payable by shipper on the due date irrespective of the fact that shipper intends to raise a dispute concerning the invoice or debit note or credit note.

Shipper may notify the dispute to authorised entity specifying –

- i. The date and number of the invoice or debit note or credit note;
- ii. The item in the invoice or debit note or credit note to which the dispute relates;
- iii. An explanation of the basis on which the dispute is submitted; and
- iv. The amount of the dispute.

Both the parties shall notify any dispute to the other party within one month from the date of receipt of the relevant invoice or debit note or credit note. If no

such notifications are made within the said one month, then, both the parties are deemed to have waived all disputes arising from the said invoice or debit note or credit note. If the dispute settles in favour of shipper, authorised entity shall make the entire payment due to the shipper within seven days of the settlement of the dispute failing which interest at the rate of five percent above State Bank of India's base rate from the date of settlement on the sum of the shipper's claim or settled amount shall be applicable.

**(g) Late payment penalty for invoice or debit note**

Where any amount payable under an invoice or debit note is not paid on or before the due date, the shipper shall pay interest at the rate of five percent above State Bank of India's base rate from the due date on the sum of the shipper's dues.

**(h) Failure of payment**

If shipper fails to pay the invoice or debit note within seven days after payment is due, authorised entity shall have the right to suspend shipper's right to use services until shipper pays the invoice or debit note or terminate access agreement.

**12.0 Communication**

**(a) Introduction**

A clear and well understood communication procedure is essential for parties to react in a timely manner especially in emergency situation in order to protect lives and properties and to minimise gas supply interruptions. This shall help to establish a good rapport and relationship as well as foster mutual understanding and co-operation between authorised entity and shippers in meeting goal of ensuring the safe, reliable and efficient operations of city or local gas distribution network.

Authorised entity and shipper shall establish the communication protocol that shall guide authorised entity and shipper during normal and emergency situation. This protocol shall be adhered to all times to ensure safe, reliable and efficient operations of the CGD network.

**(b) Gas management system**

Authorised entity may secure the establishment and operations of a web-based, gas management system (GMS) which provides for an electronic transfer of information between authorised entity and shipper.

Authorised entity and shipper may communicate with each other for purposes of the daily operations and monitoring of city or local gas distribution network by means of GMS.

The information provided by authorised entity through GMS shall be limited only to the relevant shipper's portfolio.

Authorised entity may provide shipper with access and use of the following-

- i. Shipper's portfolio in GMS;
- ii. Software installed in respect of the GMS; and
- iii. Manuals or any materials provided by authorised entity in respect of the GMS.

### **13.0 Curtailment**

#### **(a) Introduction**

Authorised entity may deem it necessary to curtail services in cgd network on a day in the event capacity to transport the total quantity of gas nominated by all shippers under the access arrangement is insufficient and such curtailment shall not have any financial implications on the authorised entity.

#### **(b) Curtailment for force majeure**

Authorised entity may curtail provision of services to shipper if –

- A. An event of force majeure occurs; and
- B. as a result of the event of force majeure, the scheduled capacity of CGD network is constrained so that authorised entity cannot transport the quantities of gas scheduled.
- C. Curtailment for operational or safety reasons. Authorised entity may curtail deliveries to shipper if it considers, in its discretion, it is necessary doing so –
  - i. for maintenance, replacement, installation or repair of CGD network or associated facilities including entry point and exit point, interconnections, and district regulating stations (DPRS);
  - ii. because of damage to, or an outage on, a city or local gas distribution network segment or associated facility used to provide services to shipper giving rise to the need to curtail.

#### **(c) Curtailment of emergency**

Authorised entity may curtail deliveries to shipper if it considers, at its discretion, it is necessary to do so by reason of emergency, giving rise to the need to curtail.

The existence of an emergency shall be determined by authorised entity irrespective of the cause of emergency or whether authorised entity or any other person may have caused or contributed to the said emergency.

The procedure applicable in the event of emergency shall be set out in the access arrangement and communication protocol agreed between the parties.

**(e) Priority of services for curtailment**

Authorised entity may curtail the provision of services to shipper to meet its obligations to other shippers. Curtailment shall be in accordance with the provisions of the CGD Access Code and other notifies regulations.

## **Schedule-II**

(see regulation 5(1) and 5(7))

### **Format for capacity booking on city or local natural gas distribution network**

1. Name of entity :
2. Name of CGD Network:
3. Name of entry points with entry points capacity (to be furnished separately for each Entry Point)
  - (i) Volume Terms
  - (ii) Energy Terms
4. Name of exit points and exit point capacity (to be furnished separately for each Exit Points)
  - (i) Volume Terms (for other than CNG Exit Point)
  - (ii) Energy Terms (for other than CNG Exit Point)
  - (iii) In Kg (For CNG Exit Points)
5. Technical parameters at entry points:
  - (a) acceptable range of pressure:
  - (b) acceptable range of temperature:
  - (c) acceptable range of the CV:
  - (d) acceptable limits for other elements in natural gas as per Schedule-VI
6. Capacity used for Own Requirement (in MMBTU):
7. Capacity used by the Associates and Affiliates (in MMBTU):
8. Capacity already booked under common carrier or contract carrier (in MMBTU):
9. Capacity available in the CGD network to Shippers

**Schedule-III**  
(see regulation 5(3) )

**Format for requesting capacity on CGD network**

1. Name of entity:
2. Name of CGD Network:
3. Name of entry points and entry point capacity requirement (in MMBTU) at each point:
4. Name of exit points and exit point capacity requirement (in MMBTU) at each exit point
5. Name of CNG exit points and capacity requirement (in Kg) at each exit point:
5. Gas parameters at entry points (to be specified separately for each entry point):
  - (a) range of pressure
  - (b) range of temperature
  - (b) range of CV
  - (c) estimated limits for other elements in natural gas like CO<sub>2</sub>, N<sub>2</sub>, O<sub>2</sub> etc.
6. Required gas parameters at exit points (to be specified separately for each exit point):
  - (a) acceptable range of pressure
  - (b) acceptable range of temperature
  - (c) acceptable range of the CV
  - (d) acceptable limits for other elements in natural gas like CO<sub>2</sub>, N<sub>2</sub>, O<sub>2</sub> etc.
7. Start date and end date for which access to capacity is required

**Schedule-IV**  
(see regulation 5(10))

**Guidelines for Website Based Open Access System for Applying for Booking of Capacity on Common Carrier or Contract Carrier Basis**

The process flow that would be followed on the authorised entity's website shall meet the following guidelines for website based open access system for applying for booking of capacity on common carrier or contract carrier basis:

1. The authorised entity shall maintain an online portal on which applications for booking common carrier or contract carrier capacity can be submitted by the marketeer or shipper.
2. The authorised entity's website shall allow booking of capacity by providing an easily accessible link in the form CGD capacity booking- Apply now- new shipper/ existing shipper.
3. In case of a new shipper an online application form shall be made available which shall be duly filled in with the prescribed details by the shipper and submitted. Following this, a unique application number will be generated along with email confirmation of submission of application.
4. In case of an existing shipper seeking to book capacity, such shipper shall login with its registered ID and password and follow the link for new request for online requisition of CGD network capacity booking. Upon filling of the application form for new request with the requisite details, the existing shipper shall receive a unique application number along with an email confirmation of submission of application.
5. The authorised entity, upon receipt of application from a new shipper shall assess whether its CGD network is/ can be connected to the delivery point of the end customer. If the CGD network cannot be connected to the delivery point, the same has to be communicated to the shipper.
6. If the CGD network can be connected to the delivery point of the customer, the authorised entity shall verify whether adequate common carrier capacity is available on its network to accommodate the request of the shipper.
7. If there is adequate common carrier capacity available, requisitions shall be processed online in a transparent non-discriminatory manner and in cases where the booking for capacity received on a particular day is more than the available common carrier or contract carrier capacity, such common carrier or contract carrier capacity shall be allotted to the entities from whom booking has been received as per the Regulation 5 (4).

8. The terms and conditions for access shall be as per the Access Arrangements guidelines provided in Schedule-I. Once the capacity is allotted, the shipper shall be allowed to access the capacity that has been allotted to it in accordance with these Regulations.
9. If there is no available common carrier or contract carrier capacity, the application shall not be processed further and closed.
10. A system generated email shall be sent at all stages intimating the developments.

**Schedule-V**

*(see regulation 5(11))*

**Format for Maintaining Records of Applications for Bookings and Allocation of Capacity in CGD Network by an Authorised Entity**

1.	Docket number allotted to application for booking of common carrier or contract carrier capacity in CGD network	
2.	Date and time of receipt of application	
3.	Mode of receipt of application and date of confirmation issued by the authorised entity	
4.	Total capacity in CGD network at each of the entry and exit points	
5.	Own capacity requirements of the entity laying, building, operating or expanding CGD network as declared by the authorised entity before the commencement of the financial year and communicated to the Board	
6.	Common carrier or contract carrier capacity available in the CGD network (in MMBTU) at all entry/exit point(s) before the date of receipt of the CGD network application for booking of capacity	
7.	CGD network allocated capacity to the applicant (in MMBTU) over the time period at each of the entry/exit points in the CGD network along with details of the point of injection of compressed natural gas in case the capacity allocated is lower than the capacity requested, specific reasons for the same to be recorded	
8	Date of sending the notice of acceptance of applicant entity's request for booking of capacity (in case of part allocation of capacity, with a disclosure of the specific reasons) and the date of acknowledgement of	

	receipt of the notice.	
9.	Date of entering into a contract for booking of capacity in the CGD network	
10	Common carrier or contract carrier capacity available in CGD after each capacity contracted	
11.	Actual quantity delivered against the capacity contracted	

**Schedule-VI**  
(see regulation 9(1))

**Threshold Limit for Gas Parameters on City or Local Natural Gas Distribution Network**

<b>Parameters</b>	<b>Limit</b>
Hydrocarbons dew pt (Degree Celsius, max.)	0
Water dew point (Degree Celsius, max )	0
Hydrogen Sulphide (ppm by wt. max.)	5
Total Sulphur (ppm by wt. max.)	10
Carbon dioxide (mole % max.)	6
Total inerts (mole % )	8
Temperature (Degree Celsius, max.)	55
Temperature (Degree Celsius, min.)	10-20
Oxygen (% mole vol. max.)	0.2
Wobbe Index for domestic consumers (based on MJ/SCM)	39-53