

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

SIXTEENTH LOK SABHA

MINISTRY OF PETROLEUM & NATURAL GAS

DEMANDS FOR GRANTS (2015-16)

FOURTH REPORT



LOK SABHA SECRETARIAT NEW DELHI

April, 2015/ Vaisakha, 1937 (Saka)

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(SIXTEENTH LOK SABHA)

MINISTRY OF PETROLEUM & NATURAL GAS

DEMANDS FOR GRANTS (2015-16)

Presented to Lok Sabha on 27.04.2015

Laid in Rajya Sabha on 28.04.2015



LOK SABHA SECRETARIAT NEW DELHI

April, 2015/ Vaisakha, 1937 (Saka)

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(iii)

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

SI. No.

Name of Members

LOK SABHA

Shri Pralhad Joshi - Chairman

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

RAJYA SABHA

- 22 Shri Mani Shankar Aiyar
- 23 Shri Ishwarlal Shankarlal Jain
- 24 Shri Prabhat Jha
- 25 Shri Bhubaneshwar Kalita

- (iv)
- 26 Shri Mansukh L. Mandaviya
- 27 Shri Ahmed Patel
- 28 Shrimati Gundu Sudharani
- 29 Prof. Ram Gopal Yadav
- 30 Shri Sharad Yadav
- *31 Shri Praful Patel

SECRETARIAT

- 1. Shri A.K.Singh Joint Secretary
- 2. Shri S.C.Chaudhary Director
- 3. Shri H. Ram Prakash Additional Director

*Nominated to the Committee w.e.f. 2nd March, 2015.

#Nominated to the Committee w.e.f. 25th March, 2015.

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 Fourth Report on 'Demands for Grants (2015-16) of the Ministry of Petroleum & Natural Gas'.

2. The Committee examined the Demands for Grants (2015-16) pertaining to the Ministry of Petroleum & Natural Gas which were laid on the Table of the House on 20th March, 2015.

3. The Committee took evidence of the representatives of the Ministry of Petroleum & Natural Gas at their sitting held on 9th April, 2015. The Committee considered and adopted the Report at their sitting held on 23rd April, 2015.

4. The Committee wish to express their thanks to the representatives of the Ministry of Petroleum & Natural Gas for furnishing the material and information in connection with the examination of Demands for Grants (2015-16) of the Ministry and for giving evidence before the Committee.

5. The Committee also place on record their appreciation for the valuable assistance rendered to them by the officials of the Lok Sabha Secretariat attached to the Committee.

New Delhi; <u>23 April, 2015</u> 3 Vaisakha,1937 (Saka) PRALHAD JOSHI, Chairman, Standing Committee on Petroleum and Natural Gas.

REPORT CHAPTER-I

INTRODUCTION

The inadequacy of domestic energy resources is one of the major concerns for a developing nation like ours, which is aiming high and striving to achieve higher economic growth rate. The sufficiency of energy resources churns the wheel of growth and development and vice versa is also equally true. To keep this process dynamic ensuring energy security is a pre-requisite. Hydrocarbon sector plays a vital role in the development and growth of a nation. In the coming years energy requirement is bound to increase and hence calls for an intelligent planning and efficient implementation thereof by oil companies. The government has taken slew of initiatives to firm up energy security of India and continuously working towards this end. For the development of hydrocarbon sector "Hydrocarbon vision - 2025" has been prepared by the Ministry entailing various policy initiative and framework to give direction to hydrocarbon sector. The vision statement as envisaged in the Hydrocarbon Vision 2025 includes the following:

- (a) To assure energy security by achieving self-reliance not only through increased indigenous production but also through acquisition of equity oil and gas abroad.
- (b) To enhance the quality of life by progressively improving the product standards to ensure a cleaner and greener India.
- (c) To develop the domestic hydrocarbon sector as a globally competitive industry which could be benchmarked against the best in the world through upgradation and capacity building in all facets of the industry.
- (d) To strive towards a free market, promote healthy competition among players and improve the customer service.
- (e) To ensure oil security for the country keeping in view the strategic and defence considerations.

1.2 The MoPNG under its mandate has been entrusted with the responsibility of developing hydrocarbon sector in India. In this endeavor a team of 9 oil PSUs, 8 subsidiaries and other companies, 8 organisations, 17 PSU Refineries and certain Private and JV companies are walking in unison to achieve its mandate.

1.3 When asked about the action taken by the Government on the objectives set under Hydrocarbon Vision 2025, the following status was submitted by the Ministry:-

"Objectives as per Hydrocarbon Vision 2015

- To undertake a total appraisal of Indian sedimentary basins for tapping the hydrocarbon potential and to optimize production of crude oil and natural gas in the most efficient manner so as to have Reserve Replacement Ratio of more than one.
- Action taken
 - (i) Entire unlicensed sedimentary area is to be surveyed, so that 100 per cent exploration coverage may be achieved during the 12th Plan period.
 - (ii) Government has approved non-exclusive multi-client policy for acquiring geo-scientific data through private participation.
 - (iii) DGH has made plan to acquire survey through public funding in order to acquire geo-scientific data in unexplored sedimentary basins.
 - (iv) Currently, reserve replacement ratio in the country is more than one.
- To keep pace with technological advancement and application and be at the technological forefront in the global exploration and production industry.
- Action taken
 - (i) In exploration, 100% FDI is allowed, therefore, foreign companies have the option to participate in E&P sector in the country.
 - (ii) E&P companies hire the latest technologies on need basis as it is available on competitive basis internationally.
- To achieve as near as zero impact, as possible, on environment.
- Action taken

E&P companies are carrying out exploration and production activities as per rules and regulations applicable for environment protection."

(A) ANALYSIS OF DEMANDS FOR GRANTS (2015-16)

Highlights of Budget 2015-16

- (a) MoPNG budget is primarily a non plan budget that contributes towards 99.83% share of total budget.
- (b) The subsidies on LPG and Kerosene accounts for 99.75% of non-plan budget.
- (c) The actuals for 2014-15 is in line with RE 2014-15, except for Rs. 2400 crore, for strategic crude oil revenue.
- (d) The BE 2015-16 is lower than BE 2014-15 by 53% mainly due to diesel price deregulation.
- (e) In BE 2015-16 subsidy on LPG and subsidy on Kerosene have been put under separate heads.

1.4 The Plan & Non Plan budgetary allocations made in respect of the Ministry of Petroleum and Natural Gas for the fiscal year 2015-16 are as under:-

Plan	Non-Plan	Total
(i) 48.00 crore for	Secretariat Economic	30125.55
RGIPT	Services – (3451) -	
(ii) 1.00 crore for	27.06	
setting up Petroleum	Petroleum –	
University in Andhra	(2802,3601 & 3602) -	
Pradesh	30075.55	
1.00 crore for	-	1.00
payment to ISPRL		
for Strategic Crude		
Oil reserve		
	Plan(i) 48.00 crore for RGIPT(ii) 1.00 crore for setting up Petroleum University in Andhra Pradesh1.00 crore for payment to ISPRL for Strategic Crude Oil reserve	PlanNon-Plan(i) 48.00 crore for RGIPTSecretariat Economic Services - (3451) - 27.06(ii) 1.00 crore for setting up Petroleum University in Andhra PradeshPetroleum - (2802,3601 & 3602) - 30075.551.00 crore for payment to ISPRL for Strategic Crude Oil reserve-

<u>Plan Outlays</u>

1.5 The Annual Plan provision of this Ministry predominantly comprises the Internal and Extra Budgetary Resources (IEBR) of Oil PSUs. The Annual Plan 2015-16 of Oil PSUs is Rs. 76565.46 crore. The projects are implemented by Oil PSUs from out of their Internal Resources and Loans. Government does not provide any Budgetary support to them. The budgetary provisions under Plan schemes for 2014-15 and 2015-16 are given below:

Budget of MoP&NG (Plan)

(in Rs. crore) SI. ΒE RE Item Actual BE 2014-15 No. 2014-15 2014-15 2015-16 1. RGIPT 42 48 1 ISPRL for Strategic crude Oil Reserve 2400 0 2. 1 1 Petroleum University in AP 3. 1 1 -2402 Total (Plan) 43 50 _

1.6 The details of Plan schemes have been discussed in the following paragraphs:

(i) <u>Rajiv Gandhi Institute of Petroleum Technology (RGIPT)</u>

1.7 The Rajiv Gandhi Institute of Petroleum Technology (RGIPT) is being set up at Jais, U.P. with the objective of creating an Institute of Excellence in the Petroleum sector to cater to the educational and training requirement in India and globally. Total estimated cost of the project would be Rs. 695.58 crore, out of which Rs. 435 crore would be on account of capital expenditure. Budgetary Support of Rs. 285 crore has been approved. The Institute has been running the academic programme from 2008, operating from a temporary campus at Rae Bareli. The acquisition process of land for

RGIPT's own campus at Jais near Rae Bareli has been delayed due to various reasons. The phase–I construction activities started in August, 2008 on the available plot of land purchased from Indian Oil Tanking Limited. Due to several hindrances, the completion of the RGIPT Campus Project at Jais could not be completed during the 11th Plan. The amount of Rs. 86 crore of budgetary support released, during XI Plan period has been fully utilized. An allocation of Rs. 48 crore as Budgetary Support has been made for 2015-16.

1.8 When the Committee enquired about the reasons for 'nil' utilization during 2014-15 for RGIPT and details of funds spent along with the sources of these funds, the Ministry furnished following status in a written reply:

"The estimated cost to set up Rajiv Gandhi Institute of Petroleum Technology at Jais (UP) was Rs. 435 Crore which was approved in 2007. The source of fund was Rs.285 crore from Government Plan outlay which was to be utilized during the 11th Five Year Plan. The balance capital expenditure of Rs.150 Crore was to be contributed by Oil Industry Development Board (OIDB).

Rs.86 crore was drawn from Plan outlay and utilized by RGIPT up to March 2014. The balance outlay of Rs.199 crore could not be availed by RGIPT within the 11th Five Year Plan owing to delay in the progress of the project. RGIPT could not complete the construction in the agreed time frame in view of the failure of the contractor to perform and leading to eventual termination of the contract in May 2013.

A new contractor has been engaged in September 2013 for carrying out the composite work for completion of the campus which is scheduled to be achieved by March, 2016. During 2014-15 RGIPT sourced Rs.88 crore from OIDB to meet the payment commitments to the new contractor.

The current progress of construction work is 86% as on March 2015. The EFC Meeting under the Chairmanship of Secretary (Expenditure) held on 24.2.2015 has approved the total RCE of Rs.538 crore and the rolling over of Rs.199 crore from 11th Plan period to the 12th Plan period".

(ii) Indian Strategic Petroleum Reserve Limited (ISPRL)

1.9 Taking into account the oil security concerns of India, the Government has decided to set up Strategic Crude Oil Storage of about 5.33 million metric tons (MMT) at three locations in the country viz. Visakhapatnam (1.33 MMT), Mangalore (1.5 MMT) and Padur (2.5 MMT). The proposed Strategic Crude Oil Storage would be in underground rock caverns. A Special purpose vehicle - Indian Strategic Petroleum Reserves Limited (ISPRL), which is a subsidiary of OIDB has been created for implementation and management of strategic storage of crude oil. Crude oil from the Reserves will be released by an empowered committee constituted by the Government,

in the event of any supply disruptions from abroad, any natural calamity or any unforeseen global event, leading to an abnormal increase in prices. The project involves capital cost of Rs. 4098.35 crore. Crude oil cost would be approximately Rs. 11725 crore (calculated at an average crude oil cost of US\$ 50/bbl and exchange rate of 1US\$= Rs. 61.75/-). A token amount of Rs. 1.00 crore has been allocated during BE 2015-16.

1.10 The Ministry of Petroleum and Natural Gas had been granted supplementary funds of Rs. 2400 crore for filling up the crude oil at Visakhapatnam cavern. When the Committee wanted to know about the reasons as to why it remained unutilized, a representative from the Ministry deposed before the Committee during evidence as under:

".....We could not utilize it as the approval had come on the last day. For next year, a token amount of Rs 50 crore has been given. If we look at the overall budget, it has come down...."

"......Firstly, the Cabinet approval came only in the afternoon of 31st of March. Then, the Head of Account could not be operated because the CAG told us that this Head of Account is wrong and it should not be on Capital Account but on the Revenue Account and we had to get it created. What we planned today is, this year we fill it up and request for the supplementary also".

1.11 In this regard, the Secretary MoP&NG during the course of evidence apprised the committee as under:

"We got permission to draw Rs 600 crore out of Rs 2,400 crore. That was the permission given on 31st of March. Rs 600 crore could not be drawn because of this problem of Head of Account. For the remaining amount, permission was not given.

The head of account requires CAG approval. We did not have a choice; we had to go there.

My submission is, Rs. 600 crore have certainly lapsed but the order for purchase of crude oil for Rs. 600 crore has been placed. The only difference would be that the OMC would pay for it in the first instance and it would be reimbursed through the supplementary Budget. So, the cargo would come and that order has already been placed for one VLCC".

1.12 In this connection, when asked about the reason for Government financing the cost of crude oil filling and not OMCs, the following reply was given by the Ministry representatives:

"This crude oil will come to the Visakhapatnam cavern and the crude will remain with ISPRL. Crude oil will not be owned by the oil companies. We have requested the oil companies like Indian Oil Corporation Limited and Hindustan Petroleum Corporation Limited to help them in procuring crude oil. The payment will be made by the Government by way of budgetary provision of funds".

1.13 Asked about the details of crude oil purchase agreements executed by the Ministry to fill in the caverns, the Ministry furnished following information:

"Indian Oil Corporation Ltd. (IOCL) and Hindustan Petroleum Corporation Ltd. (HPCL) vide MoP&NG letter dated 17th March, 2015 were advised to place the orders for 2 VLCCs each of Basrah Light Crude for their own requirement with the understanding that if the approval of Cabinet Committee on Economic Affairs (CCEA) is obtained, the load(s) can be diverted to ISPRL for filling the crude in the Vishakhapatnam rock cavern storage facility and the companies can issue fresh orders for their own use. CCEA in its meeting held on 31st March, 2015, inter-alia, decided that the entire cost for filling the crude oil in Visakhapatnam cavern would be met by the Government of India against the 12th Plan outlav of Rs. 4948 crore under the GBS Scheme of Ministry of Petroleum & Natural Gas for Indian Strategic Storage Programme for storage of crude oil by ISPRL. The remaining amount would be used for filling up the strategic caverns being constructed at Mangalore and Padur. In view of this now, Ministry of Finance, Department of Expenditure has been requested to provide Rs. 2400 crore in the first supplementary demands for grant of 2015-16 towards cost of crude for filling the Vizag cavern".

(iii) <u>Petroleum University in Andhra Pradesh</u>

1.14 It has been informed by the Ministry that in terms of the Section 93 and Schedule 13 of the Andhra Pradesh Reorganization Act-2014, the Government of India is required to take steps to establish institutions of national importance in the 12th and 13th Plan Period in the successor State of Andhra Pradesh, including one Petroleum University. In this regard, land has been identified at Subbavaran Mandal, Visakhapatanam. A letter has been sent to RGIPT to take further action for acquiring and transferring the land from Government of Andhra Pradesh to establish Andhra Petroleum University on 16.3.2014.

1.15 Asked about the activities that are proposed to be carried out in Petroleum University, Andhra Pradesh and estimated cost of the project, the Ministry gave following reply:

"In terms of the Schedule 13 of the Andhra Pradesh Reorganisation Act 2014 (Education), the Government of India will establish institutes of national importance in the 12th and 13th Plan Periods in the Successor State of Andhra Pradesh, including a Petroleum University. Government of Andhra Pradesh has identified a site measuring 150 acres at Vishakhapatnam at Subbavaran Mandal for the Petroleum University. RGIPT has approached UGC regarding setting up of new University, UGC has opined that university can be opened as a:

- a) A Central University
- b) An Institute of National Importance

For which necessary steps will have to be initiated for passing an Act in Parliament. RGIPT has submitted a DPR for Rs.855 crore to MoP&NG, but the exact fund requirement will be known only after approval of the project by the competent authority. The University is likely to offer Research, M.Tech, M.Sc., B. Tech and special programmes".

Non Plan Outlays

1.16 The non-plan Budget Estimates for 2015-16 has been kept at Rs. 30075.55 crore against Rs. 60341.22 crore in RE 2014-15. In BE 2015-16, there is no provision for payment of under recovery. Subsidy on petroleum products has been provided under new heads "Subsidy on LPG" and "Kerosene Subsidy" and Rs. 22000 crore and Rs. 8000 crore respectively have been provided. The total provision for subsidy is Rs. 30000 crore. The subsidy on LPG has three components (i) DBTL for LPG (Rs. 22140 crore), (ii) other subsidy payable including North East (NE) region (Rs. 660 crore) & (iii) Project Management Expenditure (Rs. 200 crore). Similarly, Kerosene subsidy comprise (i) DBTL for Kerosene (Rs. 1 crore token provision) and (ii) other subsidy payable including Ne region (Rs. 7999 crore). Provisions for Petroleum Regulatory Board and Society for Petroleum Laboratory have been provided.

1.17 Subsidy to Oil companies for supply of Natural Gas to North Eastern Region scheme has been devised to provide Natural Gas to consumers in North Eastern Region at subsidized rate (40% subsidy). A provision of Rs. 660.00 crore has been kept in BE 2015-16 under Non-Plan.

The non plan outlay comprises of the following items:

SI.	Item	BE	RE	Actual	BE
No.		2014-15	2014-15	2014-15	2015-16
1.	DBTL for LPG	2500	2500	2500	21140
2.	Project Management Expenditure for LPG	1	1	0	200
3.	Other Subsidy payable for LPG including	637	661	661	660
	NE region				
4.	DBTL for Kerosene	-	-	-	1
5.	Other Subsidy payable for Kerosene	-	-	-	7999
	including NE region				
6.	Subsidy on LPG & Kerosene	2930	-	-	-
7.	Compensation for under recoveries	57335.95	57085	57085	-
8.	Freight Subsidy	23	23	22.82	-
9.	Direct Transfer of Cash for Kerosene	20	20	0	20
	(DTCK) to (States)				
10.	DTCK (UTs)	10	8.82	0	10
11.	PNGRB	15.08	14.92	14.25	16.40
12.	SFPL	2.01	1.79	1.79	2.09
13.	Secretariat Services	25.96	25.69	25.34	27.06
Α.	Total (Non-Plan)	63500.00	60341.22	60310.21	30075.55

Budget of MoP&NG (Non Plan)

(in Rs. crore)

1.18 The details of Non plan outlays have been discussed in the following paras:

(i) Under recoveries of oil PSUs

1.19 The details of various subsidies on petroleum products presently in vogue, as submitted by MoPNG are as under:-.

"The Administered Price Mechanism (APM) regime under which the pricing of petroleum products was done based on cost plus principles, was dismantled effective 1-4-2002. With the dismantling of APM, the refinery prices of all petroleum products were shifted to import parity price (IPP) basis and the retail prices of all products, except PDS Kerosene and Domestic LPG, were made market determined. In June 2006, based on the recommendations of the Rangarajan Committee, the Government changed the refinery pricing of Petrol and Diesel to Trade Parity Pricing (TPP).

After dismantling APM, the Government decided to provide subsidy on sale of PDS kerosene and domestic LPG at specified flat rates under the Budget and formulated a 'PDS kerosene and domestic LPG subsidy scheme' in 2002. Under this scheme it was decided that these subsidies will be phased out in 3-5 years.

Even though APM was dismantled effective 1.4.2002, since 2004, the consumers of sensitive petroleum products, viz. Petrol (decontrolled w.e.f. 26.06.2010), Diesel, PDS Kerosene and Domestic LPG were insulated from the impact of unprecedented high international oil prices by the Public Sector Oil Marketing Companies (OMCs), namely IOCL, HPCL and BPCL. This resulted in incurrence of under-recoveries to the OMCs. These under-recoveries are being shared by all the stakeholders under the Burden Sharing Mechanism in the following manner:-

- (a) Government, through budgetary assistance.
- (b) Public Sector Upstream Oil Companies namely, ONGC, OIL and GAIL by way of price discount on Crude oil and products.
- (c) OMCs, by absorbing a part of the under-recovery.

During 2013-14 and 2014-15 (April – December, 2014), the OMCs incurred under recovery of Rs.1,39,869 crore and Rs.67,091 crore respectively. During 2013-14, the Government provided cash assistance of Rs.70,772 crore and upstream oil companies provided Rs.67,021 crore towards compensation of under recoveries and Rs.2,076 crore was absorbed by the OMCs themselves. During the current year (April – December, 2014), the Government and upstream oil companies have provided Rs.22,085 crore and Rs.42,822 crore towards compensation of under recoveries leaving an unmet gap of Rs.2,184 crore.

Price reforms:

The price of Petrol was made market-determined by Government with effect from 26.6.2010. Since then, the OMCs take appropriate decision on the pricing of Petrol in line with the international oil prices and marketing conditions.

Effective 18 January 2013, the Government authorized the OMCs to (a) increase the retail selling price of Diesel in the range of 40 paisa to 50 paisa per litre per month, and (b) sell Diesel to all consumers taking bulk supplies directly from the

installations of the OMCs at non-subsidized market determined price, with immediate effect.

Effective 19 October 2014, the Government has made the price of Diesel market determined, both at refinery gate level and retail level, for all consumers.

Present Status of Subsidy/ Under-recovery

Presently, the price of only two products namely PDS Kerosene and Subsidized Domestic LPG are being modulated by the Government and the price of all other products are market determined and decided by the OMCs.

The current subsidy [as per the Refinery Gate Price (RGP) effective 01.03.2015] provided to the consumers is as under:

	PDS Kerosene (Rs./Litre)	Subsidized Domestic LPG (Rs./Cylinder)
Under 'PDS Kerosene and Domestic LPG Subsidy Scheme, 2002'	0.82	22.58
Under-recovery incurred by the PSU OMCs	16.19	143.68
Total subsidy to consumers	17.01	166.26

The 'PDS Kerosene and Domestic LPG Subsidy Scheme, 2002' and 'Freight subsidy (For Far Flung areas) scheme, 2002' has been extended till 31st March 2015.

The Government has implemented the revised Direct Benefit Transfer of LPG Subsidy Scheme (DBTL) for direct transfer of LPG subsidy to the intended beneficiaries only. The estimated subsidy on Domestic LPG under the DBTL scheme is Rs. 3645 crore during November, 2014 to March, 2015".

1.20 Asked about the under-recoveries of the Oil Marketing Companies during last

three years on the sale of subsidized petroleum products, the Ministry in a written reply

furnished following information:

"The under-recoveries incurred by the Public Sector Oil Marketing Companies (OMCs) on sale of regulated petroleum products namely Diesel (up to 18.10.2014), PDS Kerosene and Subsidized Domestic LPG since 2011-12 and burden sharing of the same, along with percentage share to the total under-recovery, is given in the table below :

				(RS. CIOIE)
Particulars	2011-12	2012-13	2013-14	2014-15
				(Apr Dec., 2015)
Under Recovery - Product				
wise				
				10935
HSD	81192	92061	62837	
				21216
Domestic LPG	29997	39558	46458	
				34940
PDS Kerosene	27352	29410	30574	
				67,091
Total Under Recovery	138541	161029	139869	

Burden Sharing				
Cash Assistance by Government	83500 <i>(60.27%)</i>	100000 (62.10%)	70772 (50.60%)	22085 (33%)
Discount on Crude & Product by Upstream Oil Companies	55000 (39.70%)	60000 (37.26%)	67021 <i>(47.92%)</i>	42,822 (64%)
Balance under-recovery absorbed by OMCs	41 <i>(0.03%)</i>	1029 <i>(0.64%)</i>	2076 (1.48%)	2184* (3%)

*unmet gap.

1.21 Asked to furnish details of the total no. of subsidized LPG cylinders delivered to customers and the amount of subsidy released on the sale of LPG cylinders during this period, the Ministry in a written reply stated as under:

"Public sector Oil Marketing Companies (OMCs) have reported that during the last there years, following no. of subsidized domestic LPG were sold to the customers:-

	•	
ILIAIIRAC	in	crordel

		(1)	jules in cioles)
Total Domestic Subsidised 14.2	2011-12	2012-13	2013-14
kg Cylinders sold to customers			
by OMCs.			
	93.65	92.31	95.26

In order to protect consumers from the impact of fluctuating prices in the international market, the Government continues to modulate the price of Subsidized Domestic LPG and its basic price has not been revised in line with the prices in the international market since 25.06.2011. The OMCs are incurring under recovery of Rs. 143.68/14.2 kg. cylinder on subsidized domestic LPG as on 1.3.2015. Besides, the Government is also providing fiscal subsidy of Rs.22.58/14.2 kg. cylinder of subsidized domestic LPG under 'PDS Kerosene and Domestic LPG Subsidy Scheme, 2002.

The no. of Domestic LPG cylinders on which subsidy/ under-recovery was incurred during the last 3 years along with the amount of subsidy provided / under-recovery incurred is given in table below:

	2011-12	2012-13	2013-14
No. of Subsidized Domestic LPG Cylinders (in Millions)	936.51	1 926.13	930.05
Under-recovery/ Subsidy		(Rs. crore)
Subsidy under 'PDS Kerosene and Domestic LPG Subsidy Scheme, 2002'	2137	1989	1904
Subsidy under 'Freight Subsidy (For Far- Flung Areas) Scheme, 2002'	18	18	16
Under-recovery incurred by OMCs	29997	39558	46458
Total Subsidy on Subsidized Domestic LPG to consumers	32152	41565	48378

(ii) Direct Benefit Transfer of LPG (DBTL) & Direct Transfer of Cash Subsidy for Kerosene (DTCK)

1.22 The Government launched a scheme for direct transfer of LPG subsidy to consumers across 54 districts on 15.11.2014 and in the entire country from 01.01.2015. This scheme is named PAHAL. It will benefit over 15 crore LPG consumers and will be the largest direct cash transfer scheme in the world. Under this scheme, LPG is sold to consumers at the market rate while the subsidy is directly credited to their bank accounts. Aadhaar is no longer mandatory to avail this benefit. The direct transfer of subsidy will reduce the diversion of subsidized LPG cylinders to the commercial and industrial sectors, generate significant savings and reduce the annual LPG subsidy bill.

As regards the progress made so far in the implementation of the DBTL scheme, the Ministry has informed that as on 5.3.2015, the response to the scheme has been adequate as 81.8% i.e. 11.89 crore out of 14.54 crore active LPG consumers have joined the scheme.

1.23 The Committee have been informed that Rs. 200 crore have been allocated for the Project Management Expenditure for the DBTL which include expenses on project management per se and related expenditure on rolling out such as seeding expenditure, IEC, software charging/upgrade, audits, Scheme incentives for seeding, expenditure on forms/SMS/direct calls/letters, seeding/adhaar generation camps. The commission (transaction cost) payable to banks shall also be paid out of this budget head.

1.24 Under the Direct Transfer of Cash subsidy on Kerosene (DTCK) scheme Kerosene subsidies are transferred in the bank accounts of the PDS-SKO consumers. Asked about the progress made in the project, the Ministry furnished following details:-

"Direct Transfer of Cash Subsidy on Kerosene (DTCK) was initiated based on 'in principle' approval of EGoM dated 8.8.2011.A Pilot Project for DTCK was launched in the Block Kotkasim, District Alwar (Rajasthan) in December, 2011 by MoP&NG, in collaboration with Government of Rajasthan. During the Pilot, subsidy was transferred into the Bank account of PDS SKO beneficiaries and PDS SKO was moved at full market price at all points of supply.

Under the DTCK 2012, a lump-sum one time grant of Rs. 100 Crore for each State was to be provided to the states joining the Scheme prior to 31.03.2012. 11 States/UTs namely, Rajasthan, Madhya Pradesh, Sikkim, Maharashtra, Andman & Nicobar Islands, Jharkhand, Himachal Pradesh, Pudducherry, Kerala, Goa & Andhra Pradesh confirmed their participation in the Scheme within the stipulated period. Out of these 11 states, only three States i.e. Rajasthan,

Maharashtra and Goa confirmed implementation of DTCK in their following districts :

States	Districts
Rajasthan	Alwar, Ajmer, Udaipur
Maharashtra	Nandurbar, Wardha, Amaravati
Goa	North Goa

An amount of Rs 10 Crore was released for establishment of an institutional mechanism for direct transfer of subsidy in cash for PDS Kerosene beneficiaries to the States of Rajasthan, Maharashtra and Goa during 2012-13."

1.25 Asked about the State-wise details of the consumers enrolled in the DBTL and DTCK schemes so far and the targets set in this regard, the Ministry in a written reply submitted following information.

<u>"DBTL</u>

State wise details of the no. of customers enrolled in DBTL as on 31.03.15 is attached in Annexure-I. This Ministry had set a target of 80% CTC customer for OMCs to be achieved before 01.04.15. The same was achieved on 01.03.15 by OMCs.

<u> DTCK :-</u>

Direct Transfer of Cash Subsidy on Kerosene (DTCK) was initiated based on 'in principle' approval of EGoM dated 8.8.2011.

A Pilot Project for DTCK was launched in the Block Kotkasim, District Alwar (Rajasthan) in December, 2011 by MoP&NG, in collaboration with Government of Rajasthan. During the Pilot, subsidy was transferred into the Bank account of PDS SKO beneficiaries and PDS SKO was moved at full market price at all points of supply.

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An amount of Rs 10 Crore was released for establishment of an institutional mechanism for direct transfer of subsidy in cash for PDS Kerosene beneficiaries to the States of Rajasthan, Maharashtra and Goa during 2012-13. The scheme is to be implemented by State Governments".

1.26 When the Committee wanted to know about the steps taken by the Ministry for ensuring the coverage of consumers under direct benefit transfer scheme who do not

have access to bank and financial institutions, the Ministry furnished following information:

"Government has launched a very massive financial inclusion programme called 'Jan Dhan Yojana' under which around 12 crore bank accounts have been opened. Under this Scheme, banks have been directed to ensure opening of accounts of at least one person in every household in the country. Banks have been asked to undertake door to door survey of households in each Sub Service Area(SSA) in rural areas/ urban wards to ascertain the households not having a bank account, using electoral roll/ NPR database, so that all households are covered with at least one bank account under this scheme. Thus it is expected that all the households will have a bank account.

Moreover, for the customers who are not ready for cash transfer either for nonavailability of Aadhaar or bank account on commencement of the PAHAL scheme, a grace period of 3 months has been given to them to enable them to complete the formalities. During this period, consumers would continue to receive subsidized cylinders. Over and above the grace period, another 3 months is given as parking period to those customers during which the subsidy will be parked and on compliance of linking within the 3 months of parking period, subsidy will be transferred at the consumers' bank account".

1.27 On a specific query when asked as to whether the consumers accounts are actually getting simultaneously credited with the subsidy amount released by the Government or delays are taking place, the Ministry gave the following information:

"Under the PAHAL scheme, all domestic LPG consumers joining the scheme, get a onetime permanent advance on joining the scheme. On delivery of the LPG refill, customer has to pay the market rate of the cylinder & the subsidy amount for that refill is sent to the customer's bank account. The funds are normally transferred electronically within 48 hours. But due to involvement of several stake holders (like distributors, NPCI & Banks) in subsidy transfer process and dependence on their internal processes delays can happen".

1.28 On being enquired by the Committee as to whether any limitations have been imposed by MOPNG/OMCs on withdrawl of LPG subsidy from bank accounts, the Ministry informed that no such limitations has been imposed by MoP&NG/OMCs.

1.29 When the Committee asked about the steps taken by OMCs/LPG distributors for easing difficulties faced by customers in getting enrolled for availing subsidy under the DBTL /DTCK scheme, the Ministry in a written reply submitted as under:

"The earlier DBTL scheme was comprehensively reviewed and after examining the difficulties faced by the consumer during earlier scheme, the same was substantively modified prior to re launch. The following salient features are incorporated in the scheme for the benefit of people. 1) Under this revised scheme customers not having Aadhaar can also join the scheme by submitting their bank a/c details to distributorship or LPG ID to their banks.

2) The scheme offers grace period of 3 months followed by parking period of another 3 months. Within grace period, Cash Transfer Compliant (CTC) customers will be supplied with non subsidized cylinders and their subsidy will be transferred to bank a/c and Non Cash Transfer Compliant (NCTC) customers will be getting subsidized cylinders.

After Completion of grace period, another 3 months parking period is given to NCTC (non cash transfer compliant) customers by supplying them nonsubsidised cylinders and parking their subsidy till they become CTC or for 3 months whichever is less.

3) Single point Grievance Redressal for DBTL: 300 call center seats have been provided to handle the DBTL related grievances. Under this scheme customer can post their queries or grievances related to DBTL at one place.

4) Alternative modes of seeding: Customers are provided the facility to remotely seed their aadhaar details through web, SMS or IVRS & Call center. In case of bank a/c, seeding facility is available to customer through web & mobile application.

5) Mylpg.in : A comprehensive portal has been developed in which DBTL related information & queries such as Aadhaar or Bank a/c linking status with LPG & banks ,cash transfer status , post feedback or grievances, etc are available for the convenience of customers.

DTCK is to be implemented by State Governments".

1.30 On being realised by the Committee that there was lower subsidy provisions in the Budget (2015-16) as compared to the preceding years and asked about the reasons behind the lower subsidies being estimated and whether the amount would be sufficient for the purpose, the Ministry stated as under:

<u>"DBTL</u>

The DBTL Scheme has been implemented in entire country w.e.f. 01.01.2015. The scheme will save subsidy primarily by reducing the incentive to divert subsidized cylinders to commercial use and will provide any easy exit route for customers who do not want to avail subsidy on domestic gas cylinders.

<u>DTCK</u>

With respect to Kerosene subsidy, the matter has been discussed and deliberated at various levels and there are several possible ways for reduction of subsidy in kerosene and so far no strategy has been finalized".

1.31 On being asked as to whether any fall in demand of SKO and LPG in the states/districts have been observed, where the schemes of DBTL/DTCK have been launched, following details were submitted:

"DBTL :

Presently it will be too early to gauge any fall in demand with the implementation of DBTL. Any reduction in demand envisaged by the scheme will be observed once the grace period on all India gets over i.e. by 31.03.15.

DTCK has not been launched in entire country so far. However, in the pilot experiment in Kotkasim Taluk in Rajasthan demand for PDS SKO fell by 67% as per report of State Government".

B. PRODUCTION OF CRUDE OIL AND NATURAL GAS

1.32 Asked about the targets of production of oil and natural gas in the 12th Plan against the actual achievements made so far, the Ministry furnished the following details:

"As per the 12th Five Year Plan, documents of Planning Commission, crude oil production target as per 12th Plan and actual production by ONGC, OIL and Private/Joint Venture companies during 12th five year plan period is as under:

	2012	-13	201:	2013-14 2014-15		2015-16	2016-	
								17
	Target	Actual	Target	Actual	Target	Actual*	Target	Target
ONGC	25.045	22.562	28.270	22.247	28.002	18.610	26.286	25.456
OIL	3.920	3.661	4.000	3.466	4.060	2.870	4.160	4.200
Pvt/JV - PSC	13.340	11.640	13.300	12.076	12.700	8.880	12.100	11.500
Total	42.305	37.863	45.570	37.789	44.762	30.360	42.546	41.156

Crude oil Production 12th Plan target vis-à-vis Actual (MMT)

*Upto January, 2014; MMT = Million Metric Tonne

Natural Gas Production 12th Plan target vis-à-vis Actual (BCM)

	2012-13		201	2013-14		14-15	2015-16	2016-17
	Target	Actual	Target	Actual	Target	Actual *	Target	Target
ONGC	25.266	23.549	25.472	23.283	26.669	18.500	28.215	38.676
OIL	3.300	2.639	3.800	2.626	4.000	2.890	4.270	4.450
Pvt/JV - PSC	23.710	14.490	32.380	9.497	39.400	7.420	40.430	41.460
Total	52.276	40.678	61.652	35.406	70.069	28.810	72.915	84.586

*Upto January, 2014 ; BCM = Billion Cubic Metre

1.33 As regards the reasons for shortfall, following details were submitted:

"The reasons for shortfall in crude oil and natural gas production by ONGC, OIL and Private/JV companies are given in the following paragraphs.

Reasons for shortfall in production by ONGC:

- ONGC had prepared and submitted the 12th Plan in July 2011, based on the prevailing field conditions at that time.
- The envisaged increase in production in 12th Plan was estimated largely from New and Marginal Fields (NMFD), viz: WO-16, & B-193+, Cluster 7, BHE/BH-35, B-22+ & G-1. However, due to unforeseen circumstances there was unexpected delay in these projects and hence could not contribute to production as per plan.
- Now the production has already commenced from these fields like, B193 Cluster from Oct'13, B 46 cluster from February, 2013, Cluster 7 from Sept'13, G1 from Nov'13 and SB-14 from April'14. The efforts are underway to commence production from WO#16 at the earliest and is expected in 2015-16.
- Production was also affected due to less than planned production from D1 field due to complications while drilling.
- Marginal shortfall in oil production was due to delay in re-development schemes and also due to less than anticipated oil gain from new development wells under MHN Phase-II and MHS Phase-II redevelopment schemes and side-track wells. Now both MHN & MHS Redevelopment Phase-II completed in June 2014.
- Eastern Offshore Asset production was also affected due to delay in G-1 development scheme.
- ONGC is making all out efforts to minimise the natural decline by implementing various IOR/EOR schemes and field re-development projects as well as development of marginal fields. The efforts has started showing the results as the normal decline of 7-8% has been reduced considerably.
- Lower gas production due to GAIL pipeline accident near Tatipaka, Andhra Pradesh.

Reasons for shortfall in production by OIL :

- Frequent bandhs and blockades adversely affecting OIL's production.
- Most of OIL's producing fields are matured and are in declining stage. OIL is taking several steps through its IOR/ EOR programmes to maintain/ enhance production from these ageing fields. However, frequent environmental problems hampers routine servicing of the old wells, much longer revival period for the wells, leading to high amount of consequential loss of production
- Drilling campaign of OIL is also adversely affected by environmental problems leading to much lesser contribution from drilling and work over towards growth in production.
- OILs Natural Gas production is dependent on withdrawal pattern of its customers. Less than committed withdrawal by its customers has lead OIL to restrict its production of Natural Gas from its true potential.

Reasons for shortfall in production by Pvt/JV companies

Reasons for Shortfall in Oil Production under PSC regime :

• Actual oil production of 8592 TMT in RJ-ON-90/1 was less than target of 8750 TMT due to underperformance of Bhagyam field wells.

- Less oil production from MA field of KG-DWN-98/3(KG-D6 block), Panna-Mukta fields due to water/sand ingress in wells, delay in implementation of development drilling campaign/ well interventions and natural decline of the fields.
- Shutdown of PY-3 field due to expiry of contract of production facilities w.e.f 30.07.2011.
- Less oil production from Kharsang Field due to sand ingress and water cut in the wells and underperformance of newly drilled wells.
- Natural decline in the ageing and matured fields like, Hazira, Bakrol, NSA-Bheema& CB-OS/2 etc.

Reasons for Shortfall in Gas Production under PSC regime :

- Less production in KG-DWN-98/3 as 10 wells in D1-D3 and 3 wells in MA have ceased to flow due to water/ sand ingress. MA-6H well is underperforming. MA field was shut-down due to cyclone during 11-13 Oct 2014. Also, production decreased from 2nd to 4th March 2015 due to fire incident in RGTIL pipeline.
- Natural decline in the ageing and matured fields like Ravva, Hazira, NSA-Bheema & CB-OS/2 etc.
- Less gas production from Panna-Mukta due to delay in development drilling campaign and well interventions etc. Under performance of newly drilled 6 wells in Mid and South Tapti field.
- Delay in Gas Production from KG-OSN-2001/3(Deendayal field) of GSPC
- Less envisaged production from CBM blocks due to various issues such as delay in laying of pipeline for gas transportation, distance from the market, land acquisition problems etc.
- Non-associated gas wells in Ravva were closed from 3rd July, 2014 to 19 October, 2014 due to GAIL pipeline accident near Tatipaka, Andhra Pradesh".

1.34 The Committee asked about the details regarding the ventures of Indian oil PSUs of pursuing overseas opportunities to buy equity oil and gas. In its written reply, the Ministry furnished following details.

SI. No.	PSU	Country	Block	Partners	Agreeme nt signed in year	Current Status	Expected Outcome in next five years
1.	IOCL	Canada	Pacific North West integrated LNG project	Progress Energy Canada Ltd. (62% and operator, Sinopec (15%), Japex (10%), Petroleum Brunei (3%) IOCL -10%	1.1.2013	IOCL's share of current Production ~8820 boe/d Cumulative revenue received so far is C\$60 million against cumulative investment of US\$1174 million.	This opportunity provides excellent synergy for IOC to secure upstream participation in prospective Montney shale assets in Canada, along with securing long-term LNG import to India.

2.	IOCL	USA	Niobara Shale Project	OIL (20%) IOCL (10%), Carrizo Oil & Gas Inc., USA - 60% Haimo Oil and Gas - 10%	2012-13	IOCL's share of current Production ~551 boe/d Cumulative revenue received so far is US\$19.46 million against cumulative investment of US\$67.2 million.	Gaining foothold in unconventional shale play and act as a stepping stone for acquiring such assets in North America (USA and Canada) for growth of IOCL's E7P business in producing shale play.
3.	HPCL	Australia	T/L1	Origin Energy Resources Ltd37.5% Origin Energy North West Ltd- 5.0% AWE BassGas Pty Ltd 12.5% AWE Petroleum Pty Ltd 22.5% Toyota Tsusho Gas E&P Trefoil Pty Ltd 11.25% Prize Petroleum International Pte Ltd 11.25%	Sale Purchas e Agreeme nt signed in Jan, 2014. Title transfer/ registratio n completed in Jan, 2015	Production is in progress from one well. Drilling of two development wells commenced	Production of Gas, LPG and Condensate to the tune of 400,000 BoE per annum (average).
4.	HPCL	Australia	T/18P	Origin Energy Resources Ltd39% AWE BassGas Pty Ltd 35% Prize Petroleum Internation al Pte Ltd 9.75% Toyota Tsusho Gas E&P Otway Pty Ltd5% Toyota Tsusho Gas E&P Trefoil Pty Ltd6.25%	Sale Purchas e Agreeme nt signed in Jan, 2014. Title transfer /registrati on complet ed in Jan 2015	Development feasibility studies in progress.	To complete development feasibility studies and bring to production.

5.	OVL	Azerbaijan	Azeri- Chirag- Guneshli (ACG) Field	BP-36% (Operator), SOCAR - 12%, Chevron- 11%, INPEX- 11.0%, Statoil-8%, ExxonMobil- 8%, TPAO- 7%, Itochu- 11%, OVL - 2.72%.	2012-13	Production @663,000bop d (Gross)	Production @0.9MMToE to ONGC Videsh
6.	OVL	Brazil	BC-10	OVL 27 %; Shell 50% (Operator) Qatar Petroleum International -23%	(Initially only 15%.Addio nal 12% acquired in2013-14)	Producing Production @59000bopd (gross)	Production 55,000bopd (Gross avg.) About 0.8MMTo to ONGC Videsh
7.	OVL	Mozambiqu e	Area-1	OVL 16%, OIL 4%, Anadarko 26.5% (Operator), ENH 15%, Mitsui 20%, BPRL 10%, PTTEP 8.5%	2013-14	Yet to be put on Production	Likely to be on LNGC production in 2019
8	OIL	USA	Niobrara Shale Asset	OIL: 20%; IOCL: 10%; Haimo Oil and Gas: 10%; Carrizo (Operator): 60%	2012	Producing Asset. Current Production ~ 550 BOEPD	
9.	OIL	Mozambique	Area Rovuma 1	BREML : 10% (OIL:40%; OVL:60%); OVL:10%; BPRL: 10%; PTTEP: 8.5%; Mitsui: 20%; ENH: 15%; Anadarko: 26.5% (Operator)			
10.	OIL	Bangladesh	Block SS- 04	OIL: 45% ; OVL: 45% (Operator); BAPEX: 10%	2014	Exploration stage asset. Production Sharing Contract for asset signed in February, 2014. Currently, MWP is ongoing.	
11.	OIL	Bangladesh	Block SS- 09	OIL: 45% ; OVL: 45% (operator); BAPEX: 10%	2014	Exploration stage asset. Production Sharing Contract for asset signed in February,	

						2014. Currently, MWP is ongoing.	
12.	OIL	Myanmar	Block M-4	OIL: 60% (Operator); Oilmax: 10%; Mercator: 25%; Oil Star: 05%	2014	Myanmar	Block M-4
13.	OIL	Myanmar	Block YEB	OIL: 60% (Operator); Oilmax: 10%; Mercator: 25%; Oil Star: 05%	2014	Myanmar	Block YEB
14.	OIL	Russia	License 61	OIL: 50%; Petroneft (50%) (Joint Operators)	2014	Russia	License 61
15.	OVL	Colombia	GUA OFF-2 (Offsh ore) 2012	OVL- 100%			
16.	OVL	Colombia	LLA-69 (Onsh ore) 2012	OVL- 50%, SIPC- 50%			
17.	OVL	Bangladesh	SS-4 2013- 14	OVL-45% (Operator),OI L – 45%, BAPEX-10%			
18.	OVL	Bangladesh	SS-9 2013- 14	OVL-50% (Operator), OIL – 50%, BAPEX- 10%			
19.	OVL	Myanmar	B2 2014	OVL-97% (Operator), M&S-3%			
20	OVL	Myanmar	EP3 2014	OVL-97% (Operator), M&S-3%			
21.	OVL	New Zealand	PEP 57090 Taranaki Offshore 2014	OVL-100%			

1.35 In this context, the Committee desired to know the percentage of import dependence in respect of crude oil and natural gas to meet the domestic demand of

petroleum products at the terminal year of the 11th Plan and projected percentage at the terminal year of the 12th Plan, the Ministry informed as under:-

"Import dependence of the crude oil during the terminal year of 11th Five Year Plan, i.e. during 2011-12 was 76 % and that of natural gas was 28%. As per the projections given in the report of the Working Group on Petroleum and Natural Gas for the XII Plan, 86.76% of the crude oil demand and 63.06% demand of the natural gas is expected to be met by imports".

1.36 The Year-wise Expenditure incurred on the imports of crude oil and petroleum products during last five years is given in the tables below:

Item/Year	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15 (Apr Dec.)
crude Oil	375277	455276	672220	784652	864875	581751
Petroleum Products	33687	55998	68091	68363	74605	59197

Table: Value of Import in Rs. Crore

Item/Year	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15 (AprDec.)
crude Oil	79553	100080	139690	144293	142962	95802
Petroleum Products	7007	12068	14189	12506	12255	9657

Table: Value of Import in Million US\$

The Year-wise foreign exchange earned from export of petroleum products during last five years is as follows:

"Table: Foreign Exchange Earned by Export of Petroleum	Products
--------------------------------------------------------	----------

Item/Year	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15 (AprDec.)
Petroleum Products (in Rs. Crore)	144687	196861	284643	320090	368279	240803
Petroleum Products (in Million US\$)	30663	43340	59318	58848	60664	39624

C. EXPLORATION OF CRUDE OIL AND NATURAL GAS

1.37 Asked about the details and respective shortfalls registered in the exploration and production programmes of ONGC and OIL and steps taken by companies to improve upon their performance in these areas, the Ministry stated the following:

"The production of crude oil and natural gas by ONGC and OIL and shortfall in the achievement of the target during the last three years is given in table below :

Table: Production and Shortfall

		2011-12		2012-13			2013-14			2014-15		
	Target	Actual	Shortfall %	Target	Actual	Shortfall %	Target	Actual	Shortfall %	Target (Apr- Dec)	Actual (Apr- Dec)	Shortfall %
				Crude Oil (MMT)								
ONGC	23.736	23.716	0.08	23.977	22.561	5.905	24.090	22.24 6	7.655	17.554	16.723	4.73
OIL	3.760	3.847	nil	3.950	3.661	7.317	3.910	3.466	11.353	2.672	2.579	-3.49
					Na	tural Gas (E	BCM)					
ONGC	23.457	23.316	0.60	23.690	23.549	0.593	23.442	23.28 4	0.674	17.794	16.597	6.73
OIL	2.633	2.633	nil	2.919	2.639	9.585	2.740	2.626	4.168	2.153	2.058	4.38

The steps taken by oil and gas companies to enhance production from ageing fields are in terms of enhanced oil recovery schemes, apart from improved oil recovery from existing fields using new technologies. There has been an effort by the Government to undertake reforms in Production Sharing Contracts, re-assessment of hydrocarbon resources in sedimentary basins and early monetization of hydrocarbon discoveries under PSC regime apart from providing new pricing guidelines for domestically produced natural gas etc.

Seismic Survey Performance of ONGC

		2D seismic	3D seismic	Expl. Wells
		(Line Kilometre)	(Sq. KM)	Number
2011-12	BE Target	4504	10479	158
	Actual	13606	9820	135
2012-13	BE Target	12470	5840	155
	Actual	3708	11402	108
2013-14	BE Target	185	10109	153
	Actual	475	8371	106

The Exploration targets of ONGC and performance of last three years are as follows : Variation in seismic acquisition plan vis-a-vis actual is mainly due to following reasons:

- BE plan includes indicative plan considering seismic acquisition in future acreages likely to be awarded to ONGC in coming NELP rounds as a proactive approach and also future acquisition contracts in process.
- In actual acquisition of seismic data, reason for slippages are mainly because of delays in contract finalisation, performance of contractors, environmental impediments etc.

Slippage in exploratory drilling is mainly because of down hole complications during drilling or testing resulting into rig time consumed in fishing, side tracking etc., delays in obtaining clearance from statutory agencies like MOEF, MOD.

New Initiatives to enhance reserve through exploratory efforts by ONGC are as under :

- Continued exploration in known fields & basins for new plays,
- Extend exploration activities in new basins having difficult terrain, complex geology & harsh environment,
- Exploration of unconventional resources like shale gas/oil, CBM, fractured Basement etc.,
- ONGC has created four dedicated Centre of Deliveries (CoD); one each for Shale gas, HPHT, Basement & CBM to explore and exploit the unconventional resources.

Performance of Crude oil & Natural gas Production by ONGC

The oil and gas production during last three years is as under. There has been some decline in ONGC's production, both at Onshore & Offshore. The details are as below:

	Unit	2011-12		201	2012-13		2013-14		2014-15*	
		MOU	Actual	MOU	Actual	MOU	Actual	MOU	Actual	
Crude oil	MMT	23.735	23.713	23.980	22.562	24.084	22.247	19.772	18.989	
Natural Gas	BCM	23.457	23.316	23.690	23.549	23.442	23.283	21.853	20.153	

*Period: Apr'14 to Feb'15- Provisional figures

Most of the producing fields of ONGC (Mumbai High, Neelam&Heera, Kalol, Jhalora, Nawagam, Viraj, Sanand, Sobhasan, Jotana, Santhal, Ankleshwar etc. in Gujarat and Lakwa, Geleki, Rudrasagar in Assam) are matured surpassed their plateau production phase and are in the natural decline phase (a natural phenomenon in the production life of any oil field. World-wide a natural decline of about 6-7 % is seen in production from matured oil fields). Notwithstanding the constraints of mature fields and sharp decline in the base production, all out efforts are being made to increase the production. Due to Improved oil recovery (IOR) techniques & Enhanced Oil Recovery(EOR) techniques adopted by ONGC, steep natural decline has been contained.

The reasons for less crude oil and gas production are as under:

- Less Oil production due to ageing of onshore fields, declining reservoir pressure and increased water cut and less than envisaged oil gain from development wells.
- Loss of production due to closure of wells due to GAIL pipeline accident in Rajahmundry Asset.
- Less than planned gain from some of the new wells / side track wells in Western Offshore.
- Lesser number of new wells were put on production due to drilling complications.
- Major overhaul/ engine replacement of Process Gas compressors of Heera and Neelam Process Complex
- Delay in commencement of production from G-1 field in Eastern Offshore
- Delay in commencement/ramp-up of production from marginal fields in Western Offshore.

Steps taken to enhance Crude oil & natural gas production by ONGC

- Implementation of IOR/ Redevelopment Schemes to arrest the decline and improve recovery factor from mature fields.
- Fast track monetization of Marginal Fields: ONGC is developing new and marginal fields on fast track to augment the oil and gas production. ONGC is developing small / marginal fields which are not viable for on standalone basis through cluster concept.
- Development of fields in Eastern Offshore :ONGC is giving major thrust to develop discoveries made in the Krishna Godavari basin in Eastern offshore which is a promising basin with various discoveries like G1/GS-15, Vasishtha, S1, GS-29, G-4-6 and KG-DWN-98/2 etc.
- Monetization of the discoveries made in NELP blocks: Field Development Plan (FDP) has been approved by Management Committee (MC) of four onshore NELP discoveries viz. Nadiad-1, West Patan-3, Karanagar-1 and Vadatal-1. ONGC has applied for PML grant and the discoveries will be put on production as soon as PML is granted.
- Various activities such as work over jobs, well stimulation, artificial optimization, reservoir monitoring and reservoir pressure maintenanceare being carried out on routine to limit the base decline.
- Comprehensive redevelopment of Gamij Field through 'Stage Gate' process is under progress.
- Monetisation of small and marginal discoveries in onshore through service contract and out sourcing.
- Fast track development of Malleswaram field in Cauvery Asset.
- Fast track development of Nagayalanka JV block of KG onshore.
- Development of HP/HT reservoirs in Cauvery and Rajahmundry Assets through outsourcing of services from International companies / experts.
- Technology Induction/adoption/absorption and engaging international experts in the area of Drilling, Well completion, Artificial lift, Well stimulation etc. is being done regularly according to the technical requirement of the wells / fields and feasibility.
- Assam Renewal Project: The project envisages revamping and upgradation of surface facilities in Lakwa and Lakhmani fields. The surface facilities older than 20 years needed to be replaced for uninterrupted operation for next 25 years. The project is expected to be completed by March 2016.
- Pipeline Replacement Project, Ahmedabad: Project envisages replacement of old and aging internal pipes used for crude supply and water injection,

43 segments and 229 Km length. The project is likely to be completed by July 2016.

Seismic Survey Performance of OIL

The Exploration targets of OIL and performance of last three years are as under:

		2D	3D	Expl. Wells
		seismic	seismic	
		(Line Kilometre)	(Sq. KM)	Number
2011-12	BE Target	2090	1767	33
	Actual	1396.91	1837.69	16
2012-13	BE Target	470	1570	33
	Actual	223.77	1795.22	19
2013-14	BE Target	200	500	31
	Actual	499.24	928.48	9

Reasons for shortfall in 2D Seismic Survey by OIL:

- In 2011-12, the shortfall of 793 GLKM is mainly due to suspension of 2D acquisition programme in Rajasthan NELP Blocks since the areas already covered by 3D.
- In 2012-13, Survey planned in KG Basin NELP Block could not be completed due to delay in non-receipt of forest and environment clearance.

In order to enhance drilling performance, following initiatives have been taken by OIL:

- Induction of 1 (one) new 750 HP rig. The rig has already been delivered and currently under commissioning stage.
- Order placed for 2 (two) new 2000 HP drilling rigs. Delivery expected by end of 2015.
- Induction of new high performance drill bits.
- Induction of new mud pumps as replacement of old ones.
- Close monitoring and proactive actions to continue operations during bandhs and blockades.

Performance of Crude oil and natural gas production by OIL

The performance of crude oil & natural gas production in last 3 years are as under:

	Crude Oil production (MMT)		Natural Gas Production (BCM)	
	Target (MOU)	Actual	Target (MOU)	Actual
2011-12	3.76	3.847	2.633	2.633
2012-13	3.95	3.661	2.739	2.639
2013-14	3.95	3.466	2.740	2.626

To increase oil &gas production potential in OIL and chart a steady growth, the various steps that have been initiated / carried out are as follows:

i) Improved Oil Recovery (IOR)/Enhanced Oil Recovery (EOR) initiatives for revitalization of its matured fields.

a) Water injection is currently being undertaken in 13 reservoirs in the fields of Greater Nahorkatiya, Moran, Greater Jorajan, Greater Shalmari and Central small Field with an injection rate of 9300 Klpd through 43 injection wells. Actions are on hand to drill additional water injection wells and augment surface infrastructures to enhance water injection in 3 (three) more reservoirs. Recently, water injection has been initiated for the first time in an Eocene reservoir on a pilot scale.

To strategically manage increasing volumes of produced water and to reduce the volumes of fresh water from shallow aquifer, an initiative to carry out Produced Water Re-injection (PWRI) to achieve targeted voidage replenishment ratios is also being envisaged. Success of these projects may lead to their Field implementation in the future.

b) Horizontal Drilling campaign in Makum - North Hapjan reservoir was initiated to improve productivity/recovery from the reservoirs. The results were found to be encouraging with improved productivity of 2-3 times than that of a vertical wells in that field. The same is now being planned to be extended to other similar reservoirs. Moreover, study also has been initiated by reputed international consultants for identification of optimal locations for horizontal/infill wells in a few selected reservoirs.

c) In-house Reservoir simulation studies have recommended that water injection be initiated in Makum-North Hapjan as well as Dikom-Chabua fields to maintain the pressure and fill the voidages. The process to create the required surface infrastructure has been initiated. Presently, reservoir simulation study is in progress for Bhogpara and Shalmari reservoirs for field re-development options.

d) Enhancement of production by using of field proven Proprietary technology is another option looked into. For this, **M/s FOROIL, France** has been assigned to study the ageing Greater TengakhatField and suggest remedial measures.

e) Further, as part of EOR, a Joint Industry Project (JIP) with Herriot-Watt University, Edinburgh, UK on 'Improved Oil Recovery by Carbonated Water Injection (CWI)has been initiated at Lab scale. Studies are also underway to select candidates for possible implementation of Alkaline Surfactant Polymer flooding for which two reservoirs have been short listed.

f) Besides, possibility of other fit-for-purpose technologies like Radial Drilling(RD), Extended Reach Drilling(ERD) as well as Multilaterals are also being examined to drain hydrocarbon potential from the hitherto inaccessible reserves.

g) Induction of more artificial lifting system like ESP, SRP etc. have been carried out, also Stimulation services like hydraulic fracturing, matrix acidization etc. have been implemented. ii) Similarly, efforts are underway to enhance the Gas production from oil & gas fields in Assam & Arunachal Pradesh. To enhance gas production, the following steps have been implemented by OIL:

- a) Drilling campaign of Non-Associated Gas wells in current & coming years.
- b) New gas well completion policies have been adopted Completion of high volume production of gas wells.
- c) Work over campaign.
- d) Infrastructure development as Central Gas Collection Station (CGGS) at Madhuban, Duliajan.
- e) Construction of one Field Gas Gathering Station (FGS) at Chabua of 37 km long Gas pipeline from Baghjan to Duliajan.

1.38 On being asked about the steps taken to remove well complications responsible for shortfall in Exploratory drilling and development drilling activities, the Ministry furnished following reply:

"Complications are part-and-parcel of drilling activities and cannot be avoided completely. With continuous depletion of existing pay zones, down-hole problems such as mud losses and stuck pipe during drilling phase are increasing, which require to be resolved. In persuasion of exploring newer fields & augmenting the production more wells are being drilled in marginal fields with more geological uncertainties, which also is a major factor contributing to well complications.

To mitigate drilling complications, special High-Pressure/High-Temperature rigs have been deployed. Synthetic Oil-based Mud systems are being used for a variety of applications where fluid stability and inhibition are necessary in areas such as high-temperature wells, deep holes, and where sticking and hole stabilization is a problem. Down-hole motors and Polycrystalline diamond compact (PDC) bits area also being used for faster drilling and therefore minimising the well-bore exposure which many times lead to various drilling complications and stuck-ups. Geo-mechanical studies to predict pore pressure and stress field in advance are undertaken before drilling of wells which fall in areas with history of high pressure and well stability problem.

State-of-the-art technology of Logging While Drilling (LWD), Seismic Guided Drilling (SGD) and Stethoscope tool have been introduced to reduce operational time as well as to carry out mid-course correction while drilling. Induction of these technologies have helped to reduce well complications in exploratory and development drilling".

1.39 In this regard, the Committee asked as to whether OIL while carrying out E&P activities in Andhra Pradesh encountered any difficulties in moving its rigs to exploration locations/fields, the Ministry replied as under:-

"OIL is currently carrying out Exploration activities for Oil & Gas in its NELP-VI Block KG-ONN-2004/1 in Andhra Pradesh since 2008. The Minimum Work Programme (MWP) for the block comprising of reprocessing of vintage 2D seismic data, acquisition, processing and interpretation of 2D & 3D seismic data, Gravity Magnetic survey and Geochemical survey have been completed. As per revised MWP, out of exploratory drilling of 8 wells, one well has been completed and drilling of the 2nd well is in progress. In the 1st well, gas has been discovered. Appraisal of the discovery is under finalization. The balance 6 wells are expected to be completed in the next 2 years. Upto December, 2014, an expenditure of Rs. 268 Crores (approx..) have been made on various exploration activities of the block.

With regard to difficulties faced by OIL in moving its rig to drilling location, in one drilling site (at Lanka of Thane Lanka village), which is proposed to be the 1st High Pressure High Temperature (HPHT) location for OIL, the civil works were completed in December, 2014. The village is located in an island and connected to the mainland by a IRC Class B bridge (double lane), namely, the Vivekananda Varadhi Bridge. This bridge was constructed by Belur Math in 2000 with assistance from the Govt. of Andhra Pradesh. Since this is an IRC Class B bridge with double lane, in order to establish its load carrying capacity, a study was conducted by OIL through IIT-Madras. IIT-Madras certified the capability of the bridge upto 70R loading with certain changes in the trailer axles. Before actual rig movement of OIL could take place, the villagers wrote to the Collector & District Magistrate, East Godavari district, Kakinada demanding certain works in their village such as making of BT road of 4.9KM, retaining wall along the canal from the highway to their village, making of toilets in the village under Swachh Bharat Abhiyaan, etc. and also resolved not to allow OIL to use the bridge for movement of the rig and other materials. The matter was reported to the Govt. of Andhra Pradesh as well as DGH & MoP&NG. Nevertheless, efforts are on through the office of the DC as well as the Road & Bridge (R&B) Dept., and as per their requirement a revised plan of rig transportation have been submitted recently. Presently, the matter is under examination of R&B Deptt. of the State Govt. of Andhra Pradesh".

1.40 On being enquired about the methods being followed to ensure the use of State

of the Art technologies in the exploration and Production Programme of ONGC and

OIL, the Ministry informed as under:

"The technology induction in upstream sector is need based in order to resolve technical and operational difficulties. E&P companies normally take advantage of their R&D institutes for new technologies, technical forums, scouting of latest technologies in the area of exploration and production as well as discussion with national and international service providers for specific requirement. In addition, oil companies also hire domain expert for induction of suitable technologies".

1.41 On being asked about the new seismic survey and other technologies developed and inducted in their exploration techniques by upstream oil companies, the Ministry furnished the following details:

"New Technology Induction by ONGC

ONGC continuously scouts, identifies and inducts suitable cutting-edge technologies for meeting the strategic goals of ONGC for in-place reserve accretion, increasing recovery factor, arresting natural decline in producing fields and meeting complex challenges of exploration in Frontier basins, deepwater blocks and to tap unconventional energy resources.

A number of new technologies have been inducted in recent past for better subsurface imaging, enhancing in-house processing capacity software and hardware up-gradation to fulfill intensive data processing requirements, induction of new interactive work stations for data integration and interpretation with latest volume visualization software and skill improvement of its G&G personnel.

During last few years ONGC has used several new technologies for seismic survey in oil and gas exploration. These technologies are seismic data acquisition system with higher channel capacity, digital sensors, field processing unit (FPU) for onland areas. Induction of new technology like Q-marine technology, GX Technology, Sea Bed Logging, Air Borne Electro- magnetic Survey(AEM), Multi Transient Electro Magnetic (MTEM), Passive Seismic Tomography, Low Frequency Acoustic Passive Seismic, Sea Bed Node(SBN) and 3D-3C Multi-Component Seismic Survey. All these advanced technologies have resulted in benefits because of enhanced capacity for better subsurface imaging and volume visualisation. It also mitigates the risk to a certain extent and helps in firming up of prospects for subtle plays. These technologies also provide confidence in venturing into the high risk frontier areas, both in onland and offshore.

New Technology Induction by OIL

During recent years, Oil India Limited (OIL) had inducted various new technologies in field of seismic survey for hydrocarbon exploration & development. Multi-component (3C) seismic, Passive seismic, long offset seismic & wide azimuth seismic are few of them.

Multi-component seismic is an upcoming technology which intends to record full wave-field of seismic data (shear-wave along with compressional wave). It's a potent technique to locate by-passed/un-swept hydrocarbon which in-turn enhances the reserves. OIL acquired some quantum of multi-component data over its operational areas in Upper Assam Basin during 2010 to 2013. The encouraging results of the feasibility study, OIL is planning to acquire full-fledged 3C surveys in future.

Passive Seismic technique is based on the analysis of the natural (passive) low frequency seismic signals emitted from the reservoir. In many parts of the world, passive seismic is being established as a direct hydrocarbon indicator. OIL introduced passive seismic technology on experimental basis in its mature oil fields Nahorkatia and some areas in vicinities of Digboi field. It was observed that more survey is required to ascertain the efficacy of this technology.

In the thrust fold belt areas of Upper Assam Basin, OIL started the campaign to acquire long offset/close sampling seismic data to get sub-surface image of the thrust belt areas. In OIL, the acquisition of such data has started from last field season and continuing in this field season as well.
Conventional 3D seismic surveys are mostly narrow azimuth due to the limited channel count. As the acquisition technology advanced, wide azimuth 3D survey is evolved and these surveys provides better image of subsurface and moreover valuable in reservoir characterization studies. OIL started 8 to 12 line 3D survey in Upper Assam Basin and 16-20 receiver line operation in Rajasthan & Krishna-Godavari basin (NELP-block) to get wide azimuth 3D seismic data.

New Technology Induction by Pvt/JV

Service providers are better equipped with state of art technology like multiple streamer & source array, cable less ground electronics, single component digital sensors, high sensitive geophones etc to acquire Seismic data with wider band width and minimum data gaps.

In 2006 & 2008 speculative surveys were carried out in Western and Eastern Offshore of India by M/s GX Technology under India SPAN and SPAN2 respectively. They deployed state of art technology using streamers of 10 Km length, Source volume 7480 cu ins, source Pressure 2000 psi and record length of 18 sec. The survey could map the Mesozoic below trap which was not imaged with conventional technology. The geological information obtained from this survey is detailed below:

• PSDM data generated in India Span project provided a new approach to advance the understanding of deep structuring and stratigraphy of West and South India offshore areas.

• The data imaged beneath the Deccan – Traps and identified thick pre-trap sediments of Jurassic and Cretaceous age. The identification of this potential pre-trap petroleum systems was new and of significant interest to the petroleum industry.

• Seabed node technology is now gaining acceptance in the industry over conventional towed streamer technology as it can be used effectively in areas having obstructions such as platforms, pipelines & other structures. The nodes and OBS can also be effectively used for multi-component recording, full azimuth or wide azimuth surveys in deep waters".

1.42 The Ministry informed that the Reserve Replacement Ratio (RRR)*excluding JV share for ONGC and OIL is more than 1 in last three years. The year-wise RRR is given below:

Year	ONGC	OIL
2011-12	1.25	1.37
2012-13	1.47	1.63
2013-14	1.24	1.29

Reserve Replacement Ratio

Note: * Based on 2P reserves

1.43 As per information submitted by the Ministry, the estimated quantum of reserves of the new discoveries made during last three years was pegged at 16.31 MMT of oil and 62.14 BCM of gas respectively. As against this, the production of crude oil was mentioned to be 37.789 MMT and 37.863 MMT during 2013-14 and 2012-13 respectively. The Committee in this regard wanted to understand the logic behind depicting the reserve replacement ratio for the corresponding period as more than 1. The Ministry furnished a written reply in this regard which is given below:

"The figures of reserve accretion during last three years relate to PSC regime only whereas production figure of crude oil of 37.789 MMT and 37.863 MMT during the years 2013-14 and 2012-13 respectively relate to Nomination Regime as well PSC Regime".

1.44 In this connection, the Committee sought to know the recovery ratio for oil/gas in respect of fields of ONGC and OIL and its comparison with that of international standards, the reply of Ministry provided as under:

"Recovery factor for ONGC

The recovery factor has been calculated using Cumulative production upto that year divided by In-place volume (under 2P category) of the corresponding year. The year-wise recovery factors w.r.t. oil and gas for the last five years for ONGC and OIL are as under:

	Reco	overy factor for ONGC	Recovery factor for OIL		
Year	Oil	Gas	Oil	Gas	
	%	%	%	%	
2009- 10	27.64	56.60	22.91	42.05	
2010- 11	27.43	56.05	22.39	41.01	
2011- 12	27.36	55.57	23.08	42.72	
2012- 13	27.11	55.15	23.16	43.09	
2013- 14	27.01	54.26	23.23	43.45	

As per international standard, a recovery ratio of 35-40% for oil reservoirs and 55-70% for gas reservoirs are considered as a good and optimum. However, recovery ratio varies with different kind of reservoir according to drive mechanism and pressure drawdowns from wells.

In order to improve the recovery factor from its producing fields, E&P companies put efforts on continuous basis for performance analysis of fields and suitable corrective measures are taken on regular basis for improvement in crude oil production. Different kinds of IOR (Improved Oil Recovery) & EOR (Enhanced Oil Recovery) projects, as per the geological characteristics of the field, are under execution in different fields for gain of incremental oil to enhance the production and improve the recovery factor. The IOR/EOR schemes have

helped to arrest the declining trend of oil production and also sustaining the oil production. "

1.45 As seen from above, it may be noted that ONGC have very low recovery factor. Asked to define recovery factor and reasons for lower recovery factor of ONGC against the international benchmark, the CMD, ONGC during the course of evidence explained it in following terms:-

"The recovery factor for oil or for gas, as the case may be, is the ratio between total oil in place as on a particular date *versus* how much oil or gas can be produced over the life of the field. So, this ratio is not a sacrosanct ratio which is a fixed ratio for all the fields. It will depend on the type of reservoir, the size of reservoir, what sort of depletion drive is there, where there is water below or gas above the oil. So, it depends on all these factors. Now the recovery factor for ONGC for crude oil is about 27 per cent and for gas it is about 55 per cent or so. This again is not a constant factor. We expect that it would increase as we produce more and more oil and gas, we will have more technology, we will have better survey and drill to the point where the gas or the oil is. Hence it will increase over time".

1.46 He further elaborated

"The type of reservoirs which we have or which the international companies or globally which are there, they are different. For our reservoirs, I am not saying that the level at which we have reached, which is say 27 per cent for crude oil, is sufficient. It can be increased and it is being increased. So as we drill more and more wells, implement more schemes, it will increase. But from the data you would see that it is not increasing; it is constant. It is constant because more fields are being added. So, when we add more fields the recovery factor initially is low and it will increase in the course of time. For example, we have given Ankleshwar Field. In Ankleshwar Field, the recovery factor is already more than 50 per cent because the field is quite old and the type of reservoir is quite good. In Mumbai High, the recovery factor would be around 30 per cent. We want to take it to 40 per cent. All those works are going on. We are not satisfied with the existing recovery factor which will increase. We want to take it 40 per cent globally all across ONGC. That is on recovery factor".

(i) New Exploration Licensing Policy (NELP)

1.47 Asked about the status of development of exploration blocks awarded under previous rounds of NELP, the following status was provided by the Ministry.

"So far, nine rounds of NELP bidding have been concluded, under which Production Sharing Contracts were signed for 254 blocks in 19 sedimentary basins awarded to National Oil Companies, Private and Foreign Companies.

NELP-IX round was launched on 15.10.2010 and the bid receiving date was till 28.03.2011. Under this round, 34 exploration blocks were offered for bidding and 74 bids were received for 33 blocks. A total of 19 blocks (4 in Western Offshore, 2 in Assam, 2 in Madhya Pradesh, 1 in Tripura, 1 in Rajasthan and 9 in Gujarat) have been awarded to Public Sector, Private/Foreign Companies

Status of Blocks Awarded under NELP bidding Rounds

At present out of 254 exploration blocks, 92 exploration blocks are operational. The other details are as under:

BIDDING ROUND	Operational	PEL Awaited	Proposed for Relinquishment	Relinquished
NELP I	4			20
NELP II	4			19
NELP III	5		2	16
NELP IV	5		2	13
NELP IX	11	6		2
NELP V	6			14
NELP VI	14		7	31
NELP VII	20	1	9	11
NELP VIII	23	2	6	1
Grand Total	92	9	26	127

A total of 137 discoveries (46 Oil and 91 Gas) have been made in 47 NELP blocks. Out of 137 hydrocarbon discoveries made so far under NELP bidding Rounds, 11 (7 oil & 4 gas) discoveries of 5 blocks have been put on production as tabulated below so far and other 22 discoveries are under development at present. Remaining hydrocarbon discoveries are at various stages of evaluation/appraisal. The details of hydrocarbon discoveries on production are as under :

NELP Blocks	Oil	Gas	Grand Total
CB-ONN-2000/1	3		3
CB-ONN-2000/2*		2	2
CB-ONN-2002/3	2		2
CB-ONN-2003/2	1		1
KG-DWN-98/3	1	2	3
Total	7	4	11
* Clocod			

Closed

- In-Place Hydrocarbon volume accretion of 754.57 Million Metric Tonnes (MMT) of oil and oil equivalent of gas (O + OEG) has been realized so far under NELP.
- An investment to the tune of US\$ 23.67 Billion has been made by the Contractors upto 31.12.2014.for exploration and development activities in NELP block".

1.48 When asked about the number of blocks that would be offered in the NELP X, the Ministry furnished the following:-

"DGH has so far identified 52 exploration blocks having an area of 147,829 Square Kilometres for offering under next biding round for which the requisite statutory inter-ministerial in-principle clearances have been taken".

1.49 On being enquired as to whether the minimum exploration work commitments on blocks awarded under NELP to public/private companies have been fulfilled, the Ministry apprised as under :-

"At present out of 254 exploration blocks, awarded in Nine NELP bidding Rounds, 92 exploration blocks are operationally active at present and rest 127 blocks have been relinquished.

Minimum work programme consisting of surveys and drilling of wells is carried out in exploration phases by the contractor. The specific duration of each of the exploration phases is provided in the PSCs. upto NELP V Bidding Rounds, for onland and shallow water blocks, the maximum duration of exploration phases is 3 years, 2 years and 2 years for phase I, II and III respectively with the total period not to exceed 7 years. In case of deepwater and frontier area blocks, generally, the duration of phases is 4 years, 2 years and 2 years respectively with the total period not exceeding 8 years.

After NELP VI Bidding Rounds onwards, for onland and shallow water blocks, the maximum duration of exploration phases is 4 years and 3 years for phase I, II respectively with the total period not to exceed 7 years. In case of deepwater and frontier area blocks, generally, the duration of phases is 5 years and 3 years respectively with the total period not exceeding 8 years.

Extension of Phases for completion of Minimum Work Programme is sought by operators under extension clause of PSC which provides an extension of exploration phase by 6 months with set- off from the next exploration phase, however after availing the 6 months extension period as per PSC provision, the operator can also avail further extension for completing the MWP up-to 12 months as per the extension policy.

Operators face several problems in the blocks of the North Eastern states due to natural calamities like floods and landslides, other problems like insurgency, or any local issues. Further, lack of required infrastructure like roads and bridges, non-availability of resources/services for E&P industry in the near vicinity also adds to the problems in carrying out the exploration work programme.

Problems like natural calamities, such as floods and landslides, are covered under the force majeure provisions of the PSC and period of force majeure is given to contractor to complete the MWP once approved

Exploration blocks are offered for bidding after securing clearance from various agencies. Subsequently, after the grant of Petroleum Exploration Licence (PEL), some of the agencies like Ministry of Defence, Ministry of Environment and Forests, State governments, etc. later deny permissions to carry out the work in these areas. Earlier, there was no provision in the PSC for reduction in the MWP if a part of or the whole block is not available for operations however, MoP&NG has brought-out a policy in November, 2014 to this effect.

At Present Minimum work programme (MWP) have not been completed in 62 blocks out of 162 total awarded between NELP-I and NELP VI bidding rounds

and 49 exploration blocks out of 162 blocks are still active so during course of time MWP is likely to be completed by the operator.

	Nos. of Blocks where MWP
Operator	has not been completed
Reliance Industries Ltd.	26
Oil and Natural Gas Corporation Ltd.	15
Oil India Ltd.	7
Naftogaz	3
Cairn Energy India Pty Ltd.	2
Geo-Global Resources Inc.	2
Jubilant Oil & Gas Private Limited.	2
OAO Gazprom	1
ENI (India) Ltd.	1
Geo-Petrol International Inc.	1
Niko Resources Limited.	1
Hindustan Oil Exploration Company Limited.	1
Grand Total	62

An operator-wise detail of such blocks is given below:

Minimum work programme (MWP) has not been completed in exploration blocks due to following reasons:

- 1. Relinquishment of Blocks by operators before completion of MWP of exploration phase by operators due to poor propsectivity or other constraints
- 2. Delays in grant/ non-grant of Statutory Clearances required for carrying out exploratory work in the awarded block
- 3. Delays in grant of Petroleum Exploration License by State government
- 4. Termination of Block due to violation of PSC provisions

In case of Non-Fulfillment of minimum work programme/committed work programme within the stipulated exploration period, Contractor is liable to pay liquidated damage (LD) for the un-finished minimum work programme as per PSC provisions.

Details of Partial amount Paid by Contractor (in US Million \$) till Date for Unfinished MWP in 48 blocks is tabulated below:

Block	Nos. of	Amount Paid by Contractor (in US
operator	Blocks	Million \$) till Date
RIL	23	117.8
ONGC	13	43.2
OIL*	4	16.3
Others	5	14.9
		192.2

*Exchange rate 1 USD = Rs. 61 taken

Other cases of non-fulfillment of minimum work programme / committed work programme within the stipulated exploration period for exploration blocks awarded between NELP-I and NELP VI bidding rounds are under examination at DGH.

Exploration phases, of all the Active blocks awarded upto NELP VII onwards, are still active and exact status of completion of MWP will be known in due course of time

1.50 In reply to the query regarding the investments made in NELP-IX, the Ministry

furnished the following reply:

"For the NELP IX bidding round, the committed exploration investment is about US\$ 835 Million. As against this, an investment to the tune of US\$ 65 Million has been made by the contractors for exploration activities in the awarded blocks. The expected investment for NELP-X will be known after receiving the offers for the Blocks".

New Discoveries (ii)

When asked about the details of the new major and minor oil/gas discoveries 1.51 made in the country by ONGC, OIL and private/JV companies during the last three years along with the estimated guantum of oil/gas reserves in such discoveries, the Ministry furnished following reply:

"ONGC has made 75 discoveries (41 prospect and 34 pool) which include 59 discoveries made during last three years, 2011-2014 and 16 discoveries in current year (2014-15) as on 01.01.2015. State-wise / basin-wise / year-wise details of discoveries with oil & gas volumes and reserves are given in the table below :

SI.	Year	Field/Prospect Name	Hydro-	Estimated I (O+OEG	OEIP MMT) as on	Status as on
NO.			Carbon Type	In-Place	Ultimate	01.01.2015
	And	hra Pradesh: Krishna Goo	lavari Onshore			
1	2012-13	Koravaka-1	Oil & Gas	0.16	0.02	Identified for gas sales under Direct Mktg. through e-tendering.
2	2012-13	Bantumilli South-1	Gas	10.09	4.88	The well BTS-1 (sub) is under testing.
3	2012-13	Mukkamala-1	Oil & Gas	0.79	0.37	One development location released.
4	2012-13	Vanadurru South-1	Oil & Gas	6.08	1.22	Isolated area. The area is being assessed for generating locations for drilling.
5	2013-14	Seripalem-1	Gas	0.50	0.25	Firming up of production profile for offer to direct marketing in progress.
6	2013-14	Mandapeta South-1	Gas	1.00	0.3	Applied for ROU (Right Of Use) to lay flow line.
	E	ast Coast: Krishna Godav	ari Offshore			
7	2011-12	GS-70-1 (GS-70-AA)	Oil & Gas	0.85	013	The area is under study for bringing the different

New Prospect discoveries :

						discoveries on
						production based on a cluster approach
8	2011-12	KG-OSN-2004/1-NACS-1	Gas	7.66	4.59	
9	2011-12	KGOSNO41NAAL-1	Gas & Cond	3.20		DOC submitted on
10	2012-13	KGOSN041NASA-1 (Saveri-1)	Gas	5.11	2.37	19.08.2014.
11	2012-13	KGD051NAA-1	Gas	Not estimated		Discovery was sub commercial. Block is relinquished.
12	2013-14	KGOSN041NANL-2	Gas	1.29	0.5	DOC submitted on 19.08.2014 for NL-2,
13	2013-14	KGOSN041NANL-1	Gas	0.38	0.23	Further appraisal for NL-1 is in progress.
14	2014-15	YS-9-1 (YSAB Shift)	Gas			Format-A Submitted. Area under further appraisal.
15	2014-15	GD-11-1	Gas			GD-11-1 is declared gas discovery.
		Tamil Nadu: Cauvery Onsh	ore Basin			
16	2011-12	Periyakudi-1	Oil & Gas	47.44	7.92	PDAB (PD-3) is under testing. One development location has been released and planned to be drilled in 2016-17.
17	2012-13	Madanam-3	Oil & Gas	10.01	0.19	Well NMAE (Thirunagari-1, Prospect discovery). MC reviewed DOC on 24.09.2014. - PML application for 305 SKM has been submitted on 12.11.2014. - Finalization of FDP is in progress.
18	2012-13	Pandanallur-7	Gas	Not estimated		Planned to deploy work over rig before taking up Hydro-fracturing Job.
19	2012-13	Pandanallur-8	Oil & Gas	7.59	0.13	DOC submitted on 10.09.2014, under review by DGH. One location NPAD under testing.
20	2014-15	Thirunagari-1 (Madanam- 5)	Gas			Format-A submitted on 10.12.2014.
		Assam: Upper Assam	Basin			
21	2011-12	Patharia	Gas	0.31	0.16	Needs Work Over job.
22	2012-13	Phulani-1 (ELAB Shifted)	Oil	0.06		On Production
23	2014-15	Tukbai-3A (TK-3A)	Gas			Under further exploration
	Mi	zoram: Assam-Arakan Fol	d Belt Basin	Γ		
24	2011-12	Hortoki	Gas	2.28		assessed by HF job
	E	ast Coast: MBA (Mahanad	i Offshore)			
25	2011-12	MDW-13	Gas	4.01	0.49	Block in Phase-II of exploration. Block has been relinquished.
	E	East Coast: MBA (Andaman	Offshore)			
26	2011-12	ANDW-1	Gas	Not assessed		Block relinquished
		Gujarat State: Cambay	Basin			
27	2011-12	Linch -81 (East Linch)	Oil	1.25	0.1	On production.

28	2011-12	Uber-2	Gas & condensate	0.12	0.05	Format-B submitted, Block is in Phase-I exploration period
29	2012-13	Vadatal-5	Oil & Gas	2.94	0.14	DOC approved on 31.07.2014.
30	2014-15	Rupal-2	Oil			Format-B submitted on 14.10.2014
31	2014-15	Vadatal-10	Oil			Format-B submitted on 8.12.2014
		West Coast: Mumbai Offsh	ore Basin			
32	2011-12	BH-67 (BH-F)	Gas	0.23	0.14	Under assessment & delineation. Well
33	2011-12	B-127E-1	Oil & Gas	1.62	0.56	One exploratory locations B-127E-B is planned to be drilled in 2014-2015
34	2013-14	B-173A-8	Oil & gas	2.13	0.53	Format–A submitted on 21.03.2014. Under assessment & delineation.
		West Coast: (Kutch Off	shore)			
35	2011-12	GK-42-1 (GK-42-A)	Gas	26.16	3.46	The area is under appraisal. Three appraisal wells GK-28- 7, GK-28-9 & GK-42-3 found to be gas bearing. More appraisal wells are likely to be released for comprehensive assessment of the area.
36	2014-15	GKS092NAA-1	Gas			Format-A submitted
37	2014-15	GKS091NDA-1	Gas			Format-A submitted
		West Coast: (Saurashtra	Offshore)			
38	2011-12	GSSO41NAA-1	Gas	25.76	3.15	DOC to be submitted by 31.1.2015
39	2012-13	MBS051NBA-A	Gas	5.73	2.07	Appraisal location MBS051NBA-B is planned to be drilled in 2014- 2015.
40	2013-14	MBS051NAA-1	Gas	19.53	9.37	Appraisal location MBS051NBA-B is planned to be drilled in 2014- 2015.
		Madhya Pradesh: Frontie	r Basins			
41	2011-12	Nohta-2	Gas	Not estimated		Under assessment

New Pool Discoveries

SI. No.	Year	Discovery Well	Hydro- Carbon Type	IOEIP MMt. (O+OEG) as on 01.04.2014 In-place	Ultimate	Status as on 01.01.2015
Andh	ra Pradesl	h: Krishna Godavari	Onshore			
1	2012- 13	Mandapeta West- 12	Gas	31.85	0.08	Well connected to Mandapeta West 1A EPS
2	2013- 14	Geddanapalli-3	Oil	0.77	0.17	On production with SRP
East 0	Coast: Kris	shna Godavari Offsh	ore			
3	2012- 13	KG-DWN-98/2-A-2	Oil & Gas	43.28	8.95	Revised DOC was submitted.
4	2013- 14	KGD982NA-M-3	Oil & gas	99.54	2.83	progress.
5	2014- 15	GS-29-10 (AJ)	Oil & Gas			To be developed along with GS-29-1. Feasibility study, FR submitted by EOA.

Tamil Nadu: Cauvery Onshore Basin						
6	2011- 12	North Kovilkalappal	Oil & Gas	1.50	0.75	On production
7	2014- 15	Madanam-6	Oil & Gas			Format-A submitted on 01.01.2015
Gujar	at: Camba	ay Basin				
8	2011- 12	North Kadi-461	Oil	0.10	0.02	On production,
9	2011- 12	Viraj -58	Oil	0.19	0.03	On production
10	2011- 12	Aliabet-3	Gas	1.86	1.12	Combined DOC for Aliabet-2, 3 & 4 discoveries approved on 31.07.2014
11	2011- 12	North Kadi-472	Oil	0.27	0.04	On production
12	2012- 13	Anklav-9	Oil	0.29	0.25	On Production
13	2012- 13	Motera-36	Oil	0.06	0.01	On Production,
14	2012- 13	Mansa-36	Oil	12.36	1.86	On Production
15	2013- 14	Gandhar-686	Oil	1.00	0.23	On production.
16	2013- 14	Sobhasan-300	Gas	0.10	0.06	On production.
17	2013- 14	Nandasan-111	Oil	0.20	0.02	On production.
18	2014- 15	Gandhar-699 (GGAG)	Oil & gas			On production
West	Coast: Mu	mbai Offshore Basir	า			
19	2012- 13	C-39-14	Oil & Gas	5.46	2.59	Under delineation.
20	2012- 13	BH-68	Oil & Gas	0.34	0.02	Discovery does not justify stand-alone development. Delineation in progress
21	2012- 13	D1-D-1	Oil	8.02	1.01	Production from D-1-14 block has commenced
22	2014- 15	C-1-7 (C-1-H)	Oil & Gas			Delineation is in progress.
23	2014- 15	C-1-8 (C-1-F)	Oil & Gas			Delineation of the pool in progress
24	2014- 15	WO-5-11	Oil & Gas			Estimation and delineation in progress.
West	Coast: Gu	If of Cambay				
25	2012- 13	Aliabet-4	Gas & Cond.	0.19	0.12	Combined DOC for Aliabet-2, 3 & 4 approved on 31.07.2014
West	Coast: (Kı	utch Offshore)				
26	2013- 14	GK-28-9	Gas	Not estimated		The area is under appraisal. Three appraisal wells GK-28-7, GK-28-9 & GK-42-3 found to be gas bearing. More appraisal wells to be released for comprehensive assessment of the area.
27	2013- 14	GK-42-3	Gas	Not estimated		
Assar	n: Assam	Shelf				
28	2011- 12	Geleki-354	Oil & Gas	3.65	0.23	On production
29	2011- 12	Khoraghat-31	Oil	1.10	0.04	On production
30	2014- 15	Rudrasagar-184	Oil & Gas			On production
Tripu	a: Assam	-Arakan Fold Belt Ba	asin			
31	2011- 12	Gojalia-13	Gas	1.31	0.66	Not on production – linked to OTPC
32	2012-	Agartala Dome-37	Gas	3.01	0.5	On production.

	13					
33	2013- 14	Khubal-7	Gas	1.18	0.71	Format B submitted on 22.03.2014
Madhya Pradesh: Frontier Basins						
34	2014- 15	Damoh-4	Gas	Not estimated		Under assessment
~						

OIL :

OIL has made 24 hydrocarbon discoveries in the state of Assam and Rajasthan during last 3 years. The details are as under:

	List of Discoveries made by M/s Oil India Limited							
SI. No.	Year	Well Name	Basin/ State	Year of Discovery	Name of discovery	Oil/Gas	Accretion to in-place volume of O+OEG in 2P category (MMT)	
1		Diroi-5	Assam	2011	Dikcham	Oil	0.26	
2		Naharkatia-594	Assam	2011	Kharikatiya	Gas	0.54	
3		Naharkatia-595	Assam	2011	Amgurigoan	Oil	3.72	
4	N	Balimara-01	Assam	2012	Balimara	Oil	1.36	
5		Naharkatia-597	Assam	2012	East Zaloni	Gas	0.09	
6	6	Makum-41	Assam	2012	NW Makum	Oil	3.89	
7	2	Makum-43	Assam	2012	West Makum	Oil	0.53	
8		Naharkatia-600	Assam	2012	East Zaloni	Gas	0.20	
9		Moran-116	Assam	2012	Dimowkinar	Oil	0.40	
10		Balimara-2	Assam	2012	Balimara	Oil	2.64	
11		East Khagorijan-1	Assam	2012	East Khagorijan	Oil	0.33	
12		Singhibil-1	Assam	2013	Singhibil	Gas	0.03	
13		Barekuri -12	Assam	2013	West Barekuri	Oil	0.47	
14		Naharkatiya-531	Assam	2013	Deohal	Gas	0.54	
15		Naharkatiya-581	Assam	2013	Dhuliajan	Gas	0.45	
16	ю	Naharkatiya-141	Assam	2013	Naharkatiya New Pay	Gas	0.19	
17	012-1	Punam-1 (RJ-ONN- 2004/2)	Rajasthan	2012	Punam	Heavy Oil	17.12	
18	Ñ	Tavriwala-2	Rajasthan	2012	Tavriwala	Heavy Oil	0.95	
19		Sologuri-1	Assam	2013	Sologuri-1	Oil	0.94	
20		South Kathaloni-3	Assam	2013-14	South Kathaloni-3	Oil	0.11	
21	14	Baruahnagar-3	Assam	2013-14	Baruahnagar-3	Oil	1.06	
22	2013-	NHK-610	Assam	2013-14	East Deohal (Barail)	Gas	0.66	
23		NHK-614	Assam	2013-14	Jaipur (Mid Tipam)	Oil	1.07	
24		NHK-405	Assam	2013-14	Nagajan (UT)	Gas	0.16	

Private/JV companies

Under the production Sharing Contract (PSC) regime, during the last three years (2011-12 to 2013-14) and the current year (2014-15, till 28.02.2015), a total of 51 hydrocarbon discoveries, comprising of 23 oil and 28 gas discoveries in 11 sedimentary basins have been made. Out of 51 hydrocarbon discoveries, oil production from one discovery, Raageshwari South-1 of RJ-ON-90/1 Block (monetized under new Policy for Exploration in ML area) has commenced from 26.05.2014.

The list of discoveries under PSC regime by ONGC, OIL and private/JV companies during last three Years is as under :

Operator	2011-12	2012-13	2013-14	2014-15	Grand Total
ONGC	9	8	5	5	27
Cairn			3	10	13

Operator	2011-12	2012-13	2013-14	2014-15	Grand Total
RIL	2		2		4
OIL		1		1	2
Focus			1	1	2
GSPC	1				1
Jay Polychem(India)				1	1
P∨t. Ltd.					
JOGPL			1		1
Grand Total	12	9	12	18	51

The reserve estimates of the discoveries are known once the "Declaration of Commerciality (DoC)" is established after appraisal. In last three years under PSC regime, in-place hydrocarbon reserves established are about 16.31 MMT of oil and 62.14 BCM of gas.

(iii) Marginal fields of ONGC and OIL

1.52 When asked about the factors that go into deciding a field as marginal, the Ministry in a written reply stated as under:

"An oil/gas field is treated as a Marginal Field based on economics of the field development and at a border line of profitability. The understanding of a field as marginal varies from area to area and also from time to time and is broadly based upon cost of development and the fiscal framework. A field may be categorized as marginal under the following considerations:

- Reservoir Size (small volume)
- Lack of Infrastructure/technology
- Inaccessibility to the area-remoteness
- Fiscal policy
- Market for gas
- Cost of development
- Prevalent market price of oil/gas".

1.53 The details of the development stages of marginal fields presently with of ONGC

and OIL as provided by MoP&NG is as under:

Till 2007, a total of 165 marginal fields were identified by ONGC. As. on 1.4.2014, a total of 201 fields were grouped by ONGC as marginal fields. Status on marginal fields as on 1.4.2014 is given below :

ONGC Status of Marginal fields as on 01-03-2015

SI. No.	Category	Area	No. of Field	S	
		Western Offshore	25		
1	Monetized 76+4	Eastern Offshore	5	80	
		Onshore	46		

		Onshore-Outsourced	4		
		Western Offshore	13		
	Linder	Eastern Offshore	4		
2	Monetization	Onshore	12	36	
		Onshore-Outsourced	7		
3	Planned for Monetization & Appraisal	Western Offshore	38		
		Eastern Offshore	12	85	
		Onshore	35		
Total			201	201	

OIL :

OIL has 6 marginal fields in the State of Assam which are to be monetized".

1.54 On being queried about the estimated oil and gas reserve of these marginal fields, the Ministry stated as under:

"ONGC :

The estimated Oil and Gas reserves of 165 marginal fields of ONGC is around 1691.863 MMT (O+OEG) In-Place (3P) and 431.544 MMT (O+ OEG) Ultimate Reserves (3P) as on 01.04.2014.

OIL :

OIL has about 9 MMT of hydrocarbon in-place reserves in 6 blocks in the state of Assam as on 1.4.2014".

1.55 Asked about the present production from these marginal fields and share of oil & gas production of these fields in the total production of ONGC, the Ministry submitted following information:

"The total production from marginal fields of ONGC during last the three years and the current year upto December, 2014 is tabulated below :

Oil + Cond Production (MMT)	2011-12	2012-13	2013-14	2014-15 upto Dec.
ONGC Production	23.712	22.563	22.247	16.723
Marginal Fields	1.249	1.400	1.774	2.307
%age wrt ONGC production	5.3%	6.2%	8.0%	13.8%
Gas Production (BCM)	2011-12	2012-13	2013-14	2014-15 upto Dec.

ONGC Production	23.316	23.549	23.284	16.597
Offshore	1.764	2.555	3.554	3.279
%age w.r.t. ONGC production	7.6%	10.9%	15.3%	19.8%

1.56 When asked about the specific constraints being faced in developing the marginal fields, following reply was submitted by the Ministry:

"Some of the marginal oil and gas fields yet to be monetized are uneconomical to develop under the prevailing subsidy/under-recoveries sharing mechanism/fiscal regimes. Under these circumstances various fiscal incentives are required to convert their development strategy from uneconomic to economically viable one. ONGC has made a request that crude oil produced from such fields be exempted for determination of ONGC's share of underrecoveries/subsidies and consider fiscal incentives thereby making production from these fields economically viable".

1.57 Observing the inherent difficulties involved in developing the marginal fields, the Committee enquired as to whether any extra incentives are offered to bidders of the marginal fields to make the deal attractive, the Ministry submitted the following reply:

"ONGC has so far awarded 25 marginal oil and gas fields on service contract for their development in two phases for onshore fields (2004 and 2007) and one phase for offshore fields (2006) wherein bidders were allowed to bid for a share of revenue as a service fee. No extra incentives were offered to the bidders".

1.58 The Committee then sought to know about the policy on the development of marginal fields, the Ministry provided as under:

"Exploration companies are developing marginal fields based on the available technologies, infrastructure and economic viability for production of oil and gas. In order to develop hydrocarbon resources efficiently, Government is contemplating to introduce a policy for the marginal field of National oil companies (NOCs) for the faster development of hydrocarbon discoveries which have not been developed by NOCs due to various reasons".

(iv) Deep Water Exploration

1.59 As per information provided by MoP&NG, 43% of Indian sedimentary basin is under deep water areas. When asked about the progress made in this regard, the Ministry furnished the following reply:

"Indian sedimentary basins has total area of 3.14 million square kilometer covering onland, shallow water (less than 400m bathymetry), and deepwater areas (beyond 400m bathymetry). Total estimated area of deepwater (beyond 400m bathymetry) is about 1.3 million square kilometer, which is 41.4 % of total Indian sedimentary basin area.

(Note: Earlier Deepwater area was about 1.35 million Sq. Km beyond 200m bathometry as indicated in Annual Report but now it is about 1.30 million Sq. Km. beyond 400m bathymetry)

In order to accelerate exploration in deepwater areas, Government has awarded 81 exploration blocks in deepwater areas covering an area of about 9,22,519 sq. km. So far, 2,61,233 LKM of 2D seismic, 1,81,890 sq. km of 3D seismic data has been acquired and 136 exploratory wells have been drilled

Government of India is implementing a policy for non-exclusive multi-client speculative survey to generate geoscientific data in Indian sedimentary basins, both offshore and onland areas. Seven applications have been received covering about 1 lakh sq. km. of offshore area".

(iv) Policy of Speculative Survey

1.60 Policy for Geo-Scientific Data Generation for Hydrocarbons in Indian Sedimentary Basins aims to accelerate acquisition of geo-scientific data in respect of all the sedimentary basins of the country. This will further accelerate E&P opertions. Under the policy, permission for conducting Geo Scientific data survey will be granted by way of a non-exclusive multi-client survey agreement. This policy replaces the earlier model of profit sharing after cost recovery with a one-time project fee. Directorate General of Hydrocarbons will administer this policy on behalf of the Government of India (GOI). GOI will continue to be the owner of the data acquired under this Policy. The new Policy has been launched in view of the requirement for generation of geo scientific data to support E&P activities and to make the speculative survey model more attractive and easier to implement. A significant part of the India sedimentary basin is now available for exploration. Inviting private investors for exploration is handicapped by the non-availability of data and hence the need to acquire geoscientific data in respect of all the sedimentary basins so as to accelerate (E&P) operations.

1.61 The Andaman & Nicobar basin which is considered to be highly perspective has not been able to produce even a single discovery even after carrying exploratory efforts for more than half a century. When asked about the status of exploratory efforts undertaken at the Islands, the Ministry gave following reply:

"The Andaman-Nicobar basin, located in the south eastern part of the Bay of Bengal, occupies an area of 47,000 sq. km including deep waters. This basin forms a part of Island Arc System which extends from Myanmar in the north to Indonesia in the south. Prognosticated resources of 180 MMT (Million Metric Tonnes) has been indicated for offshore part of the Andaman Basin.

Exploration activities in the basin dates back to 1959. Subsequently, in the year 1982, seismic data along with gravity and magnetic recordings were acquired.

Exploratory drilling in the offshore part of the basin started in the year 1980 with the well AN-1-1 which was found to be gas bearing.

As on 01.01.2015, ONGC has acquired 22542 line kilometre of 2D seismic and 2513 sq. km. of 3D seismic data in deep water and drilled 12 exploratory wells in nomination blocks.

In order to accelerate exploration in Andaman and Nicobar Basin, Government has awarded 11 NELP exploration blocks comprising of 10 blocks to ONGC and one block to ENI as operator. ONGC is yet to make a commercial discovery in Andaman offshore area. Currently, exploration is continuing in 5 NELP blocks operated by ONGC.

So far, 26,767 Line Kilometer(LKM) of 2D seismic and 13,515 Square Kilometer(SKM) of 3D seismic data has been acquired and 6 exploratory wells have been drilled under PSC Regime. One gas discovery in the block AN-DWN-2002/1 was notified by ONGC in May, 2011. However, the Potential Commercial Interest (PCI) of the discovery was not submitted by the Operator and block has been relinquished by the operator in March, 2013

So far, about US\$ 728 Million has been incurred on exploration activities in the NELP awarded blocks".

(v) **Project Approvals**

1.62 In this regard, the Committee desired to know the projects of ONGC & OIL which

were lying pending for clearances from various Department/Ministries, the Ministry submitted following details:

"ONGC :

ONGC is continuously making all efforts to resolve various issues related to clearance from various agencies. Presently, as far ONGC's operated oil and gas blocks are concerned, 17 Nomination and 8 NELP blocks are awaiting clearances from MoD, MEA, MoEF and other authorities. The details are as under:

SI.	Block Name	Pending Clearance from
No		
1	KG-OSN-2009/4	MOD
2	GK-DW-1	MEA/MOD
3	BB-OS-DW-I	MOD
4	BB-OS-DW-II	
5	AA-ONN-2001/1 (TRIPURA)	
6	AA-ONN-2009/3 (ASSAM)	
7	VN-ONN-2004/1 (MP)	
8	SIVSAGAR DISTRICT PEL	MOEF
9	GOLAGHAT DISTRICT PEL	
10	TICHNA ML	
11	PANDIDIHING ML	
12	NORTH-RUDRASAGAR-	
	DISANGMUKH ML	
13	AA-ONN-2001/3	DISPUTED AREA BELT

14	AA-ONN-2005/1	BETWEEN ASSAM AND NAGALAND
15	AA-ONN-2001/4	SIGNING OF MOU WITH
16	AA-ONN-2002/4	NAGALAND
17	NAMBAR ML	DISPUTED AREA BELT
18	GELEKI ML	BETWEEN ASSAM AND
19	GELEKI EXTENSION ML	NAGALAND
20	NAMTI ML	
21	SOUTH EAST GELEKI ML	
22	DIMAPUR	SIGNING OF MOU WITH
23	BHAGTY BHANDARI	NAGALAND
24	SINGPHAN	
25	CHANGPAND ML	

OIL :

As far as Oil India Limited (OIL) operated NELP blocks are concerned, OIL has faced delay in obtaining the Forest Clearance in 4 (four) NELP blocks in Upper Assam basin (Assam State), of which the Forest Clearance for two (2) NELP blocks are still awaiting. Also, OIL is presently facing delay in getting Environmental Clearance from Ministry of Environment & Forest for Cauvery offshore block CY-OSN-2009/2. As far as OIL operated Nominated blocks are concerned, OIL have faced delay in obtaining the Forest Clearance in 3 (three) nominated blocks in Arunachal Pradesh. The details are as under :

	OIL Operated NELP blocks							
SI. No.	Block	Clearance waiting from						
1	AA-ONN-2010/3							
2	AA-ONN-2010/2	MOEF						
3	CY-OSN-2009/2							
4	Deomali PEL	MOEF						
5	Namchik PEL							
6	Jairampur Extn.							

(vi) Rig Availability

1.63 Asked about the kind and number of rigs available with national oil companies for carrying out exploration activities and details of idle time of rigs, the Ministry in a written reply furnished as given below:

"The type and number of rigs available with ONGC and OIL for carrying out exploration activities are as under:

Drilling rigs with ONGC in Onshore:

	Mobile 1500-3000 M	Type-I up to 3600 M	Type-II up to 4900 M	Type-III up to 6100 M	Type-IV up to 7000 M	Total
Owned Rigs	14	13	21	19	1	68
Charter Hired	1	_	_	_	_	1
Total	15	13	21	19	1	69

Drilling rigs with ONGC in Offshore:

	Jack-up	Drillship	Semi-sub	Drilling Barge	Total
Owned Rigs	6	2		_	8
Charter Hired Rigs	18	3	3	1	25
Total Offshore	24	5	3	1	33

Drilling rigs with OIL:

	Mobile 1500-3000 M	Type-I up to 3600 M	Type-II up to 4900 M	Type-III up to 6100 M	Type-IV up to 7000 M	Total
Owned Rigs	1	6	-	1	1	9
Charter Hired	2	2	1	4	-	9
Total	3	8	1	5	1	18

The idle rig time in respect of ONGC and OIL for charter Hire Rigs are as under :

ONGC :

	Idling RMs for Charter Hired Rigs							
		Waiting on Logistics	Waiting on Locations	Waiting on Ready Sites	Waiting on Weather	Bandh & Barricade	Others*	Total Rig Months
	Onshore	-	-	0.08	0.28	1.04	2.62	4.02
2011-12	Offshore	-	0.02	-	0.62	-	2.05	2.69
	Total	-	0.02	0.08	0.91	1.04	4.66	6.71
	Onshore	-	-	-	0.06	0.46	6.61	7.13
2012-13	Offshore	0.13	-	0.03	0.14		2.75	3.05
	Total	0.13	-	0.03	0.20	0.46	9.36	10.18
2013-14	Onshore	-	-	-	-	3.70	19.05	22.74
	Offshore	0.08	0.08	-	0.71	-	2.42	3.29
	Total	0.08	0.08	-	0.71	3.70	21.47	26.03

*other includes Inter-location rig move, Rig Health Check-up, Waiting on environmental Clearance, Contractual Issues on Charter Hired rigs etc.

Non Productive Time (NPT) in last 3 years, 2011-2014								
			Re	easons for NPT				
Year	Total Rig Hours Available	Surface	Absenteeism	Environm- ental	Misc.	Total (Hours)	% of Rig Hours Lost	
2011-12	1,29,912	3,727	194	8,230	15,540	27,691	21.32	
2012-13	82,296	3,021	117	13,428	6,538	23,104	28.07	
2013-14	1,12,560	2,313	254	14,500	11,589	28,656	25.46	

Idle time of rigs for OIL in last three years

1.64 When asked to clarify the standard rig months period against which the idle rig months have been calculated by ONGC, the Ministry submitted following reply:

"Ideally a rig is expected to operate round the clock for entire year, i.e. 365 days. Hence a Rig Month is 365/12=30.416 days (Standard Rig Month).

The rig operates under different phases like Rig building, Drilling, Production testing and work-over /side track. The Rig Building, Drilling and Production testing together constitutes a rig cycle.

Under some force majeure like waiting on weather, bandh/barricade, waiting for ready sites/location, inter-workcenter long distance rig moves, also capital repairs/dry-dock, contractual issues etc., the rig months are taken out of cycle which can be termed as idle rig month. Accordingly the hour-wise data is maintained by ONGC.

1.65 The Committee observe that during 2013-14 ONGC had registered sharp increase in the idle rig months to the tune of 26.03 rig months. When asked about the reasons for the same, the Ministry replied as under:

"The idle time for charter hired rigs has risen from 10.18 rig months during 2012-13 to 26.03 during 2013-14. The main reason is due to non-fulfilment of contractual obligations by charter hired rigs, wherein a total of 19.02 Rig months were lost. The details are as given below:

Year	Rig Name	Well Id	Rig months
2012-13	DR24HD	RDMA	0.00
		RDMB	0.01
		RNAC1	0.02
		RNAE	0.02
		SUKET#1	0.01
	DRIPL-		
	2000-8	SUKET#1	0.02
	SVUL-	GS_KW2#DA	0.59

Details of rig months lost on Charter Hired rigs during 2012-13 & 2013-14 on account of non-fulfilment of Contractual obligations:

	2000-27		
	SVUL-		
	2000-28	KOT#AA	2.03
	SVUL-		
	2000-33	BRMAC	3.67
	SVUL-		
	3000-50	BMAE	0.25
2012-13 Total			6.61
	AH		
2013-14	DSGVK	RJBC	0.01
	JOHN-20	AAAA	0.03
	SHIV#25	NCAB_SUB	2.90
	SHIV#26	PDAB_KKL	4.47
	SVUL-		
	1000-39	WSDF_AMD	5.33
	SVUL-		
	2000-33	BRMAC	2.77
	SVUL-		
	3000-50	BMAE	3.52
2013-14 To	otal		19.02

1.66 In this regard, when asked as to whether ONGC and OIL have entered into arrangements for hiring drilling equipment and technologies from private sector companies, the reply stated as under:

"ONGC :

ONGC hires drilling equipment and technologies from private sector companies. List of drilling rigs hired for onland and offshore areas are at given below:

ONGC: Drilling Rig Hired in last 3 years in Onshore

SI. No.	Name of	Contractor	Date of LOA	Duration of	Execution Period		Execution Period Contract Value		Contract Value	Remarks
	Rig			Contract	From	То	(Rs crore)			
1	Shiv-39	Shivani	21.10.2011	3 years	20.08.2012	21.04.2014	49.4	Contract was terminated on 21.04.2014 due to poor performance of contractor		
2	Shiv-25	Shivani	21.10.2011	2 Years	14.07.2012	13.08.2014	100.1			
3	Shiv-26	Shivani	21.10.2011	2 Years	04.08.2012	28.02.2015	123.1			
4	GTC- 201	GTC	21.10.2011	3 years	30.09.2012	Till Date	27.9			
5	John- 28	John Energy	20.01.2012	1 Year	19.04.2012	06.05.2013	17.7			

6	John- 30	John Energy	26.02.2015	3 Years	Yet to be mobilized	187.6	
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ONGC: List of Contracts for charter hire of offshore rigs during Last 3 years

SI. No.	Name of the rig	Date	Name of Contractor	Period	Contract value (Rs. In Crores)
1	Aban III	15.04.2011	M/s. Aban Offshore Limited, Chennai	03 years	328.25
2	Aban IV	15.04.2011	M/s. Aban Offshore Limited, Chennai	03 years	328.25
3	Hercules 258	04.07.2011	M/s. Hercules Marketing International Ltd., Cayman Island	180 days	98.5
4	MG Hulme Jr.	02.07.2011	M/s. Transocean Drilling Services (India) PVT Ltd., Mumbai	Drilling of 03 wells	473.92
5	Noble Duchess	19.09.2011	M/s. Deepwater Drilling & Services Pvt Ltd., New Delhi	03 years	1035.06
6	Actinia	19.09.2011	M/s. Transocean Drilling Services (India) PVT Ltd., Mumbai	03 years	1035.06
7	Energy Driller	19.09.2011	M/s. Jet Drilling (S) Pte. Limited, Singapore	03 years	1035.06
8	Hull No.108/261 (Greatdrill Chhaya)	23.09.2011	M/s. Greatship (India) Limited, Mumbai	05 years	969.21
9	Hull No.B-334 (Dynamic Vision)	30.09.2011	M/s. Deepwater Drilling & Services Pvt Ltd., New Delhi	05 years	969.21
10	Aban - II	08.11.2011	M/s. Aban Offshore Limited, Chennai	03 years	297.73
11	GSF Rig 140	11.11.2011	M/s. Transocean Drilling Services (India) PVT Ltd., Mumbai	Dr1g.5 Wells	1004
12	Discovery -1	12.01.2012	M/s. Jindal Drilling & Industries Ltd., Gurgaon	05 years	981.15
13	C.E.Thornton	16.01.2012	M/s. Transocean Drilling Services (India) PVT Ltd., Mumbai	03 years	473.31
14	F.G.McClintock	16.01.2012	M/s. Transocean Drilling Services (India) PVT Ltd., Mumbai	03 years	471.31

<u>2011- 12</u>

	2012-13						
SI. No.	Name of the rig	Date	Name of Contractor	Period	Contract value (Rs. In Crores)		
1	Aban Ice	29.11.2012	M/s. Aban Offshore Limited, Chennai	Till 31.03.2013	84.09		

2013-14								
SI. No.	Name of the rig	Date	Name of Contractor	Period	Contract value (Rs. In Crores)			
1	GSF Explorer	24.05.2013	M/s. Global SantaFe Drilling Company, USA	01 year	899.49			
2	Aban Ice	06.06.2013	M/s. Aban Offshore Limited, Chennai	03 years	1109.79			
3	Ron Tappmeyer	21.06.2013	M/s. Shelf Drilling Offshore Services (India) Pvt Limited., Mumbai	03 years	557.07			
4	Trident-XII	21.06.2013	M/s. Shelf Drilling Offshore Services (India) Pvt Limited., Mumbai	03 years	557.07			
5	Greatdrill Chetna	26.06.2013	M/s. Greatship (India) Limited, Mumbai	03 years	780.34			
6	JT Angel	09.07.2013	M/s. Shelf Drilling Offshore Services (India) Pvt Limited., Mumbai	From 1.8.2013 till 26.11.2013	40.91			
7	Trident – XII	09.07.2013	M/s. Shelf Drilling Offshore Services (India) Pvt Limited., Mumbai	From 16.08.2013 till 13.11.2013	20.04			
8	Ron Tappmayer	09.07.2013	M/s. Shelf Drilling Offshore Services (India) Pvt Limited., Mumbai	From 06.08.2013 till 02.12.2013	29.04			
9	Noble Charlie Yester	09.07.2013	M/s. Jindal Drilling & Industries Ltd., Gurgaon	From 20.07.2013 till 22.11.2013	50.81			
10	Victory Driller	09.07.2013	M/s. Dynasty Oil & Gas Pvt Ltd., New Delhi	03 years	557.07			
11	JT Angel	31.07.2013	M/s. Shelf Drilling Offshore Services (India) Pvt Limited., Mumbai	03 years	557.07			
12	Harvey H. Ward	05.09.2013	M/s. Shelf Drilling Offshore Services (India) Pvt Limited., Mumbai	03 years	557.07			
13	Hull No.117/275 (Greatdrill Charu)	21.11.2013	M/s. Greatship (India) Limited, Mumbai	05 years	1507.24			
14	Hull No.110/257 (Jindal Star)	29.11.2013	M/s. Jindal Pipes Limited., Gurgaon	05 years	1507.24			
15	Virtue - 1	15.01.2014	M/s. Jindal Pipes Limited., Gurgaon	05 years	1507.24			

			2014-15		
SI. No.	Name of the rig	Date	Name of Contractor	Period	Contract value (Rs. In Crores)
1	Sundowner P-16	19.06.2014	M/s.Sundowner Offshore International (Bermuda) Ltd., Bermuda	Completion of side track of 02 wells & Drilling of 2 wells or for a period of 170 days whichever is earlier.	70.13
2	Deepsea Fossil	09.10.2014	M/s. Jagson International Ltd., New Delhi	03 years	535.43

3	Deepsea Fortune	09.10.2014	M/s. Jagson International Ltd., New Delhi	03 years	535.43
4	Aban-III	09.10.2014	M/s. Aban Offshore Limited, Chennai	03 years	607.60
5	Aban-IV	09.10.2014	M/s. Aban Offshore Limited, Chennai	03 years	607.60
6	PARAGON L786 (Noble Kenneth Delaney)	17.10.2014	M/s. Deepwater Drilling & Services Pvt Ltd., New Delhi	03 years	535.32
7	PARAGON M1161 (Noble Charlie Yester)	17.10.2014	M/s. Deepwater Drilling & Services Pvt Ltd., New Delhi	03 years	606.89
8	Valiant Driller	17.10.2014	M/s. Deepwater Drilling & Services Pvt Ltd., New Delhi	03 years	606.89
9	Noble Ed-Holt	17.10.2014	M/s. Deepwater Drilling & Services Pvt Ltd., New Delhi	03 years	606.89
10.	Chikyu	27.01.2015	M/s. Japan Drilling Company, Japan	150 days	616.95

1.67 OIL has hired different equipment and technologies from private sector companies to meet its operational requirements. The list of drilling rigs hired by OIL in the last 3 years is given below.

SI. No.	Description	Contractor	Year of Award	Total Contract Amount
1	Charter Hire of 2(two) Nos. 650 HP Capacity Work-over Rigs for 2+1 yrs	M/s Kakoti Engineering Works, Sibsagar	2011	Rs. 31.4 crore
2	Charter Hire of 2(two) Nos. 650 HP Capacity Work-over Rigs for 2 yrs	M/s JayBee Energy Pvt. Ltd, Guwahati	2012	Rs. 15.8 crore
3	Charter Hire of 2(two) Nos. 650 HP Capacity Work-over Rigs for 2 yrs	M/s Deep Industries, Ahmedabad	2014	Rs. 30.1 crore
4	Charter hire of 1400 HP Drilling rig for 9 months	M/s Essar Oilfields Services India Ltd., Mumbai	2014	USD 8.6 million
5	Charter hire of 1400 HP Drilling rig for 2+1 yrs	M/s Simplex Infrastructure Ltd., Mumbai	2012	USD 14.4 million

OIL: List of rigs hired in last three years

SI. No.	Description	Contractor	Year of Award	Total Contract Amount
6	Charter hire of 1400 HP Drilling rig for 2 yrs	M/s JayBee Energy Pvt. Ltd, Guwahati	2013	USD 9.6 million
7	Charter hire of 1400 HP Drilling rig for 2 yrs	M/s JayBee Energy Pvt. Ltd, Guwahati	2012	USD 9.6 million
8	Charter hire of 2 Nos. 2000HP Drilling rig for 2 yrs	M/s Shiv-vani Oil & Gas Expl. Services Ltd, New Delhi	2012	Rs. 139.8crore
9	Charter hire of 1400 HP Drilling rig for 3 yrs	M/s Simplex Infrastructure Ltd., Mumbai	2015	USD 24.8 million
10	Hiring of MWD-SDMM for deviation wells	M/s Jindal Drilling & Industries Ltd., Mumbai	2014	USD 5.2 million

1.68 On being asked about the steps taken by the Government/E&P companies to minimize idle time of rigs, the replies stated as given below:

"All efforts are being made to minimize the rig-idle time by-

- Proper planning of rig movements
- Adequate and routine maintenance of equipment
- Replacement of old equipment
- Better monitoring of the rig utilization by taking proactive action during bandh and blockades.
- Utilization of suitable equipment like Kelly spinners, Drill pipe spinners.
- Induction of new technologies
- Taking support from Local Administrative bodies for safety and security of man and material at drilling rigs".

1.69 Asked about the new rigs purchased by ONGC and OIL in last three years and purchases in pipelines, the Ministry informed as under:

"ONGC :

ONGC has acquired **6 rigs** of Type-III AC VFD 2000 HP rigs for Onshore from M/s BHEL. Out of these, 5 rigs are commissioned in 2014-15 (3 in Sivasagar, 1 in Rajahmundry and 1 in Ankleshwar). Remaining 1 rig is under transportation to Karaikal. Total estimated value for six rigs was Rs 795.72 crore.

As on today, no purchases of drilling rigs are in pipeline.

OIL :

OIL has procured 1 rig in last three years and 2 rigs are in pipeline. The details are as under :

• 1 rig of 750 HP Mobile Rig was purchased vide PO No. 7950722 dated 07.05.2012 for US\$6.38 million.

 Order for 2 rigs of 2000HP VFD drilling Rigs has been placed on M/s CPTDC, China vide Purchase order no: 7950891 dated 13.01.2015 for an order value of US\$ 31.54 million".

D. <u>DEVELOPMENT OF UNCONVENTIONAL SOURCES OF FUEL</u>

(i) Coal Bed Methane

1.70 Coal Bed Methane is natural gas (Methane) adsorbed in coal and lignite seams and is aneco-friendly source of energy. Coal is both the source and reservoir rock for CBM. CBM production is done by simple depressurization and dewatering process. To harness this new source of energy in the country, the Government approved a comprehensive CBM policy in July, 1997 for exploration and production of CBM gas. As of now, 33 CBM Blocks have been awarded for exploration and exploitation of CBM. Prior to implementation of CBM policy, 2 blocks were awarded on nomination basis and one block through FIPB route. 30 blocks have been awarded through competitive international bidding under the four rounds. CBM in place reserves of 9.9 TCF have already been established in 8 CBM blocks. First commercial production of CBM has commenced from July 2007. Current CBM production is about 0.60 MMSCMD.

1.71 On being asked about the progress made in the exploration of Coal Bed Methane in the awarded blocks in the country, the Ministry in a written reply furnished as under:

"Coal Bed Methane is a form of natural gas (methane) that is extracted from coal beds. Methane is adsorbed in the coal matrix and is present in a near liquid state. CBM is extracted from coal seams by drilling wells into the coal seams, hydro-fracturing the coal seams followed by continuous dewatering of coal seams.

India having the fourth largest proven coal reserves in the world holds significant prospects for exploration and exploitation of CBM. The prognosticated CBM resources in the country are about 92 TCF (2608 BCM). In order to harness CBM potential in the country, the Government of India formulated a policy in 1997 wherein CBM being natural gas is explored and exploited under the provisions of Oil fields (Regulation & Development) Act 1948 and Petroleum and Natural Gas Rules, 1959 and administered by Ministry of Petroleum and Natural Gas.

In order to harness CBM potential in the country, the Government of India has so far awarded 33 CBM blocks under 4 round of CBM bidding & nomination basis. These CBM blocks were carved out by DGH in consultation with MoC and CMPDI. The awarded blocks cover 17,200 sq. km. (66%) of the total available coal bearing area (26,000 sq. km.) in 11 states of India viz. Andhra Pradesh, Chhattisgarh, Gujarat, Jharkhand, Madhya Pradesh, Maharashtra, Assam, Odisha, Rajasthan, Tamil Nadu and West Bengal. Total prognosticated CBM resource for 33 awarded CBM blocks is about 63.3 TCF (1792.43 BCM), of which so far, 9.9 TCF (280.8 BCM) has been established as Gas-In-Place (GIP).

As on date, 8 CBM blocks have entered development phase (Phase-III), 5 CBM blocks are in exploration phase (Phase-I&II), 4 CBM blocks are awaiting granting of PEL from state government, 4 CBM blocks have been relinquished due to poor CBM prospectivity and 12 CBM blocks are under the process of relinquishment.

Out of 8 CBM blocks in development phase, commercial CBM production has started in 1 block since 14th July 2007 which contributes about 0.38 MMSCMD of total CBM production, which is 0.76 MMSCMD. Four more CBM blocks are expected to start commercial production in near future.

	STATUS OF CBM BLOCKS AS ON 10.03.2015						
SI. No.	Block Name/ State/ Area (in sq. km.) Operator/ Consortium (PI in %)	Minimum Work Program (MWP)	Core Holes drilled	Test Wells drilled	Pilot Wells drilled	Total Dev. Wells drilled	Current Status
		СВМ	BIDDING	ROUND-I			
1	Raniganj (South) West Bengal 210 GEECL (100)	Ph-I Completed before award Ph-II Core Holes: 3 Test Wells: 1 Pilot Wells: 3 Ph-III Core Holes: 6+2 Dev. Wells: 300	8	3	3	150	On Commercial production since 14.07.2007. Currently producing @ 0.3848 MMscmd
2	Raniganj (North) West Bengal 350 ONGC (74) - CIL (26)	Ph-I Core Holes: 8 Test Wells: 1 Ph-II Pilot Wells: 2 Ph-III Dev. Wells: 80	9	1	2	_	Development Phase. PML application submitted by operator. PML yet to be awarded by State govt. of West Bengal.
3	RG(E)- CBM-2001/1 West Bengal 500 EOL (100)	Ph-I Core Holes: 12 Test Wells: 15 Ph-II Pilot Wells: 60 Ph-III Dev. Wells: 290	17	15	60	256	Development Phase Incidental CBM Production @ 0.3414 MMscmd
4	BK-CBM-2001/I 95 ONGC (80) - IOC(20)	Ph-I Core Holes: 8 Test Wells: 2 Ph-II Core Holes: 2 Pilot Wells: 12 Ph-III Dev. Wells: 146	8	2	12	_	Development Phase. PML application submitted by operator. PML yet to be awarded by State govt. of Jharkhand. Operator
5	NK-CBM-2001/I Jharkhand 340 ONGC (80)-IOC(20)	Ph-I Core Holes: 9 Test Wells: 2 Ph-II Pilot Wells: 6 Ph-III Dev. Wells: 68	9	2	5	_	Development Phase. PML application submitted by operator. PML yet to be awarded by State govt. of Jharkhand.

6	Jharia Jharkhand 85 ONGC (74) - CIL (26)	Ph-I Core Holes: 8 Test Wells: 2 Ph-II Pilot Wells: 11 Ph-III Dev. Wells: 72	8	2	11	_	Development Phase. PML application submitted by operator. PML yet to be awarded by State govt. of Jharkhand. Incidental CBM Production @ 0.0076 MMscmd
7	SP(E)-CBM-2001/I Madhya Pradesh 495 RIL(100)	Ph-I Core Holes: 8 Test Wells: 2 Ph-II Pilot Wells: 10 Ph-III Dev. Wells: 560	26 (10 in Ph-I)	5	10	27	Development Phase. CBM produced is utilized for internal consumption. Currently producing CBM @387 scmd
8	SP(W)-CBM-2001/I Madhya Pradesh 500 RIL(100)	Ph-I Core Holes: 8 Test Wells: 2 Ph-II Pilot Wells: 10 Ph-III Dev. Wells: 400	38 (9 in Ph-l)	5	31	134	Development Phase. CBM produced is utilized for internal consumption. Currently producing CBM @2032 scmd
CBM	BIDDING ROUND-II						·
1	SK-CBM-2003/II Jharkhand 70 ONGC (100)	Ph-I Core Holes: 10 Test Wells: 3 Ph-II Pilot Wells: 13	10	3	0	_	Applied for relinquishment without completing MWP due to poor prospect
2	NK(W)-CBM-2003/II Jharkhand 267 ONGC (100)	Ph-I Core Holes: 8 Test Wells: 2 Ph-II Pilot Wells: 10	8	0	0	_	Applied for relinquishment without completing MWP due to poor prospect
3	ST-CBM-2003/II Madhya Pradesh 714 ONGC(100)	Ph-I Core Holes: 3 Test Wells: 0 Ph-II Pilot Wells: 3	3	0	0	-	Relinquished
4	SH(N)-CBM-2003/II 825 RIL(100)	Ph-I Core Holes: 10 Test Wells: 5 Ph-II Pilot Wells: 10	11	5	0	-	Applied for relinquishment due to non-grant of EC
5	BS(I)-CBM-2003/II Rajasthan 1045 RIL(100)	<u>Ph-I</u> Core Holes: 8 Test Wells: 2 <u>Ph-II</u> Pilot Wells: 10	8	2	0	-	Applied for relinquishment
6	BS(2)-CBM-2003/II Rajasthan 1020 RIL(100)	Ph-I Core Holes: 8 Test Wells: 2 Ph-II Pilot Wells: 10	8	2	0	_	Applied for relinquishment
7	BS(3)-CBM-2003/II Gujarat 790 ONGC (74) - CIL (26)	<u>Ph-I</u> Core Holes: 8 Test Wells: 2 <u>Ph-II</u> Pilot Wells: 12	8	2	0	_	Relinquished
8	WD-CBM-2003/II Maharashtra 503 ONGC(100)	Ph-I Core Holes: 2 Test Wells: 0 Ph-II Pilot Wells: 2	2	0	0	_	Relinquished
CBM	BIDDING ROUND-III						
1	SP(N)-CBM-2005/III Madhya Pradesh 609	<u>Ph-I</u> Core Holes: 8 Test Wells: 5	12	2	0	_	Applied for entry into Phase-II (Phase-I completed on

	RIL(45)-RNRL(45)-	Ph-II					17.08.2013)
	GEO(10)	Pilot Wells: 15					
2	SR-CBM-2005/III Madhya Pradesh 330 COAL GAS(10) - DIL(90)	Ph-I Core Holes: 8 Test Wells: 5 Ph-II Pilot Wells: 15	8	5	0	_	MWP of Phase-I completed. Ph-I period : 19.05.2008 – 18.11.2010. Issue related to Phase extension.
3	RM-CBM-2005/III Jharkhand 469 ARROW(35)-EIG(15)- TATA(15)	Ph-I Core Holes: 8 Test Wells: 5 Ph-II Pilot Wells: 15	4	0	0	_	Applied for relinquishment due to force majeure
4	BB-CBM-2005/III West Bengal 248 BPE (100)	Ph-I Core Holes: 8 Test Wells: 5 Ph-II Pilot Wells: 15	6	0	0	_	Applied for relinquishment due to poor prospect
5	KG(E)-CBM-2005/III Andhra Pradesh 750 REL(45)-PRNL(45)- Geopetrol(10)	Ph-I Core Holes: 8 Test Wells: 5 Ph-II Pilot Wells: 15	0	0	0	_	PEL awaited. Contractor has applied for relinquishment
6	GV(N)-CBM-2005/III Andhra Pradesh 386 COAL GAS(10)-DIL(40) ADINATH(50)	Ph-I Core Holes: 8 Test Wells: 5 Ph-II Pilot Wells: 15	0	0	0	_	PEL Awaited
7	BS(4)-CBM-2005/III Rajasthan 1168 REL(45)-PRNL(45)- Geopetrol(10)	Ph-I Core Holes: 8 Test Wells: 5 Ph-II Pilot Wells: 15	0	0	0	_	Applied for relinquishment
8	BS(5)-CBM-2005/III Rajasthan 739 REL(45)-PRNL(45)- Geopetrol(10)	Ph-I Core Holes: 8 Test Wells: 5 Ph-II Pilot Wells: 15	0	0	0	_	Applied for relinquishment
9	TR-CBM-2005/III Chhattisgarh 458 ARROW(35%, Operator)-GAIL(35%)- EIG(15%)- TATA POWER(15%)	<u>Ph-I</u> Core Holes: 8 Test Wells: 5 <u>Ph-II</u> Pilot Wells: 15	8	5	0	_	Applied for relinquishment due to poor prospect
10	MR-CBM-2005/III Chhattisgarh 634 ARROW(35%, Operator)-GAIL(35%)- EIG(15%)- TATA POWER(15%)	<u>Ph-I</u> Core Holes: 8 Test Wells: 5 <u>Ph-II</u> Pilot Wells: 15	10	0	0	_	Applied for relinquishment due to poor prospect
CBW	BIDDING ROUND-IV						
1	ST-CBM-2008/IV Madhya Pradesh 714 Dart Energy(80) - Tata Power(20)	<u>Ph-I</u> Core Holes: 15 Test Wells: 2 <u>Ph-II</u> Pilot Wells: 21	15	2	0	-	Block Relinquished
2	TL-CBM-2008/IV Odisha 557 EOL(100)	Ph-I Core Holes: 30 Test Wells: 2 Ph-II Pilot Wells: 25	0	0	0	_	PEL Awaited

3	IB-CBM-2008/IV Odisha 209 EOL(100)	<u>Ph-I</u> Core Holes: 25 Test Wells: 2 <u>Ph-II</u> Pilot Wells: 20	0	0	0	_	PEL Awaited
4	AS-CBM-2008/IV Assam 113 Dart Energy(60)- OIL(40)	Ph-I Core Holes: 15 Test Wells: 2 Ph-II Pilot Wells: 30	0	0	0	_	PEL effective date: :27.04.2012 Currently in Phase-I, Exploration Phase
5	MG-CBM-2008/IV Tamil Nadu 691 GEECL(100)	<u>Ph-I</u> Core Holes: 50 Test Wells: 2 <u>Ph-II</u> Pilot Wells: 30	0	0	0	-	Yet to start work for Ph-I PEL effective date: 04.11.2011 Block is overlapping with PML area of ONGC &GEECL is asking for unrestricted access to full area.
6	SP(NE)-CBM-2008/IV MP & Chhattisgarh 339 EOL (100)	<u>Ph-I</u> Core Holes: 25 Test Wells: 2 <u>Ph-II</u> Pilot Wells: 25	0	0	0	_	PEL for 231 sq. km. received from MP state govt. on 30.11.2010. PEL from Chhattisgarh govt. (108 sq. km.) is awaited.
7	RM(E)-CBM-2008/IV Jharkhand 1128 EOL(100)	Ph-I Core Holes: 30 Test Wells: 2 Ph-II Pilot Wells: 20	0	0	0	_	PEL effective date: 11.06.2014 To commence Exploration phase activities
	GRAND TOTAL		244	63	133	567	

Note:

1. FDP of all the 8 CBM blocks in Development Phase have been approved. 2. Currently commercial production has commenced from 1 CBM block i.e. Raniganj (South) and sale of incidental gas is from 2 CBM blocks namely-Jharia and Raniganj (East). By the end of 2015-16, it is envisaged that 3 more blocks i.e. Bokaro, Sohagpur (East) and Sohagpur (West) will commence production of incidental gas provided that all clearances are obtained timely from various government agencies.

1.72 As regards the commercially producing CBM fields, the Ministry in its replies informed as under:

"Only 1 (one) CBM Block: Raniganj (South) is currently under commercial production. Details as follows :

Raniganj (South) CBM BLOCK				
Coalfield	Raniganj			
Basin				
Location (State)	West Bengal			
Area	210 sq. km.			
Area Relinquished	0			
PSC signed on	31.05.2001			
PEL Grant (Effective	09.11.2001			

Date)					
Phase duration and Extensions:	Ph-II (Original): 5 years, 09.11.2001- 08.11.2006 Ph-III (Original): 5 years, 09.11.2006- 08.11.2011 Ph-IV: 25 years, 09.11.2011-08.11.2036				
FDP Approval Date	14.02.2007				
Contractor & PI (%)	GEECL (100)				
Operator	GEECL				
GIIP (Established) (BCM)	54.368 BCM (1.92 T	CF)			
Ultimate recoverable Reserves (BCM)	37.94 BCM (1.34 TCF)				
MWP/Work carried out by operator Wells to be drilled	Phase-I: i) Core Hole: ii)Test Well : Phase-II: i) Pilot Well: Phase-III: Development wells 300	MWP 8 3 3 300	Actual 8 3 3 150		
(As per FDF) Peak production rate (As per FDP)	1.28 MMSCMD				
Present Status:	Currently in production phase and producing gas @ 0.3848 MMSCMD;				

Additional Information: 4 other CBM Blocks of CBM Round-I are producing CBM incidentally. Details are as follows :

JHARIA CBM BLOCK				
Coalfield	Ibaria			
Basin	Damodar Valley, Gondwana Basin			
Location (State)	Jharkhand			
Area 84.55 sq. km. (Parbatpur Sector: 18 Sq Km & Other Se 67 Sq Km)				
Area Relinquished	19.45 sq. km.			
PSC signed on	06.02.2003			
PEL Grant (Effective Date)	28.08.2003			
Phase Duration and Extensions	Parbatpur Sector Phase-II: 28.08.2003 to 27.04.2009 (with 3 extensions & 14 months dispensation) <u>Other Sector</u> Phase-I (Original): 3 years, 28.8.2003 - 27.10.2006 Availed 1st Extn: 28.08.2006 - 27.02.2007 Availed dispensation: 28.02.2007 - 27.04.2008 (14 months) Availed 2nd Extn: 28.04.2008 - 27.10.2008 Phase-I (Actual): 28.08.2003-27.10.2008 (3 years+ two 6 months extn.+ 14mnths dispensation) Phase-II: 3 years, 28.10.2008-27.10.2011			

	(3 years: 4-1 year set-off due to Extn. in Phase-I) Availed 1st Extn: 28.10.2011 - 27.04.2012 Availed 2nd Extn: 28.04.2012 - 27.10.2012				
	Phase-II (Actual): 28.10.2008-27.10.2012 (4-1=3 years+ two 6 month extn.)				
	Phase-III: 4 years, 28.10.2012-27.10.2016 (5-1=4 years, Extn. in Ph-II set-off from Ph-III)				
FDP approval date:	23.04.2013				
Contractor & PI	ONGC 90%, CIL 10 %				
Operator	ONGC				
GIIP (BCM)	14.61 BCM (0.52 TCF)				
Ultimate Recoverable Reserves (BCM)	3.04 BCM (0.107 TCF)				
MWP/Work carried out by Operator in Other Sector (Area: 67 Sq Km.)	Phase – I <u>MWP Actual</u> Core Hole- 8 8 Test Well- 2 2 Phase –II Other Sector:				
	Pilot Well: 2 2				
MWP/Work carried out by Operator in Parbatpur Sector	Core Hole- Nil Nil Phase –II				
	Pilot Wells- 9 2 HMMW +2 Vertical Wells Total=9.2 (MWP completed)				
Wells to be drilled (As per FDP)	72				
Peak production rate (As per FDP)	0.61 MMscmd				
Present Status:	The block is under development phase Incidental CBM Production @ 0.0076 MMSCMD Development phase activity has not commenced yet due to non-grant of ML from state govt.				

Sohagpur (East) CBM BLOCK, SP(E)-CBM-2001/I						
Coalfield	Sohagpu	r				
Basin	Gondwar	a Basin				
Location (State)	Madhya F	Pradesh				
Area	495 sq. k	m.				
Area Relinquished	0					
PSC signed on	26.07.200)2				
PEL Grant (Effective Date)	29.10.200)2				
	Ph-I:	2.5	yea	ars,	29.10.2002-2	8.04.2005
	Ph-II:	3	yea	ars,	29.04.2005-2	28.04.2007
Phase duration and Extensions:	Availed	Extn	in	Ph-II:	29.04.2007-0	1.12.2009
	(Delay		in		getting	ML)
	Ph-III: 5 years, 02.12.2009-01.12.2014					
FDP Approval Date	28.11.2007					
Contractor & PI (%)	RIL (100)					

Operator	RIL					
GIIP (Established) (BCM)	47.855 BCM (1.69 TCF)					
Ultimate recoverable Reserves (BCM)	17.56 BCM (0.62 TCF)					
	Phase-I:					
	MWP		Actual			
	i) Core Hole:	8	10			
	ii)Test Well :	2	5			
MWP/Work carried out by operator	Phase-II:					
	i) Pilot Well:	10	10			
	Phase-III:	07				
	Development wells 560	27				
Wells to be drilled (As per FDP)	560					
Peak production rate (As per FDP)	2.60 MMscmd					
Present Status:	Test production @387 SCMD					

Sohagpur (West) CBM BLOCK, SP(W)-CBM-2001/I				
Coalfield	Sohagpur			
Basin	Gondwana Basin			
Location (State)	Madhya Pradesh			
Area	500 sq. km.			
Area Relinquished	0			
PSC signed on	26.07.2002			
PEL Grant (Effective Date)	29.10.2002			
Phase duration and Extensions:	Ph-I: 2.5 years, 29.10.2002-28.04.2005 Ph-II: 3 years, 29.04.2005-28.04.2007			
	Availed Extn in Ph-II: 29.04.2007-25.10.2009 (Delay in			
	getting ML)			
	Ph-III: 5 years, 26.10.2009-25.10.2014			
FDP Approval Date	28.11.2007			
Contractor & PI (%)	RIL (100)			
Operator	RIL			
GIIP (Established) (BCM)	55.501 BCM (1.96 TCF)			
Ultimate recoverable Reserves (BCM)	18.97 BCM (0.67 TCF)			
MWP/Work carried out by operator	Phase-I: MWP Actual			
	i) Core Hole: 8 9			
	ii)Test Well : 2 5			
	Phase-II:			
	i) Pilot Well: 10 31			
	Phase-III:			
	Development wells 400 78			
Wells to be drilled (As per FDP)	400			
Peak production rate (As per FDP)	2.78 MMscmd			
Present Status:	Test production @ 2032 SCMD			

Raniganj (East) CBM BLOCK, RG(E)-CBM-2001/I		
Coalfield	Raniganj	
Basin	Damodar	
Location (State)	West Bengal	
Area	500 sq. km.	

Area Relinquished	0			
PSC signed on	26.07.2002			
PEL Grant (Effective Date)	29.03.2005			
Phase duration and Extensions:	 Ph-I (Original as per CBM Contract): 2 years, 29.03.2005-28.03.2007 Availed 1st Extn in Ph-I: 29.03.2007-28.09.2007 Availed 2nd Extn in Ph-I: 29.09.2007-28.03.2008 Availed 398 days excusable delay without set-off (Delay in EC): 29.03.2008-01.05.2009 Ph-I (Actual): 29.03.2005-01.05.2009 Ph-II (Original as per CBM Contract): 3 years, 29.03.2007-28.03.2010 Availed 1st Extn in Ph-II: 02.05.2011-01.11.2011 Availed 2nd Extn in Ph-II: 02.11.2011-01.05.2012 Ph-II (Actual): 02.05.2009-01.05.2012 Ph-II (Actual): 02.05.2009-01.05.2012 			
FDP Approval Date	20.12.2010			
Contractor & PI (%)	EOL (100)			
Operator	EOL			
GIIP (Established) (BCM)	60.881 BCM (2.15 TCF)			
Ultimate recoverable Reserves (BCM)	28.12 BCM (0.993 TCF)			
MWP/Work carried out by operator	Phase-I:	MWP	Actual	
	i) Core Hole:	12	17	
	ii)Test Well :	15	15	
	Phase-II:			
	i) Pilot Well:	60	60	
	Phase-III:			
	Development wells	300	256	
Wells to be drilled (As per FDP)	300			
Peak production rate (As per FDP)	3.35 MMscmd			
Present Status:	Producing Incidental gas @ 0.3414 MMSCMD;			
	pipeline is being laid for evacuation of gas			

1.73 In this connection, the Committee enquired as to how are the activities regarding exploration of Coal Bed Methane coordinated amongst the MoPNG and Ministry of Coal and whether any action plan has been prepared in this regard, the Ministry submitted following reply:

"A Memorandum of Understanding (MoU) was signed between MoP&NG and MoC on 09.09.1997 for arrangement and procedures for CBM Exploration and

Exploitation activities in India. Coal Bed Methane (CBM) is a natural gas and therefore the MoP&NG is required to administer CBM projects under the existing Oilfields Act & Rules (Regulation and Development Act, 1948 and Petroleum and Natural Gas Rules, 1959. However, since CBM is an associate of Coal, it is required to be extracted in a manner so that the interests of coal and lignite' industry are not affected adversely as regard to their present or prospective mining. The MoU provides a framework for the parties to act in a co-operative manner to facilitate consistent with the statutory duties, the exploitation, so far that is economically viable, of CBM in India.

According to the MoU, MoP&NG and MoC hereby agree:

i. that the procedures need to be so organized that the prospective investor should deal with one organisation and not with several organisations under different Ministries which would lead to confusion and serious difficulties in coordination, etc.

ii. to the preparation of fiscal and other terms for a "Model Contract for Production of Coal Bed Methane (CBM) by the MoP&NG and submission of a draft copy to the Ministry of Coal for its comments before finalising the same

iii. to the preparation of dockets of demarcated :Blocks of coal resources invarious sedimentary basins in India indicating assessment of CBM potential if possible of each block

iv. MoP&NG will prepare the docket after collection of relevant, geological, geophysical and drilling information of coal resources from Coal India Ltd., Geological Survey of India & ONGC/OIL etc., where applicable. The data will be made available to the companies subject to reasonable payments.

v. to the joint recommendations for a balanced exploration and exploitation of CBM and Coal/lignite"

1.74 Asked about the status of comprehensive proposal initiated by MoPNG under directions of CCEA for seeking amendments to CBM policy initiated in this regard, the Ministry furnished the following status:

"In the CCEA meeting held on 19.12.2013, it is understood that Ministry of Coal had expressed reservations at extending CBM exploration and exploitation rights to companies other than CIL and its subsidiaries. However, in the minutes circulated by Cabinet Secretariat, it was stated that CCEA approved the entire proposal contained in para 6.1 i.e. extending CBM exploration and exploitation rights to Coal India Limited (CIL) and its subsidiaries, and to other central/state coal mining PSUs (para 6.1(iv) also). The matter was brought to the notice of the Cabinet Secretariat, which advised that the MoP&NG may bring a fresh proposal to the CCEA for a change in decision. MoP&NG requested the MoC to indicate whether the decision of the CCEA, as it exists, can be implemented by the MoP&NG. MoC maintained its stand that extending the benefits to other State/Central PSUs, particularly those that have entered into joint venture agreements with private companies, could lead to legal complications. Further, in view of the recent judgment passed by the Hon'ble Supreme, cancelling the allocation of coal blocks, some issues are being re-examined. MoPNG and

Ministry of Coal are in correspondence for resolution of various issues especially pertaining to simultaneous exploration and exploitation of CBM and Coal Mining by one single Operator from the point of view of safety of operations and fast track exploitation of both the resources viz. CBM and Coal".

(ii) National Gas Hydrates Programme (NGHP)

1.75 Under National Gas Hydrate programme of MoP&NG, numerous presence of gas hydrates was established in the year 2006 in Krishna-Godavari, Mahananda and Andaman deep waters areas. In this regard, when asked to furnish the progress made in NGHP, the Ministry in a written reply furnished following information:

"Gas hydrate exploratory activities/ research in India is being steered by the Ministry of Petroleum & Natural Gas under National Gas Hydrate Program (NGHP). The Program was initiated in 1997 with participation from Directorate General of Hydrocarbons (DGH), National E&P companies (Oil and Natural Gas Corporation Ltd, Oil India Limited, GAIL India Ltd, & Indian Oil Corporation) and National Research Institutions (National Institute of Oceanography, National Geophysical Research Institute and National Institute of Ocean Technology).

The Steering Committee for NGHP is headed by Secretary, P&NG with the concerned Joint Secretary as convener. The Technical Committee is chaired by DG, DGH and has participation from all NOCs like OIL, ONGC, GAIL, IOC & EIL, and National Institutes like the NGRI, NIO & NIOT. The NGHP was restructured in the year 2000.

NGHP Expedition-01 was launched in 2006 to gather information on the presence of Gas Hydrates in Indian offshore areas of western, eastern and Andaman Sea. 21 cores were collected and 39 holes/ wells drilled using the ship JOIDES Resolution. The expedition established presence of Gas Hydrates in KG and Mahanadi basins and Andaman deep waters in numerous complex geological settings.

NGHP Expedition 02 is at present underway. Under NGHP Expedition 02, it is planned to core 20 sand prone sites and to drill 40 wells in Krishna Godavari, and Mahanadi deep water areas with the objective to establish presence of Gas Hydrates in these reservoir sediments. Based on this data, sites for pilot production testing will be identified and production of Gas Hydrate deposits are planned to be carried out under Expedition - 03".

1.76 When asked if the programme is going as per scheduled target, the Ministry furnished following reply:

"ONGC has hired vessel CHIKYU and integrated services from M/s Japan Drilling Company (JDC) for NGHP Expedition-02 for LWD (Logging while drilling), Coring/drilling and wire line logging programme at 20 sites (40 wells) in the deep water KG & Mahanadi basins. The activities are to be carried out during the financial year 2015-2016. The NGHP Expedition-02 has started on 04th March 2015 and will likely be completed by 31st July 2015".

(iii) Ethanol Blended Petrol

1.77 The Government has launched Ethanol Blended Petrol programme in the country with a target to achieve mandatory requirement of 5% ethanol blended with petrol. In December 2014, the Government decided to procure ethanol at a fixed delivered price ranging between Rs.48.50 to Rs.49.50 per litre.

1.78 Asked to furnish the progress made in the implementation of Ethanol Blended Petrol Programme in the country, the Ministry in a written reply apprised as under:

"The Government has started Ethanol Blended Petrol (EBP) Programme in 2003. In 2006 the same was extended to 20 States and 4 UTs of the country. In the series of the decisions to give boost to EBP Programme, Government in July 2013 decided that OMCs will procure ethanol (produced from molasses route only) only from domestic sources to achieve the mandatory requirement of 5% ethanol blending in areas/parts of the country where sufficient quantity of ethanol is available. In other parts of the country, blending of ethanol may be increased progressively depending upon the availability of ethanol to reach the 5% mandatory level. OMCs and Sugar Industry Associations may interact with each other on a regular basis to achieve the target.

Later in order to improve the availability of ethanol, the Government on 10.12.2014 has, inter-alia, decided to fix the delivered price of ethanol in the range of Rs.48.50 per litre to 49.50 per litre, depending upon the distance of distillery from the depot/installation of the OMCs, inclusive of all central and statutory levies, transportation cost etc, which would be borne by the Ethanol suppliers. If the need arises to reduce the Retail Selling Price (RSP) of Petrol, then such reduction would proportionately factor in the requirement of maintaining the fixed cost of purchase of Ethanol. OMCs will sign MoU with the State Governments for a comprehensive system for un-interrupted inter-depot transfer of Ethanol within and outside the State. This may include annual excise permits to OMCs for movement of ethanol and other relevant and necessary measures.

Further, ethanol produced from other non-food feedstocks besides molasses, like cellulosic and ligno cellulosic materials including petrochemical route, has also been allowed to be procured subject to meeting the relevant BIS Standards.

Accordingly, OMCs have been directed by this Ministry on 18th December, 2014 to implement the EBP Programme as per the Government decision".

1.79 In this regard, when asked as to whether any MoUs of JVs have been signed/formed by the Government to augment supply and availability of EBP, as has been done to promote the availability of Bio-diesel, the Ministry in a reply stated as under:

"Government has not signed any MoU with any of the JVs regarding manufacturing of ethanol. However, Hindustan Petroleum Corporation Limited (HPCL) has set up its wholly owned subsidiary Company HPCL Bio-fuels Ltd.
(HBL), which has commissioned two fully automated integrated Sugar, ethanol & Co-Gen power plants in February 2012 at Sugauli & Lauriya in Bihar with installed capacity of 3500 TCPD crushing and distillation @60 KL per day of each plant. The total installed capacity for ethanol production at both plants is 32400 KL for 240 days of a sugar cycle".

1.80 When asked to mention the constraints being experienced by government in implementation of the EBP Programme, the Ministry provided following reply :

"Less availability of ethanol has been an impediment in effective implementation of EBP Programme ever since the proramme has started. However, vide Government's decision dated 10.12.2014, ethanol produced from other non-food feedstocks besides molasses, like cellulosic and ligno cellulosic materials including petrochemical route, has also been allowed to be procured subject to meeting the relevant BIS Standards.

Time consuming procedures adopted by Excise departments of different States (particularly for inter-state supplies) in issuance of licenses, is another impediment. Excise Department of UP has initiated quarterly permission for export instead of earlier procedure of yearly permission. Thus movement of surplus ethanol to deficient states is a problem.

The Government has been taking up the issues related to State VAT and Interstate supply etc. with State Governments from time to time".

E. <u>PERFORMANCE OF OIL PSUs</u>

(i) Expansion Activities of upstream oil companies

1.81 The PSU oil companies are foraying in to new fields of activities. The rigid demarcation of activities among the upstream and downstream companies is gradually fading away. The Committee in this regard sought details of such ventures of ONGC and OIL, the Ministry provided following details:

"Details of investment made by ONGC and OIL on upstream activities and on other ventures during last five years are as under :

ONGC :

(Rs. Crore)

	2009-10	2010-11	2011-12	2012-13	2013-14
Plan Expenditure on Upstream activity	22,960.65	27,607.24	29,223.55	29,497.58	31,478.47
Other ventures Expenditure	598.40	668.30	23.00	10.33	991.07
Total	23,559.05	28,275.54	29,246.55	29,507.91	32,469.54

	2009-10	2010-11	2011-12	2012-13	2013-14
Investment made in upstream activities	1555.32	1709.95	1988.87	2841.85	9350.90 *
Investment made in other ventures	1.54	32.81	60.80	48.18	0.08
Total	1556.86	1742.76	2049.67	2890.03	9350.98

*includes Mozambique acquisition cost of Rs. 6413 crore".

1.82 The Committee further asked whether the activity expansion was compromising the fund flow towards their main activity i.e. E&P operations, the Ministry submitted as under;

"ONGC :

Funding for upstream activities have not been compromised or curtailed owing to diversification of activities by ONGC. ONGC's investment in diversification of activities was only approx. 3% of total plan expenditure during the financial year 2013-14.

OIL :

Funding for upstream activities have not been compromised or curtailed owing to diversification of activities by OIL as investment in diversification of activities was only about 0.8% of total plan expenditure during last five years".

1.83 The Committee find that ONGC and OIL had not fully utilised the already lowered plan capex for the year 2012-13, 2013-14 respectively under the E&P head. When asked for the reasons, the Ministry submitted as under:

ONGC:

2012-13: Against the BE 2012-13 target of Rs.33,065.31 crore, the actual utilisation was Rs.29,507.91 crore, which was 89.24% of the target. The shortfall in utilisation was due to the following reasons:

- There was under utilisation in Capital head, which was primarily due to delay in some of the schemes like Vashita S-1, C-Series Phase III, Revamping of unmanned Well platform, B193/22 and Western Onshore redevelopment schemes.
- Further, against the target of Rs.671.98 crore under integration projects, the actual utilisation was Rs.10.33 crore only, since the amount which was kept towards equity contribution for OPAL and OTPC could not materialise within the year.

2013-14: Against the BE 2013-14 target of Rs.35,049.23 crore, the actual utilisation was Rs.32,469.54 crore which was 93% of the targets. The shortfall in budget utilisation was due to the following reasons:

- Under utilisation in Capital which was primarily on account of delay in some of the schemes like delay in progressive execution of some of the capital schemes like B193 cluster field development, offshore grid interconnectivity project, cluster 7 field development, B 127 cluster development and Assam Renewable Project.
- Further there were issues in acquisition of land for Tapti Daman, finalization of technical works package for Vashita S-1,etc.

2014-15: Plan expenditure in BE 2014-15 was Rs.36,059 crore which was revised to Rs.34,813 crore in RE 2014-15. The primary reason for reduction in RE 2014-15 vis-a-vis BE for 2014-15 is on account of reduction in capital expenditure. The capital budget has been kept at Rs.8752.00 crore for RE 2014-15 as against the BE 2014-15 target of Rs.11731.00 crore. The reason for decrease in expenditure in RE 2014-15 is primarily attributable to shifting of the scheme expenditure to BE 2015-16. The reduction in capital expenditure has been partly set off by increase in Survey Expenditure, Integration projects and Producing Non Operated JV Expenditure.

2012-13: During 2012-13, as against BE of Rs.3378.29 crore, RE was revised to Rs.3069.52 crore and actual expenditure was Rs.2890.03 crore which is 85.6% of BE 2012-13 and 94.2% of RE 2012-13. The reason for variation of BE vis-a-vis RE is mainly attributed to:

- The survey works in 2012-13 BE was revised in RE mainly due to upward revision of 2D survey targets from 470 GLKM to 500 GLKM and of 3D Survey targets from 1570 SQKM to 1925 SQKM.
- The BE for drilling was revised at the RE stage. The initial 2012-13 BE targets / drilling programme of exploratory drilling & development drilling was set at 211,415 meters. However, the target was revised downward to 149,095 meters due to unforeseen sub-surface complications in several deep drilling operations arising out of frequent local bandhs / blockade, difficult logistics, environmental problems, land acquisition problems etc.
- The initial outlay for procurement of capital equipment and facilities was revised mainly on account of expenditure towards setting up a 50 MW Wind energy power project in Rajasthan
- Outlay towards overseas and other investments was revised in 2012-13 RE based on the revised overseas investment programme for 2012-13.
 2013-14: The Revised Estimate for 2013-14 was Rs.10439.00 crore against the initially approved Budget Estimate of Rs.3581.00 crore. Actual expenditure during the year 2013-14 was Rs.9351.00 crore which is 261.13% of Budget Estimate and 89.6% of the Revised Estimate. The reasons for the variation between BE and RE during 2013-14 was due to:
- Excess utilization of funds for acquiring assets abroad which was not taken into account while preparing the plan outlay (BE) due to inherent uncertainties involved in 'Mergers and Acquisition' transactions.
- There was shortfall in 2D Survey achievement which was mainly due to nonreceipt of Forest clearance for the survey work planned in KG basin.

- Shortfall in 3D Survey in Rajasthan project as some part of the block falls under Defence zone and is occupied by the Defence for their establishment.
- Shortfall in Overseas investments, mainly due to lower cash calls from the operator for project Carabobo in Venezuela.

2014-15: During the year 2014-15, an investment of Rs.3534.43 crore (provisional) has been utilised as against a BE target of Rs.3632.00 crore and RE of Rs.3529.44 crore. During the year 2014-15, the utilisation of funds are slightly higher than its RE and is marginally lower than its BE target. The marginal shortfall in utilisation from BE is primarily due to:

- Non-availability/delay in mobilisation of Charter Hired rig for OIL's operations in Mizoram & KG Basin,
- Delay in rig movement in KG Basin due to objection by villagers for moving OIL's Rig and material over Vivekananda Varadhi Bridge".

(ii) Gas Authority of India Limited (GAIL)

1.84 When on a specific query the Committee asked about the rationale for lowering of the IEBR funds from Rs.1486.83 crore to Rs.872 crore in the E&P head and again scaling it up to Rs.2304.51 crore, the Ministry in a written reply apprised as under:

"The IEBR of Rs.1486.83 crore, Rs.872.48 crore and Rs.2304.51 crore includes E&P and other pipelines and CGD projects but excluding petrochemical projects. The main reasons for variation in the estimated CAPEX under E&P head are as follows:

- On account of relinquishing of various blocks in the domestic sector and anticipated completion of development activities in the overseas blocks in Myanmar the CAPEX for E&P activities have been reduced from Rs.244 crore in BE 2014-15 to Rs.180 crore for blocks in domestic sector and Rs.148 crore in RE 2014-15 and BE 2015-16 for the overseas blocks.
- On account of various M&A opportunities envisaged at the target level not materializing at a later date, the CAPEX under M&A activities was reduced from Rs.100 crore in BE 2014-15 to Rs.10 crore in RE 2014-15. The same has been projected as Rs.100 crore in BE 2015-16 on account of anticipated M&A opportunities.

The reasons for variation of other projects are as follows:

 Pipeline projects of GAIL have been affected due to reduction in domestic gas supply from PMT and RIL KG D5 basin, problem in tying up new customers at projected RLNG prices and works hindered by ROU problems. Accordingly, the CAPEX under Pipeline segment was reduced from Rs.806 crores in BE 2014-15 to Rs.395 crore in RE 2014-15. In order to take up replacement of various existing pipelines of GAIL planned during 2015-16 and proposed CAPAX for Jagdishpur-Haldia Pipeline, the CAPEX for pipeline sector has been increased to Rs.1533 crore in 2015-16. For the City Gas Distribution (CGD) segment, the CAPEX was reduced from Rs.155 crore in BE2014-15 to Rs.78 crore in RE 2014-15 on account of delay in various permissions and clearances from regulatory authorities, award of the Geographical Area by PNGRB etc. In BE 2015-16, the anticipated CAPEX has been increased to Rs.274 crore, taking into account equity contribution to GAIL Gas Ltd. for its various expansion activities planned in 2015-16.

The details of the project of GAIL and their CAPEX which fall under the E&P sector classification is as follows:

SN		2014-	2015-16	
SIN	PARTICULARS	BE RE		BE
1	DHABOL BANGLORE P/L	39.70	64.74	19.00
	KOCHI-KOTTANAND P/L	402.22	59.02	194.60
	COMPRESSOR AT	2 55	_	_
	JHABUA, VIJAIPUR, CHAISA & JHAJJAR	2.00		
	CAPACITY AUGMENTATON OF AURAIYA-			
	JAGDISHPUR PIPELINE & KANPUR	7.34	5.75	21.45
	FERTILIZER & CEMENT LIMITED.			
	KARANPUR-MORADABAD-KASHIPUR-	33.90	15.97	-
		00.70	5.54	70.40
		36.72	5.54	73.19
		-	21.07	-
		75.46	6.56	5.42
		5.39	6.00	150.00
			92.09	407.00
	BASINI AND AGARTALA REGION PIPELINES		25.00	583 75
	WITH DRYFR		20.00	505.75
	P/L OTHERS	202.30	93 54	79.06
	TOTAL CAPEX P/L	805.58	395.28	1.533.47
2	E&P DOMESTIC	142.86	107.91	147.94
	E&P OVERSEAS	101.05	72.00	-
	TOTAL E&P CAPEX	243.91	179.91	147.94
3	CITY GAS (GAIL GAS)	150.00	72.95	274.00
	CITY GAS (JV GROUP)	5.00	4.62	-
	TOTAL CGD INVESTMENT	155.00	77.57	274.00
4	OPAL INVESTMENT	-	10.00	-
	SOUTH EAST ASIA GAS P/L	42.00	45.00	33.00
	WIND ENERGY/SOLAR		F 2F	1.00
	ENERGY/RENEWABLE ENERGY	-	5.55	1.00
	BD M&A PROJECTS	100.00	10.00	100.00
	RGPPL	14.30	82.68	8.60
	BCPL	-	35.00	-
	PHENOL& ACETONE PROJECT	-	5.00	150.00
	ТАРІ	-	7.20	15.00
	OTHERS	126.04	19.49	41.50
	TOTAL BD/INT SOURCES /PROJECT	282.34	219.72	349,10
	DEVELOPMENT	202.04	210.72	545.10
	TOTAL CAPEX	1,486.83	872.48	2,304.51

1.85 On being asked to explain the considerably lower allocations in BE 2015-16 under petro chemical sector by GAIL, the Ministry stated as under:

"The Capital outlay for BE 2014-15 and RE 2014-15 was Rs.1276 Crores & Rs.1259 Crores respectively under petro-chemical sector.

The Capex of Rs.400 Crores under petro-chemical sector by GAIL for BE 2015-16 was estimated under following heads:

1.	Capacity augmentation of Pata Petrochemical	:	Rs.150 Crores
2.	PBR project	:	Rs.150 Crores

3. Modification of petrochemical plant : Rs.100 Crores

The capacity augmentation of Petrochemical at Pata has come to commissioning stage and majority portion of the expansion i.e Gas Cracker at Pata & C2/C3 Plant at Vijaipur have already been completed in 2014-15.

For balance payment, an amount Rs.150 Crores has been earmarked in BE 2015-16. There is not much capital outlay after the Petrochemical Project is completed.

GAIL has estimated an amount of Rs.150 Crores and Rs.100 Crores for PBR (Approval / Initial stage) & Modification of Petrochemical Plant (if any) respectively in BE 2015-16".

(iii) ONGC Videsh Ltd. (OVL)

1.86 ONGC Videsh Limited is a wholly owned subsidiary of Oil and Natural Gas Corporation Ltd. The primary business of the company is to prospect for oil and gas fields in foreign countries as well as exploration, production, transportation and sale of oil and gas. When asked to furnish details of the worth of overseas assets of ONGC Videsh as on date, the Ministry furnished following reply:

"Ans: List of Projects as on 31st March 2015 including the current investment (as on 31st Dec-2014) is enclosed at <u>Annexure II</u>.

Of the indicated projects, Block RC-8 in Colombia where ONGC Videsh has 40% participation is under consideration for relinquishment on the expiry of the exploration license on 29th November 2013. The consortium did not find promising results in the initial phase of exploration. The investment made in the block, till Dec-2014 was Rs. 33.80 crore.

The exploration projects can be taken up for further development or relinquishment based on the results during exploration phase".

1.87 Asked to furnish details of the ONGC's efforts for purchasing stakes in Rosneft's East Siberian oil and gas fields and whether any understanding has been reached, the Ministry provided as under:-

"During 2014, ONGC Videsh has been engaged in preliminary discussions with Russian Oil Company – Rosneft on participation in its two East Siberian Oil and Gas Fields and submitted an Expression of Interest (EOI) to this effect in October, 2014. After detailed due diligence, further discussions would take place".

(iv) Biecco Lawrie limited (BLL)

1.88 Biecco Lawrie limited is a medium sized engineering unit working under administrative domain of MoP&NG having diversified activities. The Company has continously incurred losses in its various operations and ventures and was registered as a sick company. The Committee when wished to know about the current status of the company's affairs, the Ministry furnished following reply:

"BRPSE in its meeting held on 22nd February 2013 had recommended that Ministry of Petroleum & Natural Gas may consider closing BLL after giving VRS to all employees if the option of its takeover by other CPSEs does not succeed. On recommendation of BRPSE, the options of takeover and merger were discussed with Bharat Heavy Electricals Limited(BHEL), Thereafter, as per recommendation of BRPSE this Ministry initiated action for closure of the company.

In the meanwhile, M/s BLL registered itself under BIFR under Sick Industrial Companies (Special Provisions) Act, 1985, w.e.f. 17.11.2014 as its net worth had eroded by more than 50%. Further, in view of various representations, the matter was again reviewed and was decided not to close the company and give one more chance to BLL for its revival. It was decided to take some special measures to enable revival of BLL. These are under consideration".

1.89 On being further asked about the releasing of the bailout packages which were requested for by Bieeco Lawrie Ltd, the Ministry informed that after detailed review and deliberation it was decided to take some special measures to enable revival of BLL which are presently under consideration. When asked about the efforts to improve its financial prospects, the Ministry apprised as under:

"Hon'ble MOS has convened a meeting of OIL Industries and a decision has been taken to give one more chance for revival of the company. OIDB being the major stakeholder of the company, has been directed to provide special loan of Rs. 12.00 crore to revive the company. Further, BLL has informed that they are trying to get support of Oil Marketing Companies (OMCs) to give sufficient work load for lubricant filling operations as well as sufficient electrical maintenance works. BLL has requested this Ministry to request Ministry of Power to assign work on Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and Integrated Power Development Scheme (IPDS) on nomination basis. This request is under consideration".

F. <u>NATIONAL GAS GRID</u>

1.90 Pipeline infrastructure is prerequisite for connecting demand centers with the sources of gas. At present, the country is having about 15,000 km long existing pipeline infrastructure (including Spur lines) which is under operation. In order to complete the gas grid across the country, an additional 15,000 km of piepliens are required. It is important to note that out of this 15000 km, PNGRB/Gol has already

authorized entities to construct about 11900 Km long pipeline. For the purpose of monitoring the progress on the development of Gas Grid, the entire additional 15,000 km pipeline sections have broadly been categorized under the four categories.

SI. No.	Name of the Natural Gas Pipeline	Name of Entity	Length (KM)	Completion schedule	Present Status of Construction
1	JagdishpurHaldia Pipeline	GAIL (India) Limited	2050	2018-19	Survey work to be completed by March 2015.
2	ShahdolPhulpur Pipeline	Reliance Gas Pipelines Limited	312	2016	As per schedule
3	Kakinada Vizag Srikakulam	AP Gas Distribution Corporation	391	2017	As per schedule
4	Mallavaram Bhopal Bhilwara via Vijaipur	GSPL India Transco Limited	2042	2014	
5	MehsanaBhatinda	GSPL India Gasnet Limited	2052	2014	The entity has sought for 24 months from the date of receipt of all statutory approvals as the
6	Bhatinda Jammu Srinagar	GSPL India Gasnet Limited	725	2014	schedule time for completion,
7	SuratParadip	GAIL (India) Limited	2112	2015	The project has not yet taken off. Expected by 2020
8	Ennore Nellore	KEI-RSOS Petroleum and Energy Pvt. Ltd.	430	2017	Recently authorized by PNGRB
9.	Ennore-Bengaluru- Puducherry- Nagapattinam- Madurai-Tuticorin	-	1175	-	Under process of granting Authorization.
10	Ranchi-Talcher- Paradip	To be	520		MoP&NG has appointed GAIL as the Sponsoring Authority for the project.
11	Barauni-Guwahati- Agartala	under VGF	~1300		Subject to success of Pilot project (Ranchi-Talcher-
12	Haldia- Paradip/Srikakulam	PPP.	~500/700		Paradip pipeline), these pipelines will be considered in PPP.
13	Kochi-Koottanad- Bangalore- Mangalore	GAIL (India) Limited	1062	2014	Phase-I of project commissioned. Phase-II construction work is on Hold

1.91 The Status of the construction of upcoming gas pipeline projects under National Gas Grid (NGG) is as under:

					due to RoU issues. Matter is sub-judice in SC.
14	Spurline of Dadri- Bawana-Nangal		100	2014	Trunk line has been Commissioned.Spurlines are under-construction.
15	Spurlines of Chhainsa-Jhajjar- Hissar	GAIL (India) Limited	193	2014	Trunk line has been Commissioned.Spurlines are under-construction
16	Spurlines of Dabhol- Bangalore		410	2014	Trunk line has been Commissioned.Spurlines are under-construction

As informed by PNGRB, no cost-overrun has been reported in any project by entities.

1.92 When asked about the new licenses being issued by PNGRB for laying of trunk

Pipelines for transporting Natural Gas, the Ministry in a reply stated as under:

"The Petroleum & Natural Gas Regulatory Board (PNGRB) established under PNGRB Act, 2006 grants authorization for natural gas pipelines in accordance with the provisions of the said Act and the PNGRB (Authorizing Entities to lay, build, operate or expand natural gas pipelines) Regulations, 2008. These Regulations provide for initiation of proposal for grant of authorization through Expression of Interest route or suo-moto by PNGRB, public consultations process and subsequently selection of an entity through competitive bidding process. PNGRB has so far awarded grant of authorization under the provisions of the aforementioned Regulations for seven natural gas pipelines with an approximate length of 7950 KM and system capacity to transport about 400 MMSCMD of natural gas. Bidding process is underway for grant of authorization Ennore-Thiruvallur-Bengaluru-Puducherry-Nagapattinam-Madurai-Tuticorin for natural gas pipeline with approximate length of 1175 KM and system capacity of 18.35 MMSCMD. Further, PNGRB has received Expression of Interest (EoIs) for another two natural gas pipelines viz., Vijaywada-Nellore natural gas pipeline of approximate length 355 KM and system capacity of 2.67 MMSCMD and Contai-Paradip-Dattapulia natural gas pipeline of approximate length of 705 KM and system capacity of 14.4 MMSCMD. These EOIs are currently under process".

1.93 As regards the pending authorizations, presently lying with PNGRB, the Ministry informed that as on date, authorization for only one natural gas pipeline i.e. Ennore-Thiruvallur-Bengaluru-Puducherry-Nagapattinam-Madurai-Tuticorin natural gas pipeline is pending with PNGRB as the matter is sub-judice in Hon'ble Supreme Court (Civil Appeal No.11450/2014).

1.94 In the implementation report for the Budget announcement (2014-15), 2500 Km long spurlines under phase I have been demarcated for developing Gas Grid. The Ministry in this connection has given the details of these pipe lines proposed to be laid under National Gas Grid.

"Three (03) pipeline sections with combined length of 2753 Km have been demarcated under category -1 (Phase-1) of the planned gas grid. The details of these pipeline sections are as under -

SI. No.	Name of the Natural Gas Pipeline	Name of Authorized Entity	Length (KM)	Completion schedule
1	Jagdishpur Haldia Pipeline (JHPL)	GAIL (India) Limited	2050	By 2018-19
2	Shahdol Phulpur Pipeline (SPPL)	Reliance Gas Pipelines Limited (RGPL)	312	By 2016
3	Kakinada-Vizag- Srikakulam Pipeline	AP Gas Distribution Corporation (APGDC)	391	By 2017

1.95 When asked about the current status of the progress made regarding the 4000 kilometers of pipeline proposed to be constructed on Public-Private-Partnership (PPP) model and steps taken to remove the impasse, the Ministry replied as under:

"In order to complete the National Gas Grid (NGG), Government has identified various gas pipeline sections of total length of about 15,000 Km. Out of this 15000 Km, following 3 pipeline sections of total length about 2670 Km are under consideration to be implemented through PPP mode:

- (i) Ranchi-Talcher-Paradip Pipeline (Approx. 670 Kms.)
- (ii) Barauni-Guwahati-Agartala Pipeline (Approx. 1,300 Kms.)
- (iii) Haldia-Paradip/Srikulam Pipeline (Approx. 500/700 Kms.)

In order to start the process of implementing these pipeline sections, MOP&NG has identified Ranchi-Talcher-Paradip Pipeline as a pilot project for developing through PPP mode. Government has appointed GAIL (India) Limited, a Central Oil PSU, as the Sponsoring authority, to implement this pilot project. Depending upon the success of the pilot project, others pipelines will be implemented in coming time.

GAIL, as sponsoring authority, has completed Reconnaissance Route survey and Market Demand survey along the route of Ranchi-Talcher-Paradip Pipeline. Further, Detailed Feasibility Report (DFR) is under preparation by GAIL. GAIL has also floated tender for appointment of Financial cum Transaction and Legal Advisor (TA) for recommending project structuring and bidding for selection of private parties. TA is expected to be appointed by July 2015. PPP agreement is expected to be executed by December, 2015.

At present, there is no pricing issue for this project. Petroleum and Natural Gas Regulatory Board (PNGRB) has to fix the Transportation Tariff for the proposed pilot project based on DFR".

1.96 The Kochi-Koottanad-Bangalore-Mangalore gas pipelines of GAIL was facing certain land acquisition problems due to public resistance. The committee when asked

about the progress made in pipeline project, the Ministry in a written reply apprised as under:

"In July'2007, Government of India authorized GAIL (India) Ltd. to lay Kochi-Kanjirkkod- Bangalore- Mangalore pipeline (KKBMPL pipeline) for transportation of 16 Million Standard Cubic Meter (MSCM) of Regasified Liquefied Natural Gas (R-LNG) from Kochi LNG terminal to various industries in Kerala, Tamilnadu & Karnataka. The Project has been planned to be executed in two phases i.e. Phase-I covering various industries in and around Kochi City (41 Km) and Phase-II covering 7 Districts in Kerala, 7 Districts in Tamilnadu and 2 Districts in Karnataka (879 Km). Cost of the Project is Rs. 3263 Cr. (Rs. 348 Cr. for Phase-I & Rs. 2915 Cr. or Phase-II). The pipeline was to be completed in 36 months from the first 3(1) gazette notification.

Phase-I of the pipeline has been completed for supply of gas to various consumers in Ernakulum district. However, since the start of construction activities of phase-II of the pipeline project in February'2012, severe resistance is being faced from farmers / land owners during acquisition of land for laying the pipeline as per provision of P&MP Act, 1962, particularly in the States of Kerala & Tamilnadu. There was also an order dated 02.04.2013 issued by Govt. of Tamilnadu directing GAIL to re-route the pipeline along the National Highways and also for removing the pipes already laid in agricultural land. Against this order of Govt. of Tamilnadu, GAIL filed a comprehensive writ petition in Hon'ble Hon'ble Chennai High Court, vide Judgment dated Chennai High Court. 25.11.2013, guashed the Govt. of Tamilnadu order dated 02.04.2013. Govt. of Tamilnadu filed Special Leave Petition (SLP) in Hon'ble Supreme Court on 29.11.2013 against the High Court Judgment dated 25.11.2013. The SLP sought guashing of the judgment dated 25.11.2013 and an interim stay of its operation. This has delayed the project execution inordinately.

		Progress					
Activity	Scope	Kerala (508 Km)	ProgressTamil Nadu (310 Km)Karnataka (61 Km)n310 Km61 Kmn8 Km6 Kmm4 Km2 Km	Total			
6(1) Gazette publication		508 Km	310 Km	61 Km	879 Km		
Welding	879 Km	46 Km	8 Km	6 Km	60 Km		
Lowering		29 Km	4 Km	2 Km	35 Km		

The present progress status of pipe laying is as under :

In view of the above, the project is expected to be completed within 30 months from date of receipt of favourable judgement from Hon'ble Supreme Court and resolution of RoU issues in Kerala State".

1.97 In this context when the Committee asked about the prospects of laying gas pipelines alongside the highways the Ministry stated as given under:

"In foreign countries, particularly in developed countries like United States of America and Canada, gas pipelines are normally laid in dedicated Pipeline Corridors wherein following restrictions are generally imposed:

- High Consequence Zones are clearly defined along these Pipeline Corridors where no construction activities other than Pipeline laying are allowed without permission from concerned authorities.
- Further, a consultation zone beyond High Consequence Zone is also clearly defined wherein permission needs to be obtained from the Pipeline Operator(s) to take up any new construction activities by third parties within the consultation zone"

1.98 When asked as to whether Kerala was giving a clear way to the pipeline, the

CMD GAIL further added

"As far as Kerala is concerned, the problem is still not resolved. Last time this issue was discussed by the hon. Chief Minister of Kerala along with the Members of the Legislative Assembly of Kerala. It was said that let first the city gas project start which we had shown to the public at Ernakulam. The city gas project has started in Ernakulam. After that they will take a view whether the pipeline can be laid through Kerala or not. Today the work is held up in Kerala also. So, practically both in Tamil Nadu and Kerala the work is stopped."s

1.99 When during the discussion in evidence, it was asked that what action has

been taken to minimize the wastage of material purchased for laying the pipeline and

now getting rusted, the CMD, GAIL deposed before the Committee as under:

"Almost 600 kms. of pipe is going to Barauni. We are using these pipes and we are shifting them to Barauni to avoid wastage of material. That action is already on.

As far as retrieving the material is concerned, we are trying to do our best to see how we can use it elsewhere. About 100 kms. of pipes have gone to KG Basin and around 400 to 500 kms. of pipes are going to Barauni and Gorakhpur line so that we can utilise this material. But tomorrow when we get the clearance, we may need this material. So, depending upon how fast we get the clearance, we will use this material so that we avoid wastage of the material".

1.100 Asked for a status update on Jagdishpur-Haldia Gas pipeline the Ministry provided as under:

"GAIL (India) Limited is the authorized entity to develop the Jagdishpur-Haldia Pipeline. GAIL has completed Engineering Survey for the Pipeline Route and Cadastral Survey is currently in progress. The cadastral survey is expected to be completed by June 2015. GAIL has also initiated the process of RoU acquisition under PMP Act 1962 for pipeline laying. As 1st Phase of the project, GAIL Board has approved laying of 747 Km of Jagdishpur-Haldia Pipeline Project, comprising of 341 Km of trunk line from Phulpur (Uttar Pradesh) to Dobhi (Bihar) and 406 Km of spurlines (to Gorakhpur, Barauni, Varanasi & Patna). The estimated investment in the Project is approx. Rs.3957 Cr. The project is scheduled to be completed in 36 months from 3(1) notification for

acquisition of Right of User (RoU). Construction Offices at Patna and Lucknow are being opened shortly".

1.101 Asked about the plans of Ministry for connecting North East with the National Gas Grid, the Ministry stated as under:

"At present, about 174 Km of natural gas pipeline network exists in North Eastern (NE) Region. In order to connect the north-eastern States with the planned national gas grid, MoP&NG has identified Barauni-Guwahati-Agartala gas pipeline section to be developed under Public-Private Partnership (PPP) mode. The implementation of the proposed pipeline section will be considered after successful implementation of pilot pipeline project (i.e. Ranchi-Talcher-Pardeep pipelines) under PPP mode".

1.102 When the Committee asked about the gas availability for the upcoming gas grid, the capacity utilization of the existing pipeline network and the pipelines lying unutilized due to shortage of gas, the Ministry furnished the following reply:

"At present, country is consuming two types of gas i.e. (i) Domestically produced gas and (ii) Imported Liquefied Natural Gas (LNG). Domestic gas is a scarce natural resource of the country and is distributed in accordance with the prevailing Gas Utilisation policy of the government. However, LNG is procured at the prevailing international market prices by different entities.LNG is supplied to various gas customers as per their affordability at reasonable price by different entities directly. During 1st Half of year 2014-15, the total gas consumption was 119.34 MMSCMD, wherein the domestic availability was 74.79 MMSCMD and the balance was met from imported RLNG. The projected domestic gas availability during the year 2014-15, 2015-16, 2016-17, 2017-18and 2018-19 is 98.15 MMSCMD, 99.87 MMSCMD, 112.95 MMSCMD, 133.09 MMSCMD and 146.87 MMSCMD respectively. Any shortfall of gas availability can be met through imported RLNG by utilizing existing LNG terminals (Dahej, Hazira, Dhabol and Kochi) having an installed capacity of 80.064 MMSCMD. There are plans to augment the capacities of existing LNG terminals. In addition, one more LNG terminal at Ennore (Tamilnadu) is at an advance stage of implementation. This will increase the total installed capacity of LNG terminal from 80.064 MMSCMD to 126 MMSCMD in next five years.

Fertilizer and Power sector are the major gas consumer in the country. In order to improve the affordability of these sectors, Government has approved the gas price pooling (domestic+ RLNG) mechanism for both sectors. With these policy measures, it is expected to increase the consumption of imported RLNG by 18 MMSCMD in Fertilizer and Power sector. This additional gas will be transported from different sources to various fertilizer and Power sector units across the country through the Gas grid. As a result, it will help in improving the gas pipeline utilization.

The capacity utilization of the existing pipeline network is as under-

NETWORK/REGION	Entity	Length Kms	Design Capacity (mmscmd)	Average Flow in 2014-15 April to September 2014 (mmscmd)	% Capacity Utilization (as on 30.9.2014)
HVJ GREP -DVPL & Spur	GAIL	4658	53.0	41.3	77.92
DVPL-GREP Upgradation (DVPL- 2 & VDPL)	GAIL	1119	54	19.35	35.84
CHHAINSA- JHAJJAR -HISSAR P/L (Including Spur lines) commisioned up to Sultanpur, Jhajjar- Hissar under hold (111 Km) Flow of 5 Million up to 2011- 12	GAIL	265	5	0.79	15.8
DAHEJ-URAN-PANVEL(DUPL/ DPPL) including Spur Lines	GAIL	873	19.9	8.77	44.05
DADRI BAWANA NANGAL P/L, Dadri- Bawana:106Km, Bawana - Nangal:501 KM, Spur Line of BNPL : 196 Km.	GAIL	810	31	3.85	12.4
DHABHOL -BANGLORE- PIPELINE (Including spur)	GAIL	1004	16	0.67	4.20
KOCHI-Koottanad-Banglore- Mangalore (Phase-1)	GAIL	41	6	0.29	4.84
ASSAM (Lakwa)	GAIL	8	2.5	0.57	22.6
TRIPURA (Agartala)	GAIL	61	2.3	1.40	62.0
AHMEDABAD	GAIL	133	2.9	0.33	13.1
RAJASTHAN (Focus Energy)	GAIL	151	2.35	1.14	48.6
BHARUCH , BADODARA (UNDERA) included RLNG+ RIL	GAIL	538	15.4	4.13	26.8
MUMBAI	GAIL	129	7.0	9.6	100.0
KG BASIN (included RLNG+ RIL)	GAIL	881	16.0	3.1	19.0
CAUVERY BASIN	GAIL	278	8.7	3.48	40.14
EAST- WEST PIPE LINE (RGTIL)	RGTIL	1469	80.0	20.5	25
GSPCL Network including Spur Lines	GSPCL	2197.7	43.0	23.21	53.97
Assam Gas Company (Duliajan to Numaligarh)	AGC	1000	6.0	4.50	75
Dadri -Panipat	IOCL	132	9.5	3.11	32.8
UranTrombay	ONGC	24	6.0		
Total		15772	387	150	

G. <u>CNG/PNG NETWORK</u>.

1.103 Asked about the progress achieved in extending network of CNG and PNG in the country and actual achievements in this regard, the Ministry furnished following details:

"In year 2007, Government has established Petroleum and Natural Gas Regulatory Board (PNGRB) under the PNGRB Act 2006. Under the Act, PNGRB grants the authorization to the entities for developing a City Gas Distribution (CGD) network in a specified Geographical Area (GA) of the country. CGD network supplies gas to four distinct segments – Compressed Natural Gas (CNG) predominantly used as auto-fuel, and Piped Natural Gas (PNG) used in domestic, commercial and Industrial segments. At present, City Gas Distribution (CGD) networks are operational in 49 Geographical Areas (GA) by 23 operating companies. More GAs are under bidding process to be authorized soon for spreading the network in the length and breadth of country. PNGRB has also issued 14 No Objection Certificates (NoCs) to 13 entities for setting up facilities for selling Compressed Natural Gas (CNG) for the areas where PNGRB has not yet authorized any entity for developing or operating CGD network. Based on the available data, list of entities is placed below duly outlining the achievement against targets for last two years:

DETAILS OF CGD ENTITIES AND TARGET ACHIEVEMENT

(As on 31.12.2014)

			PNG D Conne	PNG Domestic Connections		In-Km of Steel P/L Network	
SI. No.	States	Geographical Area	Target	Achieved	Target	Achieved	
1		Sonipat	60000	4132	329	382	
2	ла	Faridabad		10154		679	
3	arya	Gurgaon		4378		580	
	Ĩ	Gurgaon		0		0	
4		Chandigarh	50000	0	1400	0	
5	Punjab	Jalandhar	46800	0	7020	0	
6		Kakinada	50000	1681	582	277	
7	Andhra Pradesh	Hyderabad	266000	459	4042	505	
8		Vijaywada	97267	109	635	321	
9	Assam	Tinsukia, Dibrugarh, Sibsagar, Johrat, Golaghat		27156		4261	
10		Ghandhinagar Mehsana Sabarkantha	99000	78509	1913	1652	
		Gandhinagar		90684		86	
11		Halol	5481	8241 28576	108	207	
13		Valsad	81821	73503	566	508	
14		Khambat	01021	25703		189	
15	jara	Palei		0		96	
16	Gu	Rajkot	166630	139336	1532	1530	
17		Navsari	67185	76057	345	517	
18		Surendranagar	34008	18488	470	577	
19		Nadiad	58581	47906	336	299	
20		Kutch(West)	41500		2769		
21		Ahmedabad		188042		1466	
22		Vadodara		507		234	
		Vadodara		0		64	

		Vadodara		75738		25
		Ahmedabad		0		0
23		Surat, Bharuch & Ankleshwar	405000	394796	4450	5122
24		Anand		18123		58
25		Jamnagar	92000	41	1049	0
26		Bhavnagar	122500		2696	1
27		Dewas	40000	760	320	374
28	Madhya Pradesh	Gwalior	44000	0	180	56
29		Indore,Ujjain	50000	2060	540	508
30		Pune	72000	14604	1313	1166
31	Maharashtra	Mumbai & Greater Mumbai	406000	543079	1580	1864
32		Thane	225000	225512	1675	1721
33	Delhi	NCT Delhi	237000	382399	3764	3058
34	Rajasthan	Kota	100000	191	344	355
35	Tripura	Agartala		13683		7
36		Meerut	125000	2314	643	719
37		Mathura	63000	1103	347	397
38		Agra	22000	3256	388	89
39		Kanpur GA	70035	3079	569	366
40		Bareilly GA	27500	885	356	149
41	desh	Noida & Greater Noida		36853		875
42	Pra	G.Noida		0		
43	lttar	Ghaziabad		65991		1084
44		Lucknow		933		509
45		Moradabad	5000	564	200	171
46		Firozabad	24000	200	1010	948
47		Khurja	500	19	240	235
48		Allahaabad	25000	0	384	0
49		Jhansi	617	0	24	0

DETAILS OF CGD ENTITIES AND TARGET ACHIEVEMENT

(As on 31.12.2013)

SI. No.	State	Geographical Area	PNG Domestic Connections		In-Km of	Steel P/L Network
			Target	Achieved	Target	Achieved
1		Sonipat	60000	4132	329.0	381.68
2	Haryana	Faridabad		7195		679.20
3		Gurgaon		2625		405.80

		Gurgaon		0		0.00
4		Chandigarh	50000		1400.0	
5	Punjab	Jalandhar	46800		7020.0	
6		Kakinada	50000	1510	582.0	277.32
7	Andhra Pradesh	Hyderabad	266000	443	4042.0	504.50
8		Vijaywada	97267	90	635.0	320.84
9	Assam	Tinsukia, Dibrugarh, Sibsagar, Johrat, Golaghat		25215		4260.83
10		Ghandhinagar Mehsana Sabarkantha	99000	77131	1913.0	1618.86
		Gandhinagar		84000		85.98
11		Halol		7991		204.81
12		Hazira		26926		8.07
13		Valsad		62990		479.49
14		Khambat		24402		164.20
15		Palej		0		96.01
16	-	Rajkot	166630	126104	1532.0	1421.23
17		Navsari	67185	67995	345.0	392.50
18	Gujarat	Surendranagar	34008	16925	470.0	581.80
19		Nadiad	58581	45804	336.0	297.37
20		Ahmedabad		186936		1466.28
21		Vadodara		420		234.00
		Vadodara		0		64.40
		Vadodara		75738		25.12
		Ahmedabad		0		0.00
22		Surat, Bharuch Ankleshwar	405000	394796	4450.0	5122.00
23		Anand		18123		58.00
24		Jamnagar	92000		1049.0	
25		Bhavnagar	122500		2695.7	
26		Dewas	40000	689	320.0	374.17
27	Madhya Pradesh	Gwalior	44000	0	180.0	0.00
28		Indore including Ujjain	50000	1925	42.0	366.80

29		Pune City including PimpriChiechwad and along with adjoining contiguous areas of Hinjewadi, Chakan& Talegaon GA	72000	11404	1313.0	1085.20
30		Mumbai & Greater Mumbai	406000	500575	1580.0	1761.86
31	Maharashtra	Thane City & adjoining contiguous areas including Mira Bhayender,Navi Mumbai, Thane City,Ambernath, Bhiwandi,Kalyan, Dombivily, Badlapur, Ulhasnagar, Panvel, Kharghar& Taloja.	225000	183971	1675.0	1568.42
32	Delhi	National Capital Territory of Delhi	237000	339486	3764.0	2870.00
33	Rajasthan	Kota	100000	191	343.6	355.15
34	Tripura	Agartala		13683		7.48
35		Meerut	125000	1936	643.2	719.09
36		Mathura	63000	830	347.0	398.00
37		Agra	22000	2463	388.0	89.14
38		Kanpur GA	70035	2800	568.9	365.77
39		Bareilly GA	27500	867	356.0	150.18
40		Noida & Greater Noida		33286		851.00
41	Uttar Pradesh	Ghaziabad		61237		1075.00
42		Lucknow		716		505.50
43		Moradabad	5000	519	200.0	170.80
44	1	Firozabad	24000	200	1010.0	909.53
45		Khurja	500	19	240.0	235.20
46		Allahaabad	25000		384.0	
47		Jhansi	617		23.6	

1.104 The announcements made during budget 2014-15 provided that a road map for scaling up of the usage of PNG has been drawn. When the Committee wanted to be apprised of the current cities identified in the vicinity of existing and proposed trunk pipelines and status of bidding by PNGRB in respect of these cities, the Ministry in a written reply submitted the following information:

"Under the Petroleum & Natural Gas Regulatory Board (PNGRB) Act,2006, PNGRB identifies the cities/Geographical Areas (GAs) for inclusion in CGD bidding rounds depending on the natural gas pipeline connectivity/natural gas availability.

PNGRB has held 4 rounds of bidding for awarding authorization to develop CGD networks. In its last (4th) bidding round, PNGRB has invited bids for development of CGD networks in 14 new Geographical Areas. In addition, PNGRB has also initiated bidding for 20 more GAs/Districts in its 5th round of CGD bidding. PNGRB has identified another 26 GAs/Districts, which also have natural gas pipeline connectivity for inclusion in 6th round CGD bidding.6th round is expected to commence from June/July 2015. Another 106 GAs/Districts that could have natural gas pipeline connectivity in future and could be considered for inclusion in future bidding rounds, have also been identified. The details of cities/GAs included/proposed to be included in 4th, 5th, 6th and future bidding rounds are as under:

S. No	Geographical Area	S. No	Geographical Area
1.	Ernakulum District	8.	Thane District
2.	Rangareddy& Medak Districts	9.	UT of Daman
3.	Nalgonda District	10.	UT of Dadar& Nagar Haveli
4.	Khammam District	11.	Shahjahanpur District
5.	Bengaluru Rural and Urban Districts	12.	Guna District
6.	Raigarh District	13.	Panipat District
7.	Pune District	14.	Amritsar District

Cities covered under 04th Round of CGD Bidding

Geographical Areas covered under 5th Round of CGD Bidding

S.No	State/ Union Territory	District (GA)	S.No	State/ Union Territory	District (GA)			
1	Andhra Pradesh	East Godavari	11	Karnataka	Tumkur			
2	Karnataka	Belgaum	12	Maharashtra	Latur			
3	Maharashtra	Ahmadnagar	13	Madhya Pradesh	Dhar			
4	Andhra Pradesh	Krishna	14	Gujarat	Dahod			
5	Uttar Pradesh	Muzaffarnagar	15	Uttarakhand	Haridwar			
6	Andhra Pradesh	West Godavari	16	Karnataka	Dharwad			
7	Uttar Pradesh	Badaun	17	Madhya Pradesh	Shivpuri			
8	Uttar Pradesh	Aligarh	18	Karnataka	Bidar			
9	Uttar Pradesh	Bulandshahr	19	Maharashtra	Osmanabad			
10	Gujarat	Banaskantha	20	Uttarakhand	Udham Singh Nagar			
Caarr								

Geographical Areas proposed to be covered under 6th Round of CGD Bidding

S.No	State/ Union Territory	District (GA)	S.No	State/ Union Territory	District (GA)
1	Uttar Pradesh	Saharanpur	14	Haryana	Yamunanagar
2	Uttar Pradesh	Raibarielly	15	Madhya Pradesh	Shahdol

		1			
3	Uttar Pradesh	Mainpuri	16	Karnataka	Gadag
4	Uttar Pradesh	Ramabai Nagar	17	Madhya Pradesh	Jhabua
5	Karnataka	Chitradurga	18	Uttarakhand	Nainital
6	Haryana	Bhiwani	19	Haryana	Rewari
7	Maharashtra	Ratnagiri	20	Goa	North Goa
8	Gujarat	Amreli	21	Madhya Pradesh	Datia
9	Punjab	Bhatinda	22	Punjab	Rupnagar
10	Uttar Pradesh	Auraiya	23	Punjab	Fatehgarh Sahib
11	Gujarat	Patan	24	Gujarat	Dahej-VagraTaluka
12	Uttar Pradesh	Baghpat	25	Uttar Pradesh	Amethi
13	Uttar Pradesh	Etawah	26	Uttar Pradesh	Hapur

Probable list of GAs (Districts) which could be connected through Natural Gas Pipelines (upcoming / under implementation) for future CGD bidding rounds

S.No	District	State	S.No	District	State
1	Burdwan	West Bengal	20	Bhilwara	Rajasthan
2	East Singhbhum	West Bengal	21	Chhittorgarh	Rajasthan
3	Hoogly	West Bengal	22	Churu	Rajasthan
4	Murshidabad	West Bengal	23	Hanumangarh	Rajasthan
5	PurbaMedinipur	West Bengal	24	Jaipur	Rajasthan
6	Purulia	West Bengal	25	Jhunjhunu	Rajasthan
7	Gorakhpur	Uttar Pradesh	26	Jodhpur	Rajasthan
8	Varanasi	Uttar Pradesh	27	Pali	Rajasthan
9	Adilabad	Telangana	28	Rajsamand	Rajasthan
10	Karimnagar	Telangana	29	Sikar	Rajasthan
11	Chennai	Tamil Nadu	30	Sirohi	Rajasthan
12	Tiruvallur	Tamil Nadu	31	Udaipur	Rajasthan
13	Coimbatore	Tamil Nadu	32	Firozpur	Punjab
14	Dharampur	Tamil Nadu	33	Gurdaspur	Punjab
15	Erode	Tamil Nadu	34	Hoshiarpur	Punjab
16	Salem	Tamil Nadu	35	Kapurthala	Punjab
17	Pratapgarh	Rajasthan	36	Mansa	Punjab
18	Ajmer	Rajasthan	37	Moga	Punjab
19	Alwar	Rajasthan	38	Pathankot	Punjab
39	Angul	Odisha	73	Kasaragod	Kerala
40	Balangir	Odisha	74	Kozhikode	Kerala
41	Bargarh	Odisha	75	Mallappuram	Kerala
42	Cuttack	Odisha	76	Palakkad	Kerala
43	Dhenkanal	Odisha	77	Thrissur	Kerala
44	Jagatsinghpur	Odisha	78	Chamrajnagar	Karnataka
45	Jajpur	Odisha	79	DakshiniKannad	Karnataka

46	Kendrapara	Odisha	80	Mandya	Karnataka
47	Khordha	Odisha	81	Bokaro	Jharkhand
48	Nauparha	Odisha	82	Dhanbad	Jharkhand
49	Sambhalpur	Odisha	83	Ranchi	Jharkhand
50	Sonapur	Odisha	84	Jammu	Jammu & Kashmir
51	Amravati	Maharashtra	85	Kathua	Jammu & Kashmir
52	Chandrapur	Maharashtra	86	Samba	Jammu & Kashmir
53	Wardha	Maharashtra	87	Srinagar	Jammu & Kashmir
54	Akola	Maharashtra	88	Fatehabad	Haryana
55	Bhandra	Maharashtra	89	Sirsa	Haryana
56	Buldhana	Maharashtra	90	Durg	Chattisgarh
57	Gondia	Maharashtra	91	Mahasumand	Chattisgarh
58	Jalgaon	Maharashtra	92	Raipur	Chattisgarh
59	Nashik	Maharashtra	93	RajnandGaon	Chattisgarh
60	Betul	Madhya Pradesh	94	Barh Bihar	Bihar
61	Bhopal	Madhya Pradesh	95	Begusarai	Bihar
62	Hoshangabad	Madhya Pradesh	96	Gaya	Bihar
63	Mandsore	Madhya Pradesh	97	Gopalganj	Bihar
64	Neemuch	Madhya Pradesh	98	Patna	Bihar
65	Rajgarh	Madhya Pradesh	99	Saran	Bihar
66	Ratlam	Madhya Pradesh	100	Siwan	Bihar
67	Sagar	Madhya Pradesh	101	West Champaran	Bihar
68	Sehore	Madhya Pradesh	102	Nellore	Andhra Pradesh
69	Vidisha	Madhya Pradesh	103	Srikakulam	Andhra Pradesh
70	Rewa	Madhya Pradesh	104	Vishakhapatnam	Andhra Pradesh
71	Alappuzha	Kerala	105	Vizianagaram	Andhra Pradesh
72	Kannur	Kerala	106	Chittoor	Andhra Pradesh

1.105 When asked about the feasibility of extending the PNG/CNG network in the rural areas, the Ministry submitted following reply:

"PNGRB has been considering entire districts, which includes rural areas, as Geographical Areas (GAs) for covering in bidding rounds for grant of authorization to develop City or local natural gas distribution (CGD) networks. PNGRB identifies the GAs for inclusion in CGD bidding rounds depending on the natural gas pipeline connectivity/natural gas availability. PNGRB has covered following 20 GAs/Districts in the ongoing 5th round of CGD bidding. Further, PNGRB has identified another 26 GAs/Districts, which also have natural gas pipeline connectivity for inclusion in 6th CGD bidding round. Another 106 GAs/Districts that could have natural gas pipeline connectivity in future and could be considered for inclusion in future bidding rounds, have also been identified".

H. <u>REFINERIES</u>

1.106 The country's present refining capacity is 215.066 MMTPA at present, comprising of 22 refineries, 17 under public sector, 2 in joint ventures and 3 under private sector. India is emerging as a refinery hub and refining capacity exceeds the

demand. The oil PSU's are continuously going for successive capacity additions. In this regard ,when the Committee asked about the status update on the new grassroot refinery of HPCL being setup at Barmer, Rajasthan, the Ministry provided as under:

"Status update on new grassroot refinery of HPCL at Barmer, Rajasthan

Government of India has accorded its approval for setting up of a 9 MMTPA Greenfield Refinery-cum-Petrochemical Complex in Barmer District of Rajasthan in September 2013 as a Joint Venture between HPCL and Government of Rajasthan at an estimated capital cost of R 37,229 Cr. (2013-Q1 prices) with a construction time frame of 48 months from the zero date of the project i.e. after receipt of all statutory clearances, including Environmental Clearance. The HPCL-Rajasthan Refinery Limited (HRRL) has been incorporated in September 2013 as a Joint Venture Company of HPCL and Government of Rajasthan (GoR) with HPCL holding 74% equity and GoR holding 26% equity.

Subsequently, Finance Department, GoR in February 2014 advised that the project is to be reviewed by the Cabinet Sub-Committee for final decision about the project.

In September 2014, GoR suggested forming a team comprising of 2 officials each from GoR and HPCL and that the team would further meet and discuss the various issues. In a meeting held by Secretary, MOP&NG with GoR and HPC officials in December 2014, a Committee consisting of Dir-Finance and Dir-Refineries from HPCL and Principal Secretary Finance and Principal Secretary – Mines & Petroleum from GoR was constituted to discuss the various project related issues and a submit a report by end of March 2015. The above Committee held two meetings so far. Meanwhile, GoR has engaged M/s Price Waterhouse Coopers as Advisors to GoR on the project.

In view of the above, the project activities are currently under hold as the final decision related to the project review is awaited.

Meanwhile, with regard to the Environmental Clearance for the proposed project, Public Hearing was conducted by Rajasthan State Pollution Control Board in May 2014. Consequent to the submission of the details related to the Public Hearing to MoEF, the Expert Appraisal Committee (EAC) of MoEF held a meeting in February 2015. Minutes of Meeting of the same is awaited for submission of clarifications to be sought by EAC"

1.107 The CPSE refineries had been found deficient in Key Performance Areas vis-àvis Asian and Global refineries in a performance benchmarking study ,when asked to furnish details about the performance areas found deficient and steps taken to upgrade the performance of refineries, the Ministry furnished following reply:

"The performance of CPSE refineries with respect to Key Performance Areas as per the Performance Benchmarking Study cycles 2010 and 2012 are presented in the following table:

Key Performance	Refinery	Actua	Value
Index		2010	2012
Process Utilisation	IOCL	82.1	82.3
	BPCL	76.2	79.4
	HPCL	74.5	72.8
	MRPL	84.3	75.3
	CPCL	84.1	76.5
	Asia Pacific Average	78.9	79.6
	Pacesetter		82.9
	Refineries Average		
	Value		
			
Energy Intensity	IOCL	127	112
Index (Ell)	BPCL	116	112
	HPCL	124	116
	MRPL	98	101
	CPCL	110	113
	Asia Pacific Average	87	86
	Pacesetter		71.5
	Refineries Average		
	Value		
Volumetrie		70	74
Volumetric Expansion Index		70	74
		12	<u> </u>
		40	32
		60	50
	Asia Pacific Average	69	
	Pacesetter	09	88.7
	Refineries Average		00.7
	Value		
	Value		
Operational	IOCI	96.7	96.4
Availability	BPCI	95.3	96
······································	HPCI	92.7	91.2
	MRPI	94.5	95.4
	CPCL	95.9	93.3
	Asia Pacific Average	95.0	94.8
	Pacesetter	-	96.8
	Refineries Average		00.0
	Value		

Steps taken to upgrade refineries to improve KPAs

1. Energy Intensity Index

- Power generation through condensing turbine stopped, leading to substantial energy saving in Refinery.
- Source of hydrogen for VGDS has been changed to CRU which leads to shutting down of HGU & improvement of EII.

- Improvement of steam traps performance by dynamic optimisation through expert agency.
- Replacement of the Old energy inefficient unit with the state of art new efficient unit through Integrated Refinery Expansion Project
- Bottom upgradation project has been initiated to produce more valuable product to improve financial performance.
- Actions initiated to explore import of cheaper grid power for Refinery operation instead of power generation from Captive Power Plant (CPP) using liquid or Gaseous fuel in Refinery
- CHP (Combined Heat and Power) tools from EIL-CHT is in use for optimizing the Utility (Steam & Power) consumption
- 2. Volumetric Expansion Index
- Maximisation of light and middle distillates from secondary processing units
- Minimisation of Hydrocarbon Loss in different areas of refinery operations and undertaking total loss survey which will in turn improve the Volumetric Expansion Index

3. <u>Process Utilisation and Operational Availability</u>

• Companies are improving the overall Asset Integrity and Reliability of the refineries

I. PROCUREMENT OF SAFETY EQUIPMENT

1.108 M.B.Lal Committee was constituted in the aftermath of the Jaipur Fire Incident happened on 6 October, 2009 to enquire about the accident and submit its observation. The Committee wanted to know the status of implementation of 118 recommendations given by the Committee to upgrade the safety of oil installations, the Ministry furnished following information:

"Status update on the implementation of the M.B.Lal recommendations.

Apropos Jaipur fire incident, the committee set-up under the chairmanship of Shri MB Lal made 118 recommendations. Of the 118 recommendations, 05 related to policy matters. One of the policy related recommendations which is under consideration of Government of India, is regarding conferring statutory status on OISD. This is planned to be achieved via creation of Petroleum & Natural Gas Industry Safety Board– the umbrella regulatory authority for the whole Petroleum & Natural Gas Industry – through appropriate legislation. The rest of the recommendation in this context stands complied.

113 of the 118 MB Lal recommendations were meant for implementations at the existing installations. At present, implementation of these recommendations is at advanced stages of completion and the status of implementation is under constant review of OISD and MoP&NG.

As on date, Oil Marketing Companies have implemented 95% of the said recommendations in totality. These implementations include both Hardware and software areas. A few examples of completed activities are as under:

• Standard operating procedures (SOPs) have been Developed for all critical activities and displayed at prominent locations.

• Push buttons of the Motor Operated valves (MOVs) of tank inlet/outlet lines have been brought outside the dyke.

• Remote closure of Motor Operated valves (MOVs) from control room restored in all automated locations.

• Modification of the piping design inside tank dyke area to ensure easy accessibility for any operations inside dyke in the tank farm.

• Lighting (LUX Level) of all the Installations has been improved to ensure adequate lighting in operational areas.

• Position indicator (open or close) of tank dyke valves with audio visual alarm in control room.

• Up-gradation and integration of tank farm Management system (TFMS) with SAP in progress at all compatible locations.

• Provision of CCTVs at all the installations has been made – Major procurement item.

• Provision of Medium Expansion Foam Generators for all the tank farms – Major procurement item

• Provision of VHF handsets for the operating crew in all the Installations completed.

• Provision of external telephones in the security cabin for all the installations.

• Relocation of Lube Oil Drums to non-hazardous areas.

• Safety and firefighting training to operating personnel including contractors and security personnel imparted /in progress –continuous process.

• Employees and security personnel being imparted live firefighting training conducted at Refinery locations and thru' recognized agencies.

The rest of recommendations, which are being implemented simultaneously in more than 300 installations spread all over the country, are in advanced stage of completion.

1.109 When asked as to whether sufficient offers are received in response to the tenders floated by PSUs for procurement of safety equipments/systems, the Ministry submitted the following reply:

"Procurement is an internal matter of the companies. Procurement process is being carried out by companies as per extant rules of companies. Regarding the numbers of offers received in response to the tenders floated by PSUs for procurement of such items, Oil PSUs have informed that in most of the tenders, the response came from multiple vendors. PSUs have reported that the procurement process for all the items as mentioned has been completed and presently, the process of installation and commissioning of all such items i.e. MEFGs, Hydrocarbon Detectors, Rim Seal Fire Protection System and High Volume Long Range Monitors at the respective installation(s) of PSUs is either completed or at advanced stage its completion.

1.110 On being enquired as to whether the present specifications of some of the items was leading to proprietary items, thereby indirectly restricting competition in the tendering process, the Ministry replied as under:

"As indicated earlier, procurement is being done by companies as per extant laws on procurement. Specifications of the items are prescribed in tenders as per laid down guidelines/standards of OISD. The terms of tenders are decided by companies".

1.111 Asked as to whether oil companies are finding the safety equipments/Systems at

sufficiently competitive prices, the Ministry furnished the following information:

"It is to be mentioned that procurement is an internal matter of the companies and is being done by companies as per laid down procedures/rules on procurement. Regarding the numbers of suppliers, Oil PSUs have informed that in most of the tenders, the response came from multiple vendors".

J. <u>PETROLEUM CONSERVATION RESEARCH ASSOCIATION (PCRA)</u>

1.112 Petroleum Conservation Research Association (PCRA) is a Registered Society set up in 1978 under the aegis of Ministry of Petroleum & Natural Gas, Government of India. Since its inception, PCRA is proactively engaged in promoting energy conservation and efficiency improvement in various sectors of the economy. It helps the government in proposing policies and strategies for petroleum conservation, aimed at reducing excessive dependence of the country on oil requirement:

1.113 The Major activities undertaken by PCRA during last 3 years in conservation and research side furnished by the Ministry are as under:

"The following major programmes are undertaken by PCRA:-

Field activities:- Field activities are one of the core areas of PCRA operations. Through sectorial field activities, PCRA engineers and its external experts are able to reach the target groups with innovative energy conservation programmes. These activities are designed to cover a large spectrum of socioeconomic profile of our country in different sector viz., Industrial, Transport, Domestic, Agriculture & Commercial. These activities include Energy Audits, Fuel Oil Diagnostic Study, Service to Small Scale Industry, Follow Ups, Institutional Training Programme, Workshop- Industrial, Agriculture, Domestic, Transport, Seminar, Technical Meet, Driver Training Programme, Model Depot Project, Training for Driver Training Instructors, Youth Programme, Kisan Mela, Exhibition , Van Publicity Cycle etc. Year-wise activities are given in the table below:

Sector	Activity	2012-13	2013-14	2014-15 (Apr- Feb)
Industrial	Energy Audits	358	271	295
	Fuel Oil Diagnostic Study	221	144	132
	Service to Small Scale Industry	221	152	156
	Follow Ups	421	395	165
	Institutional Training Programme	580	460	396
	Workshop- Industrial	368	419	333
	Seminar / Technical Meet	148	135	122
Transport	Driver Training Programme	815	1218	1249
	Model Depot Project	69	53	35
	Training for DTI	31	20	19
	Workshop- Transport	681	638	694
Domestic	Youth Programme	1576	1607	1775
	Workshop- Domestic	867	929	1003
Agriculture	Kisan Mela	55	83	49
	Agricultural Workshop	594	649	655
Misc.	Exhibition	167	133	72
	Van Publicity Cycle	7	12	32
	TOTAL	7179	7318	7182

The details of activities completed in last 3 years are as under:-

Education Campaign – Education Campaign is used by PCRA as a communication tool to create Mass awareness on efficient utilization of energy resources, a tool that is effective in bringing attitudinal changes through sustained efforts using various medium of communication. To take the message to the people, PCRA uses all possible and effective medium for mass communication. These include Electronic Media e.g., TV, Radio, Print Media at National and State level, Social Networking sites (Twitter & Facebook), Printed literature for specific target groups, outdoor publicity through Holdings, Bus panels, Kiosks, Banners, Electronic Display Board, National level Painting & Essay competition in various languages for school students, Quiz competition for school students, various people connect activities etc.

The focus of all messages is easy to implement and practical conservation tips for the Transport, Domestic, Industrial & Agriculture sectors. For effective communication to the target groups in Semi-Urban and Rural areas, messages are also disseminated in regional languages.

International / National networking - As a part of Government of India's initiative for cooperation with Japan in the field of Oil & Gas, PCRA and ECCJ

(Energy Conservation Centre Japan) had entered into MoU on 28th June, 2006 for cooperation in the field of Energy Efficiency. Since then, PCRA and ECCJ are working together for carrying out various energy conservation activities such as Workshops, Seminars, Exhibitions, and Trainings etc. by extending MoU from time to time.

Similarly, PCRA is associated actively with the Regional / National Industry bodies such as Bureau of Energy Efficiency (BEE), Central Paper & Pulp Research Institute (CPPRI), National Productivity Council (NPC) etc. to carry out jointly the activities such as Seminars, Technical meets, Training programmes & Energy Audits. These joint programmes proved very useful towards addressing effectively the issue of Energy Efficiency to the target audience.

<u>Oil & Gas Conservation Fortnight (OGCF)</u> - Oil & Gas Conservation Fortnight (OGCF), being an important annual event of the Ministry of Petroleum & Natural Gas, is organized every year from 16th to 31st January by PCRA in association with public sector Oil & Gas companies.

Started as Oil Conservation Week (OCW) in 1991, this nation-wide campaign has eventually become a very effective tool in creating and spreading mass awareness among the masses about the importance of conservation of petroleum products in the country. Encouraged by the tremendous success of campaign the duration of OCW was extended to a fortnight from the year 1997, making it Oil Conservation Fortnight (OCF). With Increasing use of cleaner and eco-friendly gaseous fuels in the country, the conservation of these fuels has also become equally important. Therefore, w.e.f the year 2004, this event is being observed as "Oil & Gas Conservation Fortnight (OGCF)".

During the fortnight, large number of activities like mass rallies, cycle rallies, marathons, human chains, technical seminars, symposiums, essays, quiz and painting competitions, LPG/PNG saving workshops, workshops for industrial workers/ drivers etc. are arranged all over the country by PCRA and Public Sector Oil & Gas Companies, for propagation of Oil & Gas conservation messages amongst the major consuming sectors namely, Transport, Industry, Agricultural, Household and Commercial.

<u>Research & Development</u>:- Towards optimum utilization of energy and reduction of pollution in different sectors of economy through development and demonstration of new and improved equipment / appliances, new efficient technologies and processes, PCRA sponsors appropriate R&D projects and also helps in adoption and dissemination of successful R&D outcomes.

R&D projects, which have the potential to contribute to energy saving and environment quality are invited from prestigious Research Institutes, CSIR Laboratories, IITs etc. in different sectors of economy viz., Industrial, Transport, Agriculture & Domestic.

R&D has been a prime focus area of PCRA's endeavour to conserve petroleum fuel ever since its genesis. List of successful R&D projects completed in last 3 years is given below:-

Name of the project	Institute
Conservation of energy in main mine ventilation fans	Indian School of Mines, Dhanbad
Replication of retro-fitting technologies for improving energy-efficiency and reducing GHG emissions of existing re- heating furnaces in SME re-rolling mills	Steel Authority of India LtdRDCIS, Ranchi
Installation of Energy Efficient Improved Biomass Cook Stoves	Maharana Pratap University of Agriculture and Technology, Udaipur
Enhanced Nutrient Removal under Shock Loads through Integrated Upflow Anaerobic Sludge Blanket (UASB) and Sequencing Batch Reactor (SBR) System for Sewage Treatment & Reuse	Department of Civil Engineering Indian Institute of Technology, Roorkee
Development of Solar Concentrator Prototype for Industrial Application	Maharana Pratap University of Agriculture and Technology, Udaipur
Minimization of energy consumption in potato cold storage using finned tube evaporator coil	Bidhan Chandra Krishi Vidyalaya, Nadia, West Bengal
Generation of Syngas Through Plasma Gasification of Plastic Waste	Central Mechanical Engineering Research Institute, Durgapur
Field demonstration & performance evaluation on biogas enrichment & bottling technology for vehicular use	Indian Institute of Technology, Delhi
Porous Radiant Burners for LPG Cooking Stoves	Indian Institute of Technology, Guwahati"

1.114 On being enquired about the funding source for PCRA activities, the Ministry in a written reply submitted the following information:

"The following are the source of funding for PCRA activities -

- Major funding is from OIDB (Oil Industry Development Board).
- Contribution from Oil PSUs to conduct specific activities like Mega Campaign, OGCF etc.

• Small portion through internal revenue generation by providing consultancy services to Industries for Energy Audits, PAT (Perform, Achieve and Trade) and ISO 50001 – Energy Management System".

1.115 When asked about the details of funds allocated and actual utilization during the last three years under various heads of activities, the Ministry submitted following details:

"SI. No	HEAD	2012-13 (Rs. in Lac)			
110.		BE	RE	Actual	
				Expenditure booked in F.Y.2012-13*	
Α.	Revenue Expenditure				
1	Field Activities	450	600	539.58	
2	Education Campaign				
	(i) Mega Campaign	2500	766	2242.4**	
	(ii) Regular Activities	800	730	808.75	
	(iii) Committed liabilities of previous year	1640	1118	1118	
3	Research & Development	100	55	55	
4	Training & Development	25	16	16	
5	Software Development / Internet connection	3	3	3	
6	Establishment & Administration Expenses	2100	2355	2343	
	Sub Total (A)	7618	5643	6007.73	
В.	Capital Expenditure	T	ſ		
7	Facility Oriented Items	5	4	4	
8	Instrument & Equipment for Energy Audit etc.	40	21.5	21.5	
9	Computers	8	5.5	5.5	
	Sub Total (B)	53	31	31	
Total for PCRA Activities (A+B)		7671	5674	6038.73	
C.	Less: OGCF Grant from Oil Companies	-100	-100	-100	
D.	Less Revenue Generation	-250	-250	-249.53	
Funding from OIDB		7321	5324	5689.2	
ŀ	Amount of FDRs matured during the year	-20	-20	-20	
Net Funding from OIDB		7301	5304	5669.2	

FY - 2012-13

*As per audited balance sheet on accrual basis **Liability deferred to FY – 2013-14

FY – 2013-14

SI. No.	HEAD	2013-14 (Rs. in Lac)			
		BE	RE	Actual Expenditure booked in F.Y.2013-14*	
Α.	Revenue Expenditure			L	
1	Field Activities	472.00	472.00	418.17	
2	Education Campaign				
	(i) Mega Campaign	1750.00	1130.00	2826 70	
	Mega campaign (cont. of oil PSU's)		2800.00	2030.19	

(ii) Regular Activities 600.00				350.00		350.00	
	(iii) Committed Liabilities of Previous year	1560.00	1560.0)0 156		0.00
3	Research & Development	50.00		35.53			
4	Training & Development		15.00		15.00		
5	Software Development / Internet connection	3.00		3.00		3.00	
6	(i) Establishment & Administration Expenses	1750.00		2020.00		2020.00	
	(ii) Deferred liabilities			600.00)		
	6200.00		9000.0	7238.49		3.49	
B. Capital Expenditure							
7	7 Facility Oriented Items				5.00		0.00
8 Instrument & Equipment for Energy Audit etc.				00 20.00			0.26
9	Computers		6.00	6.00 6.0			6.00
	Sub Total (B)		31.00	.00 31			6.26
Total for PCRA Activities (A+B)			6231.0	9031.00			7244.75
C.	C. Less: OGCF Grant from Oil Companies				(100.00)	(100.00)	
	Less : Contribution of Oil companies for mega campaign				(2800.00)	(2796.00)
D.	Less Revenue Generation			0)	(300.00)		(195.75)
	Funding from OIDB		5831.0	00	5831.00		4153.00
	Net Funding from OIDB				5231.	.00	4153.00

*As per audited balance sheet on accrual basis

FY – 2014-15

S. No.	HEAD	2014-15 (Rs. in Lac)			
		BE	RE	Actual Expenditure upto February 2015 (Unaudited)*	
Α.	Revenue Expenditure				
1	Field Activities	492.00	482.00	336.30	
2	Education Campaign				
	(i) Mega Campaign	1250.00	1250.00	1053.83	
	Mega campaign (cont. of oil PSU's)	1500.00	1500.00	1900.00	
	(ii) Regular Activities	400.00	440.00	302.65	
3	Research & Development	50.00	60.00	57.67	
4	Training & Development	20.00	24.75	19.81	
5	Software Development / Internet connection	27.00	27.00	25.24	
6	(i) Establishment Expenses	1600.00	1600.00	1427.91	
	(ii) Administration Expenses	500.00	500.00	465.43	
	(ii) Committed/Deferred liabilities	600.00	600.00	599.57	
	Sub Total (A)	6439.00	6483.75	5188.41	
В.	Capital Expenditure				
7	Facility Oriented Items	5.00	5.00	4.29	

8	Instrument & Equipment for Energy Audit etc.	10.00	10.00	0.10
9	Computers	16.00	16.00	15.27
	Sub Total (B)	31.00	31.00	19.66
	Total for PCRA Activities (A+B)	6470.00	6514.75	5208.07
C.	Less: OGCF Grant from Oil Companies	(100.00)	(100.00)	(87.00)
	Less: Contribution of Oil companies for mega campaign	(1500.00)	(1500.00)	(1000.00)
D.	Less Revenue Generation	(300.00)	(300.00)	(261.33)
	Funding from OIDB	4570.00	4614.75	3859.74
	Amount of FDRs matured during the year	99.00	143.75	143.75
	Net Funding from OIDB	4471.00	4471.00	3715.99"

*As per audited balance sheet on accrual basis

1.116 On being asked about the sanctioned and actual staff strength and manpower

requirements, the Ministry gave following information:

"Currently PCRA is having 80 officers against a sanctioned strength of 86 officers (refer table below). These officers are drawn from Oil and Gas PSUs, on deputation.

Grade/ Region	Category	Northern Region	Eastern Region	Western Region	Southern Region	HQ/ PS	Total			
ED	Executive Director	-	-	-	-	1	1			
G & H	Director / Chief Regional Coordinator	1	1	-	-	6	8			
E&F	Additional Director / Field Engineer / Sub Regional Officer / Regional Coordinator	1	3	5	6	11	26			
C & D	Deputy Director / Joint Director / Field Engineer / Sub Regional Officer	4	7	5	5	10	31			
A & B	Officer / Senior Officer / Field Engineer / Sub Regional Officer	4	1	2	3	4	14			
Total Officers		10	12	12	14	32	80			
Sanctioned Strength		12	12	14	14	34	86			
Vacancy		2	0	2	0	2	6			
Strength of Sub Regional Officers (included above)										
Sub Regional Officers		3	4	5	6	Nil	18			

Categories of manpower requirement in PCRA:

Broadly, the manpower requirement of officers is classified in two categories (i) Engineers and (ii) Non-Engineers.

Engineers: Engineers are appointed for various Technical positions i.e. Chief Regional Coordinator, Regional Coordinator, Field Engineers, Sub-Regional Officers and other engineering positions at PCRA HQ/PS, New Delhi.

Engineers preferably with Degree in Mechanical, Electrical or Chemical engineering are considered for appointment in PCRA for various technical positions enumerated above.

Non-Engineers are appointed in PCRA mainly for support functions i.e. P&A/HR, Hindi, Finance, and also to meet the requirement of officers in Education Campaign department at PCRA HQ/PS, New Delhi only.

Recruitment procedure for various categories of posts being followed in PCRA:

The following procedure is followed for appointment of various categories of officers in PCRA, excluding Executive Director, PCRA.

1. Manpower requirement of officers is sent to Oil PSU(s) for sending suitable nominations for consideration by PCRA for deputation posting in PCRA.

2. Upon receipt of nomination of officers from Oil PSUs, Personal Interaction is held with Executive Director, PCRA to access the suitability of officers nominated by Oil PSUs.

3. Concerned Oil PSUs are informed about suitability / non-suitability of officers with the request for issuance of posting orders.

Executive Director in PCRA is appointed by MoP&NG, Government of India".

K <u>CENTER FOR HIGH TECHNOLOGY (CHT)</u>

1.117 Asked about the objectives of CHT and implementation strategy, the Ministry replied as under:

"Centre for High Technology (CHT) was established as a dedicated technology cell of Ministry of Petroleum & Natural Gas (MOP&NG) in 1987 to assess futuristic technology requirements for acquisition, development and adoption in the field of refinery processes, petroleum products, additives, storage and handling of crude oil, products and gas.

CHT functions under the overall guidance and supervision of the Governing Council (GC) headed by the Secretary, P&NG as the Chairman. GC consists of Addl. Secretaries, Joint Secretaries and Advisors of MoP&NG and Chief Executives of all oil companies, GAIL, EIL, IIP, OIDB as members with ED, CHT as the Member Secretary.

Role and Objectives of CHT

The major role and objectives of CHT are as under :

Refinery Performance Evaluation and Improvement

- Energy Efficiency Improvement
- Centralised Technical Assistance to oil industry for accessing international standards and best practices, troubleshooting and process solutions

• Providing professional guidance and services to refineries/pipelines in the following critical areas :

- Process Technology
- Product Quality
- Benchmarking and Performance Excellence
- Environmental Management

- Information and Knowledge Dissemination
- Assisting refineries in achieving performance consistent with international levels
- Product Quality Upgradation, Auto Fuel Policy
- Promoting indigenous technologies through sponsoring R&D projects and their commercialization
- Co-ordinate "Scientific Advisory Committee on Hydrocarbons" of MOP&NG and Hydrogen Corpus Fund
- Technical Support to MoP&NG

Implementation of Objectives of CHT

CHT implements its objectives through regular monitoring and performance evaluation of refineries, energy efficiency improvement efforts, assessment of technology requirements, undertaking performance improvement programmes on a centralised basis, Joint Energy Audits, centralised technical assistance through reputed global leaders, performance benchmarking of refineries, knowledge dissemination, performance data base, exchange of information and experience through activity committee meetings, refinery technology meets, workshops etc.

CHT acts as the Technical Wing of MOP&NG for implementation of scientific and technological programmes of Govt. of India' viz., Auto Fuel Policy, Fuel Quality and Emission Norms, MOU parameters, Inter-Ministerial issues, Sectoral Innovation Council, Five Year Plan etc. CHT also coordinates funding of research work in refining and marketing areas and pursue the programmes of "Scientific Advisory Committee on Hydrocarbons" of MOP&NG and Hydrogen Corpus Fund".

1.118 The details of major activities undertaken by CHT during last 3 years.

"The details of major activities undertaken by CHT during last 3 years are summarised below :

• Integrated Refinery Business Improvement Programme (IRBIP) through Shell at BPCL-Kochi, IOCL-Mathura, CPCL-Manali and HPCL-Visakh refineries - Cumulative net benefit of over US \$ 50 million per year realised

• IRBIP Phase-II : under execution at BPCL-Mumbai, HPCL-Mumbai and MRPL. Estimated potential saving – US \$ 30 million per year

• Performance Benchmarking of refineries for 2010 and 2012 through Solomon Associates, USA.

• Centralised Technical Services Agreement (TSA) with Shell Global Solutions, Netherlands to provide refineries/GAIL/EIL access to the international standards and best practices

• Joint Energy Audits (JEAs) of PSU refineries through a multi-disciplinary team. Identified potential saving of around 50,000 MT of fuel in the refineries

• Energy Efficiency Improvement Study jointly with EIL for Numaligarh

Refinery Ltd.

• Annual Survey on Furnace/Boiler Efficiency & Insulation Effectiveness and Steam Leak in refineries during Oil Conservation Fortnight followed by evaluation for awards

• Regular monitoring of specific energy consumption (MBN), provide inputs for energy reduction and awards for best performance. Industry average MBN reduced from 76.4 in 2005-06 to 58.5 in 2013-14.

• Regular monitoring of distillate yield. Industry distillate yield increased from 73.3 % wt. in 2005-06 to 77.5 % in 2013-14

- Prepared 12th Five Year Plan document on "R&D" and "Refining"
- Prepared Consolidated Report on "Sectoral Innovation Council"

• Provided extensive Technical and Secretarial support to Expert Committee constituted by MoP&NG to prepare "Auto Fuel Vision & Policy 2025"

• Minimise Quality Give Away in multi-product pipeline transportation

• Review and examination of various technical proposals pertaining to technology, product quality, environment etc. forwarded by MoP&NG

• Recommend Input/Output Norms for import/export of crude oil/products

• Recommendations for issuance of Essentiality Certificates for import of project items with concessional duty

- Co-ordinate SAC and HCF Activities
- Representing MoP&NG in BIS for product quality standards and other Committees/Forums

• Activity Committee Meetings on 10 major refinery processes, Maintenance, P&U and pipelines for dissemination of experience/expertise, technological improvements and best practices

• Refinery Technology Meets (RTMs) – International conference providing a forum for interaction with global leaders and exposition of recent technological advancements. So far, CHT has organised 19 RTMs

• Workshop on "Oil & Gas Pipelines", "Process Technologies", "Fluid Catalytic Cracking", "Hydroprocessing" etc.

• "Q&A Session" on Energy Efficiency Improvement, Environment Management etc".

1.119 Asked about the funding source for the activities of CHT and funds allocated under different heads of activities and actual utilization thereof, the Ministry apprised as under:

"The Revenue and Capital expenditure and funding of Scientific Authority Council (SAC) approved R&D projects are through grants from OIDB. As regards Special Studies, the expenditure towards Refinery Performance Improvement Programmes and TSA are borne by the concerned refineries while that of Performance Benchmarking Studies are shared by CHT and PSU refineries.

	2012-13			2013-14			-	2015- 16		
Particulars	BE	RE	Actual	BE	RE	Actual	BE	RE	Actual	BE
Revenue Expenditure	780.50	927.00	856.63	965.00	965.00	804.66	965.00	930.00	685.72*	925.00
Capital Expenditure	16.00	16.00	8.66	12.00	12.00	0.57	12.00	5.00	1.26*	5.00
R & D Projects	1093.7 9	1244.0 0	254.71	180.00	668.00	227.63	335.00	1015.0 0	400.14 #	1822.00
Special Studies	230.00	314.00	303.33	600.00	575.00	211.39	250.00	275.00	84.14\$	350.00
TOTAL	2120.2 9	2501.0 0	1423.3 3	1757.0 0	2220.0 0	1244.2 5	1562.0 0	2225.0 0	1171.2 6	3102.0 0

The details with regard to BE/RE and actual expenditure is given as under:-

The actual expenditure is expected to be in line with RE (2014-15)

In view of delay in signing of MOU for 2 new major projects by the participating agencies, there is likelihood of deferment of release of payments (including 10 % initial advance payment) amounting to Rs 390 lakh to the next financial year. Release of funds amounting to Rs 202 lakh is pending with OIDB and is expected to be released by OIDB during March 2015.

\$ Executive Committee of CHT in its meeting in February, 2015 has advised for retendering of the job of 'Performance Benchmarking Studies' due to which Rs 75 lakh budgeted for this job will be carried forward to next financial year. Release of funds for payment towards Technical Services Agreement (TSA) with Shell amounting to Rs 27 lakh pending with OIDB. The total expenditure on TSA is expected to be less than budgeted since allocated manhours of CHT have been distributed to participating refineries as desired by them".

1.120 Asked about the sanctioned and actual staff strength and manpower requirements of the organisation, the Ministry gave following information.

"The sanctioned strength for CHT is 45 with 28 technical officers and 17 HR/Finance/support Staff. Against this, CHT is currently operating with 15 Technical Officers and 9 HR/Finance/support Staff (4 officers and 5 support
staff). The Officers/staff are drawn from OMCs/EIL/GAIL. All the officers are on deputation from oil companies. CHT does not have own recruitment procedure".

L. <u>CROSS COUNTRY GAS PIPELINES PROJECTS</u>

1.121 The Ministry of Petroleum and Natural Gas is presently pursuing two cross border gas pipeline projects to bring in gas from the gas rich neighbouring countries Iran and Turkmenistan through these pipelines. These projects are Turkmenistan – Afghanistan – Pakistan – India (TAPI) and Iran- Pakistan – India (IPI). When asked for the current update on these projects, the Ministry in a written reply furnished following information:

"Turkmenistan – Afghanistan-Pakistan – India (TAPI) Pipeline Project

India is pursuing the Turkmenistan – Afghanistan – Pakistan – India (TAPI) Pipeline project to receive Natural Gas supply from the Yolotan Osman (Galkynysh) fields in Turkmenistan. The 1814 kms of pipeline will carry 90 MMSCMD of natural gas, of which India and Pakistan will receive 38 MMSCMD each and Afghanistan's share is 14 MMSCMD. Afghanistan has indicated that it will be taking volumes of the tune of 1.5 - 4 MMSCMD. Volumes not taken by Afghanistan may be equally shared between India and Pakistan. The landfall point of the pipeline in India will be at Fazilka (Punjab).

With ADB support, preliminary feasibility study was carried out by M/s Penspen, U. K. in 2003 and a desktop update was done in April 2008. The cost of the project was estimated to be around USD 7.6 billion.

Two Government level agreements have been signed for the TAPI Project namely Gas Pipeline Framework Agreement (GPFA) and Inter Governmental Agreement (IGA) among the four member countries in Dec.' 2010. Bilateral Gas Sales and Purchase Agreement (GSPA) have already been signed among the three gas buyers and the seller for supply of natural gas for 30 years. Further, an Operations Agreement detailing metering, allocation and nomination aspects have been signed among the parties in Jul' 2014. The Transit Fee payable to the transiting countries has been broadly agreed.

GAIL India Limited has conveyed its willingness to Turkmengas to hold bilateral negotiations for taking up additional gas not contracted by Afghan Party and discussions in this regard are being held.

As per the project structure, the 4 TAPI Parties will select and induct a technically competent and financially capable Consortium Leader.

Asian Development Bank (ADB) was appointed the Transaction Advisor (TA) on 19th November, 2013. The scope of TA includes formation of TAPI Ltd., selection of the Consortium Leader (CL) and undertaking certain project development activities such as Detailed Feasibility Study and Route survey.

In the 18th SCM, it was informed by the Turkmen party that M/s. TOTAL, a French Company, has expressed interest in becoming the Consortium Leader

provided both Turkmen party and TOTAL are able to agree on a suitable upstream model within the framework of Turkmen law. During the 19th SCM, Turkmen party shared an update on its discussions with TOTAL. Further, it was also decided to initiate a dialogue with other potential consortium leaders for the TAPI project. Recently, 20th SCM was held in Feb' 2015 wherein timelines were discussed for identification and selection of consortium leader.

TAPI Pipeline Company Limited (TPCL), the pipeline consortium has been incorporated on 11.11.2014 in 'Isle of Man', a British Crown dependency located in the Irish Sea. Formed by the nominated entities of four TAPI countries with equal shareholding, TPCL would be responsible for building, owning and operating the TAPI Pipeline. Currently, all the four TAPI entities have committed to invest USD 5 million as initial equity in the TAPI Pipeline Company Limited.

The first gas flow from the pipeline is expected to start within 3 years from the date of the induction of Consortium Leader, which is likely to materialize by March 2016.

(ii) Iran- Pakistan – India (IPI) Pipeline Project

Iran-Pakistan-India (IPI) pipeline was planned for transportation of natural gas from South Pars gas fields of Iran to Pakistan and India. The pipeline would have capacity to transport 60 MMSCMD of Natural Gas which would be equally (30 MMSCMD each) supplied to India and Pakistan. The total length of the pipeline up to Indian border would be approx. 2135 KMs (1100 KMs within Iran and the rest within the territory of Pakistan). The pipeline would enter India in Rajasthan near Barmer. As per past estimates, investment required for this pipeline would exceed USD 7 Billion.

Various Trilateral and Bilateral Joint Working Group (JWG) meetings were held between Iran, Pakistan and India to finalize the issues like transportation cost, transit fee, price review, and governing law/seat of arbitration & delivery point. Inter-Government Agreement & Joint Co-operation Declaration were also discussed. However, due to certain unresolved contractual issues and in light of the US/ UN sanctions on Iran, the IPI project has not moved forward".

1.122 In this connection when enquired about the efforts undertaken to bring in gas from gas rich neighboring countries like Myanmar and Bangladesh to take advantage of the geographical proximities, the Ministry apprised as under :

"At present no efforts are being made to source/procure natural gas from the neighboring countries like Myanmar and Bangladesh. However, the newly acquired blocks in these countries are in the exploration stage".

CHAPTER-II OBSERVATIONS / RECOMMENDATIONS

1. Role of Ministry of Petroleum and Natural Gas

The Committee note that the Indian Economy is growing steadily leading to increase in demands for petroleum products by 3.9 percent during April – December 2014. However, the Committee note that over 75 percent of its demands are met from imports. This has resulted in the import of crude oil to the tune of 142.236 MMT during the period April to December 2014. The Committee note that the domestic crude oil production has been stagnating around 38 Million Metric Tonnes (MMT) for the last few years and the production of natural gas is coming down over a period of time.

The Committee observe that the Ministry of Petroleum and Natural Gas mandated with the task of exploration and exploitation of petroleum resources within the country has been taking several measures to enhance the supply of the hydrocarbon resources. It has come out with the new formula for gas pricing to incentivize the domestic exploration and production, working on a policy for development of marginal fields, gas pooling, shale gas policy, procurement of ethanol for ethanol blended petrol(EBP) Programme, etc. It is also pursuing acquisition of oil and gas assets overseas for strengthening the country's energy security and Indian oil companies are present in around 25 countries. The Committee have been informed that strategic crude oil strategic caverns are also being built to store crude oil for managing supply disruptions due to any unforeseen events in the global oil and gas market. Even though these measures are welcome, the Committee are of the view that improving the domestic production of crude oil and natural gas should be the utmost priority for the Ministry in order to reduce dependency on imports from foreign countries. The Committee, therefore, recommend that the Ministry should focus on this important goal and take required steps towards achieving this objective.

2. Analysis of Plan Allocations

The Committee note that the plan outlay of the Ministry of Petroleum and Natural Gas for the year 2015-16 is estimated at Rs. 50 crore out of which Rs. 48 crore have been allocated for Rajiv Gandhi Institute for Petroleum Technology (RGIPT) at Jais, Rai Barelli, Uttar Pradesh and a token provision of Rs. 1 crore each have been made towards ISPRL for strategic crude oil strategic caverns and for setting up Petroleum University in Andhra Pradesh as per the Andhra Pradesh Re-Organization Act, 2014.

The Committee observe that during the year 2014-15, the RGIPT was allocated Rs. 42 crore in the Budget Estimates which was reduced to 1 crore in the Revised Estimates but still no money was utilized. An amount of Rs.1 crore was provided in Budget Estimates (BE) of 2014-15 for ISPRL to fill up strategic crude oil reserves to enhance the energy security in the country. The Committee further observe that the Revised Estimates for 2014-15 show that an amount of Rs. 2400 crore was allotted for this purpose which remained unutilized. Also a sum of Rs. 1 crore allocated on plan side for setting up of a Petroleum University in the State of Andhra Pradesh remained unutilized.

In addition to the budgetary allocation for the Ministry, the main activities are carried out by the PSUs from the funds generated out of Internal and Extra Budgetary Resources (IEBR) and the PSU's Plan Budget for the year 2015-16 is about Rs. 76,565.46 crore. The funds are utilized by the PSU's for the activities under the Heads Exploration & Production, Refinery & Marketing, Engineering etc.

The Committee are disappointed that the plan allocation of Revised Estimates (RE) of Rs. 2402.00 crore under all the three Heads remained unutilized which shows the Ministry in poor light. The Committee expects the Ministry to ensure the proper monitoring of the utilization of the budgetary allocations on plan side to avoid any underutilization.

3. <u>Rajiv Gandhi Institute of Petroleum Technology (RGIPT)</u>

The Committee note that Rajiv Gandhi Institute of Petroleum Technology is being set up at Jais, UP to cater to educational & training requirements of Petroleum Sector. The Institute is running its academic activities from a temporary makeshift campus at Rae Barelli since 2008. The Committee are concerned to note that RGIPT has suffered delays in its progress due to various reasons.

The total estimated cost of the project has escalated to Rs. 695.58 crore as against the initially approved estimate of Rs. 435 crore in the year 2007. The Committee note that construction could not be completed due to failure of the contractor and the contract was terminated in May 2013. A new contractor has been engaged in September 2013 for carrying out composite works for completion of the campus and the project has achieved 86 percent progress in March 2015. The Institute is now expected to achieve its completion by March 2016. The project which was scheduled to be completed in the XI plan is still lying unfinished and has suffered considerable cost and time spill overs. The Committee have been informed that EFC meeting held on 24.2.2015 has approved the total revised cost estimates of Rs. 538 crore and the rolling over of Rs. 199 crore from XI plan to XII plan. Rs. 48 crore have been allocated for the financial year 2015-16. The Committee desire for an effective utilisation of allocated funds in the current fiscal to complete the planned activities in the Project and the Committee recommend that Ministry should stick to the commissioning deadlines set for RGIPT and postponement should be avoided at any cost. The Committee also note that there was a plan for setting up of a RGIPT centre in Shivsagar, Assam. The Committee desire that the work on setting up of RGIPT centre at Shivsagar be expedited and necessary allocations therefor, sought from the Ministry of Finance.

4. <u>Strategic Storage of Crude Oil -- Indian Strategic Petroleum Reserves</u> <u>Limited (ISPRL).</u>

The Committee note that in order to enhance the country's oil security, a special purpose vehicle namely, Indian Strategic Petroleum Reserves Limited (ISPRL) has been formed as a wholly owned subsidiary of OIDB, which is establishing strategic caverns with capacity of 5.33 MMT at three locations in the country viz. Vishakhapatnam (1.33MMT), Mangalore (1.5MMT) and Padur (2.5MMT) respectively in Phase-I. The Committee further note that the Vishakhapatnam cavern has been completed and is ready to receive the crude oil supplies. Other two caverns are also expected to be ready by October, 2015.

During the year 2014-15, a sum of Rs. 2400 crore was provided under Revised Estimates for purchase of crude oil for filling up the storage cavern. The Committee have been informed that this money was allotted on 31st March, 2015 and only Rs. 600 crore out of Rs.2400 crore was permitted to be drawn. The allotted amount could not be utilized due to procedural technicalities as this sum was included in Capital Head by Ministry to which CAG which pointed out that the money should have been included under the Revenue Head. However, the Ministry have informed the Committee that OMCs have placed an order for one VLCC cargo of crude and they would be reimbursed through supplementary grants during the current year.

The Committee, however, take serious note of the lapse of resulting in nonutilization of allocations funds for the purpose. The Committee, therefore, recommend that the Ministry should be more cautious in future in taking action on time and utilize the allocations for purchase of crude oil to store in the strategic storage caverns to take advantage of low prices in the international market.

The Committee deplore the lack of understanding over technicalities on the head under which the expenditure is to be incurred by the concerned Department/agency losing sight over the larger issue of buying crude oil for strategic caverns at lower international rates. This is a classic case where the procedures are held sacrosanct over the purpose and the funds were allowed to lapse. The Committee would strongly expect all concerned Departments /Ministries to introspect and facilitate smooth functioning.

5 <u>Petroleum University in Andhra Pradesh</u>

The Committee note that in terms of Schedule 13 of Andhra Pradesh Reorganization Act, 2014, Government of India is to establish a Petroleum University in the State of Andhra Pradesh. In this regard, Government of Andhra Pradesh has identified a land measuring 150 acres in Subhavam Mandal, Visakhapatnam and a letter has also been sent to RGIPT on 16.3.2014 to take further action for acquiring and transferring the land from Government of Andhra Pradesh to establish the University. University Grants Commission has also been approached by RGIPT for setting up the university. RGIPT has also submitted a DPR for Rs. 855 crore to MoPNG.

The Committee note that a provision of 1 crore was allotted under RE for the purpose of Petroleum University during the year 2014-15 remained unutilized. For the current fiscal also, Rs. 1 crore has been allocated for establishing the university. The Committee recommend that formalities for acquiring and transferring the land from Government of Andhra Pradesh to Petroleum University be pursued with adequate sincerity for expediting the process. The Committee further desire that necessary allocations may be sought for this purpose as and when required during the year.

6. Analysis of Non-Plan Allocations

The Committee observe that the non-plan outlay of the Ministry for the year 2015-16 is estimated to be Rs. 30,075.55 crore. The Non Plan Budget for 2015-16 primarily comprises of Rs 21140 crore for LPG subsidy under Direct Benefit Transfer on LPG (DBTL) scheme and Rs 660 crore for paying other subsidies for LPG including NE region and Rs. 200 crore for Project Management Expenditure. The Committee note that this year, under-recoveries on sale of petroleum products mainly on domestic LPG cylinders and PDS kerosene have been replaced by subsidy on sale of domestic LPG cylinder by direct cash transfers in consumers accounts under DBTL programme of the government. In this connection, a token provision of Rs 1 crore has been kept for the purpose of Kerosene subsidy under Direct Transfer (DTCK) project, besides keeping Rs 7999 crore payable under the Head 'Kerosene' subsidy for NE region. Further Rs. 16.40 crore for Petroleum and Natural Gas Regulatory Board (PNGRB) and Rs 2.09 crore for Society for Petroleum laboratory have been earmarked for them respectively.

Also, an allocation of Rs. 27.06 crore has been kept for Secretariat-Economic services for the Ministry. Further, Rs 20 crore and Rs. 10 crore have been allocated as Grant in Aid to State and UT's respectively for Establishment of institutional mechanism for direct transfer of subsidy in cash for PDS Kerosene beneficiaries. The Committee note that the Head under DBTL for LPG has been provided Rs. 21,140 crores for the current year. The Committee observe that if the cost of LPG goes up, the subsidy element of the cylinder would also go up and accordingly more funds may be required under this Head of account. The Committee, therefore, recommend that the Ministry should keep a strict vigil over the fund outgo under this head and take necessary action as and when required so that the consumers should not be put into difficulties for getting subsidy for purchase of domestic LPG cylinders.

7 Direct Benefit Transfer for LPG consumers (DBTL)

The Committee note that the DBTL Scheme named 'PAHAL' meant for transferring LPG subsidy in consumer's bank accounts has been launched across the country from 01.01.2015. The Ministry has informed that the DBTL scheme is the largest direct transfer scheme in the world has received adequate response from around 81.8 percent i.e. 11.89 crore of the 14.54 crore of active consumers. The Committee further note that Government has successfully achieved its target of enrolling 80 percent of the consumers before 01.04.2015. The Committee find that albeit overall target for enrolment of consumers have been achieved, it is found that in states like Mizoram, Nagaland, Manipur & J&K less than 50 percent consumers have enrolled. The Committee have noted that a number of measures have been taken to facilitate and ease out difficulties being faced by consumers in the process to enroll in the DBTL Scheme.

The Committee have been informed that though generally the subsidy amount is transferred electronically into consumer's account within 48 hours, however due to involvement of several stakeholders like distributors, Banks and National Payment Corporation of India (NPCI) in the subsidy transfer process, the actual crediting of the subsidy amount may get sometimes delayed. The Ministry should ensure that genuine LPG consumers who do not have bank accounts are covered under Jan Dhan Yojna so as to receive the subsidy in their Besides devising methods and procedures for containing bank accounts. procedural delays, the Committee recommend for expediting of efforts to increase the enrollment rate in the lagging states and make the DBTL Scheme successful by achieving highest degree of consumer satisfaction. The Committee desire that Ministry/OMCs should also continue the KYC process to its logical conclusion to eliminate multiple and fake connections in individual/household consumers. The Committee also recommend that in order to provide better service to consumers, the Ministry/OMCs should increase the number of LPG distributorships in areas which have more than optimum number of LPG consumers with the existing distributors.

8 Direct Transfer of Cash Subsidy for PDS Kerosene (DTCK)

The Committee note that the Ministry has launched DTCK scheme for transferring cash subsidy into the bank accounts of SKO beneficiaries under PDS was launched as a pilot project in the block Kotkasim, District Alwar, Rajasthan in December, 2011 by MoP&NG. In 2012, it was decided that a lump sum one time grant of Rs. 100 crore would be given for each joining State. The scheme is to be implemented by state Governments and consequently, 11 States/UTs namely Rajasthan, Madhya Pradesh, Sikkim, Maharashtra, Andaman & Nicobar Island, Jharkhand, Himachal Pradesh, Pudducherry, Kerala, Goa and Andhra Pradesh confirmed their participation in the scheme. However the Committee have been informed that till date only 3 states viz. Rajasthan, Maharashtra and Goa have confirmed implementation of DTCK.

Direct Cash transfer of subsidy in consumer's accounts is an effective tool in better targeting of intended beneficiaries and checking diversions. The Committee opine that the DTCK scheme should not remain confined to few blocks or states or few UTs rather be expeditiously implemented in the remaining states/UTs in coordination with respective state governments without causing further delay. The Committee desire that a road map with timeline for extending DTCK across the country be prepared primarily focusing on areas in states where the kerosene demand is high. The Committee desire that the Ministry should also ensure the easy availability of non-PDS kerosene in the open market.

9 Production of crude oil & Natural Gas

The Committee note that the production of crude oil & natural gas in the first three years of 12th Plan i.e. during 2012-13, 2013-14 and 2014-15 was not in the line with the projected targets and there was a continuous shortfall. In case of crude oil, production was only to the tune of 37.8 MMT, 37.7 MMT and 30.3 MMT (upto January 2015) against the projected projections of 42.3 MMT, 45.5 MMT and 44.76 MMT respectively during the above-mentioned period. The production levels of natural gas were 40.67BCM, 35.406BCM and 28.81BCM (upto Jan 2015) against targets of 52.27BCM,61.55 BCM and 70.06BCM respectively during the above period.

The Committee have been informed that cumulative factors are responsible for the decline in crude oil and natural gas production of ONGC. These include delay in development of New & Marginal Fields (NMFD), less than planned production due to drilling complications in D-1 field, marginal shortfall due to delay in redevelopment schemes and less than anticipated oil gain from new development wells under MHN Phase-II scheme etc. In case of OIL, the lower levels of crude oil production have been attributed to ageing fields that have crossed their peak period, bandhs and blockades and environmental problems are the other main reason for shortfall in production.

The Committee have been informed that ONGC is making all out efforts to minimize the natural decline by implementing various IOR/EOR scheme and field re-development projects and these efforts have started showing results. The Committee desire that ONGC/OIL should also focus on the development and improving the performance of aging, marginal and small fields of the companies having potential of contributing significantly to the production of crude oil/natural gas. The Committee also regret to note in the Odalaveru area of KG basin, ONGC has awarded the contract even before acquiring the land in the area which may result in uncertainty of the project.

The Committee would also like to point out that due to lesser subsidy sharing by upstream companies will make more funds available with them. The Committee desire that Government/upstream oil companies analyse the E&P strategies which needs reappraisal and fresh insights. As the flagship exploration PSU company, ONGC has the onerous responsibility and should invest more in the exploration and production activities to increase the domestic crude oil and natural gas production. Therefore, the Committee recommend that upstream oil PSUs should concentrate on E&P activity more vigorously and bring in latest techniques to fill the gaps wherever required so that the domestic production can be increased.

10 Seismic Survey Drilling

The Committee note that there has been considerable shortfall in the 2D and 3D seismic acquisition of ONGC, as during the year 2013-14, against the target of 10109 sq. km., 3D seismic surveys was carried out only for 8371 sq. km. Similarly, exploratory drilling has also fell short of the targets particularly for all the 2 years i.e. 2012-13 and 2013-14 where against the target of 155 and 153 wells only 108 & 106 wells respectively were actually drilled. Similarly, OIL has also registered considerable shortfall in exploratory drilling targets. The Committee would like to point out that targets for exploratory wells of ONGC and OIL have

been stagnant during the period 2011-12 to 2013-14 at about 155 wells and 33 wells respectively.

In Committee's view, seismic surveys and exploratory drilling is the sine qua non of any sound E&P programme of a company and these should be planned and implemented with all due diligence. The Committee in their previous reports have time and again emphasized the importance of these activities in the exploration programme of the upstream companies. The Committee once again reiterate that ONGC and OIL should put in all efforts to adhere to their committed targets in E&P programmes and for this the NOCs may carry out review of their exploration targets vis-a-vis achievement on quarterly basis to effectively carry out exploration activities.

11 <u>Recovery Factor in E&P</u>

The Committee note that in the Exploration and Production programmes, the recovery factor achieved by the exploration companies in the fields is an important factor to assess its effectiveness. The Committee are dismayed to note that the recovery factor of ONGC & OIL for crude oil and of OIL for Natural Gas are considerably low in comparison to the International Standards. As against the international benchmark range of Recovery Factor of 35-40 percent for oil reservoirs and 55-70 percent for gas reservoirs, the current recovery factors of ONGC and OIL in respect of crude oil are as low as 27.01 percent and 23.23 percent. In case of Natural Gas, ONGC is able to maintain it around 54.26 percent, whereas recovery factor of OII India Limited for Natural Gas is around 43 percent which is not as good as ONGC. This is a matter of great concern as both the upstream oil companies have not been able to recover the oil as per global standards.

The Committee note that E&P companies are adopting multipronged strategies to enhance recovery factor and undertake various IOR/EOR schemes to improve the Recovery factor and for arresting the declining trend of oil production. The Committee further note that every year, upstream oil companies claim new discoveries and simultaneously undertake IOR/EOR schemes to harness incremental oil but even than the recovery factor shows no sign of improvement .The Committee have been informed by ONGC that the existing

recovery factor is not satisfactory and want to take it to global levels of 40 percent for ONGC. The Committee desire that OIL should also take serious measures to improve the recovery factor of crude oil and gas from its fields.

The Committee recommend that E&P companies should undertake concerted efforts including technology measures needed to enhance the performance of their aging fields so as to improve the present recovery factor of the companies to international level.

12 <u>Rig Availability</u>

The Committee note that rigs are the key equipment for carrying out exploration and production activities. ONGC for its onshore exploration activities has a total of 69 rigs in which 68 are owned and 1 has been hired on charter hire basis. However, this appears to be in marked contrast with the rigs deployed in offshore areas, where out of the 33 rigs, 25 are charter hired rigs and only 8 are owned by ONGC. The Committee further observe that as per status submitted by ONGC, there are no purchases in pipeline for rigs. As regards OIL, the total number of drilling rigs available are 18 with 9 owned rigs and 9 charter hired rigs.

The Committee note that the idle time for the charter hired rigs is quite high for both the upstream oil companies with OIL accounting for 25 percent idle time and ONGC at 26 rig months involving huge financial loss. This idle time has been incurred due to some avoidable and manageable constraints like rigs waiting for logistics and waiting on locations on ready sites which affects the productive period of rigs.

The Committee understand that Oil India Limited (OIL) has contracted rigs for KG-ONN-2004/1 in the area of Thanelanka in East Godavari District which is lying idle due to lack of proper planning in the work location causing huge loss to the company. The Committee deprecate such lackadaisical attitude of the company and desire that all such cases of hired rigs lying idle should be looked into and a report submitted to them within a period of one month.

The Committee recommend that upstream oil companies should concentrate in effective planning and management of exploration programmes so

as to ensure optimum utilisation of rigs. The Committee have noted that some of the offshore rigs which have been hired on contract basis at a cost of more than Rs. 1000 crore for a period of 3 years. The Committee would also like ONGC to embark on a programme to systematically increase its owned offshore rigs fleet to reduce the dependence on the hiring of the offshore rigs. The Committee also desire that the upstream oil companies strive to achieve the productivity level of rigs inline with international benchmark.

13 <u>Development of Marginal Fields</u>

The Committee note that till 2007, ONGC had 165 marginal fields with estimated quantum of oil/gas reserves of 1691.863 MMT (O+OEG) in place & 431.544 MMT (O+OEG) ultimate reserves, and in the year 2014, a total of 201 fields were grouped as marginal fields by the company. Besides this, OIL has 6 marginal fields in state of Assam which are to be monetised. The production from these fields contributed about 8 percent of total crude oil production of **ONGC** during 2013-14. The Committee further note that there are certain economical constraints in development of marginal fields and hence these are commercially unviable. ONGC has made a request that fiscal incentives be provided to make the development of these fields economical. The Committee note that ONGC has so far awarded 25 marginal oil and gas fields on service contract for their development. The Committee note that Ministry is mulling over the introduction of policy for marginal fields of NOCs to speed up the development of hydrocarbon discoveries from these fields. The Committee desire that process of policy formulation for marginal fields must be expedited and suitable incentives be included in the policy after studying of the pros and cons. The Committee may be apprised of the progress made in the matter at the earliest.

14 Coal Bed Methane

The Committee note that our country has the fourth largest proven coal reserves in the world and holds significant prospects for exploration and exploitation of Coal Bed Methane. The estimated CBM reserves in the country are about 92 Trillion Cubic Feet (TCF). The Committee further note that so far 33 CBM blocks have been awarded under four CBM rounds and the total

prognosticated CBM reserves in these 33 blocks is about 63.3 TCF of which so far only 9.9 TCF has been established. But commercial production has commenced from only 1 CBM block i.e. Raniganj (South) and total CBM production is about 0.76 MMSCMD.

The Committee further note that as on date, 8 CBM blocks have entered development phase, 5 CBM blocks are in exploration phase and 4 CBM blocks are awaiting granting of PEL from state government. The Committee are not happy with the slow pace of the exploration and exploitation of CBM. After the first commercial production started in the year 2007. the commercial CBM production has not yet picked up. The Committee desire that development activities in CBM areas be pursued by MoP&NG with State authorities on regular basis.

The Ministry has informed that in view of the recent judgement passed by Hon'ble Supreme Court cancelling the allocation of coal blocks, certain issues are being re-examined and further MoP&NG and Ministry of Coal are in correspondence for resolution of various issues pertaining to simultaneous exploration and exploitation of CBM and Coal Mining by one single Operator from the point of view of safety of operations and fast track exploitation of both the resources viz. CBM and Coal. The Committee desire that MoPNG should pursue the issues with MoC to arrive at acceptable solution to give a fillip to CBM exploration.

15 <u>Revival of Biecco Lawrie Ltd. (BLL)</u>

The Committee in their 23rd Report (15th Lok Sabha) had recommended that Ministry of Petroleum and Natural Gas should explore the possibility of revival of Biecco Lawrie Limited (BLL). The Ministry has informed that the decision of closing down of BLL is being reviewed to give one more chance of revival to the company. OIDB, the major stakeholder of the company, has been directed to provide special loan of Rs. 12.00 crore to revive the company. Further, BLL is also trying to get support of Oil Marketing Companies (OMCs) to get sufficient work load for lubricant filling operations and sufficient electrical maintenance work. BLL has also requested MoPNG to request Ministry of Power to assign work on Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and Integrated

Power Development Scheme (IPDS) on nomination basis. The Committee are pleased to know about the decision of the Government to give BLL another chance to revive. The Committee recommend that MoP&NG should take up the request of BLL with Ministry of Power for assignement of work under DDUGJY and IPDS work. The Committee hope that the management and employees of BLL would also rise to the occasion and use this revival opportunity to the fullest to bring the company out of sickness. The Committee may also be apprised of the developments in the matter.

16 National Gas Grid

In order to complete the National Gas Grid, Government has identified various gas pipeline sections of total length of about 15000 kms in addition to existing 15000 kms. Out of this, 3 pipeline sections of total length of about 2670 kms are under consideration to be implemented through Public Private Partnership (PPP) mode. The Committee further note that one of these pipelines namely Ranchi-Talchar-Paradip pipeline has been identified by MoP&NG as a pilot project for developing through PPP mode. GAIL has been appointed as the sponsoring authority. The Committee note that GAIL has completed route survey and market demand survey and DFR is under preparation. The PPP agreement is expected to be executed by December 2015 depending on the success of this pilot project, other pipeline projects would be implemented. The Committee desire that MoP&NG should monitor the development of this pilot project closely and step in to sought out issues wherever required as the success of this project is crucial for future pipeline projects to be implemented by this PPP mode.

17 <u>City Gas Distribution Project</u>

The Committee note that presently City Gas Distribution network is operational in 49 Geographical Areas (GA) of the country. It has been informed that, so far 4 bidding rounds have been held by Petroleum and Natural Gas Regulatory Board (PNGRB) for awarding authorization to develop CGD network in the various Geographical Areas (GA) throughout the country. As per current status, bidding has started for 20 GAs/District in the 5th round and bidding for 26 GAs under 6th round is expected to commence from June/July 2015. GAs identified for 5th and 6th rounds already have natural gas pipeline connectivity. In

addition to this, 106 GAs have been identified by PNGRB in the regions not having pipeline connectivity to be offered in the future bidding rounds.

The Committee, however, are constrained to note that as per details furnished the actual PNG domestic connections against the targets are far below and remained stagnant in many Geographical Areas during last two years. The Committee deplore the lackluster approach of the Government in this regard and desire that the coverage of PNG domestic connections be sufficiently increased and hurdles in the existing GA's, if any, in the implementation be removed at the earliest. The Committee recommend that the Ministry and PNGRB should ensure that while they stick to the targets of increasing the GA's to develop CGD network, should also ensure availability of adequate natural gas for the purpose and increase coverage of PNG domestic Connection in the existing GA's. The Committee also desire that the capacity utilization of existing gas pipeline network be improved particularly like the Bengaluru-Dabhol pipeline network which has very low capacity utilization.

18 <u>Setting up of Barmer Refinery</u>

The Committee note that a new grassroot refinery of 9 MMT capacity is being setup at Barmer, Rajasthan by Hindustan Petroleum Corporation Limited and Government of Rajasthan having 74 percent and 26 percent equity respectively in the venture. The refinery is expected to commence its functioning within 48 months after receipts of all statutory clearances, including environmental clearance. However it has been informed that project activities are presently on hold owing to the pending various project related issues by end of March 2015. Besides this, minutes of meeting of Expert Appraisal Committee of Ministry of Environment and Forests (MoEF), held regarding the public hearing of MoEF for environmental clearances are also awaited. Since setting up of refinery was intended since long for better monetization of the locally produced crude oil from the Barmer oil field and for extending benefits to the native population, the Committee recommend for early resolution of the issues pertaining to setting up of refinery.

19 <u>Performance of Refineries</u>

The Committee note that the Indian Refinery industry has established itself as major player globally with a refining capacity of 215 MMTPA in the country. The PSU refineries have a capacity of 120 MMTPA, private sector refineries account for 80 MMTPA capacity and JV refineries have a capacity of 15 MMTPA. The refinery performance is generally assessed on various key performance areas (KPA) like energy efficiency index, process utilization, transportation fuel, production cost, margins etc. The Committee note that wide performance gaps have been registered in PSU Refineries and most of them have come in last quartile in respect of key parameters.

The Committee note with concern that CPSE refineries have been found lagging considerably on key performance areas vis-a-vis their Asian and global counterparts particularly in key areas like energy efficiency, operational costs, Gross Refining Margins, transportation of fuels and production costs etc. In view of the fact that India is emerging as a refinery hub and expanding its refining capacities with successive additions, the Committee strongly feel that an upkeep and efficient performances of the existing refineries must not be ignored. In Committee's view, PSU refineries should be a demonstration of energy efficiency measures in the country.

The Committee while noting that the refineries have started taking a number of measures to improve upon their performance in the deficient areas, recommend that requisite technologies and knowhow be sourced to upgrade the performance parameters to bring them at par with the global refineries.

20 Implementation of Recommendations of MB Lal Committee

The Committee note that M.B. Lal Committee constituted in the aftermath of the Jaipur fire accident in October, 2009, had given 118 recommendations in their Report. Out of these 118 recommendations, 5 were specially meant for policy matters and the major chunk of these i.e. 113 recommendations were meant for implementation in oil installations to make and safer equip them with latest safety systems and technology.

The Committee note that 95 percent of these recommendations have been implemented and others are in advance stage of implementation in more than 300 oil installations. The Committee desire that implementation of remaining 5 percent recommendations be pursued on regular basis for their early completion. The Committee further note that one of the important recommendations awaiting

implementation pertains to giving statutory status to Oil Industry Safety Directorate (OISD) to make it an umbrella regulatory authority for whole petroleum and natural gas industry. The Committee, therefore, desire the Ministry to initiate the process in this respect at the earliest which would give enhanced autonomy and effective supervisory powers to OISD, for monitoring all safety related issues of petroleum sector.

The Committee further note that inviting tenders, placing and finalization of purchase orders for safety equipments are internal matter of OMCs and companies are free to decide terms and conditions of tender inline with specification of items as per guidelines formulated by OISD in this regard. The Committee, however, would like OISD to play a proactive role in monitoring and supervising the procurement procedures of the companies to bring in more transparency, compliance and discipline. The Committee also desire that the Ministry should ensure procurement procedure are not tailor made for proprietary items and promote competition in the interest of economy.

21 Petroleum Conservation Research Association (PCRA)

The Committee note that PCRA is engaged in promoting energy conservation and efficiency improvement measures in various sectors of economy and assisting Government in formulating policies and strategies for petroleum conservation. PCRA conducts various field activities to reach the target groups by carrying out awareness campaigns, energy audits, fuel oil diagnostics studies, Institutional training programme, workshops, driver training programme, youth programme etc. Besides these educational campaigns, national and international networking for carrying out various energy conservation activities, research & developments for optimum utilisation of energy and reduction of pollution in different sectors of economy through development and demonstration of new and improved equipment/appliances are PCRA is adopting multipronged approach to effectively also organised. disseminate its message of petroleum conservation and trying to reach different sections of society which may help in conserving fuel and reducing overdependence on traditional fuels. The Committee desire that in this endeavour, PCRA should also include the elected representatives of local bodies, legislative assemblies and parliamentarians to give their efforts the necessary

force and fillip. The Committee feel that in a country like ours which depends on imports to meet the demand for the 80 percent of hydrocarbon requirements, the role of PCRA is crucial to encourage the household and industrial consumers to conserve the fuel. Therefore, the Committee recommend that PCRA should conduct a feedback on its awareness campaigns and make necessary changes in its methods and expand its activities to reach more consumers. The Committee desire that PCRA should focus on agriculture sector for using gas or solar energy instead of diesel in tubewells/water pumps to benefit the farmer.

22 <u>Center for High Technology (CHT)</u>

The Committee note that Center for High Technology is a specialized agency entrusted with the responsibility of assessing future technology requirement for acquisition, development and adoption in the field of refinery processes, petroleum products, additives, storage and handling of crude oil/gas and other products. The organisation hires officers and staff from oil companies on deputation basis to carry out its activities. The organisation get its funding through grants from OIDB and expenditure towards performance improvement programme are borne by concerned refineries. Apart from this, expenses on performance benchmarking studies are shared by CHT and PSU refineries. The agency for fulfilling its various objectives carry out regular monitoring and performance evaluation of refineries, undertake performance improvement programmes on centralized basis, joint energy audits and provides centralised technical assistances, performance benchmarking of refineries, knowledge dissemination, refinery technology meets, workshops. It also coordinate funding of research work in refining and marketing areas and pursues programmes of Scientific Advisory Committee on Hydrocarbons (SAC) and Hydrogen Corpus Fund.

The Committee observe that CHT is primarily focusing on activities and projects pertaining to refinery sector and extending its expert guidance and support to improve upon the performances of refineries. However, the Committee recommend that CHT should slowly diversify and undertake Research & Development projects pertaining to upstream sector to function as a guidepost for adopting new and advance technologies.

23 Transnational Gas pipeline projects

The Committee note that the Government is presently pursuing two international gas pipeline projects namely Turkmanistan-Afganistan-Pakistan-India (TAPI) and Iran-Pakistan-India (IPI) to augment supply of natural gas to the country . In respect of TAPI pipeline, all the major issues have been resolved including the finalization of transit fee on which a broad consensus has been reached among the four countries . However, the Committee have been informed that as per requirement of project structure, efforts are underway for selecting a technically competent and financially capable Consortium leader by the four stakeholder countries. The first gas flow through this pipeline is estimated to start with in three years from the date of the induction of consortium partner which is likely to materialise by March 2016. The Committee would like the Ministry/Government to pursue this project on priority basis to push for an early finalisation of the consortium leader as this will pace up the progress and benefit all the stakeholders.

The Committee also note that IPI project has suffered quite a delay in its finalization owing to non resolution of several issues related to the contract. The International sanctions over Iran has also significantly hampered the progress of the project. In the light of changing international scenario, the Committee desire that the Ministry pursue the project at the highest level.

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

MINUTES

STANDING COMMITTEE ON PETROLEUM AND NATURAL GAS (2014-15)

TWELFTH SITTING (09.04.2015)

The Committee held its sitting on 9th April, 2015 from 1100 hrs to 1300 hrs and from 1430 hrs to 1630 hrs in Committee Room 'B', Parliament House Annexe, New Delhi.

PRESENT

Chairperson

Shri Pralhad Joshi -<u>MEMBERS</u> LOK SABHA

- 2 Dr. Ravindra Babu
- 3 Shri P. K. Biju
- 4 Shri Kalikesh N. Singh Deo
- 5 Shrimati Rama Devi
- 6 Shri Elumalai V.
- 7 Shri Naranbhai Kachhadiya
- 8 Dr. Thokchom Meinya
- 9 Shrimati Pratima Mondal
- 10 Shrimati Jayshreeben Patel
- 11 Shrimati Anupriya Patel
- 12 Shri Arvind Sawant
- 13 Dr. Bhola Singh
- 14 Shri Ravneet Singh
- 15 Shri Rajesh Verma
- 16 Shri Om Prakash Yadav
- 17 Shri Laxmi Narayan Yadav
- 18 Shri A.T. Nana Patil

RAJYA SABHA

- 19 Shri Ishwarlal Shankarlal Jain
- 20 Shri Bhubaneshwar Kalita
- 21 Shri Mansukh L. Mandaviya
- 22 Shrimati Gundu Sudharani
- 23 Shri Praful Patel

Secretariat

- Shri A.K. Singh 1 2
- Shri S.C. Choudhary
- 3 Shri H. Ram Prakash
- Joint Secretary -Director
- Additional Director -

Representatives of the Ministry of Petroleum & Natural Gas

1	Shri Saurabh Chandra	-	Secretary
2.	Dr. S.C.Khuntia	-	SS&FA
3.	Shri Ajay Sawhney	-	AS
4.	Dr. Neeraj Mittal	-	Joint Secretary
5.	Shri U.P.Singh	-	Joint Secretary
6.	Shri Sandeep Poundrik	-	Joint Secretary
7.	Shri Ambrish Kumar	-	Sr. Eco. Advisor
8.	Dr. Archana S. Mathur	-	Eco. Advisor

Shri Alok Chandra Advisor (IFD) 9. -

Representatives of Public Sector Undertakings and other Organisations

1.	Shri B. Ashok	-	Chairman, IOCL
2.	Ms. Nishi Vasudeva	-	CMD, HPCL
3.	Shri B.C.Tripathi	-	CMD, GAIL
4.	Shri D.K.Sarraf	-	CMD, ONGC
5.	Shri A.K.Purwaha	-	CMD, EIL
6.	Shri S. Rath	-	Director, OIL
7.	Shri K.K. Gupta	-	Director, (MKTG), BPCL
8.	Shri Virendra Sinha	-	C&MD, Balmer Lawrie & Co. Ltd.
9.	Shri Gautam Roy	-	MD, Chennai Petroleum Corp. Ltd.
10.	Shri P. Padmanabhan	-	MD, Numaligarh Refineries Ltd.
11.	Shri H. Kumar	-	MD, Mangalore Refinery & Petrochemicals Ltd.
12.	Shri Narendra K. Verma	-	MD, ONGC Videsh Ltd.
13.	Shri H.K. Dev Choudhury	-	MD, Biecco Lawrie Ltd.
14.	Shri Upamanyu Chatterjee	-	Secretary, Petroleum and Natural Gas Regulatory Board
15.	Shri B.D. Ghosh	-	ED, Centre for High Technology
16.	Shri Hirak Dutta	-	ED, Oil Industry Safety Directory
17.	Shri Rajan K. Pillai	-	CEO & MD, Indian Strategic Petroleum Reserves Ltd.
18.	Shri C. Shankar	-	ED, Society for Petroleum Laboratories

19.	Shri B.N. Talukdar	-	DG, Directorate General of Hydrocarbons
20.	Ms. Atreyee Das	-	DG, Petroleum Planning and Analysis Cell
21.	Shri L.N. Gupta	-	Secretary, Oil Industry Development Board
22.	Shri J.P. Gupta	-	Director, Rajiv Gandhi Institute of Petroleum Technology

2. At the outset, Hon'ble Chairperson welcomed the Members and representatives of the Ministry of Petroleum and Natural Gas and PSUs to the sitting of the Committee held to have evidence of the representatives of the Ministry of P&NG and accompanying officials of PSUs/Organisations on 'Demand for Grants (2015-16)' of MoP&NG. After the customary introduction, the representatives of the Ministry made a brief presentation on the key areas under 'Demand for Grants (2015-16)'.

3. The Committee then deliberated upon various aspects related to 'Demand for Grants' such as plan and non plan allocations made for the current fiscal for various activities, non-utilisation of Supplementary grants of Rs. 2400 crore in respect of ISPRL, Production of crude oil & Natural Gas, exploration programme by NoCs, improvement of recovery factor by upstream oil companies, Reserve Replacement Ratio and efforts to improve the same, constraints in laying of Kochi-Kottananand-Manglore-Bangalore pipeline, status of laying of 15000 km. trunk pipelines and funding resources, Under-recoveries of OMCs and compensation thereof, Lacunas in the E&P programmes of OIL in Andhra Pradesh, status of Petroleum University in Andhra Pradesh, Feasibility of laying product pipelines infrastructure in North Eastern States and Laying of Jagdishpur-Haldia pipeline and projected Commissioning and formula for fixing of price of domestically produced natural gas etc.

4. * * * * * * * * * * * *

5. The clarifications were sought by the Members. However, on some of the points where the information was not readily available, the Hon'ble Chairperson instructed the Ministry to furnish the written replies to the Secretariat at the earliest.

6. A copy of the verbatim proceedings of the sitting has been kept for record.

The Committee then adjourned.

^{*} Matter not related to this Report.

MINUTES

STANDING COMMITTEE ON PETROLEUM AND NATURAL GAS (2014-15)

THIRTEENTH SITTING (23.04.2015)

The Committee sat on Thursday the 23 April, 2015 from 1000 hrs. to 1055

hrs. in Committee Room 'B', Parliament House Annexe, New Delhi.

PRESENT

Sh. Pralhad Joshi - Chairperson

MEMBERS

LOK SABHA

- 2 Dr. Ravindra Babu
- 3 Shri Elumalai V.
- 4 Shri Naranbhai Kachhadiya
- 5 Dr. Thokchom Meinya
- 6 Shri Ashok Mahadeorao Nete
- 7 Shri Arvind Sawant
- 8 Shri Kamakhya Prasad Tasa
- 9 Shri Om Prakash Yadav
- 10 Shri Laxmi Narayan Yadav

RAJYA SABHA

11 Shri Mansukh L. Mandaviya

SECRETARIAT

- 1. Shri A.K.Singh Joint Secretary
- 2. Shri S.C. Chaudhary Director
- 3. Shri H.Ram Prakash Additional Director

2. At the outset, Hon'ble Chairman welcomed the Members to the sitting of the Committee held to consider and adopt Draft Report on DFGs (2015-16) of MoPNG.

3. The Committee, thereafter, considered the draft Report on Demands for Grants (2015-16) of Ministry of Petroleum and Natural Gas. Some of the Members gave suggestions for incorporation in the Report and the Report was adopted with following changes:

(i) Recommendation No. 3 (Page No. 115)* - The following to be added in the last line: The Committee also note that there was a plan for setting up of a RGIPT centre in Shivsagar, Assam. The Committee desire that the work on setting up of RGIPT centre at Shivsagar be expedited and necessary allocations therefor, sought from the Ministry of Finance.

(ii) Recommendation No. 7 (Page No. 119)* - The following to be added in the last line: The Committee desire that Ministry/OMCs should also continue the KYC process to its logical conclusion to eliminate multiple and fake connections in individual/household consumers. The Committee also recommend that in order to provide better service to consumers, the Ministry/OMCs should increase the number of LPG distributorships in areas which have more than optimum number of LPG consumers with the existing distributors.

(iii) Recommendation No. 8 (Page No. 120)* - The following to be added in the last line: The Committee desire that the Ministry should also ensure the easy availability of non-PDS kerosene in the open market.

(iv) Recommendation No. 9 (Page No. 120)* - The following to be added in the last line of the third paragraph: The Committee also regret to note in the Odalaveru area of KG basin, ONGC has awarded the contract even before acquiring the land in the area which may result in uncertainty of the project.

(v) Recommendation No. 12 (Page No. 123)* - The following to be added separately as a new para after the second paragraph: The Committee understand that Oil India Limited (OIL) has contracted rigs for KG-ONN-2004/1 in the area of Thanelanka in East Godawari District which is lying idle due to lack of proper planning in the work location causing huge loss to the company. The Committee deprecate such lackadaisical attitude of the company and desire that all such cases of hired rigs lying idle should be looked into and a report submitted to them within a period of one month.

(vi) Recommendation No. 17 (Page No. 127)* - The following to be added in the last line: The Committee also desire that the capacity utilization of existing gas pipeline network be improved particularly like the Bengaluru-Dabhol pipeline network which has very low capacity utilization.

(vii) Recommendation No. 21 (Page No. 130)* - The following to be added in the last line: The Committee desire that PCRA should focus on agriculture sector

for using gas or solar energy instead of diesel in tubewells/water pumps to benefit the farmer.

4. The Committee authorised the Chairman to finalize the report and present/lay in both the Houses of Parliament.

The Committee then adjourned.

* Refers to page no. of the Draft Report (English version) circulated among the Members.