



**STANDING COMMITTEE ON
PETROLEUM & NATURAL GAS
(2015-16)**

SIXTEENTH LOK SABHA

MINISTRY OF PETROLEUM & NATURAL GAS

DEMANDS FOR GRANTS (2015-16)

*[Action Taken by the Government on the recommendations contained in
the Fourth Report (Sixteenth Lok Sabha) of the Standing Committee on
Petroleum and Natural Gas (2014-15)]*

EIGHTH REPORT



**LOK SABHA SECRETARIAT
NEW DELHI**

December, 2015/Agrahayana, 1937 (Saka)

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*[Action Taken by the Government on the recommendations contained in the Fourth Report
(Sixteenth Lok Sabha) of the Standing Committee on Petroleum and Natural Gas (2014-15)]*

Presented to Lok Sabha on 16.12.2015

Laid in Rajya Sabha on 16.12.2015



**LOK SABHA SECRETARIAT
NEW DELHI**

December, 2015/Agrahayana, 1937 (Saka)

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(iii)
**COMPOSITION OF THE STANDING COMMITTEE ON PETROLEUM & NATURAL
GAS (2015-16)**

Sl. 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
26	Shri Mansukh L. Mandaviya
27	Shri Ahmed Patel
28	Shrimati Gundu Sudharani
29	Chaudhary Munvvar Saleem
30	Shri Sharad Yadav
31	Shri Praful Patel

SECRETARIAT

1.	Shri A.K.Singh	-	Additional Secretary
2.	Dr. Ram Raj Rai	-	Director
3.	Shri H. Ram Prakash	-	Additional Director

INTRODUCTION

I, the Chairperson, Standing Committee on Petroleum & Natural Gas having been authorised by the Committee to submit the Report on their behalf, present this Eighth Report on Action Taken by the Government on the recommendations contained in the Fourth Report (Sixteenth Lok Sabha) of the Committee on the subject 'Demands for Grants (2015-16) of the Ministry of Petroleum and Natural Gas'.

2. The Fourth Report of the Standing Committee on Petroleum & Natural Gas was presented to Lok Sabha on 27.04.2015. The Action Taken Replies of the Government to all the recommendations contained in the Fourth Report were received on 27.7.2015.

3. The Standing Committee on Petroleum & Natural Gas (2015-16) considered and adopted the Report at their sitting held on 08.12.2015.

4. An analysis of the action taken by the Government on the recommendations contained in the Fourth Report (Sixteenth Lok Sabha) of the Standing Committee on Petroleum & Natural Gas is given in Annexure-II.

5. For facility of reference and convenience, the observations and recommendations of the Committee have been printed in bold letters in the body of the Report.

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

New Delhi;
9 December, 2015
18 Agrahayana ,1937 (Saka)

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

REPORT

CHAPTER I

This Report of the Standing Committee on Petroleum & Natural Gas deals with the action taken by the Government on the Recommendations contained in the Fourth Report (Sixteenth Lok Sabha) of the Standing Committee on Petroleum and Natural Gas (2014-15) on 'Demands for Grants (2015-16)' of MoPNG, which was presented to Lok Sabha on 27.04.2015 and laid in Rajya Sabha on 28.04.2015.

2. Action Taken Notes have been received from the Ministry in respect of all the 23 Recommendations/Observations contained in the Report. These have been categorized as follows:-

- (i) Recommendations/Observations that have been accepted by the Government:- Reco. Nos. 3,4,5,6,7,9,10,12,13,15,17,19,20,21 (Total 14)
(Chapter- II)
- (ii) Recommendations/Observations which the Committee do not desire to pursue in view of the Government's replies:- Reco. Nos. NIL
(Chapter-III)
- (iii) Recommendations/Observations in respect of which replies of the Government have not been accepted by the Committee:- Reco. Nos.1, 2,8,11,14 (Total 5)
(Chapter-IV)
- (iv) Recommendations/Observations in respect of which final replies of the Government are still awaited:- Reco. Nos. 16,18,22 and 23 (Total 4)
(Chapter-V)

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

4. The Committee will now deal with the action taken by the Government on some of their recommendations.

Recommendation No. 1

Role of Ministry of Petroleum & Natural Gas

5. The Committee had recommended as under:-

"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".

6. In this regard, the Ministry has submitted the following reply:

"During the year 2014-15, the consumption of petroleum products was about 165 MMT. Annual average growth rate in consumption of petroleum products was 3.66%.The indigenous crude oil produced in 2014-15 was 37.464 MMT and of which processed in the refineries was about 35.00 MMT. The import of crude oil during 2014-15 was 189.434 MMT. Approximately 79% of the domestic demand of the crude oil was met from the imports in 2014-15. Production of natural gas in 2014-15 was 33.66 Billion Cubic Metre (BCM), which is lower by about 8% of target of 36.62 BCM and also lower by 4.94% than that produced in 2013-14 (35.41 BCM). The Government has taken the following initiatives to increase the production of crude oil and natural gas:

A. Enhance production from the existing field by adopting Improved Oil Recovery (IOR)/Enhanced Oil Recovery (EOR) measures using induction of latest technology.

B. Early monetization of hydrocarbon discoveries under Production Sharing Contract (PSC) regime has been approved by the Government. This policy has addressed rigidities in the timelines of the PSC and has allowed the contractors to start production at the earliest. 34 cases have been already resolved under this policy framework involving resources worth \$ 5 billion.

C. Marginal Field Policy (MFP) is being formulated to monetize the marginal fields of ONGC and OIL which have not been monetized for various reasons in the past. Monetization of these discoveries under this policy through International Competitive Bidding (ICB) would also help in boosting Oil & Gas production of the Country. Lucrative fiscal terms with more autonomy is proposed in the policy for making it investor friendly.

D. A new Uniform Licensing Policy (ULP) is being formulated which covers all type of hydrocarbons viz. Conventional Oil & Gas, Unconventional Hydrocarbons like Shale Oil & Gas, CBM, Gas Hydrate etc. This would help in development of all type of hydrocarbons under single license.

E. Revision of prices of domestic natural gas is expected to incentivize production of natural gas in the country. Ministry is also considering providing premium for gas discoveries in Deep Water, Ultra Deep Water and High Pressure High Temperature (HPHT) discoveries.

F. Setting up of National Data Repository (NDR). Physical completion of hardware and software has been completed and data population is in progress.

G. Policy approved for exploration and exploitation of Shale Gas/ Shale Oil resources by National Oil Companies under the nomination regime. As per the policy, ONGC and OIL have identified 50 and 5 blocks respectively. Subsequent to Geological and Geophysical (G&G) study, these NOCs will drill minimum one well per 200 sq.km. of PML area to assess prospectivity of shale Oil/Gas in these blocks. The timeline for assessment and drilling of pilot wells is three years which would be completed by October, 2016".

Ministry of Petroleum & Natural Gas
O.M.No.G-38011/47/2015-Fin.I Dated 27-07-2015

7. The Committee had recommended MoPNG to give priority to the domestic exploration and production of oil and gas in order to reduce the dependence on import. In the Action Taken Reply, the Ministry has simply informed about the multiple steps taken to improve the domestic production of oil and gas which is merely a repetition of the work undertaken by the Ministry in the past few years. The Ministry has nowhere mentioned anything about the outcome of these efforts and the timeline and targets fixed in this regard and specific steps proposed to be

taken to achieve these targets. The Committee, therefore, reiterate their recommendation and expect the Ministry to accompany facts with figures and be more precise in setting targets under each of the steps enumerated for accrual of increased gains in the production of crude oil and natural gas from domestic sources in the coming years.

Recommendation No.2

Analysis of Plan Allocations

8. The recommendation of the Committee was as under:

"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".

9. In this regard, the Ministry has submitted the following reply:

"During 2014-15, the proposed RE was Rs.70349.32 crore. However, due to some typographical error in the Budget Document 2015-16, the total RE has been printed as Rs.72589.32 crore with RE for OVL Rs.12387.00 crore against proposed RE of Rs.10147.00 crore. The total actual utilization during 2014-15 by oil and gas PSUs was Rs.69828.81 crore i.e. 99.26% of Revised Estimates of Rs.70349.32 crore (against printed RE of Rs.72589.32 crore which is about 96.20%). This has been taken up by the Ministry with Budget Division of Ministry of Finance. The unutilized RE amount is Rs.530.51 crore. The activity-wise actual expenditure during 2014-15 is as follows:

(Rs. in crore)

Activities	2014-15		
	Revised Estimates (RE)	Actual Expenditure	Percentage of Utilisation to RE
1. Exploration & Production	51146.92	44731.23	87.46
2. Refinery & Marketing	16947.76	21805.65	128.66
3. Petrochemicals	2096.64	3212.14	153.20
4. Engineering	158.00	79.79	50.50
Total	70349.32	69828.81	99.26

As regard monitoring of the utilization of the budgetary allocation on plan side, the Ministry of Petroleum & Natural Gas is constantly monitoring the status in monthly review meetings taken by Secretary (PNG) and also intermittently by Hon'ble Minister of State (I/C), M/o PNG. The company-wise reasons for slightly lower achievement in utilization of actual funds against RE are as follows:

Oil Natural Gas Company(ONGC):

- Less expenditure in case of delayed projects.
- Lower expenditure on drilling activities as exploratory and development drilling meterage & wells were lower due to non-availability of Charter hired rigs.
- Deep water operations hampered due to naval exercise & rough weather conditions.

ONGC Videsh Limited(OVL):

- Rs.4875 crore was kept in BE and Rs.610 crore in RE for new acquisition during 2014-15. However, there was no major new acquisition that could get materialized during the year.
- Savings of US\$ 35 million due to early completion of development wells in BC-10 Brazil.
- General delay in activities in Venezuela due to cash flow and contractual challenges.

Indian Oil Corporation Ltd. (IOCL):

- Shortfall in expenditure under petrochemical sector due to the project “Coal/Coke Gasification and Acetic Acid Project at Gujarat ”Refinery was dropped as the project was not found viable.

GAIL INDIA Ltd.(GAIL):

(1) Exploration and Production: This includes all segments, other than petrochemicals, including Pipelines, Business Development projects, Exploration and Production, City Gas distribution: The shortfall in plan CAPEX is due to:

- Less capital expenditure in pipelines of Rs.466 crores than planned due to:
 - i) hindrance due to Right of Use(ROU) problems, especially in Tamil Nadu and Kerala mainly in Kochi-Koottanad-Bangaluru-Mangalore Phase-II. Further, progress in replacement of pipelines in KG Basin with planned expenditure of approx Rs.100 crores in RE has also been affected due to ROU issues;
 - ii) statutory permissions and contractual issues especially in VijaipurKota Pipe Line (VKPL) spurlines ;
 - iii) consumer tie-up awaited for some pipelines esp BNPL Spur lines (Uttaranchal)
- Shortfall due to lack of investable Merger and Acquisition (M&A) opportunities Rs.100 crore.
- Shortfall in equity investment in Gail Gas by approximately Rs.120 crore.
- Shortfall in E&P segment by Rs.100 crore as less cash call was received from operators

(2) Petrochemical segment:

- Time lag in payment vis-à-vis actual progress in Petrochemical expansion project and slow progress of some of the contractors due to financial constraints resulting in shortfall of approx. Rs.180 crore
- Non approval of Phenol Acetone Project by the Board thereby leading to CAPEX shortfall of approx. Rs.340 Crore.

Hindustan Petroleum Corporation Ltd. (HPCL):

Lower investment in Joint Venture projects due to:

- The proposed amount of Rs.740 crore for Rajasthan Refinery could not be utilized as the projects is under review by the State Government of Rajasthan,
- Rs.538 crore allocated for subsidiary company M/s Prize Petroleum for acquisition of discovered/producing E&P blocks was revised to Rs.62 crore. However, funds requirement has been met through debt funds,
- Rs.188 crore allocated for JV project of LNG terminal at Chhara, Gujarat due to change in terms of reference (TOR) conditions, environmental clearance got delayed and hence FEED for LNG terminal could not be carried out in 2013-14 as envisaged.

- Rs.137 crore allocated for JV Project of cross country Gas Pipelines with GSPC/BPC could not be utilised due to delay in getting Right of Way (ROW) approvals and environmental clearance.

Chennai Petroleum Corporation Ltd (CPCL):

- Crude oil Pipeline Project: The planned expenditure of Rs.100 crore for laying 42" New Crude Pipeline could not be incurred for want of clearances from Ministry of Road Transport and Highways.
- Mounded Bullets: The Budget estimate break up was based on the project approved cost of Rs.279 crore, whereas the expenditure became lower due to the lesser awarded contract value of Rs.199 crore. Delay in sand availability in the region due to restriction by State Government.
- Resid Upgradation Project: Project hindrances due to 'Brown field Project Nature' like less space availability for fabrication/storage, underground-redundant pipes & cables and restricted radiography permit timings etc. lowered the physical progress which resulted in lower financial progress.

Numaligarh Refinery Ltd. (NRL):

- Against BE of Rs.177.65 crores, there has been a shortfall in actual expenditure by Rs.74.88 crores. This shortfall in actual expenditure was primarily due to less than anticipated expenditure against the Wax project. For the Wax project, BE was provided at Rs.154.65 crores, against which actual expenditure was Rs.89.57 crores (shortfall by Rs.65.08 crores) primarily due to deferment in commissioning of the project from first quarter to fourth quarter of the financial year.

Balmer Lawrie & Company:

The company has made a further commitment to increase CAPEX to the tune of Rs.74.09 crore as on 31.03.2015, which includes an amount of Rs.72.00 crore towards the equity contribution in the Joint Venture with Vishakhapatnam Port Trust (VPT) could not be made due to delay in finalization of the land lease agreement with VPT".

10. The Committee had taken note of the underutilization of plan allocations of Revised Estimates of Rs. 2402 crore by MoPNG during 2014-15 and had therefore, recommended the Ministry to ensure the proper monitoring of the utilization of the budgetary allocations on plan side to avoid any underutilization during 2015-16. However, the Ministry in its reply has only stated about the normal procedure being followed in the Ministry for monitoring of budgetary allocation at Secretary and Minister level without any mention of specific steps being taken to ensure the

full utilization of plan allocation. Simultaneously, the Ministry has also informed about some typographical error in the Budget Document 2015-16. As per corrected data, the actual utilisation of plan allocation by oil and gas PSUs was to the tune of 99.26 percent of Rs.70349.32 crore resulting in slight underutilization of Rs.530.51 crore over RE. The Committee however note that 99.26 percent is the cumulative percentage utilization comprising the expenditure under all activity heads. Actual utilisation during 2014-15 under the head Exploration & Production and Engineering were pegged at 87.46 and 50.50 percent only. A significant shortfall in actual utilisation under these heads is a matter of concern and not an indicative of the balanced utilisation of the allocation. In Committee's view underutilization of allocations directly impacts the domestic crude oil and natural gas production. This rather reflects lack of proper and pragmatic planning on part of MoPNG/PSUs. The Committee, therefore, recommend the Ministry to be more prudent in their preparation of estimates as well as sincere in utilization of budgetary allocation to avoid such shortfall in utilisations of the funds.

Recommendation No. 8

Direct Transfer of Cash Subsidy for PDS Kerosene (DTCK)

11. The Committee had recommended as under:

"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".

12. In this regard, the Ministry has submitted the following reply:

"The Direct Cash Transfer of Subsidy for Kerosene(DTCK) was launched in 2012. 11 States/UTs namely Rajasthan, Madhya Pradesh, Sikkim, Maharashtra, Andaman & Nicobar Island, Jharkhand, Himachal Pradesh, Puducherry, Kerala, Goa and Andhra Pradesh confirmed their participation in the scheme. Out of those, only 3 states viz. Rajasthan, Maharashtra and Goa have confirmed implementation of DTCK in a few districts. Since, the distribution of kerosene is a matter in the domain of the State Governments/UT Administration, the State Governments/UT Administration are being addressed in this regard.

On the issue of ensuring the easy availability of non-PDS Kerosene in the open market, it is stated that existing Kerosene wholesalers of Oil Marketing Companies (OMCs) and parallel marketers are allowed to market non-PDS Kerosene to small consumers. However, with a view to ease the availability of non-PDS Kerosene for sale in the open market, the Government has amended the Kerosene (Restriction on Use and Fixation of Ceiling Price) Order, 1993. By virtue of this amendment, all the activities of storage, transportation and sale of non-PDS Kerosene have been freed of regulatory control. This is expected to reduce demand for diverted PDS Kerosene by improving availability of non-PDS Kerosene in the open market and will thus meet the demand of Kerosene for various legitimate end uses for the industry and for individual consumption at market price".

13. The Committee had noted that the Direct Transfer of Cash Subsidy for Kerosene (DTCK) scheme intended for transferring cash subsidy into the bank accounts of SKO beneficiaries under PDS and only 3 states out of the total 11 joining states/UTs had confirmed implementation of DTCK. The Committee had therefore, desired for expeditious implementation of DTCK in the remaining states/UTs in coordination with respective state governments.

The Ministry has informed that this scheme is being implemented only in a few districts of these three States and the State Governments/UT Administration are being addressed by MoPNG in this regard, as the distribution of kerosene is in the domain of the State Governments/UT Administration. The reply has nowhere hinted upon any measures suggested/devised by MoPNG to expedite the implementation of DTCK throughout the country. The Committee do not

concur with this approach of Ministry. The MoPNG being at the helm of affairs cannot get away from the responsibility of delays in implementation of such an important scheme. Successful implementation of DTCK scheme, launched by MoPNG to ensure reach of every rightful beneficiary to the subsidised kerosene under PDS is the collective responsibility of MoPNG and State Governments. The scheme can prove to be a significant step forward in curbing adulteration, diversion and misappropriation of this important petroleum product. The Committee therefore reiterate their recommendation of expeditious coverage of remaining states under the scheme in a time bound manner and desire that a state-wise follow up report be submitted to this Committee within a period of three months.

Recommendation No. 11

Recovery factor

14. The Committee had recommended as under:-

"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 Oil 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 then 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".

15. In this regard, the Ministry has submitted the following reply:-

"ONGC puts concerted efforts to increase the performance and to improve its recovery factor through various corrective measures/technologies to achieve its recovery factor up to the level of Global standards which is also one of the Strategic Goal of ONGC. The Salient measures taken to enhance global recovery factor are as under:

- Aggressive IOR/ EOR development schemes:
 - In-situ combustion in heavy oil fields of Balol, Santhal, Lanwa Fields
 - Polymer flood in Sanand Field
 - Alkali Surfactant Polymer (ASP) chemical EOR Pilots in Viraj, Jhalora and Kalol
 - Miscible gas injection in Gandhar field
 - Implementation of WAG (EOR process) in GS-11 and GS-9 sand of Gandhar
- Integrated rolling redevelopment plans
 - Implementation of schemes in MHN, MHS, Heera and Neelam fields
 - Improving Water Injection
 - MEOR Applications
 - Indigenously developed cost effective microbial EOR technique is also being applied to improve production from wells of Ahmedabad, Mehsana and Assam fields.
- Hi-tech drilling/ completion/ stimulation
 - In-fill drilling of hi-tech wells including horizontal, high angle, multilayer and multilateral wells.
 - Hydro Fracturing and multi stage hydro fracturing in tight reservoirs

OIL

OIL has taken measures for enhancing recovery factor of its field through various IOR/EOR schemes. OIL is also looking for induction of advanced state-of- the-

art technology in line with International E&P companies to improve the recovery factors in its mature fields".

16. The Committee in their recommendation had expressed their disappointment over the low recovery factors of ONGC and OIL and had recommended these PSUs to undertake concerted efforts including technological upgradation needed to enhance the performance of their ageing fields to improve the recovery factor. The Committee note that notwithstanding the elaborate measures taken by both the companies to increase upon their performance, the reply does not mention whether there is any improvement in recovery factor or not in the aftermath of these measures being implemented. The Committee also expect the Ministry's reply to provide the details of the projections for the increase in the performance and exact improvement in recovery factor post implementation of these measures. The Committee, reiterate their recommendation and desire these PSUs to put in their earnest efforts to bring about the requisite improvement in recovery factor by keeping clear-cut targets and for real assessment of the effectiveness of the measures being undertaken.

Recommendation No. 12

Rig availability

17. The Committee had recommended as under:-

"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 121 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".

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

"Delay in mobilization of Rig in KG Basin

OIL has plan to drill a well in a riverine island near Lanka Thanelanka village of East Godavari District in the State of Andhra Pradesh. OIL has completed all the civil works in December 2014 except the retaining wall for protection from the floods on the riverside of the plinth. The only means of approaching the location is using a bridge IRC Class B (158 m length).

Just prior to actual rig movement to the location in January 2015, the villagers of Thanelanka in a letter addressed to the District Collector, East Godavari District listed out a number of demands including construction of a retaining wall from the national highway to the bridge along the irrigation canal for a distance of about 4.9 km and also submitted a resolution not to allow the movement of the rig and rig related materials over the bridge.

Subsequently, Revenue Divisional Officer (RDO), Amalapuram and District Collector East Godavari District convened meetings on 05.02.2015 and 24.02.2015 respectively to convince the villagers about the utilization of the bridge. However, the villagers have vehemently opposed the same in the meeting.

The matter has been appraised to The Chief Secretary, Govt. of AP, Hyderabad in a meeting on 23.02.2015 and also requested his intervention. OIL is continuously pursuing the matter with the concerned authorities for earlier resolution of the problem.

Procurement of offshore rigs by ONGC

In view to reduce dependency on the hiring of the offshore rigs, ONGC has a plan to increase ONGC own jack-up rigs from 6 to 10 numbers and Floater rigs from 2 nos to 3 nos.

Increasing productivity level of drilling rigs

ONGC is in process of strengthening Benchmarking Norms. Further efforts are being made by inducting newer technologies to achieve the productivity level of rigs in line with international benchmark.

As far as OIL is concerned, drilling as a part of E & P activity involves operation in very remote areas, adverse geological & environmental conditions. OIL has been taking proactive actions to curb the idle time of drilling rigs and thereby cutting down the well cost and improving the efficiency of the drilling operations.

As desired by the committee, a report on cases of hired rigs lying idle has been submitted to Lok Sabha Secretariat vide this Ministry's letter No.G-38011/47/2015-Fin.I dated 10-07-2015".

19. The Committee had noted the considerable insufficiency of owned offshore drilling rigs in ONGC fleet against the hired rigs and had therefore recommended ONGC to go for systematic increase of its owned offshore rigs to reduce dependence on the hired offshore rigs. The Committee are pleased to note from the reply of the Ministry that ONGC have decided to increase their jack-up rigs from 6 to 10 and Floater rigs from 2 to 3 numbers for offshore exploration. After purchase of these rigs the total count of the offshore rigs would be 13 and it would proportionately cut down the need of hiring drilling rigs. The Committee, however, note that for this purpose they have not prepared any timeline. Moreover even after getting these rigs the number would still fall considerably short of the ONGC requirement for offshore exploration. The Committee, therefore, desire that the rig purchases to suit E&P requirements, should be done under a fix time frame and it should be a continuous exercise by ONGC/OIL instead of spending the huge capex of upstream oil companies on charter hired rigs.

Recommendation No. 13
Development of Marginal Fields

20. The Committee had recommended as under:-

"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".

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

"Union Cabinet on 02.09.2015 approved the Marginal Fields Policy (MFP) for developments of hydrocarbon discoveries made by National Oil Companies ONGC and OIL which could not be monetized for many years due to various reasons such as isolated locations, small size of the reserves, high development costs, technological constraints, fiscal regime etc.

69 hydrocarbon discoveries made by ONGC and OIL have been identified for award through International Competitive Bidding (ICB) process. The evaluation for award of blocks will be made in a transparent manner based on the fixed quantifiable parameters for biddable fiscal package to the Government and committed work programme for the offered block.

This policy will give rights to oil companies for exploration and production of both, conventional and non-conventional hydrocarbons. Regulation of the awarded blocks will be through proposed revenue sharing contract designed on the philosophy of 'Ease of Doing Business' requiring minimum regulatory burden for monetising these fields.

The policy has been notified by the Ministry".

22. The Committee are pleased to note that Government has approved the Marginal Field Policy for development of hydrocarbon discoveries made by ONGC and OIL and the same has been notified by the Ministry on 14.10.2015. The evaluation procedure for award of 69 hydrocarbon discoveries through International competitive bidding process is to be started for these blocks. The Committee note that as a new initiative, policy provides for the combined right of oil companies for exploration and production of conventional as well as unconventional oil and gas reserves including CBM, shale gas/oil, gas hydrates etc. The Committee desire that the process of awarding these blocks within a time frame be initiated soon to bring about the earliest fruition of hydrocarbon blocks.

Recommendation No. 14

Coal Bed Methane

23. The Committee had recommended as under:-

"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 judgment 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 MoP&NG should pursue the issues with MoC to arrive at acceptable solution to give a fillip to CBM exploration".

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

"As per CCEA's approval dated 19.12.2013 and subsequent directions of Committee of Secretaries (CoS) on 10.07.2015, this ministry is in the process of notifying the right of exploration and exploitation of CBM to CIL and its subsidiaries from the Coal bearing areas under their Mining Lease. Notification is to be issued shortly.

In this respect it is also informed that the Ministry of Coal (MoC) has already conveyed the decision of CoS to CIL vide letter dated 29.07.2015".

25. The Committee had recommended that the MoP&NG should work towards early resolution of issues pertaining to simultaneous exploration and exploitation of CBM and Coal Mining by one single operator and MoP&NG should pursue with Ministry of Coal to arrive at a solution to give fillip to CBM production in the country. The Ministry has informed that it is in the process of notifying the right of exploration and exploitation of CBM to CIL and its subsidiaries from coal bearing areas under their mining lease will be issued soon. The Committee appreciate the efforts of the Ministry for pursuing the matter and desire that once the notification is issued, a roadmap for exploration of CBM should be prepared by CIL and the same should be strictly adhered to in order to achieve desired results in a time bound manner.

The Committee however, note that the reply of Ministry is silent about giving permission for simultaneous exploration of CBM and Coal Mining to operators other than Coal India Limited. The Committee are not satisfied with this and desire that other operators in this field should also be allowed to explore both CBM and Coal simultaneously. The Committee would like to be apprised about the Ministry's view in this regard.

Recommendation No. 16
National Gas Grid

26. The Committee had recommended as under:-

"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".

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

"In order to complete the National Gas Grid, Government has identified various pipeline sections of the total length of about 15,000 Km in addition to existing gas pipeline infrastructure in the country. Out of this additional 15,000 km, three pipeline sections of about 2670 km have been identified by MoPNG for development through PPP mode with Viability Gap Funding (VGF). Out of these three pipeline sections, "Ranchi-Talcher-Paradip" pipeline project has been approved as the pilot project for implementation through PPP mode with VGF. The remaining two pipeline sections will be considered for implementation through PPP mode after successful implementation of the pilot project.

MoPNG has appointed GAIL as the Sponsoring Authority for implementing "Ranchi-Talcher-Paradip" pipeline project through PPP mode. GAIL has submitted application to Department of Economic Affairs for IIPDF funding for pre-project activities/project structuring. Reconnaissance route survey and market demand survey has been completed by GAIL. Detailed Feasibility Report (DFR) for the project is under preparation and is expected to be completed shortly. GAIL has floated the tender for appointment of Financial cum Transaction and Legal Adviser (TA) for recommending project structuring and bidding for selection of private parties and the same is also expected to be appointed at the earliest. Besides, MoPNG is also facilitating PNGRB to approve the project structuring and bidding process for selection of private party as envisaged in VGF scheme for the pilot project to be implemented through PPP mode".

28. The Committee note that out of the upcoming pipeline network of 15,000 km three pipeline sections of total length of 2670 km have been identified for development through PPP mode with Viability Gap Funding (VGF) by MoPNG. One Pipeline section namely “Ranchi-Talcher-Paradip” pipeline project has been approved for laying as a pilot project. The Committee have been informed that GAIL as sponsoring authority for implementing this pipeline segment is in process of completing its pre project activities. The Committee would like to point out that implementation under PPP mode with VGF is a new concept and outcome of this project will be keenly watched across the other sectors of economy too. Therefore the Committee desire that MoPNG /MoF/GAIL should ensure the successful and timely implementation of this project".

Recommendation No.18
Setting up of Barmer Refinery

29. The Committee had recommended as under:-

"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".

30. In this regard, the Ministry has submitted the following reply:

"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 Rs.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. Consequent to GOR's decision to review the project, the project activities have been put under hold.

In a meeting taken 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 submit a report. The above Committee has held 3 meetings so far. Meanwhile, GOR engaged M/s Price Waterhouse Coopers (PWC) to advise them on the project. PWC submitted its draft report in the first week of May 2015 to GOR and HPCL forwarded its comments thereon to GOR on 12.6.2015. MoP&NG had approved extension of time upto 30.6.2015 for submitting Committee report. The Committee is yet to submit its report. In the meanwhile, GoR through HPCL has requested further extension of time for the Committee to finalize and submit report.

Environmental Clearance: Public Hearing was conducted by Rajasthan State Pollution Control Board in May 2014. The Expert Appraisal Committee (EAC) of MoEFCC held a meeting in February 2015 and sought additional information on various aspects of the project. Inputs pertaining to Salt Miners' Rehabilitation and Resettlement (R&R) have been sought from Govt. of Rajasthan. The proposal shall be resubmitted to EAC for Environmental Clearance after compilation of desired information".

31. The Committee note that the setting up of Barmer refinery is being reviewed and project activities are presently on hold. A Committee consisting of HPCL officials and state government officials of Rajasthan have been constituted to discuss various project related issues. The Committee desire that impasse affecting the progress of project should soon be resolved. The Committee would like to await the outcome of this exercise and final replies of the MoPNG regarding setting up of refinery at Barmer.

Recommendation No.19

Performance of Refineries

32. The Committee had recommended as under:-

"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".

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

"a) Indian PSU Refineries are taking number of steps to improve upon their performance in the deficient areas, as under :

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 units with the state of art new efficient units through Integrated Refinery Expansion Project
- 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
- Over the years, the PSU refineries in India have adopted and implemented number of energy efficiency improvement measures to reduce the Energy Consumption. The average Specific Energy

Consumption of PSU refineries has been brought down from 76.4 in 2005-06 to 62.0 in 2014-15.

Process Utilisation and Operational Availability

- Improving the run-length between planned turn-arounds of major process units
- Strengthening of inspection and monitoring system to improve plant/equipment reliability
- Improving Overall Asset Integrity and Reliability
Gross Refinery Margin Improvement
- The refineries have gradually changed from a simple hydro-skimming / thermal cracking refinery to complex refineries with combination of major secondary processing units like Fluid Catalytic Cracking (FCC), Hydrocracker (HCU), Delayed Coker (DCU), Catalytic Reforming (CRU) along with Hydrogen generation and Hydro-treatment facilities. Retrofitting existing configuration of refineries to handle high 'Sulphur' & heavy 'opportunity crude oil' for upgrading bottom of the barrel to valuable distillates and improved refinery margin for the future.
- The average distillate yield (% wt. on crude) of PSU refineries has improved from 73.3 % in 2005-06 to 78.5 % in 2014-15.

b) Refinery Modernisation

Indian refineries are adopting modern technologies for production of petroleum products and upgrade the technologies in line with the International trend and as per the requirement.

The details of modern technologies employed in the refineries is given below :

Apart from primary processing technologies, viz., Crude Oil Fractionation by Atmospheric Distillation and Vacuum Distillation for initial separation, following are the major modern process technologies employed across PSU refineries for producing petroleum products :

i) Secondary/Upgradation Technologies for yield improvement

- Thermal cracking processes, viz., Visbreaking, Delayed Coking
- Fluidised Catalytic Cracking, INDMAX Technology
- Hydrocracking

ii) Quality Upgradation Technologies :

- Catalytic Reforming, Isomerisation, Alkylation, Prime G for meeting the quality specifications of Petrol w.r.t. octane number, benzene content, aromatics, olefins, sulphur, distillation etc.
- Diesel Hydro-desulphurisation (DHDS), Diesel Hydro-treating (DHDT) for diesel for reduction of sulphur & PAH (Poly Aromatic Hydrocarbons) and cetane number improvement

- iii) Petrochemical Integration: Naphtha cracker, Polypropylene production etc".

34. The Committee note that a number of technological upgradation measures have been taken by PSU refineries to improve their key Performance areas namely Energy Intensity Index, Process Utilisation and Operational Availability, Gross Refinery Margin and have over the years successfully improved its performance in these key areas. The yield however has not increased in the requisite quantum as the PSU refineries are still several notches below the international benchmark. Though the average Specific Energy Consumption of PSU refineries has been brought down in an effective manner from 76.4 in 2005-06 to 62.0 in 2014-15, the average distillate yield of PSU refineries has only improved to 78.5 percent in 2014-15 from 73.3 percent in 2005-06 by the introduction of a number of technological advancements. The Committee desire PSUs to identify the bottlenecks in its refineries and carry out modernisation on a continuous basis through enhanced allocation of funds for this purpose and regular monitoring to achieve the desired outcome in the performance of refineries.

Recommendation No.22

Centre for High Technology (CHT)

35. The Committee had recommended as under:-

"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 OI DB 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".

36. In this regard, the Ministry has submitted the following reply:

"It is a considered view of MoP&NG that CHT shall take up technical and other R&D projects of downstream Hydrocarbon sector. However, the recommendation of the Committee regarding involving CHT in upstream sector has been noted".

37. The Committee had recommended for undergoing diversification of the activities of the Centre for High Technology and develop it into an organisation undertaking Research & Development projects for upstream as well as downstream sector. The Committee however are not satisfied with the replies as the Ministry has simply put forth its views without mentioning the credible reasons for not endowing CHT with additional responsibility to extend the benefit of its R&D services to upstream sector. The Committee are of the view that if CHT cannot be entrusted with R&D activities of upstream sector, then there may be a separate agency catering to R&D requirements of upstream oil companies. The Committee desire the Ministry to be more receptive and open minded for any constructive suggestions and giving a serious effort to weigh the possibilities. The Committee wish to be updated regarding the follow up action taken on the matter at the earliest.

CHAPTER II
RECOMMENDATIONS/OBSERVATIONS WHICH HAVE BEEN
ACCEPTED BY THE GOVERNMENT

Recommendation No. 3

Rajiv Gandhi Institute of Petroleum Technology (RGIPT)

The Committee note that Rajiv Gandhi Institute of Petroleum Technology is being set up at Jais, UP to cater to educational and training requirements of Petroleum Sector. The Institute is running its academic activities from a temporary makeshift campus at Rae-Bareilly 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 estimates of Rs. 435 crore in the year 2007. The committee note that the 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 the composite works for completion of the campus and the project was 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 spills over. 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 has been allocated for the financial year 2015-16. The Committee desire for an effective utilization 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 therefore, sought from the Ministry of Finance.

Reply of the Government

RGIPT Jais Project

EFC meeting has cleared the proposal for Revised Cost Estimates of Rs. 538 crore and rolling over of Rs. 199 crore from 11th FYP to 12th FYP and approval of competent authority to the EFC recommendation has also been received. Rs. 48 crore allotted for financial year 2015-16 is being released.

RGIPT Assam Project

EFC / SFC note for additional fund of Rs. 92 crore is being prepared.

Recommendation No. 4

Strategic Storage of crude oil reserve - Indian Strategic Petroleum Reserves Limited (ISPRL)

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 non-utilization 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.

Reply of the Government

The Cabinet Committee on Economic Affairs (CCEA) in its meeting held on 31st March, 2015 has inter-alia decided that the entire cost for filling crude oil in Visakhapatnam cavern will be met by the Government of India against the 12th Plan outlay of Rs. 4948 crore under the GBS Scheme of Ministry of Petroleum & Natural Gas for the Indian Strategic Storage Programme for storage of crude oil by ISPRL. The remaining amount would be used for filling up the strategic part of the caverns which are being constructed at Mangalore and Padur.

2. Pursuant to the decision of Ministry of Finance, Department of Expenditure agreed to make a provision of Rs.2400 crore in the first supplementary of 2014-15 and approved an amount of Rs.600 crore to be paid as advance to ISPRL for implementation of the project out of the RE-2014-15 provision on 31st March, 2015. However, due to non-approval of the relevant debit Head by the Office of Comptroller & Auditor General of India (C&AG), the said amount could not be released.

3. Thereafter, MoPNG requested Ministry of Finance to advise on the correct Budget Head to be used so as to enable drawl of amount as and when funds are made available. Budget Division, MoF advised that classification of expenditure on payment to ISPRL for strategic crude oil reserve as capital expenditure is based on the principle to build up and maintain the strategic crude oil reserve. As the crude oil reserve is to be maintained consistently, it is appropriate to classify the expenditure as capital expenditure rather than revenue expenditure. Being capital expenditure, it is inappropriate to classify the expenditure as Grants-in-Aid (whether grants-in-aid general of grants for creation of capital assets) at the final tier of classification. Budget Division of Ministry of Finance has advised MoP&NG to apprise the Office of C&AG of the above rationale for classifying the expenditure as capital expenditure and to request that Office to consider maintaining this classification as capital expenditure as proposed earlier. Accordingly, approval of Budget Division has been sought for opening of heads of accounts on 24.07.2015.

4. In the meanwhile, Indian Oil Corporation Ltd and Hindustan Petroleum Corporation agreed to bring 2 VLCCs each for filling the crude in Visakhapatnam cavern after arrival of the 1st VLCC, the filling at the Vishakhapatnam cavern commenced on 14th June, 2015.

5. Also, MoP&NG has noted the recommendations of the Committee for compliance in future.

Ministry of Petroleum and Natural Gas
OM Ni. G-38011/47/2015- Fin. I Dated 27-07-2015

Recommendation No. 5

Petroleum University in Andhra Pradesh

The Committee note that in terms of Schedule 13 of Andhra Pradesh Reorganisation 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, Vishakhapatnam 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 MoP&NG.

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 those 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.

Reply by the Government

Rs. 1.00 crore allocated as token provision in FY 2014-15 for establishment of Petroleum University in Andhra Pradesh, could not be released since the appraisal by EFC had not been done. The EFC proposal will be prepared once the land is identified/acquired Government of Andhra Pradesh has been requested to identify the land.

Ministry of Petroleum & Natural Gas
O.M.No.G-38011/47/2015-Fin.I Dated 27-07-20

Recommendation No. 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 account 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.

Reply by the Government

MoPNG has earmarked Rs.16.40 crore for Petroleum and Natural Gas Regulatory Board (PNGRB) for BE 2015-16 against their proposal of Rs.22.06 crore. This has been done after scrutinizing head-wise details of RE 2013-14 and BE 2014-15. Thus, relevant steps are taken to keep vigil over the outgo of funds to PNGRB.

Reply with regard to DBTL to LPG consumers

The recommendation of the Committee has been noted. Further, this Ministry is keeping a strict vigil over the fund outgo under this head and will review the matter at RE stage.

Ministry of Petroleum & Natural Gas
O.M.No.G-38011/47/2015-Fin.I Dated 27-07-2015

Recommendation No.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 bank accounts. Besides devising methods and procedures for containing 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.

Reply by the Government

OMCs have informed that as on 08.06.2015, 13.15 (85.5 %) crore consumers out of total 15.38 crore active consumers have joined the 'PAHAL' scheme. The details of consumers enrolled under DBTL scheme in the states of Mizoram, Nagaland, Manipur & J&K as on 08.06.2015, are as under :-

S. No.	Name of State	CTC % (as on 08.06.2015)
(i)	Jammu & Kashmir	73.6 %
(ii)	Nagaland	60 %
(iii)	Manipur	68.5 %
(iv)	Mizoram	52.7 %

Considering the local terrain and connectivity, districts of Kinnaur, Lahul and Spiti in Himachal Pradesh and Leh and Kargil in Jammu & Kashmir and some areas in North-East States have been granted DBTL exemption to avoid the inconvenience to the consumers. Further, under Jan Dhan Yojna, zero deposit accounts are opened, this will enable the customer from all sections of society to join the scheme.

On the issue of KYC, OMCs have informed that they are collecting and digitizing KYCs at the time of releasing new connections. OMCs are also carrying intercompany de-duplication by sharing the Master consumer data with NIC (both for existing and incremental data). Results of de-duplication are being published and the LPG connections belonging to suspect list are subjected to KYC formalities. The connections found as multiple connections are blocked after verification.

With regard to increasing the number of LPG distributorships in areas which have more than optimum number of LPG consumers with the existing distributors, it is stated that setting up of LPG distributorships is a continuous process and involves identifying of a suitable location. New LPG distributorships are planned by the OMCs when an existing LPG distributor reaches a refill ceiling limit prescribed for the particular market under the restructuring plan. Feasibility studies are also conducted by the OMCs for setting up new LPG distributorships considering various parameters like LPG coverage, penetration of LPG in the areas, viability of existing distributorships, distance from the nearest distributor, potential families which could convert LPG etc. The feasible locations are then taken up for rostering and advertisement for selection of distributors.

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Recommendation No. 9

Production of crude oil and 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.

Reply by the Government

A. Strategy adopted by ONGC and OIL to augment oil & gas production

The strategy adopted by ONGC and OIL to augment production from their offshore and onshore fields are given as under:

ONGC

Implementation of IOR/ Redevelopment Schemes:

ONGC has successfully implemented several IOR schemes to augment oil and gas production from major offshore and onshore producing fields since 2000-01.

In continuation to the efforts being made to further improve the recovery factor, ONGC Board has approved two major Projects during the FY (2014-15) –“Mumbai High North Redevelopment Ph-III Project” with an investment of Rs. 5706 Crore in June 2014 envisaging 6.997 MMT of oil & 5.253 BCM of Gas by 2030 and “Mumbai High South Redevelopment Ph-III Project” with an investment of Rs.6069 Crores in November 2014 envisaging 7.547 MMT oil and 3.864 BCM gas by the year 2030.

Also, to boost gas production, ONGC Board has approved “Enhanced recovery from Bassein field through Integrated Development of Mukta, Bassein and Panna Formations” in November 2014 with an investment of Rs.4620 Crores envisaging an incremental production of 18.83 BCM of gas, 1.97 million cubic metre of condensate and 0.183 MMT of oil by the year 2027-2028.

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.

Some of marginal field put in production in last few years include NBP (D-1), SB-11, C-24 cluster, B-22 cluster, B-193 cluster, Vasai East, B-46 cluster, North Tapti, BHE/BH-35, SB-14 & Cluster-7 etc. Further a number of marginal fields under WO-16 cluster, B-127 cluster and C-26 cluster are under various stages of implementation and likely to be put on production in coming years.

Also, ONGC has approved “Daman Development Project” (C-24 Addl & B-12 fields) in August 2014 with an investment of Rs.6086 Crores with cumulative gas & condensate production of 27.67 BCM and 5.01 million cubic metre respectively by 2035.

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.

ONGC is vigorously pursuing to develop these fields as early as possible and these prominent discoveries are being developed under 4 projects namely Integrated development project of G1 & GS-15; Vasishtha & S1 integrated development project; Development of northern discoveries in KG-DWN-98/2 Block and Project Manik (GS-29 & G-4-6).

The shallow water field GS-15 is already on production since 2011 and ONGC has also commenced production from its first deep water well in G-1 field from Nov’2013 with other fields will be put on production in coming years.

As regards gas production, ONGC has been able to maintain gas production around 18 BCM from offshore fields in spite of decline from matured fields including major gas producing Bassein field through above efforts. During the FY 2014-15 the production is less in view of certain operational constraints viz., restriction from GAIL due to leakage in downstream at Bhagodia in April 2014, safety/ maintenance issues of exposed portion of 42” Bassein-Hazira pipeline in July 2014 and stoppage of gas production from

Eastern offshore in view of safety related issues of GAILs pipeline from 05-July 2014 to the end of October 2014.

In onshore ONGC is taking all possible efforts to monetize the discoveries made in NELP blocks. Three NELP blocks; West Patan-3, Karanagar-1 and Vadatal-1 have been put on production in March 2015 and other onshore NELP discoveries such as Nadiad, Madanam are in the process of monetization through fast track development.

Various activities such as work over jobs, well stimulation, artificial optimization, reservoir monitoring and reservoir pressure maintenance are being carried out on routine to limit the base decline. Notwithstanding the constraints of mature fields and sharp decline in base production, all out efforts are being made to increase crude oil production. Some of the initiatives being taken to enhance production from onshore fields are as under:

1. Comprehensive redevelopment of Gamij Field through 'Stage Gate' process is under progress.
2. Fast track development of Malleswaram field in Cauvery Asset.
3. Fast track development of Nagayalanka JV block of KG onshore.
4. Development of HP/HT reservoirs in Cauvery and Rajahmundry Assets through outsourcing of services from International companies / experts.
5. 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.
6. Assam Renewal Project (Group A): The project envisages revamping and up-gradation 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.
7. Pipeline Replacement Project, Ahmedabad: Project envisages replacement of old and aging internal pipes used for crude supply and water injection, 43 segments & 229 Km length. The project is likely to be completed by July 2016.

OIL

In order to enhance production of Oil & Gas, Oil India Limited (OIL) has taken the following initiatives:

1. Implementation of IOR/EOR Scheme
 - So far, around 26 reservoirs have been subjected to IOR/EOR scheme mainly water injection.
 - Currently, water injection is being undertaken in 13 reservoirs in 5 fields (Greater Nahorkatiya, Moran, Greater Jorajan, Greater Shalmari and

Central small Field with an injection rate of 9380 Klpd through 40 injection wells).

- Drilling of additional water injection wells in 3 more reservoirs, and to augment surface infrastructures for enhancement of water injection has been planned.
- Initiated water injection for the first time in an Eocene reservoir on a pilot scale.
- In-house Reservoir simulation studies were carried out and on the basis of same it was 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.
- To strategically manage increasing volumes of produced water and to reduce the volumes of fresh water from shallow aquifer, a study has been undertaken for carrying out Produced Water Re-injection (PWRI) to achieve targeted voidage replenishment ratios. Success of these projects may lead to their Field implementation in the future.
- As part of Enhanced Oil Recovery (EOR) initiative, 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 (ASP) flooding for which two reservoirs have been short listed.

2. Horizontal Drilling campaign

- Improved productivity / recovery from the reservoirs by drilling Horizontal wells in Makum - North Hapjan reservoir.
- Initiated the study by reputed international consultants for identification of optimal locations for horizontal/infill wells in a few selected reservoirs in other areas.

3. Field Re-development study by Reputed International Consultant: A Field re-development study has been conducted by M/s FOROIL, France using their new proprietary technology for increasing productivity from the ageing Greater Tengakhat Field. The Consultant will assist OIL in reviewing implementation parameters every 6 months for a period of 3 years. Plan for field implementation within 2015.

4. Advanced E&P technology like Radial Drilling (RD), Extended Reach Drilling (ERD) as well as Multilaterals are also being under consideration to drain hydrocarbon potential from the hitherto inaccessible reserves.

5. Chemical water shut off technology, for shut off of tending produced water is planned in selected reservoirs.
6. Induction of more artificial lifting system like ESP, SRP etc. have been carried out.
7. Stimulation services like hydraulic fracturing, matrix acidization etc. have been implemented.

Enhancement of Natural Gas Production by OIL

- Drilling campaign of non-associated gas wells has been taken up for current & coming years.
 - New gas well completion policies have been adopted - completion of high volume production of gas wells.
 - Infrastructure development as Central Gas Collection Station (CGGS) at Madhuban, Duliajan and Field Gathering Station (FGS) at Chabua has been completed
 - Gas pipeline from Baghjan to Duliajan is nearing completion.
- B. ONGC awarded the contract even before acquiring the land in the Odalarevu area of KG Basin
- An extent of 246.68 acres of land has been earmarked by APIIC (Andhra Pradesh Industrial Infrastructure Corporation) and taken over by ONGC on 03.10.2012 for Eastern Offshore Projects of which assigned land is 74.18 acres wherein the proposed VA & S1 facilities are to be developed.
 - The local revenue authorities have recently paid the compensation to the beneficiaries of the land and payments for land measuring 58.105 acres have been made by the district revenue authorities.
 - As such 58.105 acres of the land has been released for the project and the work of the project S1-VA onshore terminal has started from 8.5.2015.
 - For balance land, the remaining payments are being made.

C. Under-recoveries of Oil Marketing Companies (OMCs) on petroleum products

Due to reduction in international crude prices and also measures taken by the Govt. like deregulation of diesel, Direct Benefits Transfer for LPG (DBTL) Consumers Scheme, total under-recoveries of Oil Marketing Companies (OMCs) on petroleum products have reduced significantly to Rs. 72,314 Crore (provisional) during 2014-15 against Rs. 1,39,870 Crore during 2013-14. As a result, petroleum subsidy has reduced considerably. ONGC's share of under-recoveries has reduced from Rs. 56,384 crore in FY 2013-14 to Rs.36,300 crore in FY 2014-15. In case OIL, under recovery in 2014-15 was Rs.5,523 crore.

D. Investment on Exploration & Production

With increased thrust on exploration, development and production of Crude oil and natural gas, ONGC Board has approved a Plan Expenditure(Capex) of Rs. 36,249 crore in 2015-16. In case OIL, projected Plan Outlay in 2015-16 is about Rs.3,918 crore.

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Recommendation No. 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 119 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.

Reply by the Government

ONGC and OIL are regularly monitoring exploration and production activities on daily, weekly, monthly and quarterly basis.

In addition, Ministry of Petroleum & Natural Gas is also monitoring the progress of E&P activities on quarterly basis.

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Recommendation No. 12

Rig availability

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 in line with international benchmark.

Reply by the Government

Delay in mobilization of Rig in KG Basin

OIL has plan to drill a well in a riverine island near Lanka Thanelanka village of East Godavari District in the State of Andhra Pradesh. OIL has completed all the civil works in December 2014 except the retaining wall for protection from the floods on the riverside of the plinth. The only means of approaching the location is using a bridge IRC Class B (158 m length).

Just prior to actual rig movement to the location in January 2015, the villagers of Thanelanka in a letter addressed to the District Collector, East Godavari District listed out a number of demands including construction of a retaining wall from the national highway to the bridge along the irrigation canal for a distance of about 4.9 km and also submitted a resolution not to allow the movement of the rig and rig related materials over the bridge.

Subsequently, Revenue Divisional Officer (RDO), Amalapuram and District Collector East Godavari District convened meetings on 05.02.2015 and 24.02.2015 respectively to convince the villagers about the utilization of the bridge. However, the villagers have vehemently opposed the same in the meeting.

The matter has been appraised to The Chief Secretary, Govt. of AP, Hyderabad in a meeting on 23.02.2015 and also requested his intervention. OIL is continuously pursuing the matter with the concerned authorities for earlier resolution of the problem.

Procurement of offshore rigs by ONGC

In view to reduce dependency on the hiring of the offshore rigs, ONGC has a plan to increase ONGC own jack-up rigs from 6 to 10 numbers and Floater rigs from 2 nos to 3 nos.

Increasing productivity level of drilling rigs

ONGC is in process of strengthening Benchmarking Norms. Further efforts are being made by inducting newer technologies to achieve the productivity level of rigs in line with international benchmark.

As far as OIL is concerned, drilling as a part of E & P activity involves operation in very remote areas, adverse geological & environmental conditions. OIL has been taking proactive actions to curb the idle time of drilling rigs and thereby cutting down the well cost and improving the efficiency of the drilling operations.

As desired by the committee, a report on cases of hired rigs lying idle has been submitted to Lok Sabha Secretariat vide this Ministry's letter No.G-38011/47/2015-Fin.I dated 10-07-2015.

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Comments of the Committee (Please see Para No. 19 of Chapter-I)

Recommendation No. 13

Development of Marginal Fields

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.

Reply by the Government

The policy for marginal fields is under formulation by the Ministry of Petroleum & Natural Gas. A draft CCEA Note was circulated for inter-ministerial consultations. Currently, comments received from the concerned Ministries and Departments are under examination in the Ministry/DGH.

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Comments of the Committee (Please see Para No. 22 of Chapter-I)

Recommendation No.15

Revival of Biecco Lawrie Ltd. (BLL)

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. OADB, 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 the MoPNG should take up the request of BLL with Ministry of Power for assignment 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.

Reply by the Government

OADB being the major stakeholder of the company, has been directed to provide special loan of Rs. 12.00 crore to revive the company. 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 Ministry had forwarded the request of BLL to Ministry of Power for their consideration.

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Recommendation No. 17

City Gas Distribution Project

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 remove 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.

Reply by the Government

Under the PNGRB Act, 2006, PNGRB is the statutory authority for granting the authorization to entities for developing City Gas Distribution (CGD) networks and monitoring the implementation of CGD network projects in a specified Geographical Area (GA) of the country. PNGRB identifies GAs for inclusion in CGD bidding rounds depending on natural gas pipeline connectivity/natural gas availability. So far, PNGRB has held 5 round of bidding for awarding authorization to develop CGD networks. Accordingly, there are now 57 GAs which have been covered under CGD network in 15 States and UTs. The 6th round of CGD bidding is planned to commence by July, 2015. Subsequent to the 6th round of CGD bidding, almost all the GAs in the country having natural gas pipeline connectivity are expected to get covered.

Regarding the penetration of domestic PNG connections in a given GA, PNGRB is monitoring the targets vs. achievements of the authorized entities and is taking action, wherever permissible, as per Regulations. Besides, the progress of achievement of the targets is monitored by PNGRB through quarterly and annual progress reports submitted by entities.

Further, in order to ensure adequate availability of domestic gas to PNG (domestic) sector, Govt., alongwith CNG (transport), has accorded PNG (domestic) sector highest

priority in the matter of allocation of domestic gas. Presently, the entire requirement of CGD entities for PNG (domestic) and CNG (transport) is met through domestic gas based on preceding six month consumption data submitted by PPAC. Moreover, GAIL has been allowed to supply 10% additional domestic gas in order to meet the fluctuation in demand of PNG (domestic) and CNG (transport).

As regards improving the pipeline utilization, Govt. has recently approved two different schemes for increasing the consumption of gas by Fertilizer (Urea) sector and Power sector, which will help in improving the gas pipeline utilization.

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Recommendation No.19

Performance of Refineries

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 cost 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 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 stated 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.

Reply by the Government

- a) Indian PSU Refineries are taking number of steps to improve upon their performance in the deficient areas, as under:

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 units with the state of art new efficient units through Integrated Refinery Expansion Project.
- 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.
- Over the years, the PSU refineries in India have adopted and implemented number of energy efficiency improvement measures to reduce the Energy Consumption. The average Specific Energy Consumption of PSU refineries has been brought down from 76.4 in 2005-06 to 62.0 in 2014-15.

Process Utilisation and Operational Availability

- Improving the run-length between planned turn-arounds of major process units
- Strengthening of inspection and monitoring system to improve plant/equipment reliability
- Improving Overall Asset Integrity and Reliability

Gross Refinery Margin Improvement

- The refineries have gradually changed from a simple hydro-skimming / thermal cracking refinery to complex refineries with combination of major secondary processing units like Fluid Catalytic Cracking (FCC), Hydrocracker (HCU), Delayed Coker (DCU), Catalytic Reforming (CRU) along with Hydrogen generation and Hydro-treatment facilities. Retrofitting existing configuration of refineries to handle high 'Sulphur' & heavy 'opportunity crude oil' for upgrading bottom of the barrel to valuable distillates and improved refinery margin for the future.
- The average distillate yield (% wt. on crude) of PSU refineries has improved from 73.3 % in 2005-06 to 78.5 % in 2014-15.

b) Refinery Modernisation

Indian refineries are adopting modern technologies for production of petroleum products and upgrade the technologies in line with the International trend and as per the requirement.

The details of modern technologies employed in the refineries is given below :

Apart from primary processing technologies, viz., Crude Oil Fractionation by Atmospheric Distillation and Vacuum Distillation for initial separation, following are

the major modern process technologies employed across PSU refineries for producing petroleum products:

i) Secondary/Upgradation Technologies for yield improvement:

- Thermal cracking processes, viz., Visbreaking, Delayed Coking
- Fluidised Catalytic Cracking, INDMAX Technology
- Hydrocracking

ii) Quality Upgradation Technologies:

- Catalytic Reforming, Isomerisation, Alkylation, Prime G for meeting the quality specifications of Petrol w.r.t. octane number, benzene content, aromatics, olefins, sulphur, distillation etc.
- Diesel Hydro-desulphurisation (DHDS), Diesel Hydro-treating (DHDT) for diesel for reduction of sulphur & PAH (Poly Aromatic Hydrocarbons) and cetane number improvement

iii) Petrochemical Integration: Naphtha cracker, Polypropylene production etc.

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**Comments of the Committee
(Please see Para No. 34 of Chapter-I)**

Recommendation No.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, desires 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 in line 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.

Reply by the Government

The compliance status of recommendations of M.B. Lal Committee recommendations is one of the priority items on the agenda of MOP&NG/OISD. The status of implementation has improved from 95% to 98% due to sustained follow up and regular review meetings held at MoP&NG/OISD. The pending recommendations are at advanced stage of execution.

On the recommendation of the committee regarding giving enhanced autonomy and effective supervisory powers to OISD for monitoring safety related issues, MoP&NG is already seized of the matter and a proposal to constitute Petroleum & Natural Safety Industry Board for regulation of safety in Petroleum and Natural Gas Industry in India has been brought before Committee of Secretaries(CoS). This Bill is presently under discussion in the CoS. Two meetings of CoS have already taken place wherein the issues related to transfer of jurisdiction from agencies under Ministry of Labour and Employment and Ministry of Commerce and Industry (PESO) and PNGRB had been raised. MoP&NG's views on the said issues have been placed with the CoS for further discussions in the next meeting.

Regarding role for OISD in monitoring and supervising the procurement procedures of OMCs, it is submitted that procurement is the function of Oil & Gas companies and OISD role is to standardized safety procedures and specifications. Further, to promote competition and avoid proprietary, OISD is undertaking various technology improvement initiatives from time to time.

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Recommendation No.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 diagnostic 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 also organised. PCRA is adopting multipronged approach to effectively 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 tube wells / water pumps to benefit the farmer.

Reply by the Government

PCRA engineers and its empanelled experts reach the targeted groups with energy conservation programmes. These activities are designed to cover a large spectrum of socio-economic profile of our country in different sectors viz. Industry, Transport, Domestic, Agricultural and Commercial.

2. One of the core mass awareness activities of PCRA is Oil and Gas Conservation Fortnight (OGCF) celebrated every year during in 2nd Fortnight of January. During the fortnight, PCRA and Oil Industry undertake various mass awareness activities in different sectors of economy viz., Transport, Industry, Agriculture, Commercial and Household, to spread the message of Oil & Gas conservation and to educate the masses on the methods to achieve it. Minister of P&NG, Govt. of India and elected Members of State Legislative Assemblies (Chief Ministers/Ministers/MLAs etc.) and elected parliamentarians are actively involved in their states during the OGCF programmes to give impetus to the efforts on petroleum conservation

3. Further, communication has been circulated to the field offices to invite the elected representatives of local bodies, legislative assemblies and parliamentarians to various other programmes of PCRA to give their efforts the necessary force and fillip.

4. Regarding conducting a feedback on this awareness campaigns, PCRA has taken following steps:

- For major programmes, impact assessment surveys are being carried out through experts and necessary modifications in the programmes are done based on the feedback.
- During the field activities, feedbacks and suggestions are obtained from the participants and the organizations for improvement of the programmes.
- Suggestions received during the Executive Committee and Governing Body Meeting, are also incorporated in various programmes of PCRA.

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

-NIL-

CHAPTER IV

RECOMMENDATIONS/OBSERVATIONS IN RESPECT OF WHICH REPLIES OF THE GOVERNMENT HAVE NOT BEEN ACCEPTED BY THE COMMITTEE

Recommendation No. 1

Role of Ministry of Petroleum & 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 Million Metric Tonnes (MMT) during the period April to December 2014. The Committee note that the domestic crude oil production has been stagnating around 38 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.

Reply by the Government

During the year 2014-15, the consumption of petroleum products was about 165 MMT. Annual average growth rate in consumption of petroleum products was 3.66%.The indigenous crude oil produced in 2014-15 was 37.464 MMT and of which processed in the refineries was about 35.00 MMT. The import of crude oil during 2014-15 was 189.434 MMT. Approximately 79% of the domestic demand of the crude oil was met from the imports in 2014-15. Production of natural gas in 2014-15 was 33.66 Billion Cubic Metre (BCM), which is lower by about 8% of target of 36.62 BCM and also lower by 4.94% than that produced in 2013-14 (35.41 BCM). The Government has taken the following initiatives to increase the production of crude oil and natural gas:

- H. Enhance production from the existing field by adopting Improved Oil Recovery (IOR)/Enhanced Oil Recovery (EOR) measures using induction of latest technology.

- I. Early monetization of hydrocarbon discoveries under Production Sharing Contract(PSC) regime has been approved by the Government. This policy has addressed rigidities in the timelines of the PSC and has allowed the contractors to start production at the earliest. 34 cases have been already resolved under this policy framework involving resources worth \$ 5 billion.
- J. Marginal Field Policy (MFP) is being formulated to monetize the marginal fields of ONGC and OIL which have not been monetized for various reasons in the past. Monetization of these discoveries under this policy through International Competitive Bidding (ICB) would also help in boosting Oil & Gas production of the Country. Lucrative fiscal terms with more autonomy is proposed in the policy for making it investor friendly.
- K. A new Uniform Licensing Policy (ULP) is being formulated which covers all type of hydrocarbons viz. Conventional Oil & Gas, Unconventional Hydrocarbons like Shale Oil & Gas , CBM, Gas Hydrate etc. This would help in development of all type of hydrocarbons under single license.
- L. Revision of prices of domestic natural gas is expected to incentivize production of natural gas in the country. Ministry is also considering providing premium for gas discoveries in Deep Water, Ultra Deep Water and High Pressure High Temperature (HPHT) discoveries.
- M. Setting up of National Data Repository (NDR). Physical completion of hardware and software has been completed and data population is in progress.
- N. Policy approved for exploration and exploitation of Shale Gas/ Shale Oil resources by National Oil Companies under the nomination regime. As per the policy, ONGC and OIL have identified 50 and 5 blocks respectively. Subsequent to Geological and Geophysical(G&G) study, these NOCs will drill minimum one well per 200 sq.km. of PML area to assess prospectivity of shale Oil/Gas in these blocks. The timeline for assessment and drilling of pilot wells is three years which would be completed by October, 2016.

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**Comments of the Committee
(Please see Para No. 7 of Chapter-I)**

Recommendation No.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 112 (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 76565.46 crore. The funds are utilized by the PSU's for the activities under the Heads Exploration & Production, Refinery & Marketing, and Engineering etc.

The Committee is 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.

Reply by the Government

During 2014-15, the proposed RE was Rs.70349.32 crore. However, due to some typographical error in the Budget Document 2015-16, the total RE has been printed as Rs.72589.32 crore with RE for OVL Rs.12387.00 crore against proposed RE of Rs.10147.00 crore. The total actual utilization during 2014-15 by oil and gas PSUs was Rs.69828.81 crore i.e. 99.26% of Revised Estimates of Rs.70349.32 crore (against printed RE of Rs.72589.32 crore which is about 96.20%). This has been taken up by the Ministry with Budget Division of Ministry of Finance. The unutilized RE amount is Rs.530.51 crore. The activity-wise actual expenditure during 2014-15 is as follows:

(Rs. in crore)

Activities	2014-15		
	Revised Estimates (RE)	Actual Expenditure	Percentage of Utilisation to RE
Exploration & Production	51146.92	44731.23	87.46
Refinery & Marketing	16947.76	21805.65	128.66
Petrochemicals	2096.64	3212.14	153.20
Engineering	158.00	79.79	50.50
Total	70349.32	69828.81	99.26

As regard monitoring of the utilization of the budgetary allocation on plan side, the Ministry of Petroleum & Natural Gas is constantly monitoring the status in monthly review meetings taken by Secretary (PNG) and also intermittently by Hon'ble Minister of State (I/C), M/o PNG. The company-wise reasons for slightly lower achievement in utilization of actual funds against RE are as follows:

Oil Natural Gas Company(ONGC):

Less expenditure in case of delayed projects.

Lower expenditure on drilling activities as exploratory and development drilling meterage & wells were lower due to non-availability of Charter hired rigs.

Deep water operations hampered due to naval exercise & rough weather conditions.

ONGC Videsh Limited (OVL):

Rs.4875 crore was kept in BE and Rs.610 crore in RE for new acquisition during 2014-15. However, there was no major new acquisition that could get materialized during the year.

Savings of US\$ 35 million due to early completion of development wells in BC-10 Brazil.

General delay in activities in Venezuela due to cash flow and contractual challenges.

Indian Oil Corporation Ltd. (IOCL):

Shortfall in expenditure under petrochemical sector due to the project "Coal/Coke Gasification and Acetic Acid Project at Gujarat" Refinery was dropped as the project was not found viable.

GAIL INDIA Ltd.(GAIL):

Exploration and Production: This includes all segments, other than petrochemicals, including Pipelines, Business Development projects, Exploration and Production, City Gas distribution: The shortfall in plan CAPEX is due to:

Less capital expenditure in pipelines of Rs.466 crores than planned due to:

hindrance due to Right of Use(ROU) problems, especially in Tamil Nadu and Kerala mainly in Kochi-Kootanad-Bangaluru-Mangalore Phase-II. Further, progress in replacement of pipelines in KG Basin with planned expenditure of approx Rs.100 crores in RE has also been affected due to ROU issues;

statutory permissions and contractual issues especially in VijapurKota Pipe Line (VKPL) spurlines ;

consumer tie-up awaited for some pipelines esp BNPL Spur lines (Uttaranchal)

Shortfall due to lack of investable Merger and Acquisition (M&A) opportunities Rs.100 crore.

Shortfall in equity investment in Gail Gas by approximately Rs.120 crore.

Shortfall in E&P segment by Rs.100 crore as less cash call was received from operators

Petrochemical segment:

Time lag in payment vis-à-vis actual progress in Petrochemical expansion project and slow progress of some of the contractors due to financial constraints resulting in shortfall of approx. Rs.180 crore

Non approval of Phenol Acetone Project by the Board thereby leading to CAPEX shortfall of approx. Rs.340 Crore.

Hindustan Petroleum Corporation Ltd. (HPCL):

Lower investment in Joint Venture projects due to:

The proposed amount of Rs.740 crore for Rajasthan Refinery could not be utilized as the projects is under review by the State Government of Rajasthan,

Rs.538 crore allocated for subsidiary company M/s Prize Petroleum for acquisition of discovered/producing E&P blocks was revised to Rs.62 crore. However, funds requirement has been met through debt funds,

Rs.188 crore allocated for JV project of LNG terminal at Chhara, Gujarat due to change in terms of reference (TOR) conditions, environmental clearance got delayed and hence FEED for LNG terminal could not be carried out in 2013-14 as envisaged.

Rs.137 crore allocated for JV Project of cross country Gas Pipelines with GSPC/BPC could not be utilised due to delay in getting Right of Way (ROW) approvals and environmental clearance.

Chennai Petroleum Corporation Ltd (CPCL):

Crude oil Pipeline Project: The planned expenditure of Rs.100 crore for laying 42" New Crude Pipeline could not be incurred for want of clearances from Ministry of Road Transport and Highways.

Mounded Bullets: The Budget estimate break up was based on the project approved cost of Rs.279 crore, whereas the expenditure became lower due to the lesser awarded contract value of Rs.199 crore. Delay in sand availability in the region due to restriction by State Government.

ResidUpgradation Project: Project hindrances due to 'Brown field Project Nature' like less space availability for fabrication/storage, underground- redundant pipes & cables and restricted radiography permit timings etc. lowered the physical progress which resulted in lower financial progress.

Numaligarh Refinery Ltd. (NRL):

Against BE of Rs.177.65 crores, there has been a shortfall in actual expenditure by Rs.74.88 crores. This shortfall in actual expenditure was primarily due to less than anticipated expenditure against the Wax project. For the Wax project, BE was provided at Rs.154.65 crores, against which actual expenditure was Rs.89.57 crores (shortfall by Rs.65.08 crores) primarily due to deferment in commissioning of the project from first quarter to fourth quarter of the financial year.

Balmer Lawrie & Company:

The company has made a further commitment to increase CAPEX to the tune of Rs.74.09 crore as on 31.03.2015, which includes an amount of Rs.72.00 crore towards the equity contribution in the Joint Venture with Vishakhapatnam Port Trust (VPT) could not be made due to delay in finalization of the land lease agreement with VPT.

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Comments of the Committee (Please see Para No. 10 of Chapter-I)

Recommendation No.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 lump sum one time grant of Rs. 100 crores 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, Puducherry, 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 of 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.

Reply by the Government

The Direct Cash Transfer of Subsidy for Kerosene(DTCK) was launched in 2012. 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. Out of those, only 3 states viz. Rajasthan, Maharashtra and Goa have confirmed implementation of DTCK in a few districts. Since, the distribution of kerosene is a matter in the domain of the State Governments/UT Administration, the State Governments/UT Administration are being addressed in this regard.

On the issue of ensuring the easy availability of non-PDS Kerosene in the open market, it is stated that existing Kerosene wholesalers of Oil Marketing Companies (OMCs) and parallel marketers are allowed to market non-PDS Kerosene to small consumers. However, with a view to ease the availability of non-PDS Kerosene for sale in the open market, the Government has amended the Kerosene (Restriction on Use and Fixation of Ceiling Price) Order, 1993. By virtue of this amendment, all the activities of storage, transportation and sale of non-PDS Kerosene have been freed of regulatory control. This is expected to reduce demand for diverted PDS Kerosene by improving availability of non-PDS Kerosene in the open market and will thus meet the demand of Kerosene for various legitimate end uses for the industry and for individual consumption at market price.

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Comments of the Committee
(Please see Para No. 13 of Chapter-I)

Recommendation No. 11

Recovery factor

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 Oil 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 then 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.

Reply by the Government

ONGC

ONGC puts concerted efforts to increase the performance and to improve its recovery factor through various corrective measures/technologies to achieve its recovery factor up to the level of Global standards which is also one of the Strategic Goal of ONGC. The Salient measures taken to enhance global recovery factor are as under:

- Aggressive IOR/ EOR development schemes:
 - In-situ combustion in heavy oil fields of Balol, Santhal, Lanwa Fields
 - Polymer flood in Sanand Field
 - Alkali Surfactant Polymer (ASP) chemical EOR Pilots in Viraj, Jhalora and Kalol
 - Miscible gas injection in Gandhar field
 - Implementation of WAG (EOR process) in GS-11 and GS-9 sand of Gandhar
- Integrated rolling redevelopment plans
 - Implementation of schemes in MHN, MHS, Heera and Neelam fields
- Improving Water Injection
- MEOR Applications
 - Indigenously developed cost effective microbial EOR technique is also being applied to improve production from wells of Ahmedabad, Mehsana and Assam fields.
- Hi-tech drilling/ completion/ stimulation
 - In-fill drilling of hi-tech wells including horizontal, high angle, multilayer and multilateral wells.
- Hydro Fracturing and multi stage hydro fracturing in tight reservoirs

OIL

OIL has taken measures for enhancing recovery factor of its field through various IOR/EOR schemes. OIL is also looking for induction of advanced state-of-the-art technology in line with International E&P companies to improve the recovery factors in its mature fields.

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Comments of the Committee (Please see Para No. 16 of Chapter-I)

Recommendation No. 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 judgment 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 MoP&NG should pursue the issues with MoC to arrive at acceptable solution to give a fillip to CBM exploration.

Reply by the Government

MoPNG is actively pursuing with Ministry of Coal to resolve the various issues to enhance CBM production in the country. In the last meeting held with Ministry of Coal on 10.3.2015, Ministry of Coal agreed to consider allocation of some cancelled Coal

Blocks (by Supreme Court) overlapping CBM Blocks to CIL on nomination basis. It is the constant endeavor of this Ministry to settle the unresolved issues expeditiously.

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Comments of the Committee
(Please see Para No. 25 of Chapter-I)

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

Recommendation No. 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 Tanchi-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.

Reply by the Government

In order to complete the National Gas Grid, Government has identified various pipeline sections of the total length of about 15,000 Km in addition to existing gas pipeline infrastructure in the country. Out of this additional 15,000 km, three pipeline sections of about 2670 km have been identified by MoPNG for development through PPP mode with Viability Gap Funding (VGF). Out of these three pipeline sections, "Ranchi-Talcher-Paradip" pipeline project has been approved as the pilot project for implementation through PPP mode with VGF. The remaining two pipeline sections will be considered for implementation through PPP mode after successful implementation of the pilot project.

MoPNG has appointed GAIL as the Sponsoring Authority for implementing "Ranchi-Talcher-Paradip" pipeline project through PPP mode. GAIL has submitted application to Department of Economic Affairs for IIPDF funding for pre-project activities/project structuring. Reconnaissance route survey and market demand survey has been completed by GAIL. Detailed Feasibility Report (DFR) for the project is under preparation and is expected to be completed shortly. GAIL has floated the tender for appointment of Financial cum Transaction and Legal Adviser (TA) for recommending project structuring and bidding for selection of private parties and the same is also expected to be appointed at the earliest. Besides, MoPNG is also facilitating PNGRB to

approve the project structuring and bidding process for selection of private party as envisaged in VGF scheme for the pilot project to be implemented through PPP mode.

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Comments of the Committee
(Please see Para No. 28 of Chapter-I)

Recommendation No.18

Setting up of Barmer Refinery

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 environment 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.

Reply by the Government

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 Rs.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. Consequent to GOR's decision to review the project, the project activities have been put under hold.

In a meeting taken 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 submit a report. The above Committee has held 3 meetings so far. Meanwhile, GOR engaged M/s Price Waterhouse Coopers (PWC) to advise them on the project. PWC submitted its draft report in the first week of May 2015 to GOR and HPCL forwarded its comments thereon to GOR on 12.6.2015. MoP&NG had approved extension of time upto 30.6.2015 for submitting Committee report. The Committee is yet to submit its report. In the meanwhile, GoR through HPCL has requested further extension of time for the Committee to finalize and submit report.

Environmental Clearance: Public Hearing was conducted by Rajasthan State Pollution Control Board in May 2014. The Expert Appraisal Committee (EAC) of MoEFCC held a meeting in February 2015 and sought additional information on various aspects of the project. Inputs pertaining to Salt Miners' Rehabilitation and Resettlement (R&R) have been sought from Govt. of Rajasthan. The proposal shall be resubmitted to EAC for Environmental Clearance after compilation of desired information.

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**Comments of the Committee
(Please see Para No. 31 of Chapter-I)**

Recommendation No.22

Centre for High Technology(CHT)

The Committee note that Centre 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 product, additives, storage and handling of crude oil/gas and other products. The organization hires officers and staff from oil companies on deputation basis to carry out its activities. The organization get its funding through grants form OIDB and expenditure towards performance improvement programme are borne by concerned refineries. Apart from this, expenses on performance benchmarking studies are shared by CGT 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 centralized 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 Hydrocarbon (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.

Reply by the Government

It is a considered view of MoP&NG that CHT shall take up technical and other R&D projects of downstream Hydrocarbon sector. However, the recommendation of the Committee regarding involving CHT in upstream sector has been noted.

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Comments of the Committee (Please see Para No. 37 of Chapter-I)

Recommendation No.23

Transactional Gas Pipeline Projects

The Committee note that the Government is presently pursuing two international gas pipeline projects namely Turkmenistan-Afghanistan-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.

Reply by the Government

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 to the tune of 1.5 – 4 MMSCMD. Volumes not taken by Afghanistan may be equally shared between India and Pakistan. GAIL 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. 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. Further, an Operations Agreement detailing metering, allocation and nomination aspects has been signed among the parties in Jul' 2014. The Transit Fee payable to the transiting countries has been broadly agreed.

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.

Road shows were held in September 2012 at Singapore, New York and London for understanding the prerequisites of the companies willing to join the TAPI Pipeline Project as Consortium leader and Financiers. The Road Shows made it clear that no international company would be interested in becoming Consortium Leader (CL) without upstream participation. Subsequently, India, Pakistan, Afghanistan, and ADB requested Turkmenistan to consider upstream participation by the CL, so that the TAPI Pipeline Project could move forward. During the 17th SC meeting, Turkmenistan informed that a shortlist of prospective Consortium Leaders will be provided by the Turkmen Party by October/ November 2013 for consideration as the potential Consortium Leader for the Pipeline Consortium Company.

During the 18th SC meeting, Turkmen party provided a shortlist comprising of one name and that of M/s. TOTAL of France. Turkmen party stated that M/s. TOTAL has expressed interest in becoming the Consortium Leader provided both Turkmen party and M/s. TOTAL are able to agree on a suitable upstream model within the framework of Turkmen law.

During the 19th SCM, it was decided to initiate a dialogue with other potential CLs for the TAPI project. During this meeting and also during the 27th Technical Working Group meeting, Turkmen party stressed that the participation in the upstream on a service contract basis is available only for the consortium leader of the TAPI pipeline project.

In Nov' 2014 the pipeline consortium SPV called TAPI Pipeline Company Limited (TPCL) was incorporated in 'Isle of Man'. Formed by the four TAPI countries with equal shareholding, TPCL would be responsible for building and operating the TAPI Pipeline.

During the 20th SCM held in Feb' 2015, timelines were discussed for identification and selection of CL. Timelines were also set for the Turkmen side to sign the MoU with M/s. TOTAL and to confirm acceptability or otherwise on the inclusion of two companies (M/s. China Petroleum Pipeline Bureau (CPPB) and M/s. RT Global Resources) in the shortlist of potential CLs. The four TAPI entities agreed to select a Consortium Leader for the project by 1st September 2015.

During the 21st SCM held in Mar' 2015, Turkmen Party informed that MoU between them and M/s. TOTAL has been initialed. During this meeting, Turkmen Party also confirmed that M/s. RT Global Resources (a subsidiary of Rostec) is acceptable as a potential CL.

Recently, the Turkmen Party has informed that CPPB has indicated that they are not going to join the bidding for TAPI Pipeline Consortium Leader. Accordingly, now two companies are in the race to become Consortium Leader for TAPI project.

The Consortium Leader would be selected through a competitive solicitation process. ADB is currently preparing the bidding document for issuing to the two shortlisted companies. The first gas flow from the pipeline is expected to start within 3 years from execution of Consortium Agreement, which is envisaged to be signed by March 2016.

Iran-Pakistan-India (IPI) pipeline

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 was proposed to enter India in Rajasthan near Barmer.

Various Trilateral and Bilateral Joint Working Group 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. No JWG meeting has been held since April 2008.

During the visit of Iranian President to India, Hon'ble PM handed over a Non Paper to Iranian President on 29.04.2008. In response, a Non paper was received from Iranian Ministry of Foreign Affairs. The issues included in the Non papers among others were (a) Project execution methodology, (b) Obligations of parties so as ensure Security of the Project and (c) Trilateral mechanism for reaching an agreement with the aim of securing the delivery of gas at Pakistan- India Border. During the visit of Hon'ble Foreign Minister to Iran on 01.11.2008, Indian side handed over a letter from Hon'ble Minister, P&NG addressed to H.E. Minister of Petroleum, Islamic Republic of Iran highlighting the following:-

- a. **Trilateral Mechanism :** India welcomed Iranian suggestion to establish a trilateral mechanism with the aim of securing the delivery of gas at Pakistan - India border. Pakistan bears the responsibility for security of Gas.
- b. **Project Execution :** Each country develops the gas pipeline within its own country except for Pakistan leg of the project should be executed by a consortium of technically competent and financially capable international companies.
- c. **Price Review Clause :** As per India's view, no price review mechanism is required as the Price formula already has linkages with JCC price.
- d. **Gas Sourcing :** Iran has to ensure that the development plan of South pars phases 19, 20, and 21(Source for IPI Gas) is synchronized with the supply of gas through the IPI pipeline. Further, the reserves need to be certified from an internationally reputed accredited agency and submit the reserves certificate before signing the GSPA.

Due to the unresolved issues and in light of the US sanctions on Iran, India has not participated in any further meetings.

As per media reports, we understand that Pakistan and Iran have signed the GSPA and Inter Govt Framework Agreement in 2009 for supply of 23 MMSCMD gas. Delivery of gas was expected to start after 5 years from signing the contract. However, it is further understood that Pakistan has not yet commenced the construction of their portion of pipeline.

Ministry of Petroleum & Natural Gas
O.M.No.G-38011/47/2015-Fin.I Dated 27-07-2015

New Delhi;
9 December, 2015
18 Agrahayana, 1937 (Saka)

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

MINUTES
STANDING COMMITTEE ON PETROLEUM AND NATURAL GAS
(2015-16)
SIXTH SITTING
(08.12.2015)

The Committee sat on Tuesday, the 8 December, 2015 from 1700 hrs. to 1800 hrs. in Committee Room 'B', Parliament House Annexe, New Delhi.

PRESENT

Sh. Pralhad Joshi - Chairperson

MEMBERS

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 Shri Ashok Mahadeorao Nete
- 11 Shrimati Jayshreeben Patel
- 12 Shrimati Anupriya Patel
- 13 Shri Arvind Sawant
- 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 Bhubaneshwar Kalita
- 20 Shrimati Gundu Sudharani

SECRETARIAT

1. Shri A.K.Singh - Additional Secretary
2. Dr. Ram Raj Rai - Director
3. H. Ram Prakash - Additional Director

2. At the outset, Hon'ble Chairman welcomed the Members to the sitting of the Committee. The Committee then took up for consideration the draft Action Taken Report on the 4th Report on 'Demands for Grants (2015-16) of MoPNG' and adopted the same with some minor modifications.

3. Thereafter, the Committee took up for consideration the draft Action Taken Report on the 5th Report on the subject 'National Auto Fuel Policy' and adopted the same without any modification. The Committee then authorised the Chairman to present/lay both the Reports to the Parliament.

4. The Committee also decided to undertake study visit in connection with examination of the subjects selected during the term (2015-16) and authorized the Hon'ble Chairperson to finalize the same.

The Committee then adjourned.

Annexure II

(Vide Para 4 of the Introduction)

ANALYSIS OF THE ACTION TAKEN BY THE GOVERNMENT ON THE RECOMMENDATIONS CONTAINED IN THE FOURTH REPORT (SIXTEENTH LOK SABHA) OF THE STANDING COMMITTEE ON PETROLEUM AND NATURAL GAS (2014-15) ON 'DEMANDS FOR GRANTS (2015-16) OF THE MINISTRY OF PETROLEUM AND NATURAL GAS'.

I	<u>Total No. of Recommendations</u>	23
II	Recommendations/Observations which have been accepted by the Government (Vide Recommendations at Sl. Nos. 3,4,5,6,7,9,10,12, 13,15,17,19,20 and 21) Percentage to Total	14 60.86%
III	Recommendations/Observations which the Committee do not desire to pursue in view of Government's (NIL) Percentage of Total	NIL 0
IV	Recommendations/Observations in respect of which replies of the Government have not been accepted by the Committee (Vide Recommendations at Sl. No. 1, 2,8,11 and 14) Percentage of Total	5 21.74%
V	Recommendations/Observations in respect of which final replies of the Government are still awaited (Vide Recommendations at Sl. No. 16,18, 22 and 23) Percentage of Total	4 17.40%