

## PETROLEUM AND NATURAL GAS REGULATORY BOARD

### NOTIFICATION

New Delhi, the 20<sup>th</sup> November, 2008

**G.S.R. 807(E).**--- 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 Natural Gas Pipeline Tariff) 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;
  - <sup>1</sup> [ <sup>2</sup>[(ba) “approved tariff” means zone-wise natural gas pipeline tariff determined under regulation 4 or zone-wise tariff as per regulation 11 of the Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Regulations, 2008;]]
  - (c) “Board” means the Petroleum and Natural Gas Regulatory Board established under sub-section (1) of section 3 of the Act;
  - (d) “capacity of natural gas pipeline”<sup>3</sup>[ for the purpose of determining natural gas pipeline tariff under Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Regulations, 2008 shall be the authorized capacity as defined in the Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Regulations, 2008.

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<sup>1</sup> Notified vide Gazette Notification dated 18<sup>th</sup> November, 2022(F. No. PNGRB/COM/2-NGPL/Tariff (3) /2019 Vol-IV (P-4121).)

<sup>2</sup> Ins. by pt. (i) of Cl. (a) of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2020.

<sup>3</sup> Subs. by pt (a.), Cl. (i), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

Provided that wherever there is any change between the authorised capacity and the capacity as already considered in the latest tariff order issued by the Board prior to the notification of this amended regulation, then such capacity as already considered in the latest tariff order shall be considered as capacity of natural gas pipeline for the purpose of determining tariff.

Provided that the initial capacity of an integrated natural gas pipeline, if any, shall be as determined as per the basis as specified in the Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum, Petroleum Products and Natural Gas Pipeline) Regulations, 2010, and approved by the Board. Till such capacity is determined and approved by the Board, the capacity of an integrated natural gas pipeline, if any, shall be taken on a provisional basis as the higher of:

(a) sum total of capacity of all the constituent pipelines of the integrated natural gas pipeline, in accordance with their respective latest tariff orders, excluding capacity of such constituent pipelines which do not have any separate natural gas source directly connected to it, if any; or

(b) the capacity of an integrated natural gas pipeline as may be submitted by the concerned entity.

Provided further that entity shall submit the revised capacity of the natural gas pipeline, if any as may be necessary, in terms of clause (g) of sub regulation (5) of regulation 5 of Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum, Petroleum Products and Natural Gas Pipeline) Regulations, 2010. Such revised capacity or as modified in terms of clause (g) of sub regulation (5) of regulation 5 of Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum, Petroleum Products and Natural Gas Pipeline) Regulations, 2010, shall be considered for the tariff determination after its approval by the Board.] ;

<sup>4</sup>[(da) "Imbalance Management Services" shall have the same meaning as assigned to it in the Petroleum and Natural Gas Regulatory Board (Imbalance Management Services) Regulations, 2016;]

(e) "initial unit natural gas pipeline tariff" means the unit natural gas pipeline tariff determined for a period commencing from-

(i) the date of commissioning of the natural gas pipeline in any financial year and ending on the last day of that financial year in case the natural

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<sup>4</sup> Ins. by pt. (i) of Cl. (a) of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Third Amendment Regulations, 2020 (w.e.f. 23.11.2020).

gas pipeline is commissioned on or after the notification of these regulations; or

- (ii) the date of coming of the natural gas pipeline within the purview of these regulations in any financial year and ending on the last day of that financial year in case the natural gas pipeline is commissioned before the notification of these regulations;

Provided that in case the period between the date of commissioning of the natural gas pipeline or the date of coming of the natural gas pipeline within the purview of these regulations in any financial year, as the case may be, and the last day of the financial year is less than one hundred and eighty three days, the initial unit natural gas pipeline tariff shall be a for period commencing from the date of commissioning of the natural gas pipeline or the date of coming of the natural gas pipeline within the purview of these regulations in the financial year and extend up to the last day of the immediately succeeding financial year:

Provided further that the initial unit natural gas pipelines tariff shall be fixed on a provisional basis first and then finalized as per the basis and in the time frame specified under clause 9 of Schedule A.

<sup>5</sup>[(ea) “invoicing entity” means the <sup>7</sup>[one or more authorized entities laying, building, operating or expanding natural gas pipeline(s) constituting part of national gas grid system and which raises the invoice on the shipper(s) for the Unified Contractual Path]];

<sup>8</sup>[(eaa) “integrated natural gas pipeline” for ¶ for the purpose of tariff means such pipeline(s) of following categories which are directly interconnected (including those which may be partly commissioned and so interconnected) as may be submitted by an entity as an integrated natural gas pipeline and as may be enlisted under the tariff order by the Board:

- i) authorized by the Central Government before the appointed day and accepted by the Board under regulation 17 of PNGRB (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas

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<sup>5</sup> Notified vide Gazette Notification dated 18<sup>th</sup> November, 2022(F. No. PNGRB/COM/2-NGPL/Tariff (3) /2019 Vol-IV (P-4121).)

<sup>6</sup> Ins. by pt. (ii) of Cl. (a) of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2020.

<sup>7</sup> Subs. by pt (i), Cl. (a), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

<sup>8</sup> Subs. by pt (b.), Cl. (i), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

Pipelines) Regulations, 2008 for laying, building, operating or expanding natural gas pipeline;

- ii) laying, building, operating or expanding a natural gas pipeline before the appointed day and authorized by the Board for such activities under regulation 18 of PNGRB (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Regulations, 2008;
- iii) laying, building, operating or expanding a dedicated pipeline which is converted into a natural gas pipeline under the provisions of sub-regulation (1) or (2) of regulation 19 of PNGRB (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Regulations, 2008; or
- iv) authorized by the Board pursuant to a policy directive issued by the Central Government under sub-section (2) of section 42 of the Act;

Explanation 1: An integrated natural gas pipeline shall have the same meaning as a natural gas pipeline.

Explanation 2: The Board shall adopt public consultation process as per the provisions as specified in regulation 4 of these regulations and thereupon take a decision in respect of such enlistment so as to achieve one or more of the following objectives:

- (a) the factors which may encourage consumption of natural gas in far-flung areas;
- (b) safeguarding consumer interest and at the same time recovery of cost of transportation in a reasonable manner;
- (c) securing equitable distribution of natural gas;
- (d) to ensure simplification, stability and predictability in determination and simplification of tariffs;
- (e) minimizing the impact of additive transportation tariffs vis-à-vis tariff of integrated natural gas pipeline.

Explanatory Memorandum:—Integrated natural gas pipeline for the purpose of tariff and other related regulatory provisions under this amendment are a part of regulatory reform process for rationalization of tariffs. In this regard:

1. Para 14 of the Policy for Development of Natural Gas Pipelines and City or Local Natural Gas Distribution Networks of the Government of India notified on 20.12.2006 in the Gazette of India Extraordinary, Part-I Section 1 with F. No. L-12022/1/03-GP (Pt. II) has envisaged facilitating the creation of a National Gas Grid.

2. The PNGRB Report titled —2030-Natural Gas Infrastructure in India has also envisaged switching over to a mature tariff system inter-alia for providing access to customers located in geographically disadvantaged locations.

3. For avoidance of applicability of multiple additive pipeline tariffs of a single entity, provision for integrated natural gas pipeline for the purpose of tariff is being considered by the Board so that the same would be used as a building block towards achieving the goal of simplification and more stable unified tariff.;

<sup>9</sup>[(eb) “MMBTU” means million British Thermal Units on gross calorific value (“GCV”) basis];

<sup>10</sup>[(ec) “national gas grid system” means network of all such natural gas pipelines within India which are fully interconnected with each other (including those which are partly commissioned and so interconnected) and as enlisted in Schedule C to these regulations and the Board may, by order, amend the said Schedule C from time to time;]]

(f)“natural gas pipeline” means<sup>11</sup>[as defined under the Petroleum and Natural Gas Regulatory Board (Authorizing Entities for Lay, Build, Operate or Expand Natural Gas Pipelines) Regulations, 2008];

(g) “natural gas pipeline tariff” means the unit rate of tariff for a natural gas pipeline (excluding statutory taxes and levies) in rupees per million British Thermal Units (Rs. /MMBTU) for transport of natural gas;

<sup>12</sup>[(h) “tariff review” means the review of the unit natural gas pipeline tariff after every five consecutive years by the Board with the first tariff review to be

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<sup>9</sup> Notified vide Gazette Notification dated 18<sup>th</sup> November, 2022(F. No. PNGRB/COM/2-NGPL/Tariff (3) /2019 Vol-IV (P-4121).)

<sup>10</sup> Notified vide Gazette Notification dated 18<sup>th</sup> November, 2022(F. No. PNGRB/COM/2-NGPL/Tariff (3) /2019 Vol-IV (P-4121).)

<sup>11</sup> Subs. by pt (c.), Cl. (i), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

<sup>12</sup>Subs. by Cl. (a) of Reg. 3, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2019, for ‘clause (h) of sub -reg. (1) of Reg. 2’ (w.e.f. 27.05.2019).

done after the end of five consecutive years after the end of the initial unit natural gas pipeline tariff period as specified under clause (e):

Provided that the unit natural gas pipeline tariff so determined at the time of any tariff review shall apply for the period up to the next tariff review:

Provided further that the gap between two tariff reviews shall not be less than two consecutive financial years after the end of the financial year in which last tariff fixation occurred:

Provided also that the tariff review can be done earlier in terms of provisions of sub-clause (9) of clause 9 of Schedule A;]

<sup>13</sup>[(ha) “Settlement Mechanism” means a mechanism enlisted as Schedule D which may be framed by the Board from time to time in consultation with pipeline entities as detailed at Schedule C]

<sup>14</sup>[(i) “tariff zone” means the zone –

- (i) of a length of three hundred kilometers each along the route of the natural gas pipeline from the point of injection to the end point:

Provided that the last zone of the natural gas pipeline may be of a length of three hundred kilometers or less:

Provided further that any natural gas pipeline of a length less than three hundred kilometers shall be counted as a zone; and

- (ii) a corridor along the natural gas pipeline with a width of up to ten percent of the total length of the natural gas pipeline without including the length of the spur lines or fifty kilometers measured from the nearest point on the surface of the natural gas pipeline on both sides, and includes the point of origin and the end point of the natural gas pipelines, whichever is less, and-
  - (a) the first tariff zone shall be counted with reference to any zone in which the point of injection of natural gas into the natural gas pipeline falls; and
  - (b) the subsequent tariff zone or tariff zones, as the case may be, shall be counted separately on either side along the contractual path for delivery of natural gas in the natural gas pipeline;

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<sup>13</sup> Ins. by pt (ii), Cl. (a), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

<sup>14</sup> Ins. by pt. (ii) of Cl. (a) of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Third Amendment Regulations, 2020 (w.e.f. 23.11.2020).

Provided that natural gas pipeline tariff for transport of natural gas from the same source shall be uniform for all the customers located within the zone:

Provided further that the entity shall supply natural gas to any customer located in the zone subject to the techno-commercial feasibility of laying, building, operating or expanding a new spur line from the natural gas pipeline.

## Explanation

For the purposes of this clause, the entity shall submit to the Board information regarding various tariff zones and their sequential numbering in the natural gas pipeline from each point of injection.]

<sup>15</sup>[(j) “tariff zones for unified tariff” means the-

(i) first tariff zone for unified tariff of a length of three hundred kilometres from the unified entry point on either side of the national gas grid system; <sup>16</sup>]

(ii.) <sup>17</sup>[ second tariff zone for unified tariff of a length of more than three hundred kilometers and upto twelve hundred kilometers on either side of the first tariff zone of national gas grid system, or];

<sup>18</sup>[(iii.) third tariff zone for unified tariff being the remaining length of the national gas grid system on either side of second tariff zone for unified tariff]

<sup>19</sup>[(ja) transmission loss means as defined in regulation 2(1) of Petroleum and Natural Gas Regulatory Board (Access Code for Common Carrier or Contract Carrier Natural Gas Pipelines) Regulations, 2008.;

<sup>20</sup><sup>21</sup>(k) “unified tariff” means unit natural gas pipeline tariff, in respect of the national gas grid system determined in accordance with regulation 5A, for transportation of natural gas (excluding statutory taxes and levies) denominated in rupees per MMBTU];

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<sup>15</sup> Notified vide Gazette Notification dated 18<sup>th</sup> November, 2022(F. No. PNGRB/COM/2-NGPL/Tariff (3) /2019 Vol-IV (P-4121).)

<sup>16</sup> Omitted. by pt. (a.), Cl. (i), sub-reg. a of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022.

<sup>17</sup> Subs. by pt. (b.), Cl. (i), sub-reg. a of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022.

<sup>18</sup> Ins. by pt. (c.), Cl. (i), sub-reg. a of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

<sup>19</sup> Ins. by pt. (d.), Cl. (i), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

<sup>20</sup> Notified vide Gazette Notification dated 18<sup>th</sup> November, 2022(F. No. PNGRB/COM/2-NGPL/Tariff (3) /2019 Vol-IV (P-4121).)

<sup>21</sup> Ins. by pt. (iii) of Cl. (a) of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2020.

<sup>22</sup><sup>23</sup>[(l) “unified contractual path” means the route on the national gas grid system between the unified entry point and the unified exit point for the shipper(s); Provided that the Unified Contractual Path is to be confirmed by the shipper(s) at the time of capacity booking(s) and agreed by the transporter(s). Provided further that in case there are multiple shippers involved in transportation of gas on the Unified Contractual Path, details of all such shippers shall also be confirmed at the time of capacity booking and accepted by the transporter(s).”];

<sup>24</sup>[Notwithstanding anything contained in these regulations, in case on a unified contractual path, the network of any pipeline is used more than once for transporting gas through NGGS, then for such cases, separate unified contractual path will need to be confirmed by the shipper for each usage of the same network. Accordingly, capacity booking shall be done, and applicable zonal unified tariff shall be applied for each case.]

<sup>25</sup>[(m) “unified entry point” means the point on the national gas grid system where a shipper injects natural gas <sup>26</sup>[which shall be confirmed by the shipper at the time of capacity booking and agreed by the transporter(s)]];

<sup>27</sup>[(n) “unified exit point” means the point on the national gas grid system from where a shipper evacuates natural gas <sup>28</sup>[which shall be confirmed by the shipper at time of capacity booking and agreed by the transporter(s).]]]

<sup>29</sup>[(o) “Unified Tariff Path” means the path along the NGGS starting from Unified Entry Point and ending in the Unified Tariff Zone where in Unified Exit points falls for the underlying Unified Contractual Path for which capacity is booked. Unified Tariff Path identifies the following:

- i) pipeline networks which falls on the respective Unified Tariff Path;

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<sup>22</sup> Notified vide Gazette Notification dated 18<sup>th</sup> November, 2022(F. No. PNGRB/COM/2-NGPL/Tariff (3) /2019 Vol-IV (P-4121).)

<sup>23</sup> Subs. by pt (iii), Cl. (a), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

<sup>24</sup> Ins. By cl (a) of sub-reg. (2) of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

<sup>25</sup> Notified vide Gazette Notification dated 18<sup>th</sup> November, 2022(F. No. PNGRB/COM/2-NGPL/Tariff (3) /2019 Vol-IV (P-4121).)

<sup>26</sup> Ins. by pt (iv), Cl. (a), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

<sup>27</sup> Notified vide Gazette Notification dated 18<sup>th</sup> November, 2022(F. No. PNGRB/COM/2-NGPL/Tariff (3) /2019 Vol-IV (P-4121).)

<sup>28</sup> Ins. by pt (v), Cl. (a), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

<sup>29</sup> Ins. By cl. (b) of sub-reg. (1) of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

- ii) the applicable tariff for tariff zones for unified tariff; and
  - iii) share of each transporter on such Unified Tariff Path.]
- (2) Words and expression 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 or in the rules or regulations, as the case may be.

### **3. Application.**

These regulations shall apply to an entity-

- (1) authorized by the Central Government —<sup>30</sup>[before the appointed day] under regulation 17 of the Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build Operate or Expand Natural Gas Pipelines) Regulations, 2008 for laying, building, operating or expanding a natural gas pipeline<sup>31</sup>];
  - (2) laying, building, operating or expanding a natural gas pipeline before the appointed day and authorized by the Board for such activities under regulation 18 of the Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Regulations, 2008; and
  - (3) laying, building, operating or expanding a dedicated pipeline which is converted into a natural gas pipeline under the provisions of sub-regulation (1) or (2) of regulation 19 of Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Regulations, 2008.
- <sup>32</sup>[<sup>33</sup>(4) authorized by the Board pursuant to a policy directive issued by the Central Government under sub-section (2) of section 42 of the Act];
- <sup>34</sup>(5) authorised by the Board under regulation 9 of the Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Regulations, 2008 and whose tariff is fixed under regulation 11 of the Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build,

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<sup>30</sup> Ins. by Cl. (ii), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

<sup>31</sup> Omitted by pt. Cl. (ii), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

<sup>32</sup> Notified vide Gazette Notification dated 18<sup>th</sup> November, 2022(F. No. PNGRB/COM/2-NGPL/Tariff (3) /2019 Vol-IV (P-4121).)

<sup>33</sup> Ins. by Cl. (b) of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2020.

<sup>34</sup> Notified vide Gazette Notification dated 18<sup>th</sup> November, 2022(F. No. PNGRB/COM/2-NGPL/Tariff (3) /2019 Vol-IV (P-4121).)

Operate or Expand Natural Gas Pipelines) Regulations, 2008, for the limited applicability of unified tariff in accordance with regulation 5A.]]

<sup>35</sup>[(6) laying, building, operating or expanding an integrated natural gas pipeline;]

**<sup>36</sup>[4. Determination of natural gas pipeline tariff.**

- (1) The natural gas pipeline tariff in respect of an entity covered under sub-regulation (1), sub-regulation (2) <sup>37</sup>[,] sub-regulation (3),<sup>38</sup>[sub-regulation (4) or sub-regulation (6)] of regulation 3 shall be determined as per the procedure at Schedule A.
- (2) Prior to determination of the natural gas pipeline tariff, the Board shall issue a public notice on its website containing a public consultation document providing an opportunity to stakeholders (including the entity concerned) to participate in the determination of the natural gas pipeline tariff.
- (3) Stakeholders (including the entity concerned) may submit their comments in writing within fifteen days from the date of webhosting of the public notice.
- (4) On the expiry of the period provided for stakeholder comments as referred to in sub-regulation (3), the Board shall forward the comments received to the entity concerned for it to submit its response within fifteen days of the receipt thereof. The Board may, if required, also invite all stakeholders who have offered their comments including the entity concerned for discussions. The Board shall after considering the tariff filings by the entity, the comments of other stakeholders, the response of the entity concerned and discussions, if any, issue the tariff order.]

**5. Form for data submission by entity for determination of natural gas pipeline tariff.**

Every entity shall submit to the Board the financial costs and other data in the form at Attachment 1 of Schedule A, if, as on the day of the notification of these regulations, the natural gas pipeline –

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<sup>35</sup> Ins. by Cl. (iii), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

<sup>36</sup> Subs. by Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2014, for Reg.4 (w.e.f. 27.02.2014).

<sup>37</sup> Subs. by Cl. (iv), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022, for 'or'.

<sup>38</sup> Ins. by Cl. (iv), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

- (1) is not in operation, then at least six months before the likely date of commissioning of the natural gas pipeline, or within ninety days of the date of notification of these regulations, whichever is later; or
- (2) is already in operation, then, in relation to an entity referred to in –
- (a) <sup>39</sup>[sub-regulation] (1) of regulation 3, within ninety days of the notification of these regulations;
  - (b) <sup>40</sup>[sub-regulation ](2) of regulation 3 within ninety days of the grant of authorization by the Board; or
  - (c) <sup>41</sup>[sub-regulation ](3), within ninety days of the date of authorization by the Board
- <sup>42</sup>[ (d) sub-regulation (4) of regulation 3, within ninety days of the date of acceptance by the Board;
- (e) sub-regulation (6) of regulation 3, within ninety days from the date of submission of request for integrated natural gas pipeline]

Provided that the entity shall charge initial unit natural gas pipeline tariff “on account basis” based on these regulations from the date of commissioning of natural gas pipeline referred to in clause (1) of regulation 3 or the date of authorization <sup>43</sup>[or acceptance] by the Board of natural gas pipeline referred to in clause (2)<sup>44</sup>[,] clause (3) <sup>45</sup>[or sub-regulation (4)] of regulation 3, as the case may be, till the date the Board provisionally fixes the initial unit natural gas pipeline tariff:

<sup>46</sup>[Provided further that the initial unit natural gas pipeline tariff <sup>47</sup>[as applicable to sub-regulation (1) to sub-regulation (4) of regulation 3] shall be

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<sup>39</sup> Subs. by pt. (a), Cl. (v), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022, for ‘clause.

<sup>40</sup> Subs. by pt. (a), Cl. (v) of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022, for ‘clause’.

<sup>41</sup> Subs. by pt. (a), Cl. (v) of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022, for ‘clause’.

<sup>42</sup> Ins. by pt. (b) of Cl. (v), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

<sup>43</sup> Ins. by pt. (c) of Cl. (v), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

<sup>44</sup> Subs. by pt. (c), Cl. (v) of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022, for ‘,’.

<sup>45</sup> Subs. by pt. (c), Cl. (v) of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022, for ‘or sub-regulation (4)’.

<sup>46</sup> Subs. by Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2012, for second proviso in sub-reg. (2) of reg.5 (w.e.f. 13.09.2012).

provisionally fixed by the Board within six months of receipt of the relevant tariff data from the entity after which the entity shall carry out adjustments with a retrospective effect with the customers for the difference between the initial unit natural gas pipeline tariff that the entity had so charged and that provisionally fixed.]

<sup>48</sup>[<sup>49</sup>**5A. Procedure for Determination of Unified Tariff and matters incidental thereto:**

- (1) Notwithstanding anything contained in these regulations, Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand Natural Gas Pipelines) Regulations, 2008 and any other regulation made under the Act and for the time being in force, invoicing entity shall raise invoice towards and collect the unified tariff for unified contractual path instead of the approved tariff from the shipper and the shipper shall be liable to pay such unified tariff to such invoicing entity.

<sup>50</sup>["Provided that if such unified contractual path consists of pipelines of different entities, then all such entities shall raise invoice towards applicable unified zonal tariff at a pre-defined ratio determined in accordance with the Settlement Mechanism and the shipper(s) shall be liable to pay such unified zonal tariff to such invoicing entities as per their respective invoices;

Provided further that the sum total of such unified tariff for a unified contractual path, charged by such invoicing entities on such shipper(s), shall be equal to the unified zonal tariff applicable for such unified contractual path.

Provided further that the applicable unified zonal tariff after multiplication with approved ratio shall be rounded to two (02) places of decimal.

Clarification: This is to clarify that the shipper(s) will be charged tariff based on the applicable tariff zones for the unified contractual path.”]

- (2) The invoice referred to in sub-regulation (1), shall be raised for the quantity of gas delivered to the shipper by the <sup>51</sup>["transporter(s) at the exit point of the respective pipeline network forming part of the NGGS. The ship or pay quantity will be as per the respective Gas Transmission Agreement entered by the transporter(s). The invoice, including the invoice for ship or pay quantity, will be raised by each

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<sup>47</sup> Ins. by pt. (d) of Cl. (v), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022.

<sup>48</sup> Notified vide Gazette Notification dated 18<sup>th</sup> November, 2022 and shall come into force on 01<sup>st</sup> April 2023(F. No. PNGRB/COM/2-NGPL/Tariff (3) /2019 Vol-IV (P-4121).)

<sup>49</sup> Ins. by Cl. (b) of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2020.

<sup>50</sup> Ins. by pt (i), Cl. (b), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

<sup>51</sup> Subs. by pt (ii), Cl. (b), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

transporting entity involved in contractual path at a predefined ratio of applicable unified tariff. The ratio shall be derived in accordance with the Settlement Mechanism.

Provided that the entity laying, building, operating or expanding natural gas pipeline other than the one which is part of national gas grid system shall continue to pay the approved tariff to such entity.”]

Provided that the entity laying, building, operating or expanding natural gas pipeline other than the one which is part of national gas grid system shall continue to charge the approved tariff from the shipper and the shipper shall continue to pay the approved tariff to such entity.

- (3) Revenue entitlement of the entities laying, building, operating or expanding natural gas pipelines which are part of the national gas grid system under unified tariff system, shall be the revenue with reference to approved tariff for such natural gas pipelines, that is to say that the entities shall remain revenue neutral and the procedure for determination of unified tariff shall be as specified in Part A of Schedule B of these regulations and the procedure for settlement amongst the pipeline entities shall be as specified in Part B of Schedule B.

<sup>52</sup>[Provided that in case of any additional Goods and Service tax (“GST”) implication on any entity due to implementation of unified tariff regulations (including settlement between entities), the same shall be included in the revenue entitlement of the respective entity for that year.]

- (4) Considering the experience and suggestions, if any, received from the stakeholders during the initial period of six months from the date of <sup>53</sup>[ notification of this para], the Board may, by order notified in the official gazette, suitably modify the provisions of this regulation, wherever considered necessary, and on the issue of such order, this regulation shall be deemed to be modified accordingly.]]

#### <sup>54</sup>[6. Miscellaneous.

If any question arises as to the interpretation of these regulations, the same shall be decided by the Board.]

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<sup>52</sup> Ins. by pt (iii), Cl. (b), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

<sup>53</sup> Subs. by Cl. (i), sub-reg. b of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022.

<sup>54</sup> Subs. by ‘Reg. 2’, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2014, for ‘Reg. 6’, (w.e.f. 01.01.2015).

## Schedule A

[see regulations 4 and 5]

### **Procedure for determination of natural gas pipeline tariff.**

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The natural gas pipeline tariff 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 natural gas pipeline.

#### **Explanation:**

The expression “normative level” shall be with reference to a level, which is both reasonable and justifiable in terms of incurrence of capital and operating expenditure required for laying, building, operating or expanding an efficient natural gas pipeline over its economic life.

#### **1. Financial Feasibility.**

The entity to which these regulations apply shall submit all technical, operating, financial and cost data of the natural gas pipeline project that may be required by the Board in determination of the natural gas pipeline tariff.

#### **2. Methodology for determination of natural gas pipeline tariff.**

The unit rate of natural gas pipeline tariff to be charged for a period shall be the calculated based on the “Discounted Cash flow” (DCF) methodology<sup>55</sup> considering the reasonable rate of return as specified in clause 3 to be the project’s internal rate of return. The parameters relevant to the applicability of the DCF methodology have been described in detail in clauses 4 to 6 below.

#### **3. Reasonable rate of return.**

The rate of return on capital employed shall be the rate of return on capital employed equal to twelve percent post-tax. The rate of return on capital employed once applied to a natural gas pipeline project shall remain fixed for the entire

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<sup>55</sup> Discounted Cash Flow methodology refers to equating the inflows from the projected revenue earnings out of natural gas pipeline tariff with the outflows of capital and operating expenditures over the economic life of the project by discounting these flows at the project’s reasonable rate of return. The volumes and outflows are estimated over the economic life which results in the determination of the natural gas pipeline tariff required to be earned by the project to achieve the internal rate of return.

economic life of the project.<sup>56</sup>[Such lowest nominal rate of income tax shall be applied with effect from the financial year of this amendment regulation.]

**Note:**

The pre-tax rate of return on capital employed shall be computed by grossing-up twelve percent by the nominal rate of income tax applicable for corporate assesses as per the provisions of the income Tax Act, 1961, as amended from time to time.

<sup>57</sup>[**Explanation-** For removal of doubt, it is clarified that in case more than one nominal rates of income tax are available as an option to the entity under the law relating to income tax, the lowest of such nominal rates of income tax shall be considered for the purpose of grossing-up the post-tax rate of return of twelve per cent for computing pre-tax rate of return on capital employed.]

**4. Return on total capital employed.**

- (1) The reasonable rate of return shall be applied on the total capital employed to determine the return on 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.
- (2) The total capital employed shall be equal to the gross fixed assets in the project less accumulated depreciation<sup>2</sup> plus normative working capital (equal to thirty days of operating costs excluding depreciation and eighteen days natural gas pipeline tariff receivables).
- (3) The gross fixed assets shall be equal to their actual historical cost of acquisition (including the cost of an subsequent replacement or improvement or modification) or that normatively assessed by the Board, whichever is lesser and required in the natural gas pipeline project over its economic life based on the principles<sup>3</sup> to create and sustain an efficient infrastructure, namely:-
  - (a) treatment of an investment in the fixed asset in determination of total capital employed shall be as per the basis indicated in Attachment 2;

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<sup>56</sup> Ins. by pt. (a) of Cl. (vi), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022.

<sup>57</sup> Ins. by Reg 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2020 (w.e.f. 27.03.2020).

<sup>2</sup> 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 assets on a straight line basis.

<sup>3</sup> The basis and parameters identified here are not exhaustive and may vary depending upon the specific natural gas pipeline project under consideration which the Board may apply in a transparent manner.

- (b) capital costs in similar projects, if any, 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 such as, compressors, metering systems, SCADA, firefighting required, based on an assessment of the appropriate available technology;
- (e) spur lines;
- (f) design parameters for compressors; and
- (g) assessment of the costs of major equipments and facilities in the natural gas pipeline, laying or building costs, project management consultancy and pre-operative expenditure.

## **5. Operating costs.**

Operating costs<sup>4</sup> required in the operation and maintenance of the natural gas pipeline over its economic life shall be computed, on an actual basis or based on a normative assessment by the Board, whichever is lower,<sup>58</sup>[except as specified] over the following functional cost heads, namely:-

- (1) consumables;
- (2) utilities;
  - (a) power;
  - (b) fuel (including the cost of natural gas and the natural gas pipeline tariff<sup>59</sup>[thereon, corresponding to the volumes of natural gas considered as divisor for tariff determination subject to maximum of 2% of the volumes of natural gas considered as divisor for tariff determination of the natural gas pipeline]);

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

<sup>58</sup> Ins. by sub pt.(i) pt. (b) of Cl. (vi), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022.

<sup>59</sup> Ins. by sub pt.(ii) pt. (b) of Cl. (vi), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022.

<sup>60</sup>[Explanation: Actual fuel cost for the respective years shall be multiplied by the volumes considered as divisor for determining tariff and divided by actual volumes flow.]

(c) water

<sup>61</sup>[(d) transmission loss @ 0.1% of the actual volume, multiplied by the gas price plus applicable transmission charges.

<sup>62</sup>[Clarification: The ‘applicable transmission charges’ referred above also includes the natural gas pipeline tariff not recovered due to transmission loss.]

Provided that for the future years, likely future volumes of the pipeline shall be considered for calculating the transmission loss.

Provided further that the gas price used for calculation of transmission loss shall be the gas price ceiling issued by Petroleum Planning & Analysis Cell in accordance with Ministry of Petroleum and Natural Gas, Govt of India, Notification No.O-22013/27/2012-ONG-D-V (Vol-II) dated 21.03.2016 for marketing including pricing freedom for gas being produced from discoveries in Deepwater, Ultra Deepwater and High Pressure-High Temperature areas or actual gas price, whichever is lower for the respective period.;

- (3) salaries and wages;
- (4) repairs and maintenance;
- (5) insurance premia on assets (excluding the value of loss of profit) and on line-pack volumes;
- (6) administrative overheads [to the extent not classifiable under sub-clause (1) to sub-clause (5)], related and also commensurate to the level of operations in the natural gas pipelines;

<sup>63</sup>[\*\*\*]

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<sup>60</sup> Ins. by sub pt.(iii) pt. (a) of Cl. (vi), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022.

<sup>61</sup> Ins. by sub pt.(iv) pt. (b) of Cl. (vi), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

<sup>62</sup> Ins. by sub-reg. (2) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

<sup>63</sup>The words “specified in sub clause (7) of clause 5” omitted by the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2016 (w.e.f. 08.01.2016).

<sup>64</sup>[(8)<sup>65</sup>[Adjustment of Miscellaneous income against Operating Costs: Financial Year-wise actual revenue earned by the entity from the regulated asset base, including] Miscellaneous income realizable from a fixed asset included in the capital employed or out of an expense considered as an operating cost, including income from imbalance management services in accordance with the provisions of Petroleum and Natural Gas Regulatory Board (Imbalance Management Services) Regulations, 2016, but excluding interest income, profit or loss on sale or transfer of any fixed or other asset, shall be<sup>66</sup>[. worked out. If considering such actual revenue, return earned by the entity on the date of review results in more than the allowed rate of return as per clause 3 of Schedule A, then adjustment would be made in the tariff to make the return earned by the entity on the date of review equals to the allowed rate of return as per clause 3 of Schedule A]]

## **6. Volumes to be considered in determination of the unit natural gas pipeline tariff.**

<sup>67</sup>[(1) The volumes of natural gas to be considered as divisor in the determination of the unit natural gas pipeline tariff over the economic life of the project shall be computed on a normative or actual basis, whichever is higher.

<sup>68</sup>[Provided that in case of future years, PNGRB shall consider the volumes taking into account various factors including normative volumes and likely future volumes as provided by the entity, if higher than the normative volumes]

Volume on normative basis shall be calculated as indicated below:- <sup>69</sup>[

(a) [] <sup>70</sup>[ The divisor for each of phase of natural gas pipeline for the first ten years of its operations or any subsequent expansion in the capacity (other than expansion to which clause 6(1)(c) is applicable) shall be arrived by

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<sup>64</sup> Subs. by pt. (i) of Cl. (b) of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Third Amendment Regulations, 2020 (w.e.f. 23.11.2020).

<sup>65</sup> Ins. by sub pt.(v) pt. (b) of Cl. (vi), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

<sup>66</sup> Subs by pt.(v) pt. (b) of Cl. (vi), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

<sup>67</sup>Subs. by Cl. (ii) of sub reg. (a) of reg.2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2016 (w.e.f. 08.01.2016)

<sup>68</sup> Ins. by sub pt. i pt. (c) of Cl. (vi), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

<sup>69</sup> Subs. by sub pt. ii, pt. (c) of Cl. (vi), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

<sup>70</sup> Ins. by sub pt. ii pt. (c) of Cl. (vi), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

multiplying the applicable percentage utilization for the year, as per the basis indicated below, with seventy five per cent of the capacity of each phase of natural gas pipeline or of natural gas pipeline or each expansion of capacity, as the case may be:

<b>Year of natural gas pipeline operations</b>	<b>Percentage utilization</b>
First	30%
Second	35%
Third	40%
Fourth	45%
Fifth	50%
Sixth	60%
Seventh	70%
Eighth	80%
Ninth	90%
Tenth and onwards	100%]

(b) The divisor for the <sup>71</sup>[ eleventh and the subsequent years of operation of each phase of natural gas pipeline or of natural gas pipeline or each expansion of capacity, as the case may be (other than expansion to which clause 6 (1) (c) is applicable) shall be equal to the seventy-five per cent of the capacity of natural gas pipeline or actual volumes (including ship or pay volumes)], whichever is higher.

<sup>72</sup>[(c) Notwithstanding anything contained in any other regulations, in case of addition of any new natural gas source to a natural gas pipeline which comes anytime from 01.04.2020 and onwards, any increase in the capacity of the pipeline, if any, because of such addition of such new source shall not be considered in the tariff determination for a period of five years from the date of commissioning of the pipeline connectivity due to the relevant source.

(d) It is clarified that any new injection point on a common carrier or contract carrier natural gas pipeline due to interconnection from another common carrier or contract carrier natural gas pipeline shall not be considered as capacity expansion for determination of tariff. Provided that the entity has taken approval wherever required in terms of Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand

<sup>71</sup> Ins. by sub pt. ii pt. (c) of Cl. (vi), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

<sup>72</sup> Subs. by sub pt. iv pt. (c) of Cl. (vi), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

Natural Gas Pipelines) Regulations, 2008 along with the increase in capacity due to such interconnection as per Petroleum and Natural Gas Regulatory Board (Determining Capacity of Petroleum, Petroleum Products and Natural Gas Pipeline) Regulations, 2010.;

<sup>73</sup><sup>74</sup>[(e).]

- (2) The volume of natural gas determined under sub-clause (1) shall be converted into its energy equivalence in MMBTU terms for the purpose of-
- (a) determination of the provisional unit natural gas pipeline tariff by considering the weighted average of heat value of different natural gases which are likely to be transported by the entity during this period;
  - (b) determination of the final initial unit natural gas pipeline tariff by considering the weighted average heat value of the natural gas delivered to customers during the initial unit natural gas pipeline tariff period;
  - (c) first tariff review by considering the weighted average heat value of natural gas delivered to the customers between the period from the end of the initial unit natural gas pipeline tariff period and the due date of the first tariff review;
  - (d) any subsequent tariff review by considering the weighted average heat value of the natural gas delivered to the customers during the period between that tariff review and the immediate previous tariff review.

<sup>75</sup>[(3) Notwithstanding anything contained in any regulations made under the Act, 350 working days shall be considered in a year for the purpose of tariff determination under these regulations.]

#### <sup>76</sup>**[7. Economic Life.**

Notwithstanding anything contained in any regulations made under the Act, economic life of the pipeline shall be considered as thirty years from the date of commissioning for the purpose of tariff determination under these regulations. In

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<sup>73</sup> Omitted by sub pt. v pt. (c) of Cl. (vi), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

<sup>74</sup> Ins. by sub-pt. (A) of pt. (ii) of Cl. (b) of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Third Amendment Regulations, 2020 (w.e.f. 23.11.2020).

<sup>75</sup> Ins. by sub-pt. (B) of pt. (ii) of Cl. (b) of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Third Amendment Regulations, 2020 (w.e.f. 23.11.2020).

<sup>76</sup> Subs. by sub-pt. (B) of pt. (ii) of Cl. (b) of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Third Amendment Regulations, 2020 (w.e.f. 23.11.2020).

case, the natural gas pipeline has been authorized for more than thirty years or its authorisation has been subsequently extended beyond thirty years or is in operation beyond thirty years, the DCF model for the tariff computation may be made for the entire period of authorization or operation till the next tariff review, including the extended period. Any replacement of the pipeline, in excess of five per cent of the length of the pipeline including spur-lines and tie-in lines, before the completion of the aforesaid economic life, shall not be considered for tariff determination if approval of the Board has not been obtained by the entity for such replacement.]

<sup>77</sup>[Provided that, in case of any integrated natural gas pipeline, notwithstanding anything contained in any regulations, its economic life for the purpose of tariff determination under these regulations shall be considered based on the remaining economic life of the natural gas pipeline which is part of such an enlisted integrated natural gas pipeline with latest commissioning date of operation;]

#### **8. Procedure for apportioning of unit natural gas pipeline tariff over the tariff zones.**

<sup>78</sup>[(1) The entity shall submit for the Board's approval, the calculations in respect of apportioning of the unit natural gas pipeline tariff over all the tariff zones during the economic life of the project in the form specified in Part II of Attachment 1(i), where X% shall be a single number lower than one hundred per cent and Y% shall be a single number lower than fifty per cent.

In case the entity fails to submit the required information within the time determined by the Board for such purpose, the Board may apportion the unit natural gas pipeline tariff over all the tariff zones in the ratio of tariff for various tariff zones during the immediate preceding zonal tariff determination in respect of that pipeline or in any other manner as may be deemed fit by the Board.]

(2) No adjustment shall be made by the entity with the customers for any over-achievement or under-achievement in the recovery of the natural gas pipeline tariff by the entity due to the volumes actually transported in different tariff zones being different than the volumes considered by the entity for apportioning the unit natural gas pipeline tariff for each of the tariff for zones during-

- (a) the period of initial unit natural gas pipeline tariff;

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<sup>77</sup> Ins. by pt. (d) of Cl. (vi), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

<sup>78</sup> Subs. by pt. (iv) of Cl. (b) of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Third Amendment Regulations, 2020 (w.e.f. 23.11.2020).

(b) the first five and consecutive years after the end of the initial unit natural gas pipeline tariff; and

(c) the period between any two consecutive tariff reviews.

<sup>79</sup>[(3) Notwithstanding anything contained in any regulations, for the purpose of apportioning of the natural gas pipeline tariff over tariff zones in case of natural gas pipeline, the Board may, by order, consider to have simpler and reduced number of tariff zones after adopting public consultation process in this regard as per the provisions as specified in regulation 4 of these regulations, in a transparent manner.]

**9. Determination of initial unit natural gas pipeline tariff and review of unit natural gas pipeline tariff.**

(1) The unit natural gas pipeline tariff shall be determined for the natural gas pipeline over its economic life and levelized during-

(a) the period applicable for the initial unit natural gas pipeline tariff;

(b) the period of five consecutive years after the end of the initial unit natural gas pipeline tariff; and

(c) the period between any two consecutive tariff reviews.

<sup>80</sup>[Provided that, for a period of five years or for the period between any two consecutive tariff reviews as the case may be, in order to protect the interest of consumers, in place of a levelized tariff, the DCF model for tariff computation may provide for a gradual annual increase in the levelized tariff at a pre-specified rate as may be approved, by order, by the Board after adopting public consultation process in this regard as per the provisions as specified in regulation 4 of these regulations. Accordingly, a gradually increasing year-wise zonal tariff shall be charged based on such pre-specified rate.]

(2) The initial unit natural gas pipeline tariff including its apportioning over all tariff zones shall be determined based on provisional computations.

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<sup>79</sup> Ins. by pt. (e) of Cl. (vi), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022.

<sup>80</sup> Ins. by sub pt. i pt. (f) of Cl. (vi), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022.

(3) The final computations in respect of the initial unit natural gas pipeline tariff shall be made considering the adjustments<sup>81</sup>[.] <sup>82</sup>[as required for the actual capital, operating costs and volumes as specified under clause 4, 5 and 6.]

<sup>83</sup>[(4) The adjustment on account of variation in the provisional initial unit natural gas pipeline tariff, final initial unit natural gas pipeline tariff and tariff determined under tariff review shall be made in the DCF calculations and the derived tariff shall be charged from the customers on prospective basis till next review, that is, the tariff shall be applicable from the first day of the month, following the month, in which the tariff order (zonal tariff in case of applicability of zonal tariff) is issued by the Board.]

(5) The final unit natural gas pipeline tariff as specified under sub-clause (3) shall apply for the period upto the first tariff review until the time the same is revised by the Board;

(6) The entity shall submit for Board's approval the data for determination of the unit natural gas pipeline tariff after the notification of these regulations in the form and time frame specified under regulation 5 alongwith the provisional computations of the initial unit natural gas pipeline tariff including the apportioning of the same over all tariff zones;

Provided that the final computations of the initial unit natural gas pipeline tariff including apportioning of the same over all tariff zones shall be submitted three months before the last date of the period applicable for the initial unit natural gas pipeline tariff.

(7) The entity shall submit computation of the unit natural gas pipeline tariff including apportioning of the same over all tariff zones in the form specified under regulation 5 at the time of each tariff review within three months of the

—  
(a) end of the last year of the five consecutive years after the initial unit natural gas pipeline tariff; or

(b) end of the preceding tariff review period:

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<sup>81</sup> Omitted by sub pt. ii pt. (f) of Cl. (vi), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

<sup>82</sup> Ins. by sub pt. ii pt. (f) of Cl. (vi), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022.

<sup>83</sup> Subs. by Cl.(b) of Reg. 3, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2019, for 'Sub cl. (4) of Cl. 9 in Schedule A' (w.e.f. 27.05.2019).

Provided that the computation shall consider the actual cost, financial and operational data or that normatively assessed by the Board, whichever is lesser as per clauses 4 and 5 in respect of the period specified under sub-clause (a) or (b) as the case may be.

- (8)<sup>84</sup>][<sup>85</sup>[Adjustments on account of the variations with respect to actuals in the capital, operating costs and volumes as specified under clause 4, 5 and 6, during the five consecutive years after the initial unit natural gas pipeline tariff or any tariff review shall be made in the DCF calculations in respective years as required.]
- (9) The Board may, either on its own or on the entity's request, carry out a review of the unit natural gas pipeline tariff any time between two tariff reviews, as the case may be, considering-
- (i) applicable nominal rate of income tax used for grossing-up the rate of return on capital employed;
  - (ii) sudden change in any parameter used in the determination of the unit natural gas pipeline tariff.
- (10) The provisional and final initial unit natural gas pipeline tariff, unit natural gas pipeline tariff for the period of five consecutive financial years after the initial unit natural gas pipeline tariff and the unit natural gas pipeline tariff fixed after any tariff review thereafter shall continue to apply till the time the same is revised by the Board.

**<sup>86</sup>[10. Adjustment of volume variation in Tariff computation after final computations of initial unit natural gas pipeline tariff.**

<sup>87</sup>[.]

<sup>88</sup>[(1) Adjustment shall be carried out in the normative volumes considered as per clause 6 (1) where normative being higher than actual volumes. The extent of adjustment shall be maximum upto the difference between actual volumes

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<sup>84</sup> Subs. by sub pt. iii pt. (f) of Cl. (vi), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022.

<sup>85</sup> Ins. by sub pt. iii pt. (f) of Cl. (vi), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022.

<sup>86</sup> Ins. by Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas pipeline Tariff) Amendment Regulations, 2010, (w.e.f. 20.12.2010).

<sup>87</sup> Subs. by pt. (g) of Cl. (vi), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022.

<sup>88</sup> Ins. by pt. (g) of Cl. (vi), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022.

higher than the normative volumes considered in any of the year(s) of the economic life of the pipeline.

(2) An audited statement showing actual volume shall be submitted by the entity to Board within three months after the conclusion of each financial year of natural gas pipeline operations to enable the Board to advise the necessary adjustments.

(3) The tariff so adjusted shall also be applicable for the subsequent period till the same is modified, adjusted or reviewed. An illustration for volume adjustment are as follows:

Name of Pipeline: XYZ  
Volumes at the time of inception

Particulars	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Total	
Capacity of Pipeline	50																					
Normative %	30%	35%	40%	45%	50%	60%	70%	80%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Normative Volumes	11.25	13.13	15.00	16.88	18.75	22.50	26.25	30.00	33.75	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	600.00
Actual Volumes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Volume to be considered																						
Before Adjustment	11.25	13.13	15.00	16.88	18.75	22.50	26.25	30.00	33.75	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	600.00
After Adjustment	11.25	13.13	15.00	16.88	18.75	22.50	26.25	30.00	33.75	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	600.00

Volume adjustment and volume after five years of inception

Particulars	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Total	
Capacity of Pipeline	50																					
Normative %	30%	35%	40%	45%	50%	60%	70%	80%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Normative Volumes	11.25	13.13	15.00	16.88	18.75	22.50	26.25	30.00	33.75	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	600.00
Actual Volumes	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
<b>Volume to be considered</b>																						
Before Adjustment	11.25	13.13	15.00	16.88	18.75	22.50	26.25	30.00	33.75	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	600.00
After Adjustment	11.25	13.13	15.00	16.88	18.75	22.50	26.25	30.00	33.75	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	600.00

### Volume adjustment and volume after 10 years of inception

Particulars	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Total	
Capacity of Pipeline	50																					
Normative %	30%	35%	40%	45%	50%	60%	70%	80%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Normative Volumes	11.25	13.13	15.00	16.88	18.75	22.50	26.25	30.00	33.75	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	600.00
Actual Volumes	12.00	12.50	13.00	14.00	15.00	25.00	24.00	28.00	30.00	33.00	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	581.50
<b>Volume to be considered</b>																						
Before Adjustment	12.00	13.13	15.00	16.88	18.75	25.00	26.25	30.00	33.75	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	603.25
After Adjustment	12.00	12.50	13.00	16.26	18.75	25.00	26.25	30.00	33.75	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	600.00

### Volume adjustment and volume after 15 years of inception

Particulars	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Total	
Capacity of Pipeline	50																					
Normative %	30%	35%	40%	45%	50%	60%	70%	80%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Normative Volumes	11.25	13.13	15.00	16.88	18.75	22.50	26.25	30.00	33.75	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	600.00
Actual Volumes	12.00	12.50	13.00	14.00	15.00	25.00	24.00	28.00	30.00	33.00	40.00	42.00	43.00	45.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	616.50
<b>Volume to be considered</b>																						
Before Amendment in 2022	12.00	13.13	15.00	16.88	18.75	25.00	26.25	30.00	33.75	37.50	40.00	42.00	43.00	45.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	638.25
After Amendment in 2022	12.00	12.50	13.00	14.00	15.00	25.00	24.00	28.00	30.00	33.00	40.00	42.00	43.00	45.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	616.50

Notes:

- i. Set Off Credit Volumes is the difference between actual volumes higher than normative volumes
- ii. Volume adjustment shall be done subject to maximum of cumulative Set Off credit volumes. Volume adjustment in any year cannot be more than difference in actual volume lower than normative volume.
- iii. Volume adjustment shall be allowed in such a way that volumes considered for tariff shall not be lower than the cumulative normative volumes on prospective basis over the economic life.
- iv. Such volume adjustment shall be allowed on FIFO basis.
- v. No Set Off Credit Volumes or Volume Adjustments shall be considered for the period prior to this amendment i.e. it will be available on prospective basis.
- vi. At the end of the economic life, if any set off credit of volumes is available, it will lapse.

<b>Attachment 1</b>				
[see regulation 5]				
<b>Project capital cost summary (Capex outflows)</b>				
<b>Sr. No.</b>	<b>Description</b>	<b>INR</b>	<b>FE</b>	
		Indian Rupees	Foreign Exchange	Total (*)
<b>A</b>	<b>Plant and machinery</b>			
1	Receiving terminal			

	[see attachment 1 (a)]			
2	Compressor station [see attachment 1 (b)]			
3	Intermediate terminal [see attachment 1 (c)]			
4	Delivery terminal [see attachment 1 (d)]			
5	Pipeline [see attachment 1 (e)]			
	<b>Subtotal (A)</b>			
<b>B</b>	<b>Engineering costs</b>			
1	Detailed engineering, procurement, construction, supervision and project management			
2	Service Tax on above			
	<b>Subtotal (B)</b>			
<b>C</b>	<b>Site related costs</b>			
1	Land			
2	Any other (details to be given)			
	<b>Subtotal (C)</b>			
<b>D</b>	<b>Owner's cost, start- up expenses</b>			
1	Start-up and commissioning expenses			
2	Owner's management expenses			
	<b>Subtotal (D)</b>			
<b>E</b>	<b>Other Costs</b>			
1	Contingencies and			

	escalation			
2	Preliminary and pre-operative expenses			
3	Interest during construction period and financing charges			
4	Margin money for working capital			
	<b>Subtotal (E)</b>			
	<b>Total (A+B+C+D+E)</b>			
	<b>(* INR + FE converted to INR.</b>			
	<b>Note: Detailed assumption / calculations to be given for item E.</b>			

**Attachment 1 (a)**

[see regulation 5]

**Capital cost of receiving terminal**

<b>Sr. No.</b>	<b>Description</b>	<b>INR</b>	<b>FE</b>	<b>Total (*)</b>	<b>Technical specifications</b>
		Indian Rupees	Foreign Exchange		
<b>A</b>	<b>Major Items</b>				
1	Scrapper traps and pig signaller				Rated capacity as per supplier
2	Metering system				
3	Cartridge filters				
4	Fire protection system				
5	Power supply arrangement				
6	Compressors				Rated capacity as per supplier
7	Any other item (details to be given)				
	<b>Subtotal</b>				
<b>B</b>	<b>Bulk Materials</b>				
1	Piping				
2	Electrical				
3	Instrumentation				
4	Any other item (details to be given)				
	<b>Subtotal</b>				
<b>C</b>	<b>Spares (details to be given)</b>				
<b>D</b>	<b>Erection</b>				
1	Mechanical				
2	Electrical				
3	Instrumentation				
4	Civil works				
5	Land				
6	Any other item (details to be given)				
	<b>Subtotal</b>				

<b>E</b>	<b>Taxes and duties</b>				
1	Ocean freight				
2	Customs duty				
3	Port handling				
4	Inland freight				
5	Excise & CST				
6	Works contract tax				
7	Insurance				
8	Any other applicable tax and duty (give details)				
	<b>Subtotal</b>				
	<b>Total (A to E)</b>				

(\*) INR + FE converted to INR.

**Attachment 1 (b)**  
[see regulation 5]

**Capital cost of compressors**

<b>Sr. No.</b>	<b>Description</b>	<b>INR</b>	<b>FE</b>	<b>Total (*)</b>	<b>Technical specifications</b>
		Indian Rupees	Foreign Exchange		
<b>A</b>	<b>Major Items</b>				
1	Compressors				Rated Capacity as per Supplier
2	Scrapper traps and pig signaler				
3	Metering system				
4	Cartridge filters				
5	Fire protection system				
6	Power supply arrangement				
7	Any other item (details to be given)				
	<b>Subtotal</b>				
<b>B</b>	<b>Bulk materials</b>				
1	Piping				
2	Electrical				
3	Instrumentation				
4	Any other item (details to be given)				
	<b>Subtotal</b>				
<b>C</b>	<b>Spares</b> (details to be given)				
<b>D</b>	<b>Erection</b>				
1	Mechanical				
2	Electrical				
3	Instrumentation				
4	Civil Works				
5	Land				
6	Any other item (details to be given)				

	<b>Subtotal</b>				
<b>E</b>	<b>Taxes and duties</b>				
1	Ocean freight				
2	Customs duty				
3	Port handling				
4	Inland freight				
5	Excise & CST				
6	Works contract tax				
7	Insurance				
8	Any other applicable tax and duty (give details)				
	<b>Subtotal</b>				
	<b>Total (A to E)</b>				

(\* INR + FE converted to INR

**Attachment 1 (c)**  
[see regulation 5]

**Capital cost of intermediate terminal**

<b>Sr. No.</b>	<b>Description</b>	<b>INR</b>	<b>FE</b>	<b>Total (*)</b>	<b>Technical specifications</b>
		Indian Rupees	Foreign Exchange		
<b>A</b>	<b>Major Items</b>				
1	Scrapper traps and pig signaler				Rated Capacity as per Supplier
2	Metering system				
3	Cartridge filters				
4	Fire protection system				
5	Power supply arrangement				
7	Any other item (details to be given)				
	<b>Subtotal</b>				
<b>B</b>	<b>Bulk materials</b>				
1	Piping				
2	Electrical				
3	Instrumentation				
4	Any other item (details to be given)				
	<b>Subtotal</b>				
<b>C</b>	<b>Spares (details to be given)</b>				
<b>D</b>	<b>Erection</b>				
1	Mechanical				
2	Electrical				
3	Instrumentation				
4	Civil Works				
5	Land				
6	Any other item (details to be given)				
	<b>Subtotal</b>				

<b>E</b>	<b>Taxes and duties</b>				
1	Ocean freight				
2	Customs duty				
3	Port handling				
4	Inland freight				
5	Excise & CST				
6	Works contract tax				
7	Insurance				
8	Any other applicable fax and duty (give details)				
	<b>Subtotal</b>				
	<b>Total (A to E)</b>				

(\* INR + FE converted to INR

**Attachment 1 (d)**  
[see regulation 5]

**Capital cost of delivery terminal**

<b>Sr. No.</b>	<b>Description</b>	<b>INR</b>	<b>FE</b>	<b>Total (*)</b>	<b>Technical specifications</b>
		Indian Rupees	Foreign Exchange		
<b>A</b>	<b>Major Items</b>				
1	Scrapper traps and pig signaler				Rated Capacity as per supplier
2	Metering system				
3	Cartridge filters				
4	Fire protection system				
5	Power supply arrangement				
6	Any other item (details to be given)				
	<b>Subtotal</b>				
<b>B</b>	<b>Bulk materials</b>				
1	Piping				
2	Electrical				
3	Instrumentation				
4	Any other item (details to be given)				
	<b>Subtotal</b>				
<b>C</b>	<b>Spares</b> (details to be given)				
<b>D</b>	<b>Erection</b>				
1	Mechanical				
2	Electrical				
3	Instrumentation				
4	Civil Works				
5	Land				
6	Any other item (details to be given)				
	<b>Subtotal</b>				
<b>E</b>	<b>Taxes and duties</b>				
1	Ocean freight				

2	Customs duty				
3	Port handling				
4	Inland freight				
5	Excise & CST				
6	Works contract tax				
7	Insurance				
8	Any other applicable fax and duty (give details)				
	<b>Subtotal</b>				
	<b>Total (A to E)</b>				

(\*) INR + FE converted to INR

**Attachment 1 (e)**  
[see regulation 5]

**Capital cost of pipelines**

<b>Sr. No.</b>	<b>Description</b>	<b>INR</b>	<b>FE</b>	<b>Total (*)</b>	<b>Technical specifications</b>
		Indian Rupees	Foreign Exchange		
<b>A</b>	<b>Major Items</b>				
1	Survey and soil investigation				
2	Land, ROU and crop compensation				
3	Line pipes				Outer diameter and wall thickness
4	Line materials				
5	Coating and pipe transportation				
6	Pipeline Laying				
7	Cathodic protection				
8	OFC, telecom and telesupervisory system				
9	SCADA & APPC system				
11	Power source				
12	Any other item (details to be given)				
	<b>Subtotal</b>				
<b>B</b>	<b>Minor items</b>				
1	Ocean freight				
2	Customs duty				
3	Port handling				
4	Inland freight				
5	Excise & CST				
6	Works contract tax				
7	Insurance				
8	Any other cost (give details)				
	<b>Subtotal</b>				
	<b>Total (A +B)</b>				

(\*) INR + FE converted to INR

**Attachment 1 (f)**

[see regulation 5]

**Profit and Loss Account (\$)**

**Rs.**

<b>Sr. No.</b>	<b>Description</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>----</b> <b>----</b>	<b>Year 25</b>
<b>1</b>	<b>Total inflows</b>						
a	Revenue from natural gas pipeline tariff						
<b>2</b>	<b>Total operating cost outflows</b>						
a	Consumables and chemicals						
b	Utilities – (Power fuel and water)						
c	Salaries						
d	Repair and maintenance						
e	Gen. administrative expenses (including bank charges on bid bond and performance bond as per grant of authorization)						
f	Any other expenses (to be detailed)						
g	Insurance (including on line-pack volumes)						
<b>3</b>	<b>Profit before depreciation interest and tax (PBDIT) (1 - 2)</b>						
4	Interest on working capital borrowings to the extent utilized in working capital requirement for above expenses (with rates)						
5	Interest on term loan (with rates)						
<b>6</b>	<b>Profit before depreciation and tax (PBDT) (3-4-5)</b>						
7	Depreciation on SLM basis and miscellaneous expenses written off (give details of each)						
<b>8</b>	<b>Profit before tax (PBT) (6-7)</b>						
9	Tax provision (provide as per income tax rules in force)						
<b>10</b>	<b>Profit after tax (PAT) (8-9)</b>						
	Cash from operation (CFO) (10+7) – To be transferred to cash flow sheet						

(\$) Actual or estimates, wherever applicable

(\*) Excluding all direct, indirect and allocated common cost beyond transportation of natural gas pipeline. Financial costs and selling expenses to be excluded.

Note :

1. The natural gas pipeline tariff shall be based on the actual volumes of natural gas transported in natural gas pipeline as determined by DCF methodology adopted by considering a PIRR, at which level the net inflows equal the net outflows over the economic life of the project.
2. For expansion or extension of natural gas pipeline – data in the above format as applicable for project post expansion or extension.
3. Non-operating income (such as, Interest on interest-free refundable security deposit from PNG domestic customers) not to be considered as project inflows.
4. Modvat benefit, if available is to be reflected separately alongwith the calculations
5. Copy of Audited Profit and Loss Account to be attached wherever applicable.

**Attachment 1 (g)**  
[see regulation 5]

**Cash flow statement**

**Rs.**

Sr. No.	Year	Construction period			Economic Life			
		Year- 3	Year- 2	Year- 1	Year- 1	Year- 2	Year- 3	----- Year 25
<b>1</b>	<b>Sources of funds</b>							
a	Equity or Preference Equity (*)							
b	Term Loans and short term loans							
c	Cash from operations							
d	Bank borrowings for working capital							
e	Others (please specify)							
<b>2</b>	<b>Uses of funds</b>							
a	Capital expenditure							
b	Normal/additional capital expenditure							
c	Increase or (decrease) in net working capital							
d	Repayment of loans							
e	Dividends to equity holders							
f	Tax on distributable profits							
g	Others (please specify)							
<b>3</b>	<b>Cash surplus or (deficit)</b>							
a	Opening cash balance							
B	Closing cash balance							

(\*). Redemption details to be given.

**Attachment 1 (h)**

[see regulation 5]

**Balance Sheet (\$)****Rs.**

<b>Year</b>	<b>Construction period</b>			<b>Economic Life</b>				
	Year 3	Year 2	Year 1	Year 1	Year 2	Year 3	Year 4	-----
<b>Assets</b>								
Gross fixed assets								
Less: Accumulated depreciation (*)								
<b>Net Fixed assets</b>								
Net current assets								
Cash and bank balance								
Investments								
Miscellaneous fixed assets								
Deferred revenue expenditure								
Others (please specify)								
<b>Liabilities</b>								
New worth								
Equity capital								
Preference share capital (**)								
Reserves								
<b>Debt</b>								
Rupee term loans								
FC term loans								
Bank borrowings for working capital								
Others (please specify)								

(\$) Actuals or estimates, wherever applicable

(\*) Asset head-wise depreciation calculations to be provided

(\*\*) To the extent non-redeemable. Redeemable preference capital to be shown under debt.

**Note :**

- a) Copy of audited Balance Sheet to be attached, wherever applicable

**Attachment 1 (i)**

[see regulation 5 and clause 8 and clause 9 of Schedule A]

**Part 1: Computations for natural gas pipeline tariff based on project IRR**

Year	Construction period			Economic Life										
	Year(-3)	Year(-2)	Year(-1)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	....	Year 25	
a) Capital and operating cost outflows (including margin money)														
b) Inflows Profit before depreciation, interest and income tax as per item 3 of estimated profit and loss account in Attachment 1(f)														
Net Inflows/(outflows)														
Cumulative Inflows/(outflows)														
Levelized unit natural gas pipeline tariff calculated based on the reasonable rate of return as specified in clause 2 and 3 of Schedule A for:														
A) the period of initial unit natural gas pipeline tariff (T1)				T1: For Year 1										
B) the period of five consecutive years after the initial unit natural gas pipeline tariff (T2)					T2: For Year 2 to Year 6									

<p>C) the period of each of the tariff period (T3 and onwards) calculated based on reasonable rate of return as project's internal rate of return as specified in clause 2 of schedule A.</p>			<p>T 3 : F o r Y 7 t o Y 1 1</p>					<p>...and so on...</p>
---	--	--	--	--	--	--	--	--------------------------------

Notes:

1. The calculations for natural gas pipeline tariff alongwith the data are required to be submitted by the entity to the Board each time the same is due for fixation or review.
2. The adjustments required in the DCF calculations for the variations in capital cost, operating cost and volumes as per the basis specified under 9 of Schedule A shall be clearly specified at the time of submission of such computations to the Board.
3. Capital outflows includes outflows on account of capital work-in-progress.

**Attachment 1(i) (Contd..)**

**Part II: Apportionment of unit natural gas pipeline tariff over natural gas pipeline tariff Zones.**

[See regulation 5 and clause 8 and clause 9 of Schedule A]

(in rs./MMBTU)

	Period applicable for initial unit natural gas pipeline tariff/Review period	Unit natural gas pipeline tariff	Tariff zone 1	Tariff zone 2	Tariff zone 3	Tariff zone 4	Tariff zone 5	.....till last tariff zone..
				X%=[indicate one number towards % age increase over Tariff zone 1]	Y%=[indicate % age increase(lower than 100%) over preceding tariff zone]			
			TZ1=[one number to be indicated for the period applicable to initial unit natural gas pipeline tariff]	Incremental increase over TZ1= [TZ1xX%/100]	Incremental increase over TZ1 = [Y%xX%xTZ1]	Incremental increase over TZ1= [Y%xY%xX%xTZ1]	Incremental increase over T1= [Y%xY%xY%xX%xTZ1]	...and so on...
Unit natural gas pipeline tariff as per Part	For the period applicable to initial unit natural gas pipeline tariff			TZ2= TZ1+ Above incremental increase over TZ1	TZ3= TZ2+ Above incremental increase over TZ1	TZ4= TZ3+ Above incremental increase over TZ1	TZ5= TZ4+ Above incremental increase over TZ1	...and so on...
Unit natural gas pipeline tariff as per Part 1	Second (*)							
Unit natural gas pipeline tariff as per Part 1	Third (*)							
	:							
	:							
Unit natural gas pipeline tariff as per Part 1	Last(*)							

(\* ) The process shall be followed on the same basis as described for the initial natural gas pipeline tariff period.

(in MMBTU)

	Period	Tariff zone 1	Tariff zone 2	Tariff zone 3	Tariff zone 4	Tariff zone 5	Last tariff zone	Total
Volumes considered in each tariff zone	Initial period							
Volumes considered in each tariff zone	First Review Period							
Volumes considered in each tariff zone	Second Review Period							
	:							
	:							
Volumes considered in each tariff zone	Last Review Period							

Note:

1. The Calculations for apportionment of natural gas pipeline tariff over natural gas pipeline tariff zones are required to be submitted for every tariff review period.
2. The basis followed in bifurcating the unit natural gas pipeline tariff over each of the natural gas pipeline tariff zone to be specified.
3. The basis for considering the volumes in each natural gas pipeline tariff zone to be provided (including copies of contracts to be enclosed).
4. Volumes in MMSCM to be provided in respect of above and the basis for conversion of volume of natural gas into its energy equivalence in MMBTU to be indicated.

**Attachment 1 (j)**  
[see regulation 5]

**Assumptions**

1. Exchange rate used for determining the capital costs in Indian currency to be indicated.
2. Format for providing annual operating cost by the entity.

	<b>Description of cost elements</b>	<b>Rs.</b>
<b>A.</b>	<b>Variable cost</b>	
1.	Consumables	
	Fuel (quantity and rates)	
2.	Utilities (quantity and rates)	
a)	Power (*)	
b)	Water	
c)	Any other expenses(to be specified)	
	<b>Sub Total</b>	
<b>B.</b>	<b>Fixed and semi variable cost</b>	
1	Salary and wages	
2	General administration	
3	Repairs and maintenance	
4	Any other expenses (to be specified) (£)	
	<b>Sub Total</b>	
<b>C.</b>	<b>Insurance (%)</b>	
	<b>Total (A+B+C)</b>	

(\*) Break-up of purchased power (over fixed charge & variable charge) & and own generation to be provided.

(\$) Break –up over routine & turn around as well as function-wise over electrical, civil, mechanical, etc. to be provided.

(£) Basis of direct & indirect administrative expenses (along with basis of allocation to be provided).

(%) Break-up of premium on loss of profit policy, facilities & line-fill quantity to be provided.

**Note:**

- a. For each items of operating cost, detailed assumptions and working to be attached.
- b. For common overheads, complete basis of apportionment and allocation of costs to be provided.
  3. Project implementation schedule to be given along with break up of expenditure for each year.
  4. Loan schedule to be provided for each type of loan interest rates, repayments etc.
  5. Depreciation schedule as per the Companies Act and Income Tax Act should be provided.
  6. Section-wise capacity of the natural gas pipeline along with length of each section.
  7. Pipeline design capacity and rated capacity of compressors to be provided.
  8. Capacity utilization proposed and the basis to be provided.
  9. Implementation period of project in phases to be provided.
  10. Economic life of the project.
  11. Applicable income tax rates and the exemption, if any available under the income Tax Act, 1961 to be provided.
  12. Details of volumes of natural gas estimated to be transported in the natural gas pipeline over the economic life along with copies of the contracts for booking pipeline capacity to be provided in following format:

(MMSCMD)

	Year 1	Year 2	Year 3	Year 4	-----	Year 25
Own Requirement Firm						
Firm Contracted						
Extra capacity (*)						
<b>Total</b>						

(\*) to be made available on common carrier open access and non-discriminatory basis.

13. Basis for conversation of natural gas volumes into its energy equivalence in MMBTU to be provided.
  1. All assumptions with reference to the estimates of capital or operating costs and any other assumption which has a material impact on the determination of the until natural gas pipeline tariff are to be separately indicated along with the financial impact of the same.

## Attachment 2 to Schedule A

[see clause 4 (3) (a) of the Schedule]

Treatment of a fixed asset in the determination of return on total capital employed for natural gas pipeline tariff.

The basis of considering fixed assets in a natural gas pipeline in the determination of the return on total capital employed shall be as per the following norms:-

- (1) A fixed asset in a natural gas pipeline is a tangible asset having a useful operating life of more than one year and is integral to the generation of revenues through natural gas pipeline tariff. 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, expansion 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) Only the cost of land purchased and used for the putting the facilities essential to the natural gas pipeline shall be considered. Land purchased for any future use (such as for putting-up facilities required for expansion of capacity in natural gas pipeline for its extension) shall be considered only when used.

<sup>1</sup>[\*\*\*]

- (5) A fixed asset shall be considered for return on capital employed on a “rolling basis” till the end of the economic life of the natural gas pipeline project, provided it is not de-commissioned. On de-commissioning of the fixed asset, the value realized on its sale or scrapping should be considered as a project inflow in the DCF calculations. In the terminal year of the economic life, the residual value of the fixed asset, which is the difference between the original cost less the amount of accumulated depreciation shall be treated as a project inflow in the DCF calculations for natural gas pipeline tariff.
- (6) Treatment of line-pack volume in natural gas pipeline shall be as per the procedure indicated below: -
  - (a) Assessment of the volume of natural gas required as line pack in the natural gas pipeline as and when commissioned shall as be specified in the relevant regulations for the technical standards and specifications, including safety standards.

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<sup>1</sup>The words and letter “specified in cl. (4) of Attachment 2 to Schedule A” omitted by the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2016 (w.e.f. 08.01.2016).

- (b) The line-pack value of natural gas in natural gas pipeline and included in the total capital employed for determination of the unit natural gas pipeline tariff shall be considered as a non-depreciating fixed asset and the value to 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 point on injection of natural gas into the natural gas pipeline at the time of commissioning of the natural gas pipeline.
- (d) The salvage value of the line-pack volume at the end of the economic life of the project shall be equal to its value assessed at the time of its capitalization specified under sub-clause (b) and shall be considered as a project inflow.

<sup>89</sup>[Schedule B

[See regulations 5A]

**Part A. Procedure for determination of Unified Tariff:**

<sup>90</sup>[ 1. Unified tariff shall be determined by the Board in respect of the national gas grid system for each financial year before start of such financial year. Financial year for this purpose shall mean a period commencing on the first day of April and ending on thirty-first day of March immediately following it:

Provided that in the event the date on which the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment, Regulation, 2020 comes into force is between first April and thirtieth September, the first unified tariff shall be determined for the period commencing from the date on which the said regulations of 2020 comes into force and ending on the immediately following thirty-first March.

Provided further that in the event, the date on which the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment, Regulation, 2020 comes into force is between first October and thirty-first March, the first unified tariff shall be determined for the period commencing from the date on which the said regulations of 2020 comes into force and ending on the thirty-first March next from the one immediately following. That is to say that the first unified tariff could be determined for a period ranging between six months to eighteen months.

2. The Board may determine revised unified tariff during the financial year in case it deems it necessary to do so. Without prejudice to the generality of the foregoing provision, the Board may do so in case any new interconnected pipeline is added or an existing interconnected pipeline is removed, or approved tariff in respect of any interconnected pipeline is revised, or the quantity of gas estimated to be transported including ship or pay quantity considered by the Board for determining the unified tariff undergoes a significant change.

3. Unified tariff shall be the weighted average of approved zonal tariffs in respect of all the pipelines forming part of the national gas grid system, considering the summation of quantity of gas <sup>91</sup>[estimated to be] transported and the quantity of ship or pay <sup>92</sup>[, if any] for

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<sup>89</sup> Ins. by Cl. (d) of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2020.

<sup>90</sup> Notified vide Gazette Notification dated 18<sup>th</sup> November, 2022 and shall come into force on 01<sup>st</sup> April 2023(F. No. PNGRB/COM/2-NGPL/Tariff (3) /2019 Vol-IV (P-4121).)

<sup>91</sup> Ins. by sub. pt (a) of pt (i), Cl. (c), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

<sup>92</sup> Ins. by sub. pt (b) of pt (i), Cl. (c), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

which the pipeline entity is contractually entitled to recover approved tariff for each such pipeline.

<sup>93</sup>[ Provided that the quantities of gas estimated to be transported through multiple pipelines shall be considered only once;

Provided further that in case of any additional Goods and Service tax (“GST”) implication on any entity due to implementation of unified tariff regulations (including settlement between entities), the same shall be included in the revenue entitlement of the respective entity for that year;]

4. The Board shall determine the unified tariff applying-

- (i) the zone-wise approved tariffs applicable on the date of determination; and
- (ii) the quantity of gas estimated by it to be transported including ship or pay quantity <sup>94</sup>[, if any] by each pipeline forming part of the national gas grid system during the financial year for which such tariff is being determined and while making such estimates, the Board may consider the actual quantities during the twelve months <sup>95</sup>[ or lesser periodas available] preceding the date of determination, for which data may have been made available by the pipeline entities, the estimates of the quantities which may have been submitted by the pipeline entities and any other factor as it may deem fit. Such estimation by the Board shall be final and binding on all, including pipeline entities and shippers. The impact of the difference, if any, between the estimates considered by the Board and the actual quantities, shall be adjusted by the Board in the next determination of the unified tariff.]

<sup>96</sup>[(iii) any additional Goods and Service tax (“GST”) implication on any entity due to implementation of unified tariff regulations (including settlement between entities), the same shall be included in the revenue entitlement of the respective entity for that year on estimated basis. Such estimation by the Board shall be final and binding on all, including pipeline entities and shippers. The impact of the difference, if any, between the estimates considered by the Board and the actuals shall be adjusted by the Board in the next determination of the unified tariff.]

5 .(1) Each pipeline entity shall—

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<sup>93</sup> Subs. by sub. pt (c) of pt (i), Cl. (c), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

<sup>94</sup> Ins. by sub. pt (a) of pt (ii), Cl. (c), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

<sup>95</sup> Ins. by sub. pt (a) of pt (ii), Cl. (c), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

<sup>96</sup> Ins. by sub. pt (b) of pt (ii), Cl. (c), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

- (i) <sup>97</sup> []
- (ii) <sup>98</sup> []
- (iii) <sup>99</sup> []
- (iv) <sup>100</sup> [provide reasons for variation between estimates and actuals for such period and in such format as may be required by the Board.]
- (v) submit such other one-time or periodic regular information as may be required by the Board from time to time.

(2) The Board may issue such directions to the pipeline entities as it may deem fit regarding the manner in which information described in sub-paragraph (1) shall be submitted by them, including specifying or modifying formats, designating emails for submission of the information to the Board and specifying the portals on which the information is to be uploaded by the entities.

(3) In case of non-submission of any information by any entity within the specified time in this regard in this paragraph, the Board may consider the information as per its best judgement for the purpose of determination of unified tariff.

6. In terms of a formula, unified tariff shall be determined is provided in the following table, namely: -

<b>UFT</b>	=	$\{(((AT_1*EEV_1) + (AT_2*EEV_2) + (AT_3*EEV_3).....+(AT_n*EEV_n)) + Adj) / ((EEV_1 + EEV_2 + EEV_3.....+ EEV_n) - EDV_n)\}$
Where:		
UFT	=	unified tariff
AT <sub>1</sub> .....AT <sub>n</sub>	=	approved tariff in respect of pipelines 1 to n applicable on the date of determination
EEV <sub>1</sub> ...EEV <sub>n</sub>	=	Quantity of natural gas estimated to be transported plus estimated ship or pay quantity for pipelines 1 to n during the financial year for which unified tariff is being determined
Adj		Impact of the difference, if any, between the estimated quantities considered by the Board and the actual quantities during the previous determination of the unified tariff
EDV <sub>n</sub>	=	Quantities of natural gas estimated to be transported plus estimated ship or pay quantities through more than one pipelines during the financial year for which unified tariff is being

<sup>97</sup> Omt. by sub. pt (a) of pt (iii), Cl. (c), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

<sup>98</sup> Omt. by sub. pt (b) of pt (iii), Cl. (c), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

<sup>99</sup> Omt. by sub. pt (c) of pt (iii), Cl. (c), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

<sup>100</sup> Subs. by sub. pt (d) of pt (iii), Cl. (c), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

		determined
*	:	Denotes multiplication sign
/	:	Denotes division sign

**Notes:**

(i) the approved tariff for pipelines 1 to n, as referred above table, denotes zone-wise approved tariff for such pipelines. Similarly, the quantities of natural gas estimated to be transported including ship or pay quantity for pipeline 1 to n, as referred to above, denotes the estimated quantity of gas transported and the estimated quantity of ship or pay for such pipelines zone;

(ii) the formula provided in the above table shall determine the levelised unified tariff. Unified tariff for the <sup>101</sup>[three] unified tariff zones shall be determined by the Board in a manner that the tariff for first tariff zone for unified tariff shall be <sup>102</sup>[<sup>103</sup>[52.5%]] <sup>104</sup>[ and tariff for the second tariff zone shall be 75% of the tariff for third tariff zone”,] for unified tariff; <sup>105</sup>[ Notwithstanding anything contained in this clause, the Board may decide any other percentage or basis other than percentage as mentioned above.]

(iii) in these regulations the volume of gas refers to gas expressed in terms of SCM and the quantity of gas refers to gas expressed in terms of MMBTU on GCV basis.

7. The workings of levelised unified tariff and the zonal unified tariffs are shown with the help of a numerical example in Attachment 2 to this Schedule.

**Part B. Settlement**

Difference between revenue entitlement of natural gas pipeline entities and unified tariff invoiced by such entities shall be settled amongst such pipeline entities on a periodic basis for which settlement mechanism shall be developed by pipeline entities, facilitated by a

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<sup>101</sup> Subs. by pt. (a), Cl. (ii), sub-reg. c of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

<sup>102</sup> Subs. by pt. (b), Cl. (ii), sub-reg. c of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

<sup>103</sup> Subs. by sub. pt (a) of pt (iv), Cl. (c), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

<sup>104</sup> Ins. by pt. (c), Cl. (ii), sub-reg. c of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

<sup>105</sup> Ins. by sub-reg. (3) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

representative from the Board within a period of two months from the date of the <sup>106</sup>[notification of this para].

1. Revenue entitlement of natural gas pipelines that is to say the revenue entitlement for a natural gas pipeline entity in respect of a pipeline which forms part of national gas grid system shall be equal to the sum of pipeline-wise transportation charges calculated based on zone-wise actual quantity of gas transported including ship or pay quantities of each such pipeline, multiplied by the respective zone-wise approved tariff for that pipeline.

<sup>107</sup>[Provided that in case of any additional Goods and Service tax (“GST”) implication on any pipeline entity due to implementation of unified tariff regulations (including settlement between entities), the same shall be included in the revenue entitlement of the respective entity for that year;]

2. Amount charged by invoicing entity that is to say the amount charged by the invoicing entity in respect of natural gas pipelines which are part of national gas grid system shall be equal to the sum of amounts invoiced to the shippers, for natural gas transported including ship or pay quantities in respective unified tariff zones of each such pipeline, multiplied by the respective approved unified zonal tariff for the period.

3. In terms of a formula, entity-wise revenue entitlement and revenue charged by way of unified tariff shall be worked out as provided in the table below, namely: -

<b>i) RE</b>	=	<b>(EEV<sub>1</sub>*AT<sub>1</sub> + EEV<sub>2</sub>*AT<sub>2</sub> +.....+ EEV<sub>n</sub>*AT<sub>n</sub>)<sup>108</sup>[ + IT<sub>1</sub>....IT<sub>n</sub>]</b>
Where:		
RE	=	Revenue entitlement of the entity as per the approved tariff
EEV <sub>1</sub> .....EEV <sub>n</sub>	=	Actual quantities of natural gas transported and the quantity of ship or pay during the period by pipeline 1 to n
AT <sub>1</sub> .....AT <sub>n</sub>	=	approved tariff in respect of pipelines 1 to n for the period
<sup>109</sup> [ IT <sub>1</sub> ....IT <sub>n</sub>	=	any additional Goods and Service tax (“GST”) implication on any pipeline entity due to implementation of unified tariff regulations (including settlement between entities), the same shall be included in the revenue entitlement of the respective

<sup>106</sup> Subs. by pt. (b), Cl. (iii), sub-reg. c of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022 for ‘notification of this para’

<sup>107</sup> Ins. by pt (i), Cl. (d), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

<sup>108</sup> Ins. by pt (ii), Cl. (d), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

<sup>109</sup> Ins. by pt (iii), Cl. (d), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

		entity for that year.]
<b>ii) RU</b>	=	$\sum AV_n * UFT$
Where:		
RU	=	Tariff charged by the invoicing entity for quantities of gas evacuated at unified exit point including ship or pay quantities for the unified contractual path
AV <sub>1</sub> .....AV <sub>n</sub>	=	Actual quantities transported and the quantity of ship or pay during the period based on the unified exit points falling on the unified contractual path irrespective of number of natural gas pipelines falling on contractual path
<sup>110</sup> [AUFT <sub>n</sub>	=	Applicable unified zonal tariff rate charged by the entity for unified contractual path at a predefined ratio determined in accordance with the Settlement Mechanism]
*	:	Denotes multiplication sign

**Notes:** The approved tariff for pipeline 1 to n, as referred to in above table, denotes the approved tariff considered for each tariff zone for pipeline 1 to n. Similarly, the actual quantities of natural gas transported and the quantity of ship or pay by pipeline 1 to n, as referred to in above table, denotes the actual gas transported and the quantity of ship or pay in each of such zones. <sup>111</sup>[Further, any additional Goods and Service tax (“GST”) implication on any pipeline entity due to implementation of unified tariff regulations, (including settlement between entities) the same shall be included in the revenue entitlement of the respective entity for that year.]

4. The workings of revenue entitlement and tariff invoiced are shown with the help of a numerical example in Attachment 2 to this Schedule.

<sup>112</sup>[5. Settlement of difference in the revenue entitlement and amount charged between various entities shall be carried out by such entities.

6. The Board may issue such further instructions and guidelines as it may deem fit including, without limiting, on periodical submission of information by the entities, working of revenue entitlement and amount charged and inter-se settlement between the entities.

7. In case any dispute regarding interpretation arises among the entities relating to these regulations, such entities may approach the Board and Board’s decision in this regard shall be final].

<sup>110</sup> Subs. by pt (iv), Cl. (d), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

<sup>111</sup> Ins. by pt (v), Cl. (d), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

<sup>112</sup> Notified vide Gazette Notification dated 18<sup>th</sup> November, 2022(F. No. PNGRB/COM/2-NGPL/Tariff (3) /2019 Vol-IV (P-4121).)

113[\*\*\*]

114[Attachment 2 to Schedule B]

{See note 4 to paragraph 3 of Part B to Schedule B}

**Example for Determination of Unified Tariff, Revenue Entitlement, Amount Charged and Settlement of differences within entities**

Data to be submitted in format 1.

**Table 1**

		Approved Tariff (a)	Actual volume of gas transported (b)	Gross Calorific Value (c)	Actual quantity of gas transported (d)	Ship or pay volumes (e)	Total Actual Volumes (f)=(d)+(e)	Transportation tariff (g)=(f)*(a)
Pipelines	Zones	(INR/ MMBTU)	(SCM)	(Kcal/SCM)	(MMBTU)	(MMBTU)	(MMBTU)	INR
Pipeline A	Zone-1	10.00	30,000	9,500.00	1,130.95	200.00	1,330.95	13,309.52
	Zone-2	20.00	40,000	9,400.00	1,492.06		1,492.06	29,841.27
	Zone-3	30.00	50,000	9,300.00	1,845.24		1,845.24	55,357.14
	Zone-4	40.00	80,000	9,600.00	3,047.62	100.00	3,147.62	1,25,904.76
	<b>Total</b>		<b>2,00,000</b>		<b>7,515.87</b>	<b>300.00</b>	<b>7,815.87</b>	<b>2,24,412.70</b>
Pipeline B	Zone-1	10.00	45,000	9,300.00	1,660.71		1,660.71	16,607.14
	Zone-2	11.00	42,000	9,400.00	1,566.67		1,566.67	17,233.33
	Zone-3	12.00	38,000	9,500.00	1,432.54	150.00	1,582.54	18,990.48
	<b>Total</b>		<b>1,25,000</b>		<b>4,659.92</b>	<b>150.00</b>	<b>4,809.92</b>	<b>52,830.95</b>
Pipeline C	Zone-1	30.00	58,000	9,546.00	2,197.10		2,197.10	65,912.86
	Zone-2	40.00	34,000	9,645.00	1,301.31		1,301.31	52,052.38
	Zone-3	45.00	30,000	9,852.00	1,172.86	350.00	1,522.86	68,528.57
	Zone-4	50.00	68,000	9,900.00	2,671.43		2,671.43	1,33,571.43
	Zone-5	55.00	85,000	9,500.00	3,204.37	150.00	3,354.37	1,84,490.08
	<b>Total</b>		<b>2,75,000</b>		<b>10,547.06</b>	<b>500.00</b>	<b>11,047.06</b>	<b>5,04,555.32</b>

Data to be submitted in format 2

Data for Inter-pipeline volume flow

**Table 2**

Data by Pipeline A

From Up-stream P/L				
Up-stream P/L	Actual Volumes	Gross Calorific Value	Actual Volumes	Ship or pay Volumes
	(SCM)	(Kcal/SCM)	(MMBTU)	(MMBTU)
Pipeline C	1,825.00	9,500.00	68.80	0.50

To Down Stream P/L				
Down-stream P/L	Actual Volumes	Gross Calorific Value	Actual Volumes	Ship or pay Volumes
	(SCM)	(Kcal/SCM)	(MMBTU)	(MMBTU)
Pipeline B	549.00	9,500.00	20.70	

<sup>113</sup> Del. by Cl. (e), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

<sup>114</sup> Notified vide Gazette Notification dated 18<sup>th</sup> November, 2022(F. No. PNGRB/COM/2-NGPL/Tariff (3) /2019 Vol-IV (P-4121).)

**Data by Pipeline B**

From Up-stream P/L				
Up-stream P/L	Actual Volumes	Gross Calorific Value	Actual Volumes	Ship or pay Volumes
	(SCM)	(Kcal/SCM)	(MMBTU)	(MMBTU)
Pipeline A	549.00	9,500.00	20.70	
Pipeline C	4,392.00	9,500.00	165.57	

To Down Stream P/L				
Down-stream P/L	Actual Volumes	Gross Calorific Value	Actual Volumes	Ship or pay Volumes
	(SCM)	(Kcal/SCM)	(MMBTU)	(MMBTU)
NIL				

**Data by Pipeline C**

From Up-stream P/L				
Up-stream P/L	Actual Volumes	Gross Calorific Value	Actual Volumes	Ship or pay Volumes
	(SCM)	(Kcal/SCM)	(MMBTU)	(MMBTU)
Nil				

To Down Stream P/L				
Down-stream P/L	Actual Volumes	Gross Calorific Value	Actual Volumes	Ship or pay Volumes
	(SCM)	(Kcal/SCM)	(MMBTU)	(MMBTU)
Pipeline A	1,825.00	9,500.00	68.80	0.50
Pipeline B	4,392.00	9,500.00	165.57	

**Summary of the duplicate volume flows**

Pipeline From	Pipeline to	Actual Volumes (SCM)	Gross Calorific Value (Kcal/SCM)	Actual Volumes (MMBTU)	Ship or pay Volumes (MMBTU)
Pipeline C	Pipeline A	1,825.00	9,500.00	68.80	0.50
Pipeline A	Pipeline B	549.00	9,500.00	20.70	0.00
Pipeline C	Pipeline B	4,392.00	9,500.00	165.57	0.00
<b>Total</b>		<b>6,766.00</b>		<b>255.07</b>	<b>0.50</b>

**Data to be submitted in format 3**

**Data for Unified Zonal volume flows to be provided by Entities:**

**Data provided by Pipeline A**

**Table 3**

Unified Tariff Zone*	Actual Volumes (SCM)	Gross Calorific Value (Kcal/SCM)	Actual Volumes (MMBTU)	Ship or pay Volumes (MMBTU)
Zone 1	30,000.00	9,500.00	1,130.95	200.00
Zone 2	1,67,626.00	9,464.21	6,295.42	99.50

**Data provided by Pipeline B**

Unified Tariff Zone*	Actual Volumes (SCM)	Gross Calorific Value (Kcal/SCM)	Actual Volumes (MMBTU)	Ship or pay Volumes (MMBTU)
Zone 1	45,000.00	9,300.00	1,660.71	-
Zone 2	80,000.00	9,447.50	2,999.21	150.00



Zone 1	X	53,608.00	3,789.59	2,031.52	-	2,031.52	
Zone 2	Y	2,17,000.00	3,847.91	8,349.96	500.00	8,849.96	
<b>Total</b>				<b>10,381.48</b>	<b>500.00</b>	<b>10,881.48</b>	

**Statement of settlement of differences among entities:**

**Table 6**

<b>Pipelines</b>	<b>Revenue Entitlement</b>	<b>Amount Charged (from table 5)</b>	<b>Amount to be Paid/ (Received)</b>
	(a)	(b)	(b-a)
Pipeline A	2,24,412.70		
Pipeline B	52,830.95		
Pipeline C	5,04,555.32		
<b>Total</b>	<b>7,81,798.97</b>	<b>7,81,798.97</b>	<b>0.00</b>

<sup>115</sup>[Schedule C]  
{See regulation 2(1) (ec)}

**List of natural gas pipelines which are part of national gas grid system for calculation of Unified Tariff**

S.No.	Entity Authorized	Pipeline Name
1	GAIL (India) Limited	Hazira-Vijaipur-Jagdishpur-GREP-Dahej-Vijaipur, Dahej-Uran-Dabhol-Panvel Natural Gas Pipeline, Dahej-Vijaipur (DVPL)-Vijaipur-Dadri (GREP) capacity augmentation, Jagdishpur-Haldia-Bokaro-Dhamra Natural Gas Pipeline network, Dadri-Bawana-Nangal Natural Gas Pipeline, Chainsa-Jhajjar-Hissar Natural Gas Pipeline, Dabhol-Bangalore Natural Gas Pipeline. <sup>116</sup> [KG Basin Natural Gas Pipeline, Baroda Sub Network of Gujarat Regional, Mumbai Regional a) Uran Thal Usar Sub Network, b) Trombay Sub Network]
2	Indian Oil Corporation Limited	Dadri-Panipat.
3	Pipeline Infrastructure Limited	East West Natural Gas Pipeline.
4	Gujarat State Petronet Limited	GSPL's High Pressure Gujarat Gas Grid, <sup>117</sup> [GSPL's Low Pressure Gujarat Gas Grid]
5	Reliance Gas Pipelines Limited	Shahdol-Phulpur.
6	GSPL India Gasnet Limited	Mehsana – Bhatinda, Bhatinda - Jammu – Srinagar.
7	GSPL India Transco Limited	Mallavaram-Bhopal-Bhilwara-Vijaipur.
<sup>118</sup> [8.	Oil and Natural Gas	Uran Trombay Natural Gas Pipeline System

<sup>115</sup> Notified vide Gazette Notification dated 18<sup>th</sup> November, 2022 and shall come into force on 01<sup>st</sup> April 2023(F. No. PNGRB/COM/2-NGPL/Tariff (3) /2019 Vol-IV (P-4121).)

<sup>116</sup> Ins. by Cl. (i), sub-reg. d of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022.

<sup>117</sup> Ins. by Cl. (ii), sub-reg. d of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022.

	Corporation Limited	
9.	Gujarat Gas Limited	Hazira Ankleshwar Natural Gas Pipeline System]
<sup>119</sup> [10.	Indradhanush Gas Grid Limited	North-East Natural gas Pipeline Grid*] *shall be part of NGGS from date of its commissioning

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<sup>118</sup> Ins. by Cl. (iii), sub-reg. d of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Second Amendment Regulations, 2022

<sup>119</sup> Ins. by sub-reg. (a) of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2025. (w.e.f. 25.04.2025).

<sup>120</sup>[Schedule D]

{See Regulation 2(1)(ha)}

<sup>121</sup>[\*\*\*\*\*] SETTLEMENT MECHANISM

## 1. APPLICABILITY

1.1. The Settlement Mechanism, shall be applicable to all the entities including shippers availing transportation services through the natural gas pipelines forming part of the National Gas Grid System ("NGGS") and pipeline entities which are part of NGGS as detailed at Schedule C.

## 2. DEFINITIONS

<sup>122</sup>[2.1] For the purpose of this settlement mechanism, unless the context otherwise requires, the following words and expressions shall have the meanings assigned to them herein under:

- a) “**Common Volume**” shall mean the quantity of natural gas which traverses through pipeline(s) of multiple entities under the NGGS from the Supply Point to the Final Exit Point.
- b) “**Deficit Entity**” shall mean the entity which is expected to obtain deficit revenue for transportation of gas by charging Unified Tariff which is less than its entitlement considering approved tariff during the relevant period.
- c) “**Deficit Amount**”, as the context may require, shall mean any negative difference calculated between the invoiced amount of all the entities through Unified Tariff and the revenue entitlement by all the entities.
- d) “**Final Exit Point**” shall mean the point at which the gas is evacuated from the natural gas pipeline for delivery to the pre-identified Shipper(s).
- e) “**Industry Committee**” shall mean the committee as constituted by Board comprising of duly authorized representatives as nominated by the pipeline entities forming the part of NGGS at Schedule C, for the purpose of development and operationalisation of settlement mechanism and to act and decide on behalf of respective pipeline entity, on matters related to Unified Tariff .

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<sup>120</sup> Ins. by Cl. (f), of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2023

<sup>121</sup> The words and expression mentioned herein be omitted by cl. (a) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

<sup>122</sup> Renumbered by cl. (b) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

- f) “**Interconnection Point**” means the point where two common carrier or contract carrier pipeline of two different pipeline entities interconnect and at which the gas is injected into the natural gas pipeline of one entity from a natural gas pipeline of other entity which is a part of NGGS.
- g) “**Pipeline Entity**” means an entity who is authorized by the Board to lay, build, operate or expand the natural gas pipeline.
- h) “**Settlement Committee**” shall mean the committee constituted in accordance with paragraph 3.1(a) of this Schedule, to facilitate the operationalization of the settlement mechanism including the validation of data pertaining to invoicing, collection, settlement of surplus/deficit, etc.
- i) “**Single Entity Volume**” shall mean the quantity of Natural Gas with Unified Contractual Path on the natural gas pipeline(s) of a single entity forming part of NGGS.
- j) “**Supply Point**” means the point at which the gas is injected in the NGGS from the source <sup>123</sup>[interconnection point] for further transportation.
- k) “**Surplus Amount**” as the context may require, shall mean any positive difference calculated between the invoiced amount of all the entities through Unified Tariff and the revenue entitlement by all the entities.
- l) “**Surplus Entity**” shall mean the entity which is expected to obtain surplus revenue for transportation of gas by charging Unified tariff, which is more than its entitlement considering approved tariff during the relevant period.
- m) “**Transactional Day/T**” shall mean the last day of the invoicing period (fortnightly) for which each of the individual entities invoice the Shipper.
- n) “**Working Day**” shall refer to any day other than a Saturday, a Sunday or a day declared as public holiday.
- o) All other words and expressions used herein but not defined, and defined in the PNGRB Act, 2006 an extant regulations framed thereunder, have the meanings respectively assigned to them in that Act.

## <sup>124</sup>[3] SETTLEMENT MECHANISM

### <sup>125</sup>[3.1] Settlement Committee

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<sup>123</sup> Ins. by cl. (d) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

<sup>124</sup> Renumbered by cl. (c) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

<sup>125</sup> Renumbered by cl. (c) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

In order to facilitate the operation of this settlement mechanism, a Settlement Committee will be formed as set out hereunder:

**a) Constitution of Settlement Committee**

- i. The Settlement Committee shall comprise of 5 (five) members from the Industry Committee.
- ii. 3 (three) out of the 5 (five) members of Settlement Committee shall be permanent members. (“**Permanent Member(s)**”).
- iii. The remaining 2 (two) members shall be selected by the entities which are not Permanent Members, to act as the representative of such remaining entities (“**Non-Permanent Member(s)**”). The Non-Permanent Member shall be rotated on an annual basis.
- iv. Amongst the Permanent Members, 1 (one) member shall be selected on an annual basis to act as the Lead Member of the Settlement Committee by the Permanent Members. One month prior to completion of tenure of the Lead Member, Permanent Members shall decide the Lead Member for the next year. Tenure of Lead Member shall be from 1<sup>st</sup> of April to 31<sup>st</sup> March of the following year, unless extended/ reduced by the Settlement Committee. For the first time Lead Member tenure shall start from the date of approval of this Settlement Mechanism by Board.
- v. The representative(s) of Gujarat State Petronet Limited (GSPL), GAIL (India) Limited and Pipeline Infrastructure Limited (PIL) will constitute Permanent Members of the Settlement Committee until substituted/replaced by the Industry Committee and notified accordingly by it to the Board.
- vi. The representative of PIL shall be the first Lead Member of the Settlement Committee, and thereafter, any substitution/replacement of the Lead Member shall be informed by the Settlement Committee to Board along with contact details.

**b) Working of Settlement Committee:**

- i. The Settlement Committee shall convene meetings on a regular basis <sup>126</sup>[as may be required].
- ii. All the members of the Settlement Committee shall confirm the data relating to UFT /Settlement working amount before submission to Board through the mechanism as decided by Settlement Committee.

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<sup>126</sup> Subs. by cl. (e) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

- iii. The Settlement Committee along with lead member shall be functional till the time TSO/Pool Operator/ Independent entity is appointed by Board/GoI and takes over the responsibilities of the Industry and/or Settlement Committee.
- iv. The settlement committee shall maintain records of all the calculations carried out as per the defined settlement mechanism upto a period of 10 years.

### <sup>127</sup>**[3.2] Roles and Responsibility of Lead Member**

The role of the Lead Member shall be to:

- a) Co-ordinate the Settlement Committee meetings.
- b) Communicate and co-ordinate with the Industry Committee and Board with respect to all aspects of the UFT and settlement mechanism.
- c) to facilitate and co-ordinate with Board in clarifying/resolving any queries related to UFT.
- d) Any other activity decided by the Settlement Committee or Industry Committee.
- e) Appointment of an independent auditor of repute which shall audit all the settlement amounts and its working on a quarterly basis. The scope of the auditor shall be jointly finalized by the Settlement committee in consultation with the Industry Committee. The payment to the auditor shall be released by the entity of the lead member and the expenses of auditors shall be equally shared by all the members of an industry committee.

### <sup>128</sup>**[3.3] Scope of Settlement Committee**

- a) The calculation of unified tariff (“UFT”) by Board shall be facilitated by the Settlement Committee (*defined hereinafter*). Industry Committee shall duly and timely support the Settlement Committee. The members of the Industry Committee shall be as per **Annexure-1** hereto. Any subsequent changes or addition of new members to the Industry Committee shall be notified by the Board subsequently. Each member of the Industry committee/Settlement Committee shall be represented by its main and alternate representative at all the times. The Industry committee member entities shall notify the changes related to main and alternative representatives to the Board in advance and shall ensure an overlapping time period of 5 working days where both the outgoing and incoming representatives shall be present.

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<sup>127</sup> Renumbered by cl. (c) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

<sup>128</sup> Renumbered by cl. (c) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

- b) The Settlement Committee shall facilitate the Board in providing all the required support documentation/information including, *inter alia*, anticipated zonal volumes for Pipeline entities after due reconciliation with each Pipeline entity for the common volumes for the UFT determination by the Board. The Settlement Committee shall ensure that any support documentation/information required by Board is provided on a timely basis.
- c) The Settlement Committee shall undertake periodic reconciliation of actual data submitted by entities to work out the settlement amount and its adjustment with relevant entities.

<sup>129</sup>**[3.4.] Data for Volume Estimates**

The forecasted data for estimated/anticipated volumes, calorific values, zonal distances across entities shall be provided on annual basis to Board for determination of UFT, unless as may be required by Board which could be due to several reasons including, *inter alia*, change of the pipelines which forms part of the NGGS, major changes in volumes forecasts, etc.

The data shall be duly reconciled by the Industry Committee including common volumes prior to such data being shared with the Board. The UFT shall be determined and approved by Board as per the provisions of PNGRB (Determination of Natural Gas Pipeline Tariff) Regulations, 2008 and any amendments from time to time.

Without prejudice to the above, the <sup>130</sup>[Settlement Committee after collecting the data from all] entities shall provide the forecasted data for the following financial year <sup>131</sup>[to the Board by the third] week of January of every year. The forecasted data shall be shared as per the format provided in **Annexure-2** or such other format as may be required by Board for determination of UFT. As the UFT system matures, the Industry Committee may look into reducing the duration of the volumes estimations from annual to half-yearly and so on to arrive at a more accurate Unified Tariff calculations.

<sup>132</sup>**[3.5.] Computation of UFT Ratio for Invoicing (UFT Ratio)**

<sup>133</sup>[\*\*\*] Settlement Committee based on the <sup>134</sup>[data submitted by all the entities] as mentioned in paragraph <sup>135</sup>[ 3.4, submit the detailed working to the Board by third week

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<sup>129</sup> Renumbered by cl. (c) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

<sup>130</sup> Ins. by cl. (f) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

<sup>131</sup> Subs. by cl. (f) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

<sup>132</sup> Renumbered by cl. (c) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

of January every year.]. The Settlement Committee shall calculate the UFT ratio and the likely Surplus Entity and Deficit Entity, for each of the natural gas pipelines forming part of NGGS, which shall be used for the purpose of determining share of UFT for invoicing of Common Volumes to the Shippers by respective entities. In case of Single Entity Volumes, the concerned entity will invoice at 100% of UFT. The Settlement Committee shall provide UFT ratios along with details of likely Surplus and Deficit entity to the Board by 15<sup>th</sup> February every year.

The UFT and UFT ratios applicable for the subsequent financial year shall be approved by the Board and hosted on its website by the first week of March of every year. For the UFT applicable w.e.f. from 1st April 2023, the UFT calculations shall be performed through suitable IT model/or any other mode as decided by Settlement Committee and subsequently based on the experience of Industry committee, an improved IT tool shall be developed and used for arriving at the final UFT. <sup>136</sup>[ The expenses on account of development/operations pertaining to IT system shall be equally shared by all the members of the industry committee.]

The objective of the UFT ratios for invoicing Common Volume shall be to primarily reduce the amount of settlement among the Surplus Entities and Deficit Entities, for achieving the overall estimated revenue entitlement by each individual entity. For the same purpose, entities shall be required to timely share the data of information for estimated volumes (only estimated zonal volumes needs to be shared and individual contract wise data is not required to be shared) and approved tariff with the Settlement Committee as per the prescribed format. Any amendment in the format in which the information shall be shared by the entities be approved by the Settlement committee based on experience gained for smooth and timely flow of information. The UFT ratios shall be finalized by the Settlement Committee by following below mentioned principles and basis in order to optimise the settlement amount and process:

- a) Surplus Entities shall invoice the minimum of the agreed ratios so as to generate lesser surplus. In case of more than two entities, the entity with a higher estimated surplus shall utilize the minimum of the agreed ratios.

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<sup>133</sup> The words and expression mention therein are omitted by pt. (i) of cl. (g) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

<sup>134</sup> Subs. by pt. (ii) of cl. (g) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

<sup>135</sup> Subs. by pt. (iii) of cl. (g) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

<sup>136</sup> Subs. by pt. (v) of cl. (g) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

- b) In case of two entities, the entity which is likely to meet its estimated revenue entitlement shall invoice at an adjusted ratio which shall be sufficient to invoice any amount equal to its estimated revenue entitlement.
- c) Similarly, in case of three entities, the Surplus Entity shall invoice at a minimum agreed ratio with the remaining two entities attempting to limit the ratio to the extent of estimated revenue entitlement of the Surplus Entity.
- d) In case of two Surplus Entities, the entity with the lower estimated revenue entitlement shall be allowed to invoice at minimum agreed percentage.
- e) A Minimum agreed percentage shall be invoiced by each of the individual entities related to a contractual path. Purpose to keep minimum percentage for invoicing is to reduce the settlement amount to minimum possible and at the same time each Pipeline entity can maintain the direct contractual relationship with the shipper.
- f) Such other aspects as may be necessary considering settlement issues in consultation with the Industry Committee.
- g) The ratios so determined shall be submitted to the Board for its approval, as per the timeline mentioned above.

To implement this settlement mechanism, all the Pipeline entities shall mutually and timely develop and enter into a contract/agreement among themselves by the representatives of the Industry committee in accordance with the provisions of this settlement mechanism. Provided that upon any new member joining the Industry Committee shall also sign such contract/agreement.

### <sup>137</sup>**[3.6.] Invoicing**

Each of the entity shall generate the invoice based on following principles:

- a) **Invoicing Quantity** – Invoicing quantity shall be measured at the exit point of respective entity networks as per the respective contracts/agreements between Pipeline entities and Shippers.
- b) **Tariff** – The Shipper(s) in total shall only be charged a Zonal UFT as applicable. The individual entities shall generate an invoice at the applicable Zonal UFT for Single Volume. For Common Volume the shippers shall be charged applicable Zonal UFT as per the ratios finalized by the Settlement Committee and approved by the Board provided that sum total of tariff charged as per the pre-determined ratio shall be equal to applicable Zonal unified tariff.

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<sup>137</sup> Renumbered by cl. (c) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

- c) Each of the entities involved in the unified contractual path of the Shipper(s) shall invoice the Shipper(s) as per the predetermined ratio calculated by the Settlement Committee and approved by the Board.
- d) For the purpose of booking of capacity for allocation of APM/Non-APM domestic gas to CGD entities in accordance with the guidelines issued by MoP&NG from time to time, entity(ies) will have flexibility to change the quantity and exit point.

### <sup>138</sup>[3.7.] Sharing of Data

Post invoicing, the data pertaining to the respective entity pipeline forming part of NGGS shall be shared with the Settlement Committee on a fortnightly basis. Entities shall be required to submit the actual data on or before T+<sup>139</sup>[8] Working Days to the Settlement Committee. The data shall be shared as per the format provided in **Annexure-3** or such other format as may be mutually agreed by the Settlement Committee.

### <sup>140</sup>[3.8.] Calculation of Settlement Amount

Based on the data shared by the entities as referred in paragraph 3.6 above, the Settlement Committee shall complete the reconciliation and convey to Industry Committee within <sup>141</sup>[two] Working Day i.e. by T+<sup>142</sup>[10] Working Days, for settlement amount processing. Surplus Entities shall complete the payment within <sup>143</sup>[four] Working Days from the date of receipt of settlement invoice from Deficit Entities.

- a) The Settlement Committee shall reconcile the data submitted by individual entities <sup>144</sup>[\*\*\*\*] All the entities shall provide necessary support / additional information required for timely reconciliation of data.
- b) The methodology to calculate the settlement amount shall be as follows:

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<sup>138</sup> Renumbered by cl. (c) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

<sup>139</sup> Subs. by cl. (h) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

<sup>140</sup> Renumbered by cl. (c) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

<sup>141</sup> Subs. by pt. (i) of cl. (i) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

<sup>142</sup> Subs. by pt. (i) of cl. (i) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

<sup>143</sup> Subs. by pt. (iii) of cl. (i) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

<sup>144</sup> The words and expression mentioned therein are omitted by pt. (iv) of cl. (ii) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

- i. Settlement amount for any individual entity shall be equal to [the sum of the total amount invoiced to the Shippers basis the applicable Zonal UFT ratio minus (-) the revenue entitlement on the basis of Approved tariffs as applicable for the respective pipelines forming part of the NGGS].
  - ii. The entities with positive settlement amount (Surplus Entities) shall be invoiced by the entities with negative settlement amount (Deficit Entities).
  - iii. Settlement committee shall provide the details about the Surplus Entities and Deficit Entities and who will adjust with whom along with the amount while conveying the details about the settlement amount processing to Industry Committee.
- c) In case of delay in payment by the Surplus Entity, an interest at the rate of State Bank of India's Base Rate (SBIBR) as applicable on the date of payment plus 6.25 % per annum shall be applicable on the delayed amount.
  - d) In case there is a delay beyond <sup>145</sup>[4] Working days, as provided above, in payment by the Surplus Entity, the Deficit Entity shall be compensated for the same on <sup>146</sup>[5<sup>th</sup>] Working day, from the date of receipt of settlement invoice, from the Surplus Amount including interest and such Surplus Entity shall deposit the invoiced amount plus applicable interest accrued till the date of deposit to the relevant account of the Surplus Amount. In case there is no Surplus Amount, then payable amount along with the interest shall be adjusted in the following fortnight's settlement from the revenue entitlement of such Surplus Entity which has not paid the amount.
  - e) For the first <sup>147</sup>[nine months or such period as may be mutually agreed by Settlement Committee] from the date of implementation of this settlement mechanism there shall be no penal charges/interest for delay in payments, in the event such delay has been caused due to reasons beyond the Surplus Entity's control and in the event the Surplus Entity has made timely payment of the amount received over and above its revenue entitlement, excluding any defaulting Shipper payment.
  - f) Post the period of the first <sup>148</sup>[nine months or such period as may be mutually agreed by Settlement Committee], any delays or defaults by the Shipper, the Settlement Committee shall initiate discussions in good faith in order to arrive at an amicable solution for cases of non-payment by the Surplus Entity due to non-payment of dues under the GTAs by the Shipper(s) or delay in payment by the Shipper(s) where neither payment security mechanism can be invoked nor can the gas transmission be stopped.

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<sup>145</sup> Subs. by pt. (v) of cl. (i) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

<sup>146</sup> Supra 145 (w.e.f. 15.04.2024)

<sup>147</sup> Subs. by pt. (vi) of cl. (i) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

<sup>148</sup> Subs. by pt. (vii) of cl. (i) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

- g) In case of non-receipt of payment from the Shipper due to any stay order from any court and/or exhaustion of all the payment security instruments under the contract with such Shipper, then to that extent the Surplus Entit(ies) shall not be required to make payment to the Deficit Entit(ies). The Deficit Entit(ies) shall receive such payment from Surplus Amount. In case there is no balance in the Surplus Amount, then the shortfall amount shall be shared by all the pipeline entities forming part of the NGGS, in proportion to the revenue entitlement by making necessary adjustment in the following fortnight settlement working and the same shall be made good after the amount has been received from such customer, or in the following fortnight, or through adjustment in next UFT review, whichever is earlier. Further, for such a specific customer, the revenues and volumes from that customer shall not be considered for revenue entitlement from the following fortnight settlement workings and UFT determination at the time of next UFT review. Any amount received from such customer after the stay is vacated the same shall be considered as a part of the settlement mechanism.
- h) Based on the settlement data of first month, the Settlement Committee shall identify the surplus and deficit entity(ies) for the following quarter. The surplus entity(ies) shall furnish the payment security to the deficit entity(ies). In this regard Settlement committee shall formulate a payment security mechanism during the first month. Further, Settlement Committee shall also review the data sharing, payment timelines and payment security mechanism once the software is developed/ IT system is in place.

<sup>149</sup>**[3.9.] Dispute Resolution Mechanism:**

- a) Initially the dispute shall be attempted to be resolved mutually among the entities involved in the dispute. In case of failure to resolve, the Settlement Committee shall be approached by the affected entity(s) for resolution of the dispute.
- b) The dispute/issue shall be discussed in a joint meeting held between Settlement Committee and the concerned entities for timely resolution.
- c) In the event parties fail to resolve their settlement dispute through above mechanism, such disputes may be referred to the Board for final decision.

<sup>150</sup>**[3.10] Surplus Amount Management**

- a) In case of surplus revenue collection within a fortnight, post payment to Deficit Entities, such Surplus Amount shall be identified by the Settlement Committee and the same shall be acknowledged by the relevant entity.
- b) This Surplus Amount at the end of the month shall be invested in a callable fixed deposit (FD) by the respective entities with at-least having a long term credit rating of

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<sup>149</sup> Renumbered by cl. (c) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

<sup>150</sup> Renumbered by cl. (c) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

AA+ from at least two credit rating agencies registered with SEBI, provided that the surplus amount with the entity is minimum Rupees Ten Lakh.

- c) The FD amount along with the interest accrued after deduction of applicable tax on the interest income and any other expenses, as agreed by Settlement Committee, incurred for management over the year shall be used for settlements throughout the year or for subsequent UFT adjustments.
- d) The process of withdrawal mechanism from the Surplus Amount shall be as follows:
  - i. The Settlement Committee shall internally calculate and discuss the deductions applicable, and the available Surplus Amount accrued in each of the committee meetings.
  - ii. From time to time, the Settlement Committee shall deliberate on the usage of Surplus Amount either for settlement or as carryforward for subsequent UFT adjustments.
- e) Based on the first four months of experience, the Settlement Committee shall decide the threshold funds with the approval of the Board to be maintained for the unforeseen circumstances of shortfall in the UFT collection.
- f) In case of Deficit Amount, the Settlement Committee shall discuss the mechanism to make good such Deficit Amount till such Deficit Amount is made good on. The Industry Committee shall share the deficit amount in proportion to their revenue entitlement.

<sup>151</sup>[ Provided that the deficit amount shall be entitled to be compensated with interest @ Repo Rate of Reserve Bank of India + 2% per annum from the date of deficit amount determined by the settlement committee till the amount is recouped. Such interest on deficit amount can be included in the revenue entitlement of the respective entity of the Industry Committee.]

### <sup>152</sup>[3.11.]      **Imbalance Charges**

- a) Imbalance quantity shall be worked out by the entities as per the relevant regulation for their respective networks as per their contracts with the Shippers.
- b) The imbalance charges shall be at the applicable invoicing ratio of UFT for each of the individual entities in the contractual path.

### <sup>153</sup>[3.12.]      **Miscellaneous**

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<sup>151</sup> Ins. by cl. (j) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

<sup>152</sup> Renumbered by cl. (c) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

- a) In case of revised invoices to Shippers, the same shall be settled in the next billing/payment cycle.
- b) Bad debts shall be dealt in respective Gas Transmission Agreements (GTAs) and the same shall not impact settlement amount and payment timelines except as provided in paragraph <sup>154</sup>[3.8] above.
- <sup>155</sup>[ c) Expenses pertaining to working of Settlement/Industry Committee as may be approved by the settlement committee shall be equally shared by all the members of the industry committee.]

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<sup>153</sup> Renumbered by cl. (c) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

<sup>154</sup> Subs. by pt. (i) of cl. (1) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

<sup>155</sup> Ins. by pt. (ii) of cl. (1) of sub-reg. (4) of Reg. (2), the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2024 (w.e.f. 15.04.2024)

**ANNEXURE 1**  
**MEMBERS OF INDUSTRY COMMITTEE**

GAIL (India) Limited
Pipeline Infrastructure Limited
Oil and Natural Gas Corporation Limited
Reliance Gas Pipeline Limited
Indian Oil Corporation Limited
Gujarat State Petronet Limited
Gujarat Gas Limited
GSPL India Gasnet Limited
GSPL India Transco Limited
<sup>156</sup> [Indradhanush Gas Grid Limited]

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<sup>156</sup> Ins. by sub-reg. (b) of Reg. 2, the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Amendment Regulations, 2025. (w.e.f. 25.04.2025).

**ANNEXURE 2**

**FORMAT FOR SHARING FORECASTED DATA**

	Entry		Exit									
Entity	Supply Point	Input Interconnection Point with other entity	Evacuation Point	Output Interconnection Point with other entity	Unified Tariff Path	Volume (MMSMD)	Gross Caloric Value (MMBTU)	Distance (Kms)#	Input Interconnection Point entity	Output Interconnection Point entity	Tariff *(INR/MMBTU)	Common Volume/ <b>Single Entity</b> Volume

\*Note – Entities only to share respective approved zonal tariff

**ANNEXURE 3**

**FORMAT FOR SUBMISSION OF ACTUAL FORTNIGHTLY PIPELINE WISE DATA**

Name of Pipeline ----- Fortnight & Month-----

Zone	Approved Tariff (a) (INR/ MMBTU)	Actual Quantity of Gas Transported (MMBTU GCV) (b)	Ship or Pay Quantity (MMBTU GCV) (c)	Total Quantity (MMBTU) (d) = (b) + (c)	Entitled Revenue (e) = (d) * (a) (INR)
Zone 1					
Zone 2					
Zone n					

Zone	Invoiced Unified Tariff /Part Unified Tariff (f) (INR/MMBTU)	Actual Quantity of Gas Transported (MMBTU GCV) (g)	Ship or Pay Quantity (MMBTU GCV) (h)	Total Quantity (MMBTU) (i) = (b) + (c)	Invoiced amount (j) = (i) * (f) (INR)
Unified Tariff Path 1					
Unified Tariff Path 2					
Unified Tariff Path n					

[F. No. S-Admn/II/8/2008-Vol.-1]  
RATAN P. WATAL, Secy.

**Foot Note:** Principal regulation were published in the Gazette of India (Extraordinary) under No. G.S.R.807(E), dated the 20<sup>th</sup> November, 2008 and amended *vide* G.S.R. 986(E), dated 20<sup>th</sup> December, 2010 and, F. No.

PNGRB/M(C)/11/Final Tariff Filing, dated 30<sup>th</sup> May, 2012 and, PS/Secy./M(C)/2012, dated 13<sup>th</sup> September, 2012. and, F. No. PNGRB/M(C)/48, dated 17<sup>th</sup> February, 2014 and, F. No. PNGRB/M(C)/100, dated 27<sup>th</sup> February, 2014 and, F. No. L-MISC/VI/I/20017, dated 01<sup>st</sup> January, 2015 and, PNGRB/M(C)/110, dated 08<sup>th</sup> January, 2016, PNGRB/COM/2-NGPL Tariff (3)/2019, dated 27<sup>th</sup> May, 2019, and F. No. PNGRB/COM/2-NGPL/Tariff (3)/2019 Vol-II, dated 27<sup>th</sup> March, 2020 and F. No. PNGRB/COM/2-NGPL/Tariff (3)/2014 Vol-IV(Part-1) (P-1439) dated 23<sup>rd</sup> November, 2020 and F. No. PNGRB/COM/2-NGPL/Tariff (3)/2014 Vol-IV(Part-1) (P-1439) dated 23<sup>rd</sup> November, 2020, PNGRB/COM/2-NGPL/Tariff (3) /2019 Vol-IV (P-4121) dated 17<sup>th</sup> November, 2022, PNGRB/Com/10-NGPL Tariff (11)/2022 (P-4142) dated 27<sup>th</sup> March, 2023 and vide PNGRB/Com/13-Reg(1)/2023 (E-4676) dated 15.04.2024 and PNGRB/Com/10-NGPLTariff(9)/2022(E-4124) dated 25.04.2024.