

### STANDING COMMITTEE ON PETROLEUM & NATURAL GAS

(2014-15)

### SIXTEENTH LOK SABHA

### **MINISTRY OF PETROLEUM & NATURAL GAS**

### ALLOCATION AND PRICING OF GAS

[Action Taken by the Government on the recommendations contained in the Nineteenth Report (Fifteenth Lok Sabha) of the Standing Committee on Petroleum and Natural Gas (2013-14)]

### THIRD REPORT



### LOK SABHA SECRETARIAT NEW DELHI

April, 2015/ Vaisakha, 1937 (Saka)

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[Action Taken by the Government on the recommendations contained in the Nineteenth report (Fifteenth Lok Sabha) of the Standing Committee on Petroleum and Natural Gas (2013-14)]

Presented to Lok Sabha on 27.4.2015

Laid in Rajya Sabha on 28.4.2015

## LOK SABHA SECRETARIAT NEW DELHI

April, 2015/ Vaisakha, 1937 (Saka)

(iv)

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### COMPOSITION OF THE STANDING COMMITTEE ON PETROLEUM & NATURAL GAS (2014-15)

### Shri Pralhad Joshi – Chairman

2	Dr. Ravindra Babu
3	Shri P. K. Biju
*4	Shri Haribhai Chaudhary
5	Shri Kalikesh N. Singh Deo
6	Shrimati Rama Devi
7	Shri Elumalai V.
8	Shri Naranbhai Kachhadiya
9	Dr. Thokchom Meinya
10	Shrimati Pratima Mondal
11	Shri Ashok Mahadeorao Nete
12	Shrimati Jayshreeben Patel
13	Shrimati Anupriya Patel
14	Shri Arvind Sawant
15	Shri Raju Shetty
16	Dr. Bhola Singh (Begusarai)
17	Shri Ravneet Singh
18	Shri Kamakhya Prasad Tasa
19	Shri Rajesh Verma
20	Shri Om Prakash Yadav
21	Shri Laxmi Narayan Yadav

### **RAJYA SABHA**

22	Shri Mani Shankar Aiyar
# 23	Dr. Akhilesh Das Gupta

24	Shri Ishwarlal Shankarlal Jain
25	Shri Prabhat Jha
26	Shri Bhubaneshwar Kalita
27	Shri Mansukh L. Mandaviya
28	Shri Ahmed Patel
29	Shrimati Gundu Sudharani
30	Prof. Ram Gopal Yadav

### **SECRETARIAT**

- 1. Shri A.K.Singh Joint Secretary
- 2. Shri S.C.Chaudhary Director

Shri Sharad Yadav

31

3. Shri H Ram Prakash – Additional Director

<sup>\*</sup>Ceased to be a Member of the Committee on becoming Minister in the Union Council of Government w.e.f. 9<sup>th</sup> November, 2014.

<sup>#</sup> Ceased to be a Member of the Committee consequent upon his retirement from the membership of the Rajya Sabha w.e.f 25<sup>th</sup> November, 2014.

### INTRODUCTION

I, the Chairman, Standing Committee on Petroleum & Natural Gas having been authorised by the Committee to submit the Report on their behalf, present this Third Report on Action Taken by the Government on the recommendations contained in the Nineteenth Report (Fifteenth Lok Sabha) of the Committee on the subject 'Allocation and Pricing of Gas'.

- 2. The Nineteenth Report of the Standing Committee on Petroleum & Natural Gas was presented to Lok Sabha on 10.12.2013. The Action Taken Replies of the Government to all the recommendations contained in the Nineteenth Report were received on 19.11.2014.
- 3. The Standing Committee on Petroleum & Natural Gas (2014-15) considered and adopted the Report at their sitting held on 27.1.2015.
- 4. An analysis of the action taken by the Government on the recommendations contained in the Nineteenth Report (Fifteenth Lok Sabha) of the Standing Committee on Petroleum & Natural Gas is given in Annexure-II.
- 5. For facility of reference and convenience, the observations and recommendations of the Committee have been printed in bold letters in the body of the Report.
- 6. The Committee place on record their appreciation for the valuable assistance rendered to them by the officers of the Lok Sabha Secretariat attached to the Committee.

New Delhi; 23 April, 2015

3 Vaisakha,1937 (Saka)

PRALHAD JOSHI, Chairman, Standing Committee on Petroleum & Natural Gas.

#### **REPORT**

#### CHAPTER I

This Report of the Standing Committee on Petroleum & Natural Gas deals with the action taken by the Government on the Recommendations contained in the Nineteenth Report (Fifteenth Lok Sabha) of the Standing Committee on Petroleum and Natural Gas (2013-14) on 'Allocation and Pricing of Gas', which was presented to Hon'ble Speaker on 18.10.2013 and thereafter presented to Lok Sabha and laid in Rajya Sabha on 10.12.2013.

- 2. Action Taken Notes have been received from the Ministry in respect of all the 12 Recommendations/Observations contained in the Report. These have been categorized as follows:-
  - (i) Recommendations/Observations that have been accepted by the Government:- Reco. Nos. 3,9,11 and 12 (Total 4)

(Chapter- II)

(ii) Recommendations/Observations which the Committee do not desire to pursue in view of the Government's replies:- Reco. Nos. 5 and 6 (Total 2)

(Chapter-III)

(iii) Recommendations/Observations in respect of which replies of the Government have not been accepted by the Committee:- Reco. Nos. 2 and 10 (Total 2)

(Chapter-IV)

(iv) Recommendations/Observations in respect of which final replies of the Government are still awaited:- Reco. Nos. 1,4,7 and 8 (Total 4)

(Chapter-V)

- 3. The Committee desire that the Action Taken Notes on the Recommendations/Observations contained in Chapter-I of this Report and Final Replies in respect of the recommendations for which interim replies have been furnished by the Government (included in Chapter-V), should be furnished expeditiously.
- 4. The Committee will now deal with the action taken by the Government on some of their recommendations.

### Recommendation No. 1

### **Demand and Supply of Natural Gas**

5. The Committee had noted that Natural Gas had emerged as one of the principal sources of energy in the world and accounted for 23.94% of total global energy mix. Due to its inherent advantages over other fossil fuels there was a global trend of shift in energy mix from oil to natural gas. However, in case of India, share of natural gas in total energy mix accounts only 8.7% which was even lower than the Asia Pacific share of 11.27%.

As the Government pursued the economic policy to achieve high growth, the demand for natural gas had also sharply increased in India during the past few years, and expected to escalate further. The Committee were however, constrained to note the widening gap between demand and supply of gas in the country, as during 2012-13 there was only 134 mmscmd of gas available including the imported LNG against the demand of 286 mmscmd. Thus there was huge unmet demand of 152 mmscmd. During the year 2015-16, the expected gap would be to the tune of 300 mmscmd as against the demand of 439 mmscmd the available gas supply would be 139 mmscmd only. The chunk of this growing supply deficit was expected to be met through LNG imports from different countries. However, the Committee had noted that present LNG terminal capacity was 53 mmscmd only unable to support the increased purchase of LNG. Though the LNG infrastructure was expected to grow to 180 mmscmd by 2016-17, it would not still be sufficient to cater to the increasing LNG import in the coming years.

The Committee were of the view that MoP&NG should evolve a plan to explore all possible options to increase the production and supply of natural gas in the country. Towards this end, the Committee had desired that the Ministry should increase the blocks awarded for exploration, intensify activities for exploration and production of shale gas, pursue strong diplomatic efforts to expedite construction of transnational pipelines from neighbouring regions to bring gas and try to enter into long term contract for import of LNG at cheaper cost. The Committee had further desired that unconventional sources of gas like Gas Hydrates, CBM, Shale Gas should be seriously monitored for exploitation and development. Therefore, the Committee recommend that Ministry should prepare a blue print to improve the

production and supply of natural gas in the country so that there is no deficit in meeting the domestic demand.

6. The Ministry of Petroleum and Natural Gas submitted the following reply in this regard:

"It is true that at present there is wide gap between production of domestic natural gas and demand in the country. However, this demand is price sensitive. The demand of natural gas in the country is mainly from fertilizer and power sector. Both the sectors have low affordability for imported LNG. The demand from customers in sectors other than power and fertilizer is also price sensitive. Therefore, the gap in demand and supply in the country can be met only partially by imported LNG. On one side, there is need to construct new LNG Terminals and increase the capacity of existing ones to meet the short fall in demand from domestic sources. On the other side, one cannot overlook the fact that demand of natural gas is price sensitive and the construction of LNG Terminal is highly capital intensive. If large capacity of LNG import and regasification is created without proper study of market/demand, LNG Terminals may remain under-utilized, putting huge investments to risk.

In the year 2013-14, out of total average daily supply of about 121.13 mmscmd, the supply from domestic production was 80.02 mmscmd and from imported LNG was 41.11 mmscmd.

At present, the country has capacity to import and re-gasify 22 MMTPA (79.2 MMSCMD) of LNG. This capacity is likely to increase to 41 MMTPA (147.6 MMSCMD) by the year 2016-17. Additional LNG Terminals of capacity around 27 MMTPA are at various stages of planning.

The details of existing Re-gasified LNG (R-LNG) Terminals are as under:

Location of LNG terminal	Owner of the Terminal	2014-15 Existing Capacity	2015-16 Projected Capacity	2016 – 17 Projected Capacity
Dahej	Petronet	10	10	15
Hazira	Hazira LNG	5	5	7.5 *
Kochi	Petronet	5	5	5
Dhabol	GAIL	2	5	5
Total capacity (MMTPA)		22	25	32.5
Total capacity (MMSCMD)		79.2	90	117

<sup>\*</sup> The increase in capacity from 5 to 7.5 MMTPA will become available at the end of year 2016-17.

In addition, Regasification terminal for a capacity of 35.5-36.5 MMTPA in eastern and western coast of India are also being planned by different

entities. The development of these projects purely depends on techno commercial feasibility.

### LNG tie-up:

Long term contracts for LNG have conditions of TAKE or PAY. As the demand of natural gas in India is price sensitive, long term contracts of LNG need to be planned on the basis of proper study of market and demand, considering the affordability of LNG.

Petronet LNG Limited (PLL) and GAIL have executed long term LNG Sale Purchase Agreements (SPAs), the details of which are as follows:

### PLL

- 7.5MMTPA with Rasgas, Qatar for 25 years. The supplies have started in 2004.
- 1.44MMTPA with Exxon Mobil for supplies from Gorgon Project in Australia for 15 years starting from 2015.

### **GAIL**

- 3.5 MMTPA with Sabine Pass Liquefaction LLC for supplies from Sabine Pass terminal in Louisiana, USA starting in 2018.
- 2.3 MMTPA of liquefaction capacity booking in the Cove Point LNG terminal proposed to be commissioned by Dominion Cove Point LNG LP in 2017.

In addition to long term contracts, GAIL has executed **2 short term contracts**, details of which are as follows:

- 0.8MMTPA with GNF, Spain for supplies from 2013 to 2015.
- GAIL has also contracted 2.5 MMTPA of LNG to be supplied by Gazprom Marketing and Trading Singapore (GMTS).

GSPC has contracted with British Gas for supply of 1.25 MMTPA from June 2015 and 2.5 MMTPA from June 2017.

In addition, LNG is being **imported on spot** by PLL, GAIL, Reliance Industries Limited (RIL), Gujarat State Petroleum Corporation (GSPC) etc.

### **Coal Bed Methane (CBM)**

### (1) Amendment to CBM policy

CCEA meeting held on 19.12.2013 approved the policy for Exploration & Exploitation of CBM for coal mining areas. However, the approval for para 6.1 except para 6.1 (iv) was not reflected in the minutes of CCEA meeting. Accordingly, this Ministry requested Cabinet Secretariat to revise minutes of the CCEA meeting held on 19.12.2013. In reply, Cabinet Secretariat vide O.M. dated 13.2.2014 has indicated to bring a fresh proposal for consideration of the CCEA note for a change decision, if required. The Cabinet Note is

under preparation by MoP&NG. In view of recent judgment passed by Supreme Court in Coal Blocks case, certain issues are being re-examined and note is under submission to Hon'ble Minister, P&NG.

In pursuance of CBM policy, till date 4 rounds of CBM blocks have been launched in which 33 of blocks were awarded. 30 were awarded through international Competitive Bidding while 2 were given on nomination basis and 1 CBM block was awarded through Foreign Investment Promotion Board (FIPB) route. Out of these 33 blocks, 8 blocks are in the development phase, 5 blocks are in the Exploration phase, 16 blocks are relinquished/under relinquishment and there are 4 blocks which are yet to be effective for want of PEL/PEL deed by the State Government.

### (2) <u>Ten CBM blocks identified for exploration under Uniform Licensing</u> Policy in 10<sup>th</sup> round of NELP

The Ministry of Petroleum & Natural Gas is proposing to launch tenth bid round of NELP (NELP-X) shortly, wherein blocks shall be offered for Exploration and Exploitation of conventional as well as unconventional hydrocarbon resources under Uniform Licensing Policy. Ten CBM rich blocks (6 in Gujarat, 2 in Madhya Pradesh and 2 in Maharashtra) have been identified primarily for exploration and exploitation of CBM.

### TRANS-NATIONAL PIPELINE PROJECTS

### Turkmenistan-Afghanistan-Pakistan-India (TAPI)

The Government is pursuing the Turkmenistan-Afghanistan-Pakistan-India (TAPI) transnational Gas Pipeline Project.

On 11<sup>th</sup> December, 2010 the four countries involved in the TAPI Gas pipeline project, signed an Inter-Governmental Agreement along with a Gas Pipeline Framework Agreement in Ashgabat, Turkmenistan. To accelerate the project, parties have formed a Minister level Steering Committee and Technical Working Group (TWG).

To settle various issues related to the Gas Sale Purchase Agreement (GSPA), bilateral and multilateral meetings have been held amongst the four countries and their gas companies participating in the Turkmenistan-Afghanistan-Pakistan-India (TAPI) pipeline project. Regarding security & safety of the pipeline, suitable provisions have been made in the Inter-Governmental Agreement (IGA) and Gas Pipeline Framework Agreement (GPFA) signed by the Governments of Turkmenistan, Afghanistan, Pakistan and India in December 2010. On 23<sup>rd</sup> May, 2012 GAIL (India) Ltd. and Pakistan's Inter State Gas Systems signed their respective Gas Sales Purchase Agreements (GSPA) with Turkmenistan's state gas company Turkmen Gaz which envisage Turkmen gas being supplied to India and Pakistan via Afghanistan in 2018. Turkmenistan and Afghanistan have also signed anMoU for cooperation in the gas sector, leaving the signing of a bilateral GSPA till negotiations on gas price is concluded.

ADB has been appointed as the Transaction Advisor consequent to the signing of Transaction Advisory Services Agreement (TASA) between the 4 entities (3 buyers & the Seller) and ADB on 19<sup>th</sup> November, 2013. The major

scope of work of TA includes (i) Formation of TAPI Limited and (ii) Selection of the Consortium Leader.

During PETROTECH 2014 (January 12-15, 2014), the Turkmen side has indicated that the shortlist of prospective Consortium Leaders will be provided during the first quarter of 2014.

The Turkmen Party provided a shortlist which contained only one company viz. M/s TOTAL of France, which has expressed its interest in becoming the Consortium Leader for TAPI Limited. In addition, the Turkmen Party also informed that the three international companies working in offshore E&P blocks in Turkmenistan may also be interested in becoming the consortium members in TAPI Limited. Accordingly, the SC advised the TA to carry out discussions with TOTAL as well as with the other three companies. The SC has asked the TA and Turkmen Party to present the status of discussions on this subject in November 2014.

During a recent meeting held among the TA and the 4 TAPI entities from 27<sup>th</sup> to 29<sup>th</sup> August, 2014 at Dubai, the TA has informed that a detailed presentation had been made earlier to the Turkmenistan Government highlighting the principles on which Technical Service Contracts (based on the Iraqi Service Contract model) may be used to provide sufficient incentives for investment by a potential Consortium Leader (particularly with respect to booking reserves). The Turkmenistan Government indicated these principles were acceptable, and authorized the Transaction Advisor to convey them to TOTAL.

In parallel, the TA is undertaking actions for preparation of the Information Memorandum for issuing to the shortlist of potential leaders.

The Steering Committee had desired that the Consortium Leader should be selected by September 2015 and the Consortium Agreement be signed by March 2016. However, these timelines are contingent upon the outcome of the November 2014 status update.

During the 25<sup>th</sup> TWG meeting held in Dubai on 26-27 Feb, 2014, an agreement has been reached on the payment modalities for the transit fee payable by GAIL to the Governments of Afghanistan and Pakistan. The indexation formula is yet to be agreed.

### **Shale Gas**

The Government has issued "Policy Guidelines for Exploration and Exploitation of Shale Gas and Oil by National Oil Companies under Nomination regime" on 14<sup>th</sup> October, 2013. Under this Policy, the right to exploration and exploitation of Shale Gas & Oil will lie with the NOCs holding Petroleum Exploration License (PEL)/Petroleum Mining Lease (PML) granted under the nomination regime. A Phase II policy for grant of exploration and exploitation of shale gas and oil in the pre-NELP, NELP & CBM area is presently under consideration.

ONGC has recently commenced drilling of one well (Jambusar # 55) in Gujarat for assessment of shale gas/shale oil potential of Cambay Shale. Currently, there is no commercial production of shale gas in the country.

Under the first phase of assessment of shale gas and oil, exploration and exploitation, at present, 56 PEL/PML blocks (ONGC 50, and OIL-6) have been identified by NOCs. These blocks are located in the states of Assam (7 blocks), Arunachal Pradesh (1 Block), Gujarat (28 blocks), Rajasthan (1 Block), Andhra Pradesh (10 blocks) and Tamil Nadu (9 blocks). ONGC has drilled one well where coring has been completed. In addition, ONGC has collected cores from another 7 wells".

7. The Committee had recommended that the Ministry should prepare a blue print to improve the production and supply of natural gas in the country so that there is no deficit in meeting the domestic demand. The Ministry in their reply has spelt out its measures being taken for increasing the natural gas production from the unconventional sources like CBM, shale gas/oil and efforts made in TAPI project and import of LNG. The Committee, however, are concerned to note that the Ministry is altogether silent on the efforts being made to increase the natural gas production from existing fields or new discoveries within the country. The Committee are further dissatisfied that MoP&NG have no blue print as yet to improve the production of natural gas in the country so as to meet the growing demand. The Committee therefore, reiterate its recommendation that MoP&NG should focus on preparation of a blue print to increase the natural gas production in the country. Committee would also want the government to expedite the finalisation of TAPI by impressing upon the participating countries in this regard.

#### Recommendation No. 2

### Gas Allocation by EGoM

8.The Committee in its earlier report had recommended that the allocation of natural gas should be made on a pragmatic basis taking into account the projected production during the year and should not exceed by more than 10% of the production. The Committee had further pointed out that due to shortfall in production in KG-D6 basin, the MoP&NG was forced to cut back allocation to various sectors.

9. The Ministry of Petroleum and Natural Gas submitted the following reply in this regard:

"The allocation of all categories of domestic gas (APM, Non APM, Pre-NELP, NELP) put together is 242.57 MMSCMD. The allocation of KG-D6 gas by EGoM is only 93.34mmscmd out of total 242.57mmscmd. The contractors of KG-D6 had projected that production from KG-D6 will reach plateau of around 80 MMSCMD by 2012. Based on the above projection, EGoM allocated 63.171 MMSCMD of KG-D6 on firm basis and 30.165 MMSCMD of gas on fallback basis. The firm allocation of KG D-6 was less than the projected production. The total allocation of KG D-6, including fallback allocation, is only 16.67% more than the projected production".

10. The Ministry in its reply has mentioned that the allocation out of KG-D6 production was 93.34 mmscmd which was only 16.67 per cent more than the projected production of 80 mmscmd in 2012-13. However, the actual production in KG-D6 basin was only 25 mmscmd. The Committee do not find the reply of the Ministry tenable as during the year 2012-13 against the total gas allocation of 119.4 mmscmd from APM fields and 17.73 mmscmd from pre NELP fields, the actual supply was only to the tune of 49.58 mmscmd and 9.02 mmscmd respectively of the actual allocations made for the year. Thus the huge mismatch between the allocations and actual supply was not only restricted to the allocations pertaining to the gas produced from KG-D6 blocks but also from other fields. The Committee, therefore, urge the Ministry to be more prudent in their future allocations so as to reduce the variation between allocation and actual supply of natural gas.

### **Recommendation No. 8**

### Rangarajan Committee on PSC

- 11. The Committee in their earlier Report had recommended that since the Rangarajan Committee recommendations have wide ramifications on the investments in the E & P sector, it needs to be examined in greater detail before any decision is taken on their implementation as the E & P activities under NELP has not achieved the desired participation from adequate number of both domestic and international companies.
- 12. The Ministry of Petroleum and Natural Gas submitted the following reply in this regard:

"The Uniform Licensing Policy (ULP) and revenue sharing model is under consideration of the Government. A Model Revenue Sharing Contract (MRSC) was posted on website of the Ministry to seek comments from all the stakeholders. The comments have been received and are being analyzed by the Ministry".

13. The Committee had recommended that the Rangarajan Committee recommendations needs to be examined in greater details, as it has vide ramifications on the investments in the E&P sector. The MoP&NG in their reply has informed that a Uniform Licensing Policy and revenue sharing model is still under the consideration of the Government. It has been stated that a model revenue sharing contract was posted on the website of the Ministry to seek comments from all stakeholders the same have been received and being analyzed by the Ministry. The Committee while hoping early action in this regard by the Ministry would like to be informed about the progress made on the Uniform Licensing Policy and Revenue Sharing Model. The Committee would also like to be apprised by the Ministry about the action taken by it on the other suggestions made by the Rangarajan Committee.

### Recommendation No. 9

### Gas Price formula by Rangarajan Committee

14. The Committee had noted that the Rangarajan Committee appointed to review Production Sharing Contract (PSC) entered between contractors and Government under NELP regime had devised a new formula regarding the price of natural gas produced. In this regard, its report had stated that, "...the producers in India get at least the average price of what producers elsewhere are getting". The proposed formula was a simple average of two methodologies. In the first method, it takes the price of imports of LNG into India by different suppliers while in the second method, the weighted average of prices of natural gas prevailing at Henry Hub (HH) in USA, National Balancing Point (NBP) in London and netback import price at the wellhead of suppliers into Japan in the preceding quarters is considered.

The Committee had noted that during the year 2012, the natural gas prices in these three selected hubs were around US \$ 2.5 to 3.5 per mmbtu in HH (USA), US \$ 8 to 10 at NBP and \$ 14 to 16 at Japan respectively. However, it was observed that the benefit of lower gas price at HH had been largely diluted by the inclusion of

Japan's LNG FOB prices which includes 60 % royalty component linkage to JCC and host of other factors.

The note prepared by Ministry of Finance for EGoM on the Rangarajan Committee formula argued that there was no logic in inclusion therein of the consumption by Japan which is having very high import LNG price and that nowhere in the world, wellhead prices of natural gas had been linked to spot LNG contract basis. The Committee had found merit in this view of the Ministry of Finance.

The Committee further observed that Russia, being the second largest among the gas producing and consuming countries, exporting 40 to 50 percent of its gas to Europe at a price of about \$ 8.77 per mmbtu, could be a valuable and better indicator of gas price. The Committee had desired that Russian prices could be incorporated as one of the reference price in the pricing formula.

The Committee had also point out the glaring omission of factoring of domestic cost of production of natural gas by NOCs namely ONGC and OIL which was pegged at \$ 3.63 and \$ 3.21 respectively during the year 2012-13. Similarly the cost of production for RIL in 2012-13 stood at US \$ 2.48 per MMBTU from KG-D6 field.

The Committee had further highlighted that the price of domestic natural gas need not be dollar denominated due to huge volatility in dollar vis-à-vis Rupee which often leads to gains to operators for no reasons and adversely impact the Government financials. As the present price of \$ 4.2/MMBTU at an exchange rate of Rupees 45/-, works out to be Rupees 189/MMBTU and as against Rs. 60/USD, equals to Rs. 252/MMBTU which is 30 % windfall gain accrued due to rupee devaluation from Rs 45 to 60 against the US dollar.

The Committee taking into consideration all the factors analyzed above had recommended that the Rangarajan Committee formula for arriving at the natural gas price should be thoroughly reviewed and reconsidered. The Committee had recommended factoring domestic cost of production of gas for arriving at the price, and fixation of price of gas in rupee terms in PSC under NELP regime.

15. The Ministry of Petroleum and Natural Gas submitted the following reply in this regard:

- "1. Government considered the gas price issue in CCEA meeting held on 25<sup>th</sup> June, 2014 and noted that the whole issue of gas pricing would need comprehensive re-examination. Accordingly, it was directed that the Domestic Natural Gas Pricing Guidelines, 2014 notified by the previous government on 10<sup>th</sup> January, 2014 be kept in abeyance up to 30.09.2014 and till that time, the domestically produced gas would continue to be priced at the rate prevailing on 31.03.2014.
- 2. Further, in pursuance of the CCEA decision on 25.06.2014, MOPNG constituted a Committee consisting of the Secretary (Power), Secretary (Expenditure) and Secretary (Fertilizers) with Additional Secretary (MOPNG) as Member Secretary to carry out re-examination of the issue of gas pricing. The Committee submitted its report on 16.09.2014.
- 3. The Government further considered the gas price issue in CCEA meeting held on 24<sup>th</sup> September, 2014 and directed that the Domestic Natural Gas Pricing Guidelines, 2014 notified on 10<sup>th</sup> January, 2014 may further be kept in abeyance up to 15.11.2014 and till that time, the domestically produced gas would continue to be priced at the rate prevailing on 31.03.2014. A circular on this was issued by MOPNG dated 29<sup>th</sup> 30<sup>th</sup> September, 2014.
- 4. MOPNG submitted a note for CCEA on 17.10.2014 regarding pricing of domestically produced natural gas on basis of recommendations of the Committee. CCEA considered the proposal in meeting held on 18.10.2014 and approved MOPNG proposals. The formula approved by CCEA includes the price and volume consumed by Former Soviet Union Countries and excludes the Japanese LNG prices as was recommended by the Standing Committee (copy of guidelines enclosed as Annex-I). The New Domestic Natural Gas Pricing Guidelines, 2014 have been notified by the Government and the prices determined under these guidelines have become applicable with effect from 1<sup>st</sup> November, 2014 and are to remain valid up to 31<sup>st</sup> March, 2015. The price notified by PPAC is US \$ 5.05/mmbtu on Gross Calorific Value (GCV) basis".
- 16. The Committee in its report had recommended that the gas price formula proposed by Rangarajan Committee should be thoroughly reviewed and reconsidered. The Committee had desired that the Gas prices of Russia could be incorporated as one of the reference price in the formula instead of Japan's LNG FOB prices. The Ministry had replied that the CCEA had in its meeting held on 18.10.2014 approved a formula which replaces the Japanese LNG prices with the price and volumes consumed by former Soviet Union Countries as was recommended by the Standing Committee on Petroleum and Natural Gas. The Committee appreciate the action taken by the Ministry to

review the gas price formula as recommended by this Committee and incorporating its suggestions in the new formula approved by CCEA. The Committee would also expect the Ministry to be sensitive in future to the price of gas so that it reflects the global natural gas prices as well as the interests of consumers of the country.

#### Recommendation No. 10

### Strategy to attract investments in Exploration and Production sector

- 17. The Committee, in their earlier Report not agreeing with the strategy of the Government on deploying the single instrument of price to achieve multiple objectives of incentivizing domestic gas exploration and production on the supply side and meeting the huge unmet demands for gas at reasonable cost and knowing that flow of private investment in exploration has actually started tapering down every year from 2009-10 had recommended a thorough review of the whole strategy of price-led investment growth to attract investment in E&P of hydrocarbons.
- 18. The Ministry of Petroleum and Natural Gas submitted the following reply in this regard:

"Based on the recommendations made in the Report submitted by the Committee of Secretaries on 16.09.2014, MOPNG submitted a note for CCEA on 17.10.2014 regarding pricing of domestically produced natural gas. CCEA considered the proposal in meeting held on 18.10.2014 and approved MOPNG proposals.

The New Domestic Natural Gas Pricing Guidelines, 2014 have been notified by the Government and the prices determined under these guidelines have become applicable with effect from 1<sup>st</sup> November, 2014 and are to remain valid up to 31<sup>st</sup> March, 2015. The price notified by PPAC is US \$ 5.05/mmbtu on Gross Calorific Value (GCV) basis.

The gas price notified on the basis of this formula provides 33% increase at the current gas price level and is expected to incentivize the investments in upstream sector and would also consider the requirements of the consuming sector".

19. The Committee had recommended that MoP&NG should do a through review of price led investment growth strategy to attract investments in exploration and production of hydrocarbon. The Committee note that the Ministry in their reply had stated that the new gas price is expected to incentivize the investments in upstream sector.

The Committee are not satisfied with the reply of the Ministry as precisely it had wanted to review the price led investment strategy for Exploration & Production activities. The Committee would like to emphasize that pricing of natural gas should not be the only component and other measures like a stable tax regime, proper regulatory framework, faster clearances, transparency in revenue sharing etc. will go a long way to attract investment in this crucial and important sector. The Committee, therefore, would reiterate their recommendation that the Ministry should review its strategy to attract investments in Exploration & Production sector.

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#### CHAPTER-II

### RECOMMENDATIONS/OBSERVATIONS THAT HAVE BEEN ACCEPTED BY THE GOVERNMENT

### **Recommendation No.3**

### Allocation of gas to various sectors

The Committee note that allocation of natural gas is to be made to various consuming sectors as per the priority order decided by EGoM. As per this priority order, fertilizer industry comes at first place followed by LPG plants at the second and power plants at third place. The city gas distribution network rank fourth in priority.

The Committee, however note that due to less supply, allocation to the sectors have been much below the demand. In case of power sector, the allocation has been only 42.53 mmscmd against demand of 135 mmscmd in 2012-13 which is projected to go up to 207 mmscmd in 2016-17. However, large investments have been made in gas based power plants which has become infructous due to non-availability of gas. The power plants have the option of using imported LNG or coal in place of natural gas. As the cost of imported LNG is high, its use is uneconomical. As regards the usage of coal, the plants which have been designed for using natural gas have to make extra investments for shifting to coal as fuel. The Committee, therefore, recommend the Government to indicate the clear picture regarding the availability of gas for power sector in the next 5 to 10 years so that before making the investments in gas based power plant, the gas availability is factored in by the companies.

The Committee note that during 2012-13, power and fertilizer sectors cumulatively received 61.6% of natural gas whereas CGD sector received only 11.6% of the total available gas. Besides being an efficient environment friendly fuel, natural gas presently used in PNG and CNG does not also contain any subsidy element in its cost structure. Even a small quantity of natural gas allocation can cater to a large number of customers in the CGD network. The Committee seriously feel that in order to benefit a wider section of society, expansion of PNG/CNG network will be the way forward as this will also save the subsidy burden of the Government on the use of LPG and diesel. Hence, the Committee recommend that the CGD networks must be allocated an increased quota of gas due to a slew of benefits that could be achieved by the use of natural gas over the other conventional fuels.

The Committee would also like to point out that requirement of natural gas varies from time to time and hence the allocation policy of Government needs to be dynamic and responsive towards the societal needs and changing economy. Therefore, the Committee desire that the allocation policy should be reviewed to reflect the changing demand supply scenario of the various sectors and the direction in which the Government wants to move forward.

### REPLY OF THE GOVERNMENT

At present, the projection of production of domestic gas till 2016-17 is available with the Ministry. The data with regard to projected production is shared

with the Ministry of Power. The existing policy of the Ministry regarding allocation of domestic gas is available in public domain. Based on this information, the industries in various sectors, including that of power, may take appropriate decision regarding investment.

Ministry of Petroleum and Natural Gas, vide order dated 14.11.2013, has issued guidelines for allocation/supply of domestic natural gas to CGD entities for CNG (transport) and PNG (domestic) segment. In the guidelines dated 14.11.2013, Central Government has increased the total amount of domestic gas supply to CNG (transport) and PNG (domestic) segment from 5.75mmscmd in 2012-13 to 6.4mmscmd.

Thereafter in order to comply with the directions of Supreme Court in W.P. No. 13029/1985 ordered in April, 2002, revised guidelines dated 3.2.2014 were issued wherein the allocation to CGD entities for CNG (transport) and PNG (domestic) was increased to 8.32 mmscmd in order to meet the 100% requirement of CGD entities

In the latest guidelines dated 20.8.2014, GAIL has been directed to review the allocations every six months. Further, GAIL has also been authorised to supply 10% over and above the allocation to CGD entities for CNG (transport) and PNG (domestic) segments to meet the fluctuation in demand of CGD sector (CNG (transport) and PNG (domestic). GAIL was further informed that the guidelines will be applicable till divertible gas from non-priority sector is available with GAIL.

Further, in the above guidelines, Government of India has directed to supply the domestic gas in uniform proportion and at uniform base price to CGD entities for purpose of CNG (transport) and PNG (domestic). This scheme ensures uniformity in supply of domestic gas across all CGDs for CNG (transport) and PNG (domestic) without discriminating amongst CGD entities, subject to operational imperatives.

The domestic natural gas allocation policy has evolved over a period of time and is reviewed from time to time to ensure proper prioritization amongst various sectors.

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#### Recommendation No. 9

### Gas Price formula by Rangarajan Committee

The Committee note that the Rangarajan Committee appointed to review Production Sharing Contract (PSC) entered between contractors and Government under NELP regime has devised a new formula regarding the price of natural gas produced. In this regard, its report has stated that, "...the producers in India get at least the average price of what producers elsewhere are getting." The proposed formula is a simple average of two methodologies. In the first method, it takes the price of imports of LNG into India by different suppliers while in the second method, the weighted average of prices of natural gas prevailing at Henry Hub (HH) in USA,

National Balancing Point (NBP) in London and netback import price at the wellhead of suppliers into Japan in the preceding quarters is considered.

The Committee has noted that during the year 2012, the natural gas prices in these three selected hubs were around US \$ 2.5 to 3.5 per mmbtu in HH (USA), US \$ 8 to 10 at NBP and \$ 14 to 16 at Japan respectively. However, it is to be observed that the benefit of lower gas price at HH has been largely diluted by the inclusion of Japan's LNG FOB prices which includes 60 % royalty component linkage to JCC and host of other factors.

The note prepared by Ministry of Finance for EGoM on the Rangarajan Committee formula argues that there is no logic in inclusion therein of the consumption by Japan which is having very high import LNG price and that nowhere in the world, wellhead prices of natural gas has been linked to spot LNG contract basis. The Committee find merit in this view of the Ministry of Finance.

The Committee further observe that Russia, being the second largest among the gas producing and consuming countries, exporting 40 to 50 percent of its gas to Europe at a price of about \$ 8.77 per mmbtu, could be a valuable and better indicator of gas price. The Committee desire that Russian prices could be incorporated as one of the reference price in the pricing formula.

The Committee would also like to point out the glaring omission of factoring of domestic cost of production of natural gas by NOCs namely ONGC and OIL which was pegged at \$ 3.63 and \$ 3.21 respectively during the year 2012-13. Similarly the cost of production for RIL in 2012-13 stood at US \$ 2.48 per MMBTU from KG-D6 field.

The Committee would further like to highlight that the price of domestic natural gas need not be dollar denominated due to huge volatility in dollar vis-à-vis Rupee which often leads to gains to operators for no reasons and adversely impact the Government financials. As the present price of \$ 4.2 / MMBTU at an exchange rate of Rupees 45/-, works out to be Rupees 189 / MMBTU and as against Rs. 60 / USD, equals to Rs. 252 / MMBTU which is 30 % windfall gain accrued due to rupee devaluation from Rs 45 to 60 against the US dollar.

The Committee taking into consideration all the factors analyzed above would like to recommend that the Rangarajan Committee formula for arriving at the natural gas price should be thoroughly reviewed and reconsidered. The Committee recommends factoring domestic cost of production of gas for arriving at the price, and fixation of price of gas in rupee terms in PSC under NELP regime.

### **REPLY OF THE GOVERNMENT**

1. Government considered the gas price issue in CCEA meeting held on 25<sup>th</sup> June, 2014 and noted that the whole issue of gas pricing would need comprehensive re-examination. Accordingly, it was directed that the Domestic Natural Gas Pricing Guidelines, 2014 notified by the previous government on 10<sup>th</sup> January, 2014 be kept in abeyance up to 30.09.2014 and till that time, the domestically produced gas would continue to be priced at the rate prevailing on 31.03.2014.

- 2. Further, in pursuance of the CCEA decision on 25.06.2014, MOPNG constituted a Committee consisting of the Secretary (Power), Secretary (Expenditure) and Secretary (Fertilizers) with Additional Secretary (MOPNG) as Member Secretary to carry out re-examination of the issue of gas pricing. The Committee submitted its report on 16.09.2014.
- 3. The Government further considered the gas price issue in CCEA meeting held on 24<sup>th</sup> September, 2014 and directed that the Domestic Natural Gas Pricing Guidelines, 2014 notified on 10<sup>th</sup> January, 2014 may further be kept in abeyance up to 15.11.2014 and till that time, the domestically produced gas would continue to be priced at the rate prevailing on 31.03.2014. A circular on this was issued by MOPNG dated 29<sup>th</sup> 30<sup>th</sup> September, 2014.
- 4. MOPNG submitted a note for CCEA on 17.10.2014 regarding pricing of domestically produced natural gas on basis of recommendations of the Committee. CCEA considered the proposal in meeting held on 18.10.2014 and approved MOPNG proposals. The formula approved by CCEA includes the price and volume consumed by Former Soviet Union Countries and excludes the Japanese LNG prices as was recommended by the Standing Committee (copy of guidelines enclosed as Annex-I). The New Domestic Natural Gas Pricing Guidelines, 2014 have been notified by the Government and the prices determined under these guidelines have become applicable with effect from 1<sup>st</sup> November, 2014 and are to remain valid up to 31<sup>st</sup> March, 2015. The price notified by PPAC is US \$ 5.05 / mmbtu on Gross Calorific Value (GCV) basis.

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### Comments of the Committee (please see para 16 of Chapter-I)

Annex-I

### New Domestic Natural Gas Pricing Guidelines, 2014 No.22013/27/2012-ONG D.V.

In supersession of this Ministry's Gazette notification no. 22011/3/2012-ONG.D.V dated 10.1.2014, the Government of India hereby notifies the New Domestic Natural Gas Pricing Guidelines, 2014, as hereunder:—

1. The wellhead gas price\* (P), under these guidelines would be determined as per the formula given below:-

### Where

- (i)  $V_{HH}$  = Total annual volume of natural gas consumed in USA & Mexico.
- (ii)  $V_{AC}$  = Total annual volume of natural gas consumed in Canada.

- (iii) V<sub>NBP</sub> = Total annual volume of natural gas consumed in European Union (EU) and Former Soviet Union (FSU) countries, excluding Russia.
- (iv)  $V_R = Total$  annual volume of natural gas consumed in Russia.
- (v) P<sub>HH</sub> and PNBP are the annual average of daily prices at Henry Hub
   (HH) and National Balancing Point (NBP) respectively, less the transportation and treatment charges as given in para 2.

P<sub>AC</sub> and P<sub>R</sub> are the annual average of monthly prices at Alberta Hub and Russia (as published by Federal Tariff of the Russian Government or equivalent source) respectively, less the transportation and

treatment charges as given in para 2.

(\*Well head price refers to the price of gas receivable by the producer of gas at the contract area/lease area from the buyer of gas. In case of on-land blocks, the price receivable by the contractor (producer) in the contract area will be the well head price. In case of offshore blocks, if the gas is processed and sold in the offshore contract area, the price receivable at the offshore will be the well head price. If the gas is brought to landfall point for processing and is sold at landfall point, the facilities located in the landfall point will be considered part of the contract area and the price receivable at land fall point will be the well head price).

- 2. The wellhead price for three different hubs and Russia would be determined by deducting US \$ 0.50/MMBTU towards transportation and treatment charges from each of the three Hub prices and Russian price.
- 3. The gas price, determined, under these guidelines would be applicable to all gas produced from nomination fields given to ONGC and OIL India, New Exploration and Licensing Policy (NELP) blocks, such Pre-NELP blocks where, the Production Sharing Contract, (PSC) provides for Government approval of gas prices and Coal Bed Methane (CBM) blocks except as indicated in para 4 and 5 below.
- 4. The gas price, so determined under these guidelines shall not be applicable, where prices have been fixed contractually for a certain period of time, till the end of such period. This gas price shall also not be applicable where the PSC concerned provides for a specific formula for natural gas price indexation/fixation and to such Pre-NELP PSCs which do not provide for Government approval of formula/basis for gas prices. Further, the pricing of natural gas from small/isolated fields in the nomination blocks of NOCs will continue to be governed by the extant guidelines in respect of these fields issued on 8th July, 2013.
- 5. The matter relating to cost recovery on account of shortfall in envisaged production from D1, D3 discoveries of Block KG-DWN-98/3 is under arbitration. The difference between the price, determined under these guidelines converted to NCV basis and the present price (US \$ 4.2 per million BTU) would be credited to the gas

pool account maintained by GAIL and whether the amount so collected is payable or not, to the contractors of this Blocks, would be dependent on the outcome of the award of pending arbitration and any attendant legal proceedings.

- 6. The periodicity of price determination/notification shall be half yearly. The price and volume data used for calculation of price under these guidelines shall be the trailing four quarter data with one quarter lag. The first price on the basis of aforementioned formula in these guidelines would be determined on the basis of price prevailing at Henry Hub, NBP, Alberta Canada and Russia, between 1<sup>st</sup> July, 2013 and 30<sup>th</sup> June, 2014. This price would come into effect from 1<sup>st</sup> November, 2014 and would remain valid till 31<sup>st</sup> March, 2015. Thereafter, it would be revised for the period 1<sup>st</sup> April, 2015 to 30<sup>th</sup> September, 2015 on the basis of said prices prevalent between 1<sup>st</sup> January, 2014 and 31<sup>st</sup> December, 2014, i.e., with the lag of a quarter and so on. The price determined under these guidelines would be announced in advance of the half year, for which it is applicable.
- 7. The price determined under these guidelines would be applied prospectively with effect from 1<sup>st</sup> November, 2014.
- 8. Director General of Petroleum Planning and Analysis Cell (DG PPAC) under the Ministry of Petroleum and Natural Gas shall notify the periodic revision of prices under these guidelines.
- 9. For all discoveries after the issuance of these guidelines, in Ultra Deep Water Areas, Deep Water Areas and High Pressure High Temperature (well head shut-in pressure > 690 bars, bottom hole temperature> 150 degree centigrade) areas, a premium would be given on the gas price determined as per the formula given in para 1. The premium under this para shall be determined as per prescribed procedure.
- 10. Price determined under these guidelines would be on GCV basis.
- 11. The price, determined under these guidelines would be in US \$ per MMBTU.
- 12. In the North Eastern Region (NER), the 40% subsidy would continue to be available for gas supplied by ONGC/OIL. However, as private operators are also likely to start production of gas in NER, and would be operating in the same market, this subsidy would also be available to them to incentivize exploration and production.
- 13. The price determined under these guidelines shall be applicable to all sectors uniformly.

### Recommendation No. 11

### Impact of Gas Price Revision on Power / Fertilizer Sector

The Committee note that under the allocation policy for natural gas, the top priority has been accorded to gas based fertilizer plants, followed by power plants supplying to grid. The allocation of Natural Gas to Fertilizer and Power sector during 2012-13 was 40.18 MMSCMD and 42.53 MMSCMD respectively and accounted for 29.9 % and 31.6 % of the total allocation. The Committee have been informed that

presently fertilizer sector is getting natural gas at a price of \$ 4.2 per MMBTU and increase of 1 US dollar per MMBTU will result in extra expenditure of Rupees 3155 crore per annum towards fertilizer subsidy. Similarly the Power Ministry has in its note submitted to CCEA have stated that if base price of domestic natural gas is increased beyond US \$ 5 / MMBTU, it would be unviable for power sector.

Considering the above it is clear that in the event of increase in gas prices, the Government will have to provide more money for the purpose of fertilizer subsidy. Simultaneously since power is an important input to most of the industries, increase in its cost will have a cascading impact on the economy as a whole.

In this regard, the Ministry while justifying the revision of natural gas prices have informed the Committee that the 12<sup>th</sup> Five Year Plan document has the underlying philosophy of the Government that the energy prices in the country must align with global energy prices. Hence, as the country is thriving on imported fuel, the pricing has to be linked to international prices.

The Committee while understanding the need to adopt market linked pricing of energy in the country also wish to point out that being a developing nation and having a huge population with very little surplus purchasing capacity, it would not be advisable to switch to market linked energy prices from a protected price environment.

The Committee therefore, recommend that the new formula for natural gas pricing as suggested by the Rangarajan Committee should be reviewed and reconsidered; the issue of market linked price of natural gas should be dealt and considered in due consideration of its impact on other sectors like fertilizer, power etc including their viability, resources to fund increased subsidy by the Government and related issues.

### REPLY OF THE GOVERNMENT

As recommended by the Committee, new formula for natural gas prices as suggested by the Rangarajan Committee was reviewed. The new government considered the gas price issue in CCEA meeting held on 25<sup>th</sup> June, 2014 and noted that the whole issue of gas pricing would need comprehensive re-examination. Accordingly, it was directed that the Domestic Natural Gas Pricing Guidelines, 2014 notified by the previous government on 10<sup>th</sup> January, 2014 be kept in abeyance up to 30.09.2014 and till that time, the domestically produced gas would continue to be priced at the rate prevailing on 31.03.2014.

The New Domestic Natural Gas Pricing Guidelines, 2014 have been notified by the Government and the prices determined under these guidelines have become applicable with effect from 1<sup>st</sup> November, 2014 and are to remain valid up to 31<sup>st</sup> March, 2015.

The price notified by PPAC is **US \$ 5.05 / mmbtu** on Gross Calorific Value (GCV) basis.

The estimated impacts of increase in natural gas price of one US\$ (1 US\$ =Rs. 60) are as under:

- i. **Fertilizer**: Increase in cost of production of urea by Rs. 1370/MT. For the 2013-14 production level of 23 million MT, this works out to Rs. 3151 crore per annum.
- ii. **Power**: Increase in cost of power generation from gas based power plants by Rs. 0.45/unit at 70% Plant Load Factor (PLF).
- iii. **LPG**: Increase in cost of Liquefied Petroleum Gas (LPG), [produced from natural gas having higher fractions, by Rs. 12.21 per non-subsidized gas cylinder. For subsidized gas cylinder, the subsidy would go up by this amount.
- iv. **CNG**: Increase in cost of Compressed Natural Gas (CNG) by Rs. 2.93 per kg. [Price in Delhi is Rs. 38.15/kg].
- v. **PNG**: Increase in cost of Piped Natural Gas (PNG) by at least Rs. 1.89 per Standard Cubic Meter (SCM) [Price in Delhi is Rs. 25.5/SCM upto a consumption of 36.5 SCM in two months].

The **increase in Governments revenue** for every dollar increase in gas price, at the production level of 2013-14 is estimated as follows:

i. Royalty: Rs. 597.12 crore

ii. Profit Petroleum: Rs. 106.08 crore

iii. Tax Revenue: Rs. 1965.66 crore (considering Flat Tax Rate of 33.33%)

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### **Recommendation No. 12**

### Pooling of Gas

The Committee note that natural gas is produced from different category of fields like nominated blocks, Pre-NELP blocks and NELP blocks on both onshore and offshore fields. However by and large the priority in allocation for gas produced from different fields is same.

The Committee have also noted that the price for gas varies depending upon the type of fields from which the gas has been produced. The gas produced from APM fields is priced at \$4.20/MMBTU whereas from PMT and RAVA fields it is priced at \$5.57 and \$3.5 – 6.8 respectively, whereas for KG – D6 basin it is priced at \$4.2/MMBTU.

The Committee however, are of the view that the differential pricing of gas do not provide clarity and transparency about gas pricing to consumers. The Committee desire the MoP&NG to consider pooling of the entire production and then allocate to the sectors as per the priority at a uniform price.

The Committee is also of the firm opinion that for pooling gas prices, prices of gas from different fields must be premised on the respective cost of production and this necessitate factoring of domestic cost of production for arriving at the gas price.

The Committee note that a Committee was set up under the Chairmanship of Dr. SaumitraChaudhari, Member, Planning Commission to examine the need for and to suggest a viable scheme for a pooled price for natural gas delivered to customers.

This Committee have since given the report. The various stake holders like Ministry of Fertilizer and Power have expressed reservations on the recommendations of the Committee. While appreciating the reservations expressed by the stake holders, the Committee recommend that the Ministry should try to evolve a consensus on pooling of gas, so that a uniform price policy can be put in place for natural gas in the country.

### REPLY OF THE GOVERNMENT

Ministry of Petroleum and Natural Gas, vide order dated 14.11.2013, 03.2.2014 and 20.8.2014 has issued guidelines for allocation/supply of domestic natural gas to CGD entities for CNG (transport) and PNG (domestic) segment. The new guidelines, ensures supply of domestic gas in uniform proportion and at uniform base price to all existing CGD entities for purpose of CNG (transport) and PNG (domestic) without discriminating amongst CGD entities, subject to operational imperatives.

Regarding pooling in other sector it is reiterated that the acceptability of a pooled gas price would depend on the ability of the sector, mainly power and fertilizer, to absorb the pooled price and manage a pass-through to their consumers. So long as the pooled price is acceptable to end consumers, MoP&NG has no objection for a pooled price mechanism.

Based on the recommendations made in the Report submitted by the Committee of Secretaries on 16.09.2014 and subsequent approval of CCEA, the New Domestic Natural Gas Pricing Guidelines, 2014 have been notified by the Government and the prices determined under these guidelines have become applicable with effect from 1<sup>st</sup> November, 2014.

The gas price, determined, under these guidelines would be applicable to all gas produced from nomination fields given to ONGC and OIL India, New Exploration and Licensing Policy (NELP) blocks, such Pre-NELP blocks where, the Production Sharing Contract, (PSC) provides for Government approval of gas prices and Coal Bed Methane (CBM) blocks except as indicated in para (i) and (ii) below:

The gas price, so determined under these guidelines shall not be applicable, where prices have been fixed contractually for a certain period of time, till the end of such period. This gas price shall also not be applicable where the PSC concerned provides for a specific formula for natural gas price indexation/fixation and to such Pre-NELP PSCs which do not provide for Government approval of formula/basis for gas prices. Further, the pricing of natural gas from small/isolated fields in the nomination blocks of NOCs will continue to be governed by the extant guidelines in respect of these fields issued on 8th July, 2013.

The matter relating to cost recovery on account of shortfall in envisaged production from D1, D3 discoveries of Block KGDWN98/3 is under arbitration. The difference between the price, determined under these guidelines converted to NCV basis and the present price (US \$ 4.2 per million BTU) would be credited to the gas pool account maintained by GAIL and whether the amount so collected is payable or not, to the contractors of this Blocks, would be dependent on the outcome of the award of pending arbitration and any attendant legal proceedings.

The periodicity of price determination/notification shall be half yearly. The price and volume data used for calculation of price under these guidelines shall be the trailing four quarter data with one quarter lag. The first price on the basis of aforementioned formula in these guidelines would be determined on the basis of price prevailing at Henry Hub, NBP, Alberta Canada and Russia, between 1st July, 2013 and 30th June, 2014. This price would come into effect from 1st November, 2014 and would remain valid till 31st March, 2015. Thereafter, it would be revised for the period 1st April, 2015 to 30th September, 2015 on the basis of said prices prevalent between 1st January, 2014 and 31st December, 2014, i.e., with the lag of a quarter and so on. The price determined under these guidelines would be announced in advance of the half year, for which it is applicable.

The price determined under these guidelines would be applied prospectively with effect from 1<sup>st</sup> November, 2014. Price determined under these guidelines would be on GCV basis.

Director General of Petroleum Planning and Analysis Cell (DG PPAC) under the Ministry of Petroleum and Natural Gas shall notify the periodic revision of prices under these guidelines. The price, determined under these guidelines would be in US \$ per MMBTU.

For all discoveries after the issuance of these guidelines, in Ultra Deep Water Areas, Deep Water Areas and High Pressure High Temperature (well head shut-in pressure > 690 bars, bottom hole temperature> 150 degree centigrade) areas, a premium would be given on the gas price determined as per the formula. The premium shall be determined as per prescribed procedure.

In the North Eastern Region (NER), the 40% subsidy would continue to be available for gas supplied by ONGC/OIL. However, as private operators are also likely to start production of gas in NER, and would be operating in the same market, this subsidy would also be available to them to incentivize exploration and production.

The price determined under these guidelines shall be applicable to all sectors uniformly.

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### **CHAPTER-III**

### RECOMMENDATIONS/OBSERVATIONS WHICH THE COMMITTEE DO NOT DESIRE TO PURSUE IN VIEW OF THE GOVERNMENT'S REPLIES

### **Recommendation No. 5**

### Allocation to States

The Committee note that the natural gas produced from different denominated fields like APM, Non-APM, KG D6 and PMT are allocated as per the gas utilization policy by the EGoM. As per the policy the allocation of gas is done sectorwise in the order of priority as decided by EGoM and the geographical location of any oil/gas producing asset does not influence the allocation criteria of Government. Hence, this means that even though natural gas is produced from or adjoining areas of a State, there is no guarantee of any allocation to the State whereas industries in the priority sector in any state including far off ones would get preference in allocation of gas.

The Committee observe that total gas production during 2012-13 was 40678 million cubic metres, out of which the share of private/JV in the KG D6 basin located in coastal area adjoining Andhra Pradesh was 13700 million cubic metres. This accounts for 30% of the total natural gas production of the country. However, the allocation to Andhra Pradesh is pegged at 29.02 mmscmd in 2012-13, out of a total allocation of 216.27 mmscmd which works out to less than 15%. The Committee note that only regional preference given to Andhra Pradesh is that the power plants have been allocated KG D6 gas based on 75% plant load factor whereas power plants outside Andhra Pradesh have been allocated to operate at 70% PLF. The Committee are of the opinion that this is an insignificant privilege given to Andhra Pradesh considering the quantum of gas produced in the State. Further, though the gas producing and nearby states have enough demand for gas, it is transported from East to West Coast and vice-versa thus entailing extra expenditure increasing the cost of gas.. The Committee feel that utilization of gas in nearby areas or states, could be more pragmatic and economical than transporting it to longer distances until a nation vide gas pipeline network is in place.

The Committee are of the strong view that this policy should be re-examined and the industries in the state concerned or in the neighboring regions should be given priority in matter of allocation of gas as the state in which the field is located will be very eager and interested to use the gas for its economic development. The Committee, therefore recommend MoPNG to supply atleast 50% of the gas produced to industries belonging to the state where the fields are situated.

### **REPLY OF THE GOVERNMENT**

### **Previous reply:**

Under Article 297 of the Constitution of India, Natural Gas vestswith the Union of India, and under entry 53 in Schedule VII of the Constitution, Natural Gas is the part of the Union List. The powers of allocation of domestic gas vest with Union of India. As the domestic natural gas is a scarce commodity at present, the Central Government has been following the policy of sectoral priority in allocation of domestic gas. Broadly, at present, the following order of priority is being followed in allocation of domestic gas:

- Gas based fertilizer plants
- LPG:
- Gas based power plants supplying power to distribution companies at regulated tariff;
- CGD for domestic and transport sector;

At present, there is no policy of allocating domestic gas to individual states. The natural gas reserves are available in very few states and those states are also mostly on coast. If it is decided to allocate 50% of share of domestic gas to the states where fields are situated, the industries in other states would be put to severe disadvantage, leading to regional imbalance in development of the country.

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### Recommendation No. 6

### Royalty to States on Natural Gas Production

The Committee notes that oil and natural gas is produced from the fields located in onshore, shallow water and offshore. Some of the fields for exploration and production were awarded under nomination basis and once NELP regime came into being, the fields were awarded under competitive bidding. As per Production Sharing Contract (PSC) the contractor has to pay royalty to the Central / State Government depending on the area from where the natural gas is produced. The royalty rates on natural gas production are 10 % of wellhead value for on-land and shallow water areas applicable uniformly for all regime and it is paid to respective states in which the fields are located. The royalty rates applicable for gas produced from deep water fields under NELP is 5 % of the wellhead price for first 7 years and 10 % thereafter on ex-royalty basis. However, in case of production from deep water, royalty accrues only to Central Government on the consideration that all the resources which are in the offshore areas belong to the Union of India.

The Committee feel that this policy has put the States where the gas is being produced from offshore fields to disadvantageous position as they are being deprived of royalty arising out of production of natural gas. In the case of KG D6 basin which is one of the biggest discovery of natural gas in the recent years, the royalty on the production accrues only to the Central Government and no revenue is earned by the Andhra Pradesh State Government. As the royalty payment to States where the natural resources are located and produced is substantial as seen in the case of Rajasthan where State Government is earning to the tune of Rs. 5000 crore / annum by way of royalty from Barmer fields, depriving other states of its rightful share of royalty from offshore fields is unjustified. Even though, the offshore fields lie in the coastal areas, the contractors would set up offices and source other infrastructure to carry out the work in the adjoining state to the offshore. Hence, it is reasonable for the state to expect some benefits from such economic activities being carried out adjacent to their coast will incentivize the states to extend all cooperation to carry out the exploration and production activities.

As the production of oil and natural gas is expected to increase substantially with the new discoveries from offshore fields being made, the issue relating to non-sharing of royalty from offshore areas with State Governments needs to be revisited and the State Government should also be benefited from the economic activities being carried out in their coastal region. Since the exploration and production activities are expected to increase in offshore and deep waters in the years to come, the Committee therefore recommends that MOPNG should devise a policy for sharing the royalty earned from offshore areas also with the concerned State Governments.

### REPLY OF THE GOVERNMENT

- 1. By virtue of Article 297 of the Constitution of India, Petroleum in its natural state in the Territorial Waters and the Continental Shelf of India is vested in the union of India.
- 2. The "regulation and development of oil fields and mineral oil resources; petroleum and petroleum products; other liquids and substances declared by Parliament by law to be dangerously inflammable" is included as entry 53 in the Union List of the Seventh Schedule to the Constitution of India. Accordingly, the Oilfields (Regulation and Development) Act, 1948 (ORDA) was enacted by the Parliament. The Petroleum and Natural Gas Rules, 1959 (P & NGR), framed under this Act, lay down the terms and conditions for grant of exploration licenses and mining leases in respect of petroleum and natural gas.
- 3. Section 6A of the Oilfields (Regulation and Development) Act, 1948 and Rule 14 of the PNG Rules, 1959 provide that lessee of offshore leases pay royalty to the Central Government.
- 4. Present royalty regime under NELP is brought out under the Article "Taxes, Royalties, Rentals, Duties etc" of the PSC. It is stipulated that, "Companies (Lessee) shall be required to pay royalty to the Government (Lessor) for Offshore areas at the rate of ten percent (10 %) of the wellhead value of Crude Oil and Natural Gas. In case of an on-shore area, Companies shall be required to pay to the State Government(s) (Lessor) at the rate of twelve point five zero percent (12.5 %) of the wellhead value of crude oil and ten percent (10 %) of the wellhead value of Natural Gas. In case of an Offshore area falling beyond four hundred (400) metresisobath, the rate of royalty payable by the Companies (Lessee) to the Government (Lessor) shall be at the rate of five percent (5 %) of the wellhead value of Crude Oil & Natural Gas for the first seven years from the date of commencement of Commercial Production in the Field..."
- 5. Therefore, the royalty from offshore mining lease areas accrue to the Union of India and the extant statutory provisions do not provide for sharing of offshore mining royalties with the State Governments.

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#### CHAPTER-IV

### Recommendations/Observations in respect of which replies of the Government have not been accepted by the Committee

### **Recommendation No.2**

### Gas Allocation by EGoM

The Committee note that domestic production of Natural Gas during the 12<sup>th</sup> plan was projected to be 111.54 mmscmd in the year 2012-13 and is expected to go up to 175 mmscmd by the end of the plan i.e. by 2016-17. The Committee however are surprised to note that the allocations made by EGoM for the year 2012-13 were to the tune of 238.27 mmscmd, which is more than double the projected production during the same period. This shows huge mismatch devoid of any realistic estimations on part of EGoM. Though the Committee understands that the minimal surplus allocations are unavoidable but at the same time such excess allocations is not acceptable.

Further the shortfall in the actual production which plunged to 91.36 mmscmd in 2012-13 forced the Ministry to cut back the allocations to various sectors on prorata basis. So much so, that the consistent decline in production of gas from KG-D6 basin ultimately resulted in nil gas supply from the KG-D6 basin to power sector. These developments have an adverse impact on the projects and investment plans of many sectors of the economy which expects assured gas supply on basis of allocations made by the Government. The Committee therefore recommend that the allocations should be made by adopting a more pragmatic approach, and should not be more than 10% of the projected production.

### **REPLY OF THE GOVERNMENT**

The allocation of all categories of domestic gas (APM, Non APM, Pre-NELP, NELP) put together is 242.57 MMSCMD. The allocation of KG-D6 gas by EGoM is only 93.34mmscmd out of total 242.57mmscmd. The contractors of KG-D6 had projected that production from KG-D6 will reach plateau of around 80 MMSCMD by 2012. Based on the above projection, EGoM allocated 63.171 MMSCMD of KG-D6 on firm basis and 30.165 MMSCMD of gas on fallback basis. The firm allocation of KG D-6 was less than the projected production. The total allocation of KG D-6, including fallback allocation, is only 16.67% more than the projected production.

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Comments of the Committee

(please see para 10 of Chapter-I)

### **Recommendation No. 10**

### Strategy to attract investments in Exploration and Production sector

The Committee is not sufficiently convinced on the efficacy of the strategy of the Government on deploying the single instrument of price to achieve multiple objectives of incentivizing domestic gas exploration and production on the supply side and meeting the huge unmet demands for gas at reasonable cost. Doubts have been raised in the Committee as to whether a big rise in gas price would attract additional investment from within and abroad in the field of exploration. Data supplied by the Ministry on flow of investment by private / JV companies in exploration of gas reveal that flow of private investment in exploration has actually started tapering down every year from 2009-10 onward compared to similar investments in 2007-08 and 2008-09 despite there be substantial jump in the gas price from 2009 onward and also country's gas output marked a drastic decline. The Committee, therefore, recommends a thorough review of the whole strategy of price-led investment growth.

### **REPLY OF THE GOVERNMENT**

Based on the recommendations made in the Report submitted by the Committee of Secretaries on 16.09.2014, MOPNG submitted a note for CCEA on 17.10.2014 regarding pricing of domestically produced natural gas. CCEA considered the proposal in meeting held on 18.10.2014 and approved MOPNG proposals.

The New Domestic Natural Gas Pricing Guidelines, 2014 have been notified by the Government and the prices determined under these guidelines have become applicable with effect from 1<sup>st</sup> November, 2014 and are to remain valid up to 31<sup>st</sup> March, 2015. The price notified by PPAC is US \$ 5.05 / mmbtu on Gross Calorific Value (GCV) basis.

The gas price notified on the basis of this formula provides 33% increase at the current gas price level and is expected to incentivize the investments in upstream sector and would also consider the requirements of the consuming sector.

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Comments of the Committee (please see para 19 of Chapter-I)

#### CHAPTER-V

### RECOMMENDATIONS/OBSERVATIONS IN RESPECT OF WHICH FINAL REPLIES OF THE GOVERNMENT ARE STILL AWAITED

### **Recommendation No.1**

### Demand and Supply of Natural Gas

The Committee note that Natural Gas has emerged as one of the principal source of energy in the world and accounts for 23.94% of total global energy mix. Due to its inherent advantages over other fossil fuels there is a global trend of shift in energy mix from oil to natural gas. However, in case of India, share of natural gas in total energy mix accounts only 8.7% which is even lower than the Asia Pacific share of 11.27%.

As the Government pursued the economic policy to achieve high growth, the demand for natural gas has also sharply increased in India during the past few years, and expected to escalate further. The Committee are however, constrained to note the widening gap between demand and supply of gas in the country, as during 2012-13 there was only 134 mmscmd of gas available including the imported LNG against the demand of 286 mmscmd. Thus there was huge unmet demand of 152 mmscmd. During the year 2015-16, the expected gap would be to the tune of 300 mmscmd as against the demand of 439 mmscmd the available gas supply would be 139 mmscmd only. The chunk of this growing supply deficit is expected to be met through LNG imports from different countries. However, the Committee note that present LNG terminal capacity is 53 mmscmd only unable to support the increased purchase of LNG. Though the LNG infrastructure is expected to grow to 180 mmscmd by 2016-17, it would not still be sufficient to cater to the increasing LNG import in the coming years.

The Committee are of the view that MoPNG should evolve a plan to explore all possible options to increase the production and supply of natural gas in the country. Towards this end, the Committee desire that the Ministry should increase the blocks awarded for exploration, intensify activities for exploration and production of shale gas, pursue strong diplomatic efforts to expedite construction of transnational pipelines from neighbouring regions to bring gas and try to enter into long term contract for import of LNG at cheaper cost. The Committee further desire that unconventional sources of gas like Gas Hydrates, CBM, Shale Gas should be seriously monitored for exploitation and development. Therefore, the Committee recommend that Ministry should prepare a blue print to improve the production and supply of natural gas in the country so that there is no deficit in meeting the domestic demand.

### **REPLY OF THE GOVERNMENT**

It is true that at present there is wide gap between production of domestic natural gas and demand in the country. However, this demand is price sensitive. The demand of natural gas in the country is mainly from fertilizer and power sector. Both the sectors have low affordability for imported LNG. The demand from customers in sectors other than power and fertilizer is also price sensitive. Therefore, the gap in demand and supply in the country can be met only partially by imported LNG. On one side, there is need to construct new LNG Terminals and increase the capacity of

existing ones to meet the short fall in demand from domestic sources. On the other side, one cannot overlook the fact that demand of natural gas is price sensitive and the construction of LNG Terminal is highly capital intensive. If large capacity of LNG import and regasification is created without proper study of market/demand, LNG Terminals may remain under-utilized, putting huge investments to risk.

In the year 2013-14, out of total average daily supply of about 121.13 mmscmd, the supply from domestic production was 80.02 mmscmd and from imported LNG was 41.11 mmscmd.

At present, the country has capacity to import and re-gasify 22 MMTPA (79.2 MMSCMD) of LNG. This capacity is likely to increase to 41 MMTPA (147.6 MMSCMD) by the year 2016-17. Additional LNG Terminals of capacity around 27 MMTPA are at various stages of planning.

The details of existing Re-gasified LNG (R-LNG) Terminals are as under:

Location of LNG terminal	Owner of the Terminal	2014-15 Existing Capacity	2015-16 Projected Capacity	2016 – 17 Projected Capacity
Dahej	Petronet	10	10	15
Hazira	Hazira LNG	5	5	7.5 *
Kochi	Petronet	5	5	5
Dhabol	GAIL	2	5	5
Total capacity (MMTPA)		22	25	32.5
Total capacity (MMSCMD)		79.2	90	117

<sup>\*</sup> The increase in capacity from 5 to 7.5 MMTPA will become available at the end of year 2016-17.

In addition, Regasification terminal for a capacity of 35.5 - 36.5 MMTPA in eastern and western coast of India are also being planned by different entities. The development of these projects purely depends on techno commercial feasibility.

### LNG tie-up:

Long term contracts for LNG have conditions of TAKE or PAY. As the demand of natural gas in India is price sensitive, long term contracts of LNG need to be planned on the basis of proper study of market and demand, considering the affordability of LNG.

Petronet LNG Limited (PLL) and GAIL have executed long term LNG Sale Purchase Agreements (SPAs), the details of which are as follows:

### <u>PLL</u>

• 7.5MMTPA with Rasgas, Qatar for 25 years. The supplies have started in 2004.

• 1.44MMTPA with Exxon Mobil for supplies from Gorgon Project in Australia for 15 years starting from 2015.

### **GAIL**

- 3.5 MMTPA with Sabine Pass Liquefaction LLC for supplies from Sabine Pass terminal in Louisiana, USA starting in 2018.
- 2.3 MMTPA of liquefaction capacity booking in the Cove Point LNG terminal proposed to be commissioned by Dominion Cove Point LNG LP in 2017.

In addition to long term contracts, GAIL has executed **2 short term contracts**, details of which are as follows:

- 0.8MMTPA with GNF, Spain for supplies from 2013 to 2015.
- GAIL has also contracted 2.5 MMTPA of LNG to be supplied by Gazprom Marketing and Trading Singapore (GMTS).

GSPC has contracted with British Gas for supply of 1.25 MMTPA from June 2015 and 2.5 MMTPA from June 2017.

In addition, LNG is being **imported on spot** by PLL, GAIL, Reliance Industries Limited (RIL), Gujarat State Petroleum Corporation (GSPC) etc.

### **Coal Bed Methane (CBM)**

### 1. Amendment to CBM policy

CCEA meeting held on 19.12.2013 approved the policy for Exploration & Exploitation of CBM for coal mining areas. However, the approval for para 6.1 except para 6.1 (iv) was not reflected in the minutes of CCEA meeting. Accordingly, this Ministry requested Cabinet Secretariat to revise minutes of the CCEA meeting held on 19.12.2013. In reply, Cabinet Secretariat vide O.M. dated 13.2.2014 has indicated to bring a fresh proposal for consideration of the CCEA note for a change decision, if required. The Cabinet Note is under preparation by MoP&NG. In view of recent judgment passed by Supreme Court in Coal Blocks case, certain issues are being re-examined and note is under submission to Hon'ble Minister, P&NG.

In pursuance of CBM policy, till date 4 rounds of CBM blocks have been launched in which 33 of blocks were awarded. 30 were awarded through international Competitive Bidding while 2 were given on nomination basis and 1 CBM block was awarded through Foreign Investment Promotion Board (FIPB) route. Out of these 33 blocks, 8 blocks are in the development phase, 5 blocks are in the Exploration phase, 16 blocks are relinquished/under relinquishment and there are 4 blocks which are yet to be effective for want of PEL/PEL deed by the State Government.

### 2. <u>Ten CBM blocks identified for exploration under Uniform Licensing</u> Policy in 10<sup>th</sup> round of NELP

The Ministry of Petroleum & Natural Gas is proposing to launch tenth bid round of NELP (NELP-X) shortly, wherein blocks shall be offered for Exploration and Exploitation of conventional as well as unconventional hydrocarbon resources under

Uniform Licensing Policy. Ten CBM rich blocks (6 in Gujarat, 2 in Madhya Pradesh and 2 in Maharashtra) have been identified primarily for exploration and exploitation of CBM.

### TRANS-NATIONAL PIPELINE PROJECTS

### Turkmenistan-Afghanistan-Pakistan-India (TAPI)

The Government is pursuing the Turkmenistan-Afghanistan-Pakistan-India (TAPI) transnational Gas Pipeline Project.

On 11<sup>th</sup> December, 2010 the four countries involved in the TAPI Gas pipeline project, signed an Inter-Governmental Agreement along with a Gas Pipeline Framework Agreement in Ashgabat, Turkmenistan. To accelerate the project, parties have formed a Minister level Steering Committee and Technical Working Group (TWG).

To settle various issues related to the Gas Sale Purchase Agreement (GSPA), bilateral and multilateral meetings have been held amongst the four countries and their gas companies participating in the Turkmenistan-Afghanistan-Pakistan-India (TAPI) pipeline project. Regarding security & safety of the pipeline, suitable provisions have been made in the Inter-Governmental Agreement (IGA) and Gas Pipeline Framework Agreement (GPFA) signed by the Governments of Turkmenistan, Afghanistan, Pakistan and India in December 2010. On 23<sup>rd</sup> May, 2012 GAIL (India) Ltd. and Pakistan's Inter State Gas Systems signed their respective Gas Sales Purchase Agreements (GSPA) with Turkmenistan's state gas company Turkmen Gaz which envisage Turkmen gas being supplied to India and Pakistan via Afghanistan in 2018. Turkmenistan and Afghanistan have also signed anMoU for cooperation in the gas sector, leaving the signing of a bilateral GSPA till negotiations on gas price is concluded.

ADB has been appointed as the Transaction Advisor consequent to the signing of Transaction Advisory Services Agreement (TASA) between the 4 entities (3 buyers & the Seller) and ADB on 19<sup>th</sup> November, 2013. The major scope of work of TA includes (i) Formation of TAPI Limited and (ii) Selection of the Consortium Leader.

During PETROTECH 2014 (January 12-15, 2014), the Turkmen side has indicated that the shortlist of prospective Consortium Leaders will be provided during the first quarter of 2014.

The Turkmen Party provided a shortlist which contained only one company viz. M/s TOTAL of France, which has expressed its interest in becoming the Consortium Leader for TAPI Limited. In addition, the Turkmen Party also informed that the three international companies working in offshore E&P blocks in Turkmenistan may also be interested in becoming the consortium members in TAPI Limited. Accordingly, the SC advised the TA to carry out discussions with TOTAL as well as with the other three companies. The SC has asked the TA and Turkmen Party to present the status of discussions on this subject in November 2014.

During a recent meeting held among the TA and the 4 TAPI entities from 27<sup>th</sup> to 29<sup>th</sup> August, 2014 at Dubai, the TA has informed that a detailed presentation had been made earlier to the Turkmenistan Government highlighting the principles on which Technical Service Contracts (based on the Iraqi Service Contract model) may be used to provide sufficient incentives for investment by a potential Consortium Leader (particularly with respect to booking reserves). The Turkmenistan

Government indicated these principles were acceptable, and authorized the Transaction Advisor to convey them to TOTAL.

In parallel, the TA is undertaking actions for preparation of the Information Memorandum for issuing to the shortlist of potential leaders.

The Steering Committee had desired that the Consortium Leader should be selected by September 2015 and the Consortium Agreement be signed by March 2016. However, these timelines are contingent upon the outcome of the November 2014 status update.

During the 25<sup>th</sup> TWG meeting held in Dubai on 26-27 Feb, 2014, an agreement has been reached on the payment modalities for the transit fee payable by GAIL to the Governments of Afghanistan and Pakistan. The indexation formula is yet to be agreed.

### Shale Gas

The Government has issued "Policy Guidelines for Exploration and Exploitation of Shale Gas and Oil by National Oil Companies under Nomination regime" on 14<sup>th</sup> October, 2013. Under this Policy, the right to exploration and exploitation of Shale Gas & Oil will lie with the NOCs holding Petroleum Exploration License (PEL)/Petroleum Mining Lease (PML) granted under the nomination regime. A Phase II policy for grant of exploration and exploitation of shale gas and oil in the pre-NELP, NELP & CBM area is presently under consideration.

ONGC has recently commenced drilling of one well (Jambusar # 55) in Gujarat for assessment of shale gas/shale oil potential of Cambay Shale. Currently, there is no commercial production of shale gas in the country.

Under the first phase of assessment of shale gas and oil, exploration and exploitation, at present, 56 PEL/PML blocks (ONGC 50, and OIL-6) have been identified by NOCs. These blocks are located in the states of Assam (7 blocks), Arunachal Pradesh (1 Block), Gujarat (28 blocks), Rajasthan (1 Block), Andhra Pradesh (10 blocks) and Tamil Nadu (9 blocks). ONGC has drilled one well where coring has been completed. In addition, ONGC has collected cores from another 7 wells.

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Comments of the Committee (please see para 7 of Chapter-I)

### Recommendation No. 4

### Production of Natural Gas from KG - D6 Basin

The Committee notes that KG-D6 basin is one of the successful discoveries in the NELP regime which gave hope to the country in its quest for exploration of hydrocarbon resources. The Committee notes that the planned production as per the approved Field Development Plan (FDP), which was 33.83 MMSCMD in 2009-10 was to go up to 86.73 MMSCMD in 2012-13. However, the production from the KG – D6 basin started declining as the actual production was 55.89 in 2010-11 to 26.18 MMSCMD in 2012-13.

The Committee find that one of the reasons stated by the Ministry for the declining production was due to non-drilling of required number of gas producer wells by the contractor in line with Addendum to Initial Development Plan (AIDP). Whereas according to the contractor, the decline has been due to substantial variance in reservoir behavior and higher pressure decline than envisaged. The Committee have further been informed that the contractor has been advised certain corrective measures to increase natural gas production in KG-D6 block. However, the contractor has failed to adhere to the corrective measures.

The Committee also observe that DGH had commissioned a study by an expert on the decline in production and the expert has concluded that reserves as estimated earlier, which is around 10 tcf are still available and remedial measures will help the production to go up. The expert has also observed that the shortfall in gas production is due to non-drilling of adequate number of wells as per ADP (Approved Development Plan) and delays in commissioning additional producers would trigger water drive in the reservoir and consequent reduction of the ultimate recovery as a result of water encroachment as well as permanent loss of some of the gas reserves. Based on the aforesaid report the cost disallowance amounting to US \$ 1.005 billion has been imposed upon the contractor which the contractor has taken for arbitration.

The Committee is worried and express unhappiness at the whole series of events. The KG-D6 basin was success story of NELP regime which invited private companies and MNCs in the exploration and production regime which until then was a NOCs forte. However, the contractor has not adhered to the measures suggested by the upstream regulator DGH to drill wells to increase natural gas production. Also coincidentally, the demand for increase in the price of natural gas by the contractor over and above the discovered price by arms length mechanism as provided in the PSC has also brought question mark regarding the interest of the contractor to abide by the sanctity and stability of the PSC.

The Committee has taken serious note of the statement made by the Ministry that the contractor (RIL) failed to adhere to the approved field development plan both in terms of gas production as well as drilling and putting on stream the required number of wells, even after repeated reminder. The Committee also note that the action taken by the Ministry in respect of cost disallowance of US \$ 1.005 billion to contractor based on arbitration procedure. In view of the above, the Committee is of the opinion that non-adherence by the contractor to approved field development plan should be construed as 'default' and not just failure and remedial action by the Ministry in this regard must be premised on 'default' by the contractor and not on 'failure'.

The Committee would like to point out that Supreme Court has observed that natural resources are national assets and are to be utilized for larger good of the people. Therefore, the Committee would recommend to MOPNG to explore all possible options and take corrective measures to increase the natural gas production from KG-D6 basin, as observed in the study commissioned by DGH.

### REPLY OF THE GOVERNMENT

- 1. The reserve estimates of D1 / D3 gas discoveries were revised and Addendum to the Initial Development Plan (AIDP) was approved in 2006 by the Management Committee (MC) of the block, based on the contractor's geological assessment. The reserve estimate of about 10 tcf for these discoveries envisaged in AIDP was evaluated by reputed international consultants engaged by the contractor and cross verified by DGH through another expert. Further, after production started declining, DGH engaged an expert in 2011 to review performance of D1 / D3 discoveries. The expert has concluded in the Report that, "the Gas-Initial-In-Place (GIIP) in D1 / D3 field is adequate to achieve the planned gas rates as per approved development plan. There is no geological or reservoir constraint to achieve the recommended gas production rate as per AIDP".
- 2. The contractor's submissions regarding complexity of the reservoir and geological surprise leading to downward revision of in-place gas volumes and ultimate recoverable reserves has not been agreed by DGH. The GOI members on MC in the MC meeting held on 1<sup>st</sup> October, 2013 rejected downward revision based on data, its interpretation and analysis, it has been stated in the MC Resolution forwarded to the contractor that DGH / GOI is unable to agree with findings of the contractor due to following reasons:
  - (i) 50 wells were planned to be drilled in 2P area of D1 / D3 with 34 wells being in the main channel A & B and 16 wells outside the main channel area. The development well drilling efforts are not in proportion to the reserves estimated and as envisaged in AIDP
  - (ii) The Operator has ruled out presence of gas sands in inter-channel area mainly on the basis of results from SB-1 well which has been drilled just outside main channel area. The operator is of the opinion that area outside the main channel is predominantly mud rich. However, DGH is of the view that areas outside main channels also contain significant reservoir sands which require physical inputs, as envisaged in AIDP.
  - (iii) The areas outside the main channels require drilling of new wells.
  - (iv) The reservoir pressure has declined more than that envisaged in FDP due to production in field at a gas rate higher than the rate envisaged in production profile approved by MC under AIDP. This resulted in preferential water encroachment also. Hence, the in-place gas volume in main Channel may not be less than that envisaged in AIDP.
- 3. Since the Government nominees on the Management Committee have rejected the Revised Field Development Plan (RFDP) proposal for the reasons given by DGH in MCR, the production targets and estimates of gas reserves agreed under AIDP are still valid under the PSC. The contractor has not completed commitments made under the PSC despite several earlier reminders by DGH. Hence, GOI determined that the contractor is in breach of PSC and issued orders disallowing cost recovery on 2/5/2012 and subsequently on 14/11/2013 and 10/07/2014.
- 4. Thus, it is clear that in respect of D1-D3 discoveries of KG-DWN-98/3,DGH / MOPNG has not accepted the contractor's contention that the decline in gas

production is not due to default in implementation of AIDP, but due to downgrading of reserves. The matter is under arbitration subsequent to the cost disallowance order based on shortfall in the cumulative production up to 31.03.2012. Cost recovery to the extent of US \$ 1.005 billion was denied to the contractor of the above block vide GOI order dated 2<sup>nd</sup> May, 2012. DGH further informed that based on the same principles, the amount of cost recovery to be denied to the contractor up to 31.03.2013 will be US \$ 1.797 billion. MOPNG issued order disallowing cost recovery for 2012-13 in November, 2013. Using the same methodology, the US \$ 2.376 billion has been disallowed up to FY 2013-14. MoPNG issued order disallowing cost recovery for 2013-14 in July, 2014. The matter is under arbitration.

- 5. Given the gas potential of KG-DW-98/3 Block, the requirement of energy security for the country demands that all legally permissible steps be taken within the framework of the PSC to monetize gas resources as quickly as possible. Termination of the contract could be considered as a last resort when all other measures to remedy the situation have failed. Reference is also invited to the Article 30.6 of the PSC which reads as, "If the circumstance or circumstances that would otherwise result in termination are the subject matter of proceedings under Article 33, then termination shall not take place so long as such proceedings continue and thereafter may only take place when and if consistent with the arbitral award".
- 6. Since arbitration proceedings have been initiated and the matter is before the Supreme Court for appointment of presiding arbitrator, appropriate action will be taken based on outcome of the arbitration proceedings under Article 33.

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### **Recommendation No. 7**

### Supply of APM Gas to TTZ Area

The Committee note that in pursuance of Supreme Court order, MoPNG has been supplying natural gas to the industrial units most of which are glass – bottle manufacturing units in Taj Trapezium Area, in Ferozabad near Agra since 1996. The allocation of gas for this purpose now stands at 1.7 mmscmd. The price of the natural gas charged to these units are APM price which has remain unchanged since 2005.

The Committee are given to understand that the number of factories in this area has grown manifold taking advantage of the low priced APM natural gas. The Committee feel that this has defeated the purpose of the Supreme Court order which wanted that Taj Area should be preserved from environmental pollution from the factories in the nearby area. The Committee also wish to observe that glass units in other town/cities in the country which buy gas at market related prices are at a distinct competitive disadvantages compared to the units located in TTZ Area.

In view of the above, the Committee desire the MoPNG to implement the Supreme Court order and the objectives set out in it in the right spirit without creating any imbalances in competitive factors for other similar industrial units in the country. Therefore, the Committee recommend that the MoPNG to initiate concrete corrective

action and supply natural gas at competitive market price to these units so as to check the Mushrooming of industries in TTZ area which are taking unfair advantage of low gas price.

### REPLY OF THE GOVERNMENT

Gas supplies to industrial units in TTZ were made as per Supreme Court orders dated 30.12.1996 and 05.04.2002 directing (i) 292 industries of Agra to use Natural Gas in lieu of conventional fuel (ii) first priority to CNG and thereafter if any gas is available the same may be allocated to industries with preference being shown to PSU and power projects. Accordingly, Govt. of India had allocated 0.6 MMSCMD of APM Gas on 02.05.1995 and additional 0.5 MMSCMD on 05.06.2000. APM allocation of 1.1 mmscmd was made in favour of GAIL, which in turn made allocations in favour of individual customers. On 29.09.2011 the allocation of GAIL was transferred to GAIL Gas Ltd. a 100% subsidiary of GAIL. Subsequently, new industrial units came into operation in Agra & Firozabad and they also required natural gas for their operation. Since, no additional APM gas was available for allocation these units had to depend on high priced imported R-LNG & at such high fuel cost the operation was unsustainable in longer run. In view of above, GAIL Gas requested MoPNG to allow them to pool APM gas with R-LNG & charge pooled price from all the customer which will provide a level playing field to all customers in TTZ. Accordingly, MoPNG allowed GAIL Gas to pool APM gas with R-LNG w.e.f. 02.06.2012. At present, the customers in TTZ area are receiving gas under uniform price mechanism, where the price is higher than domestic gas but lower than RLNG.

The Ministry is examining the possibility of implementing recommendations of the committee in this regard.

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### **Recommendation No. 8**

### Rangarajan Committee on PSC

The Committee note that the Production Sharing Contracts are entered between contractors and Government on a host of issues under the NELP. Government appointed the Rangarajan Committee to review Production Sharing Contract (PSC). Some of the important recommendations of the Committee include a new revenue sharing model, pricing formula for natural gas and tax holidays. The revenue sharing model has been proposed to overcome the present system of pre tax investment model and cost recovery mechanism.

The Committee desire that since Rangarajan Committee recommendations have wide ramifications on the investments in the E & P sector, it needs to be examined in greater detail before any decision is taken on the implementation as the E & P activities under NELP has not achieved the desired participation from adequate number of both domestic and international companies.

### REPLY OF THE GOVERNMENT

The Uniform Licensing Policy (ULP) and revenue sharing model is under consideration of the Government. A Model Revenue Sharing Contract (MRSC) was posted on website of the Ministry to seek comments from all the stakeholders. The comments have been received and are being analyzed by the Ministry.

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Comments of the Committee (please see para 13 of Chapter-I)

New Delhi; 23 April, 2015 3 Vaisakha,1937 (Saka) PRALHAD JOSHI, Chairman, Standing Committee on Petroleum & Natural Gas.

## MINUTES STANDING COMMITTEE ON PETROLEUM & NATURAL GAS (2014-15)

### TENTH SITTING (27.01.2015)

The Committee sat on Tuesday, the 27 January, 2015 from 1130 hrs. to 1245 hrs. in Room No. '53', Parliament House, New Delhi.

### **PRESENT**

Shri Pralhad Joshi - Chairperson

### MEMBERS LOK SABHA

2.	Dr. Ravindra Babu Pandula
3.	Shri P.K. Biju
4.	Smt. Rama Devi
5.	Shri Elumalai V.
6.	Shri Naranbhai Kachhadiya
7.	Dr. Thokchom Meinya
8.	Smt. Pratima Mondal
9.	Shri Ashok Mahadeorao Nete
10.	Smt. Jayshreeben Patel
11.	Smt. Anupriya Patel
12.	Shri Arvind Sawant
13.	Shri Raju Shetty
14.	Dr. Bhola Singh
15.	Shri Ravneet Singh
16.	Shri Rajesh Verma
17.	Shri Laxmi Narayan Yadav
	RAJYA SABHA
18.	Shri Bhubaneshwar Kalita
19.	Smt. Gundu Sudharani
20.	Prof. Ram Gopal Yadav

### **SECRETARIAT**

1. Shri H. Ram Prakash - Additional Director

- 2. At the outset, Hon'ble Chairman welcomed the Members to the sitting of the Committee. The Committee then considered the draft Action Taken Report on the recommendations contained in the 19<sup>th</sup> Report (15<sup>th</sup> Lok Sabha) of the Committee on the subject 'Allocation and Pricing of Gas'.
- 3. The Committee, therefore, adopted the above Report and authorized the Chairman to finalise and present/lay the Report in both the Houses of Parliament.

The Committee then adjourned.

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### **Annexure II**

### (Vide Para 4 of the Introduction)

ANALYSIS OF THE ACTION TAKEN BY THE GOVERNMENT ON THE RECOMMENDATIONS CONTAINED IN THE NINETEENTH REPORT (FIFTEENTH LOK SABHA) OF THE STANDING COMMITTEE ON PETROLEUM AND NATURAL GAS (2013-14) ON 'ALLOCATION AND PRICING OF GAS'

1	Total No. of Recommendations	12
II	Recommendations/Observations which have been accepted by the Government (Vide Recommendations at SI. Nos. 3,9,11 and 12)	4
	Percentage to Total	33.33%
III	Recommendations/Observations which the Committee do not desire to pursue in view of Government's Reply (Vide Recommendations at SI. No. 5 and 6)	2
	Percentage of Total	16.66%
IV	Recommendations/Observations in respect of which replies of the Government have not been accepted by the Committee (Vide Recommendations at SI. Nos. 2 and 10)	2
	Percentage of Total	16.66%
V	Recommendations/Observations in respect of which final replies of the Government are still awaited (Vide Recommendations at SI. Nos. 1,4,7 and 8)	4
	Percentage of Total	33.33%