



## Public Consultation Document

(Ref: No. PNGRB/M(C)/74-Vol-II dated 13.07.2018)

<b>Subject</b>	Final initial unit natural gas pipeline tariff (“final tariff”) under the provisions of the Petroleum and Natural Gas Regulatory Board (Determination of Natural Gas Pipeline Tariff) Regulations, 2008 (“Tariff Regulations”).
<b>Name of Entity</b>	Oil and Natural Gas Corporation Limited (ONGC)
<b>Name of Pipeline</b>	Uran-Trombay Natural Gas Pipeline (UTNGPL)
<b>Acceptance of Central Government Authorisation</b>	Infra/PL/Exis/17/UTPL/ONGC/01/11 dated 03.05.11
<b>Provisional Tariff Order</b>	TO/12/2013 dated 30.12.2013
<b>Capacity</b>	6.00 MMSCMD (including common carrier capacity of 1.50 MMSCMD)
<b>Length</b>	24 km
<b>Economic Life</b>	25 years (Commissioning date: 30.05.2008)

## 1. Regulatory Framework

- 1.1. In terms of Section 22 of the Petroleum and Natural Gas Regulatory Board (“PNGRB”) Act, 2006, the Board is entrusted with the responsibility of determining the natural gas pipeline tariff to be charged by the entities laying, building, operating or expanding a natural gas pipeline before the appointed day.
- 1.2. The methodology for determination of pipeline tariff has been specified in the relevant provisions of the PNGRB (Determination of Natural Gas Pipeline Tariff) Regulations, 2008 (hereinafter referred to as “Tariff Regulations”) notified on 20.11.2008. Under the provisions of the Tariff Regulations, PNGRB is to determine the initial unit natural gas pipeline tariff on provisional basis first and then finalise the same considering the actual cost and data at the end of the financial year on the basis of audited accounts.

## 2. Provisional Transportation Tariff Orders

PNGRB issued a provisional tariff order no. TO/12/2013 dated 30.12.2013 (“provisional tariff order”) determining the provisional initial unit natural gas pipeline tariff (“provisional tariff”) of UTNGPL under the provisions of the Tariff Regulations. The provisional tariff as proposed by ONGC and as determined by PNGRB are as follows:

<b>Particulars</b>	<b>Provisional Tariff proposed by ONGC (Rs. / MMBTU on GCV basis)</b>	<b>Provisional Tariff determined by PNGRB (Rs. / MMBTU on GCV basis)</b>
Levelized Provisional Tariff	18.88	5.70

### 3. Tariff filing submitted by ONGC

- 3.1. ONGC, vide its letter dated 12.04.2018, submitted the following tariffs in its updated tariff filing with actual data up to 2016-17 and future projections from FY 2017-18 onwards:

<b>Scenarios</b>	<b>Financial Year</b>	<b>Rs./MSCM</b>
Scenario I Levelised Tariff	2009-10 to till the end of economic life of the pipeline	542.74
Scenario II Tariff Considering escalation at 8% p.a	2009-10	293.77
Scenario III Tariff considering escalation at 10% p.a.	2009-10	244.32

- 3.2. As per clause 2(1)(g) of Tariff Regulations, "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.

ONGC in its updated tariff filing has submitted tariff in Rs./MSCM in place of Rs./MMBTU.

- 3.3. As per clause 9(4) of Schedule A of Tariff Regulations, "Adjustment on account of variation in the provisional initial unit natural gas pipeline tariff and final initial unit natural gas pipeline tariff 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, in case tariff order is issued before 30th September, tariff shall be applicable from 1st April of the financial year in which Tariff Order is issued, otherwise tariff shall be applicable from 1st April of the next financial year."

ONGC in its updated tariff filing has claimed tariff in Rs./MSCM form FY 2009-10. However, as per above clause, the adjustment on account of variation in the provisional tariff and final tariff shall be made in the DCF calculations and the derived tariff shall be charged from the customers on prospective basis till next review.

#### **4. Details of Tariff Filing submitted by ONGC**

##### **4.1. Salient features of tariff filing:**

4.1.1. ONGC in its tariff submission has considered an economic life of 25 years from 28.05.2008 to 28.05.2033.

4.1.2. The total capital outflow considered by ONGC is Rs.241.87 Cr. ONGC in its tariff submission has considered Nil CWIP.

4.1.3. ONGC has considered depreciation @ 3.80% SLM basis on pipeline Capex for 25 years of economic life after considering 5% salvage value.

4.1.4. The total operating expenses considered by ONGC during the economic life of pipeline is Rs.767.82 Cr.

4.1.5. ONGC has considered an inflation rate of 8.00%.

4.1.6. ONGC has not considered any unaccounted gas loss.

4.1.7. The average working capital considered by ONGC is Rs.4.15 Cr.

4.1.8. The number of working days for the pipeline has been taken by ONGC to 365 days in a year.

4.1.9. Terminal value considered as Rs.16.55 Cr. consisting of line pack of Rs.0.02 Cr and Rs.16.53 Cr towards residual value of fixed assets.

4.1.10. IRR is determined @ 12.00% as rate of return on capital employed.

**5. The various aspects of final tariff filing submitted by ONGC are as follows:**

**5.1. Economic Life of Pipeline**

In the tariff filing, ONGC has considered economic life of the pipeline for a period of 25 years from date of commissioning i.e.28.05.2008 to 28.05.2033.

**5.2. Capital Expenditure (Capex)**

ONGC, in its updated tariff filing, has considered total Capex outgo of Rs. 241.87 Cr from 20.11.2008 till the end of the economic life of the pipeline in 2033-34.

**5.2.1. Net Block (NB) / Net Fixed Assets (NFA) as on 20.11.2008**

NFA (including CWIP, Land & ROU) as on 20.11.2008 as per updated tariff filing and CA certificates submitted by ONGC is as follows:

<b>Rs. in Cr.</b>			
<b>Period</b>	<b>Tariff Filing</b>	<b>CA Certificate dated 05.02.2015</b>	<b>CA Certificate dated 16.04.2018</b>
2007-08	152.37	0.00	152.37
Upto 30.09.2008		149.24*	
01.04.2008 to 20.11.2008	89.50		89.50
<b>Total</b>	<b>241.87</b>	<b>149.24</b>	<b>241.87</b>

\* Net Block as on 30.09.2008 as per books of accounts

ONGC, vide email dated 19.03.2012 stated that, in its books of accounts economic life of the pipeline has considered as one year and accordingly charged depreciation @ 100% per annum (i.e.8.33% per month on monthly basis) on underground pipelines.

Further, ONGC in its CA certificate dated 16.04.2018 inter alia stated that “Asset was fully installed and ready to use on 28.05.2008. Depreciation has been

charged as per useful life of the assets i.e. 25 years, considering scarp value @ 5%. Therefore, effective rate of depreciation is 3.80%.

As the actual use of UTNGPL is allowed w.e.f. 20.11.2008, Net Asset Value has been adopted on this date”.

### 5.3. **Operating Expenses (Opex)**

ONGC in its tariff submission vide email dated 12.04.2018 has claimed total Opex of Rs. 767.82 Cr. The actual Opex outgo from FY 2008-09 to FY 2016-17 is Rs.122.04 Cr. and future Opex projections from FY 2017-18 till the end of economic life in FY 2033-34 upto 23.05.2033 is Rs.645.78.

#### 5.3.1. **Actual Opex Outgo from FY 2008-09 to FY 2016-17**

In its tariff filing, ONGC has claimed Opex of Rs. 122.04 Cr from 20.11.2008 to FY 2016-17. Year-wise breakup of Opex claimed in tariff filing and certified by CA certificates submitted by ONGC is as follows:

<b>(Rs. in Cr)</b>		
<b>Financial Year</b>	<b>Tariff Filing</b>	<b>CA Certificates</b>
2008-09	1.94	1.94
2009-10	7.35	7.35
2010-11	13.43	13.43
2011-12	13.64	13.64
2012-13	16.98	16.98
2013-14	17.32	17.32
2014-15	16.46	16.46
2015-16	15.22	15.22
2016-17	19.70	19.70
<b>Total</b>	<b>122.04</b>	<b>122.04</b>

CA certificate dated 16.04.2018 for Opex states that “*Since a specific pipeline has not been configured as a separate cost or profit center in books of accounts, the Operating expenses has been derived upon by allocating total pipelines related costs to the UTNGPL based on the length of the UTNGPL pipeline to*

*the total operating pipeline lengths of Uran Trombay section. The cost has been allocated for length (Km.) of the pipeline irrespective of the dimension of the pipe.”*

On reviewing the tariff submission of ONGC, it is found that following expenses have been allocated/considered by ONGC on the basis as mentioned below:

<b>Opex Head</b>	<b>From 2008-09 to 2016-17</b>
Health, Safety & Envvn.	HSE costs are booked to a common cost center in IF module in SPA. Allocation is performed in the ratio of product sold by ONGC, Uran to ratio of Gas sold through UTNGPL
Insurance	Insurance Cost has been taken from each year’s Insurance Policy as factor of the premium for ONGC, Uran to the Value Insured for UTNGPL/Total Value Insured for ONGC, Uran
Way Leave	Way Leave Charges are specific to UTNGPL as per the agreement dated 28.01.2005. Way Leave Charges as provided under Financial Terms & Condition clause 2A of the agreement are to be increased @ 4% every year.
Project Overheads	10% of the total expenditure

### **5.3.2. Future Opex projections from FY 2017-18 to FY 2033-34**

In its tariff filing, ONGC has claimed a future Opex of Rs.645.09 Cr from FY 2017-18 to the end of economic life in FY 2033-34 with 8% inflation rate on Opex considered in FY 2016-17 other than mentioned below:

<b>Opex Head</b>	<b>From 2017-18 till the end of the economic life</b>
Health, Safety & Envvn.	HSE costs are taken as the average cost of past 9 years & inflated @ 8% for FY 2017-18. The said costs have been inflated @ 8% from FY 2018-19 onwards.
Insurance	Insurance Cost for the FY 2017-18 has been considered Rs.0.11 Cr. and the same has been inflated @ 8% from FY 2018-19 onwards.
Way Leave	Way Leave Charges are specific to UTNGPL as per the agreement dated 28.01.2005. Way Leave Charges as provided under Financial Terms & Condition clause 2A of the agreement are to be increased @ 4% every year.
Project Overheads	10% of the total expenditure

#### 5.4. **Volume Divisor**

Year-wise capacity considered by ONGC in its tariff submission is as follows:

<b>Financial Year</b>	<b>Capacity (in BCM)</b>
2008-09	0.474
2009-10	1.380
2010-11	1.238
2011-12	1.317
2012-13	1.404
2013-14	1.440
2014-15	1.409
2015-16	1.393
2016-17	1.314
2017-18 & 2018-19	1.300
2019-20 onwards till 2032-33	1.250
2033-34	0.195

#### 5.5. **Weighted Average Heat Value:**

As per Clause 6 of Schedule A of Tariff Regulations, the volume of natural gas determined as per the regulations shall be converted into its energy equivalence in MMBTU terms for the purpose of determination of final tariff by considering the weighted average heat value of natural gas delivered to customers during the provisional tariff period.

ONGC, in its tariff filing, has not considered weighted average heat value for the purpose of determining final tariff, whereas the final tariff is submitted by ONGC in Rs./MSCM in various scenarios as mentioned in para 3.1.

ONGC in response to PNGRB's query submitted the data for the year from 2008-09 to 2013-14 based on which weighted average heat value has been calculated and mentioned in below table. Further, ONGC has submitted year-wise net calorific value (NCV) and gross calorific value (GCV) for APM and NAPM gas from 2014-15 to 2016-17. Average of NCV and GCV for APM and NAPM Gas from 2014-15 to 2016 has been mentioned in the table below:

<b>Year</b>	<b>Net Calorific Value</b>	<b>Gross Calorific Value</b>
2008-09	8379.30	
2009-10	8288.17	
2010-11	8584.47	
2011-12	8377.54	
2012-13	8449.57	
2013-14	8408.66	
2014-15	8408.93	9394.47
2015-16	8374.32	9290.76
2016-17	8301.97	9213.34

#### 5.6. **Working Capital**

In the tariff filing, ONGC has considered average working capital of Rs. 4.15 Cr, calculated as sum of 30 days working capital on Opex cost per spread over the economic life of the asset and 18 days receivables.

This has been worked out year wise over the economic life of the asset considering the levelised tariff of Rs.542.74 per MSCM.

#### 5.7. **Line Pack**

Line pack is the value of gas which always remains in the pipeline and as per regulations it is to be considered as cash outflow in the initial year and to be considered as cash inflow in the last year of the economic life of the pipeline. ONGC, in its tariff filing, has considered line pack of Rs.0.02 Cr (Qty 34,044 SCM) as cash outflow in the year 2007-08.

#### 5.8. **Terminal Value**

Terminal Value is the sum of the residual value of the NFA, working capital and line pack and is cash inflow at the end of economic life of the pipeline. The

terminal value submitted by ONGC in its tariff filing is Rs. 16.55 Cr which consist of Rs.16.53 Cr. on account of residual value of NFA (only pipeline) and Rs.0.02 Cr on account of line pack.

#### 5.9. **Return on Capital Employed**

In terms of tariff regulation, 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. Rates of corporate income tax considered by ONGC are as follows:

<b>Financial Year</b>	<b>2008-09 &amp; 2009-10</b>	<b>2010-11 onwards</b>
Income Tax Rate	33.99%	33.22%

#### 5.10. **Zonal Apportionment**

Since the length of the UTNGPL of ONGC does not exceed 300 km, the apportionment of the levelized tariffs is not required to be undertaken.

### 6. **Views of stakeholders sought**

- 6.1. Determination of the final initial unit natural gas pipeline tariff is a time bound exercise. PNGRB solicits the views in writing of stakeholders on ONGC's tariff filing for the UTNGPL within 15 days of the issue of this document at the following address:

*Secretary,  
Petroleum and Natural Gas Regulatory Board,  
1<sup>st</sup> Floor, World Trade Centre,  
Babar Road, New Delhi 110001.*

(Vandana Sharma)  
Secretary  
For and on behalf of the Board