

16

**STANDING COMMITTEE ON
PETROLEUM & NATURAL GAS
(2016-17)**

SIXTEENTH LOK SABHA

MINISTRY OF PETROLEUM & NATURAL GAS

DEMANDS FOR GRANTS (2016-17)

[Action Taken by the Government on the recommendations contained in the Twelfth Report (Sixteenth Lok Sabha) of the Standing Committee on Petroleum and Natural Gas (2015-16)]

SIXTEENTH REPORT



**LOK SABHA SECRETARIAT
NEW DELHI**

December, 2016/Agrahayana, 1938 (Saka)

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[Action Taken by the Government on the recommendations contained in the Twelfth Report (Sixteenth Lok Sabha) of the Standing Committee on Petroleum and Natural Gas (2015-16)]

Presented to Lok Sabha on 14.12.2016

Laid in Rajya Sabha on 14.12.2016



**LOK SABHA SECRETARIAT
NEW DELHI**

December, 2016/Agrahayana, 1938 (Saka)

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COMPOSITION OF THE STANDING COMMITTEE ON PETROLEUM & NATURAL GAS (2016-17)

Sl. No.	Name of Members
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LOK SABHA

Shri Pralhad Joshi - Chairperson

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

RAJYA SABHA

- | | |
|----|-----------------------------------|
| 22 | Shri Om Prakash Mathur |
| 23 | Shri Bhubaneshwar Kalita |
| 24 | Smt. Ranee Narah |
| 25 | Shri Dilipbhai Pandya |
| 26 | Shri Ahmed Patel |
| 27 | Shri V. Lakshmikantha Rao |
| 28 | Shri V. Vijayasai Reddy |
| 29 | Chaudhary Munvar Saleem |
| 30 | Mahant Shambhuprasadji B. Tundiya |
| 31 | Shri A. Vijayakumar |

SECRETARIAT

- | | | | |
|----|---------------------|---|----------------------|
| 1. | Shri A.K.Singh | - | Additional Secretary |
| 2. | Dr. Ram Raj Rai | - | Director |
| 3. | Shri H. Ram Prakash | - | Additional Director |
| 4. | Shri Sujay Kumar | - | Under Secretary |

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 Sixteenth Report on Action Taken by the Government on the recommendations contained in the Twelfth Report (Sixteenth Lok Sabha) of the Committee on the subject 'Demands for Grants (2016-17) of the Ministry of Petroleum and Natural Gas'.

2. The Twelfth Report of the Standing Committee on Petroleum & Natural Gas was presented to Lok Sabha on 03.05.2016. The Action Taken Replies of the Government to all the recommendations contained in the Twelfth Report were received on 04.08.2016.

3. The Standing Committee on Petroleum & Natural Gas (2016-17) considered and adopted the Report at their sitting held on 07.12.2016.

4. An analysis of the action taken by the Government on the recommendations contained in the Twelfth 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;
8 December, 2016
17 Agrahayana ,1938 (Saka)

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

REPORT

CHAPTER I

This Report of the Standing Committee on Petroleum and Natural Gas deals with the action taken by the Government on the Recommendations contained in the Twelfth Report (Sixteenth Lok Sabha) of the Standing Committee on Petroleum and Natural Gas (2015-16) on 'Demands for Grants (2016-17) of the Ministry of Petroleum and Natural Gas", which was presented to Lok Sabha and laid in Rajya Sabha on 03.05.2016.

2. Action Taken Notes have been received from the Ministry in respect of all the 25 Recommendations/Observations contained in the Report. These have been categorized as per the following:-

- (i) Recommendations/Observations that have been accepted by the Government:- Recommendation Nos. 1, 2, 4, 5, 6, 8, 9, 10, 11, 13, 14, 16, 18, 19, 20, 21, 22, 24 and 25 (Total 19) **(Chapter- II)**
- (ii) Recommendations/Observations which the Committee do not desire to pursue in view of the Government's replies:- Recommendation No. 23 (Total 1) **(Chapter- III)**
- (iii) Recommendations/Observations in respect of which replies of the Government have not been accepted by the Committee:- Recommendation Nos. 7, 12, 15, and 17 (Total 4) **(Chapter- IV)**
- (iv) Recommendations/Observations in respect of which final replies of the Government are still awaited:- Recommendation No. 3 (Total 1) **(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. 2

Exploration and Production Scenario of Crude oil and Natural Gas

5. The Committee had recommended as under:

"The Committee note that strengthening 'Energy Security' is one of the mandates of the Ministry of Petroleum and Natural Gas (MoPNG) and exploration and production of crude oil and natural gas is one of the most important ways of providing this security. The fortuitous circumstance of the low international prices of crude oil and gas has given some respite. But it cannot be a substitute for domestic sources of energy developed through exploration and bringing them online. As the nation moves forward on the high growth trajectory and prosperity levels of the citizens increase, the demand of crude oil and gas is going to increase rapidly. At current levels of consumption, about 80% of our crude oil requirements are being met through imports. The Committee note that the production of crude oil is stagnant in the last few years while the natural gas production has actually gone down. The Committee further note the recent initiatives of the Ministry to simplify the rules involving exploration of crude oil and natural gas in the country including formulation of the Hydrocarbon Exploration Licensing Policy (HELP). The Committee, however, find that from discovery of oil fields to production is a long drawn process involving substantial time frame and capital expenditure. Moreover, clearances from various Ministries/Departments are also required. Therefore, the Committee feels that it is very important to lay down a consistent and predictable licensing environment in the country in order to attract interest from national as well as global players who can bring much needed capital and technology to invest in the sector. The Committee, therefore, recommend that the Ministry should make focused effort to increase exploration and production by stimulating investment in the sector and prescribing a stable and transparent licensing/regulatory regime geared to face challenges of the sector and ensure increase in crude oil production. The Committee also desire that the Ministry should make sincere efforts to obtain all necessary clearances from different agencies for the blocks that have been stalled due to various reasons for initiating E&P activities".

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

"100% Foreign Direct Investment (FDI) is allowed in exploration & production sector. Government awards exploration licenses through international competitive bidding process wherein National oil Companies, Indian private and foreign companies have to bid on equal footing. No preferential treatment is given to any company either foreign or Indian. Government has taken recent Policy initiatives with the following guiding objectives:

- Enhance Domestic oil and gas production
- Bring substantial investment
- Generate sizeable employment
- Enhance Transparency
- Reduce Administrative Discretion

The visible impact of these policy decisions will be seen in couple of years. Some of the recent policy initiatives are as under:

- Hydrocarbon Exploration Licensing Policy (HELP) for award of Hydrocarbon acreages with new contractual system and fiscal model coupled with the open acreage policy that provides right to investors to explore and produce all type of hydrocarbons including non-conventional such as CBM, shale gas, gas hydrates, etc.
- Discovered Small Fields Policy - 69 oil & gas fields which have been held by ONGC and OIL for many years, but have not been exploited, is to be opened for competitive bidding. Government has already announced the Policy on 25th May, 2016 for bidding of 67 oil and gas fields. Bid closing date under this policy is 31st October, 2016.
- Marketing and Pricing freedom for new gas production from Deepwater, Ultra Deepwater and High Pressure-High Temperature Areas with ceiling Price. This policy decision is expected to monetize 28 number of discoveries having reserves of 6.75 trillion cubic feet (TCF).
- Policy for grant of extension to the Production Sharing Contracts – Provision for extension of time period for another 10 years or till the economic life of the field for 28 Small and medium sized discovered fields.
- Monetization of the Ratna offshore field – ONGC has initiated actions for development of this field.
- Drill Stem Test (DST) Policy - Monetization of 10 hydrocarbon discoveries in 5 NELP blocks by resolving the long pending dispute associated with testing requirements.
- Permission of Extraction of CBM to Coal India Limited (CIL) & its subsidiaries in coal Mining area. This decision will help in enhancement of production of coal as well as coal bed methane (CBM).
- New Domestic Natural Gas price Guidelines, 2014: Under these guidelines, prices of domestically produced natural gas has been linked to prices of natural gas at important markets/hubs.
- Policy Framework for relaxation, extensions and clarifications at the development and production stage under PSC regime for early monetization of hydrocarbon discoveries: Government approved this policy on 10.11.2014, and the same is being implemented. Under this policy, about 40 pending cases have been resolved.

As regards to various statutory clearances such as EC-FC is concerned, on some occasions the statutes provides for operator only to apply. As such, it becomes difficult to obtain full clearance before the blocks are awarded. However, Government takes in-principle approvals / clearances from different agencies such as - Ministry of Defence, Ministry of Environment, Forest & Climate Change, etc. before offering new blocks to the investors. Moreover, DGH and Ministry are helping the investors in getting clearances from different agencies as and when required.

7. The Committee had recommended for focused efforts for increasing exploration and production of crude oil by stimulating investment in the petroleum sector and prescribing a stable and transparent licensing/regulatory regime geared towards facing challenges of the sector, thus ensuring increase

in crude oil production. In its Action Taken Reply, the Ministry has only repeated the various policy decisions taken by the Ministry to enhance domestic crude oil and natural gas production such as, permitting 100% Foreign Direct Investment (FDI) in the exploration and production in oil sector. The Ministry has further mentioned that recent policy initiatives such as HELP, Discovered Small Fields Policy, Marketing and Pricing Freedom for new gas production from Deepwater fields, etc., have been undertaken the impact of which will be seen in a couple of years. However, there is no mention of any short term or long term targets set to increase the crude oil and natural gas production and time-frame fixed for implementation of policy decisions taken in that regard. The reply of the Government is also silent when it comes to actual measures being taken to promote India as a preferred destination for investment in the petroleum exploration sector or any concrete steps being taken to obtain clearances for the blocks that have been stalled due to various reasons for exploration and production activities. The Committee feel that in the current economic scenario, it is not enough to just provide an even handed policy environment and wait for the investors to come in. The potential investors have to be wooed through positive campaigns and highlighting the attraction of the country as an investment destination. While appreciating the measures being adopted by the Government for formulating transparent and even-handed licensing regimes for crude oil exploration and production, the Committee reiterate their recommendations and desire that Ministry should set specific targets for exploration and production of oil and natural gas and focussed efforts should be made to project this sector as a rewarding destination. The Committee would like to be informed about the short term and long term targets set and time-frame fixed to enhance the domestic crude oil and natural gas production, the specific initiatives taken to stimulate investment in this sector and outcome thereof.

Recommendation No.3

Levy of cess on Crude Oil

8. The Committee had recommended as under:

"The Committee observe that the Government has modified the levy of Oil Industries Development (OID) cess on domestically produced crude oil from

oil PSU's from 4500/MT to 20% ad-valorem. This measure will result in saving of about Rs. 1150/MT at the crude oil rate of US\$ 35/bbl and at exchange rate of Rs.67 per US dollar. However, if the crude oil rates in the international markets rise, the burden of cess on the upstream oil companies like ONGC and OIL will increase. At the price point of US\$ 50/bbl and at exchange rate of Rs. 67 per US\$, the burden will be even more than the previously fixed cess of 4500/MT, which will defeat the purpose of rationalizing the cess and give relief to upstream oil PSUs. Keeping this fact in view, the Ministry have decided to take up the matter with the Ministry of Finance for reduction of the cess from the current 20% to reasonable levels. They have also requested for transfer of part of the funds collected as cess from the oil companies to the OIDB for taking up initiatives like appraisal of unappraised areas, for national data repository as well as for the development of gas pipeline infrastructure. The Committee fully support the lowering of ad valorem rate making it more practical and simpler to administer the cess. The Committee, therefore, strongly desire that the issue of present ad valorem cess of 20% proposed in the budget should be raised by the Ministry with the Ministry of Finance so that the oil cess is brought down preferably in the range of 10%. The Committee may be informed about the outcome in this regard".

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

"Government has revised OID cess at the rate of 20% ad-valorem basis w.e.f. 1st March 2016 from the earlier rate of Rs. 4500 per tonne in respect of crude oil. The new cess rate is beneficial to the industry when crude oil price is below US\$45/bbl. However, the new rate of 20% cess will have negative impact on oil companies on increase of crude oil price beyond US\$ 45/bbl. Ministry of Petroleum& Natural Gas has taken up the matter with Ministry of Finance to reconsider the OID cess rate. The outcome in this regard will be apprised to the committee".

10. **The Committee had favoured the lowering of ad valorem rate of cess on crude oil, preferably in the range of 10% from the rate of 20% in order to make it more practical and simpler to administer the cess. The Ministry, in its action taken reply, has stated that oil prices are increasing in the international market and once the crude oil prices cross the level of US\$ 50/bbl at the exchange rate of Rs 67 per dollar, the burden on the oil companies will be even more than the previous regime of fixed cess of 4500/mt. The Committee note that the international crude oil prices are hovering in the range of US\$ 50/bbl and the matter of reducing cess has become urgent. The Committee, therefore, urge the Ministry to impress upon the Ministry of Finance, the necessity of taking action in the matter and reducing the ad valorem rate of cess to 10% immediately as this step is essential to protect the long-term viability of the oil PSUs.**

Recommendation No. 4

LPG connection for households below poverty line

11. The Committee had recommended as under:

"The Committee note that Government has announced a scheme as a part of 'Pradhan Mantri Ujjwala Scheme' which will be implemented in three years (2016-17, 2017-18 and 2018-19) to give 5 crore new LPG connections in the name of women members of BPL households. An amount of Rs. 2000 crore has been allocated for the scheme to provide free LPG connection to 1.5 crore BPL households during 2016-17. The Committee note that the Socio-Economic Caste Census (SECC) 2011 will be used to identify the BPL households and the States which are below the national average in the LPG coverage will be given preference. The Committee however, desire that the LPG connections surrendered under 'Give it Up' scheme should also be brought into the ambit of this scheme and targets be revised suitably. The Committee appreciate launching of this pro-poor measure of the Government and hope that if the new scheme is successfully implemented, it can go a long way in providing clean energy to the poor households and also contribute to empowerment and health care of women. The Committee, however, note that the implementation of the scheme may face difficulties due to lack of adequate infrastructure including LPG dealerships, bottling plants, pipelines across the country, availability of adequate quantity of LPG in the country, supply of reasonably priced LPG stoves, etc. The Committee, therefore, desire that Ministry should fine tune the processes linked to implementation of the Scheme particularly the development of delivery infrastructure in the remote and border areas. The Committee suggest that the services of public representatives may be utilised in implementation of the scheme".

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

"The Government has recently launched "Pradhan Mantri Ujjwala Yojana" for providing LPG connections to 5 crore women belonging to the Below Poverty Line (BPL) families over a period of 3 years starting from FY 2016-17. Hon'ble Prime Minister of India has formally launched the scheme on 01.05.2016.

Under the GiveItUp Scheme, a customer surrenders his LPG subsidy only and not the LPG connection. Earlier, LPG connections linked to 'GiveItUp' campaign were released to BPL households from the available CSR funds of Oil PSUs.

Government is planning to set up 10,000 new distributorships. Presently, the process for setting up of more than 1800 new LPG distributorships is at different stages of selection across the country. Majority of these distributorships will come in rural areas to cater to unserved consumers. Further, advertisement for new locations will be issued to appoint new distributorships.

OMCs have projected 20722 TMT demand of LPG in the year 2016-17 and it will go up to 28988 TMT in 2021-22. Capacity augmentation of existing Bottling Plants and setting up of new Bottling Plants is in progress to meet the projected demand till 2021-22. OMCs are planning to set-up 54 grass root Bottling Plants upto 2020-21. As on 01.04.2016 there are 188 Bottling Plants with bottling capacity of 15172 TMT.

The availability of indigenous LPG in the country is insufficient to cater the demands of the LPG. To meet this demand, OMCs import the LPG and imports are tied with different countries well in advance. Hence, OMCs do not see any shortage of LPG in the country.

OMCs are providing two burner star rating gas stoves to beneficiaries under Pradhan Mantri Ujjwala Scheme @ Rs. 990/- per unit, which is cheaper than the one sold in open market.

OMCs will organise 'Melas' at various locations for release of connections to BPL families. This will be done in the presence of public representatives and distinguished personalities of the area. The presence of public representative will enhance the awareness of the scheme. Further, District Nodal Officers (DNOs) have been appointed to co-ordinate with elected representatives for smooth implementation of the scheme".

13. The Committee had desired that the Ministry should fine-tune the processes linked to implementation of the Pradhan Mantri Ujjwala Yojana particularly the development of delivery infrastructure in the remote and border areas and availability of LPG in the country. The Committee had also suggested that the services of public representatives should be utilised in implementation of the scheme. The Ministry, in its Action Taken Reply, has stated that the Government is planning to set up 10,000 new distributorships to cater to the unserved consumers. Moreover, the OMC's will be setting up 54 grass root bottling plants by 2020-21. Further, to meet demand of LPG, OMC's have tied up with different countries to import LPG in advance. It has also been communicated by the Ministry that public representatives and distinguished personalities of the area will be involved to enhance the awareness of the scheme. But the Committee note that only 1800 new LPG distributorships are at different stages of selection and there is no time-frame fixed for establishing more new distributorships. As Pradhan Mantri Ujjwala Yojana is intended to provide relief to the lowest strata of the society, within a period of three years, the Committee desire that measures being taken by the Ministry to ensure success of the Scheme such as setting up new distributorships, augmentation of existing bottling plants and setting up of

new plants should be expeditiously completed in consonance with the requirement of the scheme as well as regular LPG requirements.

Recommendation No. 7

Rajiv Gandhi Institute of Petroleum Technology (RGIPT)

14. The Committee had recommended as under:

"The Committee note that the Rajiv Gandhi Institute of Petroleum Technology (RGIPT) is in the process of being set up on 47 acres of land at Jais in Rai Bareli district of Uttar Pradesh (UP) as an Institute Of Excellence in the petroleum sector to cater to national and global educational and training requirements. Although it is operating from makeshift campus in the same district since 2008, there has been inordinate delays in the project. The new completion date for the project has been stated as June 2016. The total estimated cost for the Institute is Rs. 695.58 crore against the initial estimate of Rs. 435 crore in the year 2007. The Committee note that the progress in March 2015 was 86% while the progress in January 2016 is reported to be 93%. Thus in 11 months, the progress has been a mere 7% in the project which has been already suffering from substantial time and cost overruns.

The Committee also note that RGIPT Assam Project is under construction on 100 acres of land in Sivasagar district of Assam and very little progress has been made in the project with the estimates already gone up from Rs. 143 crore to Rs. 235 crore. The work of RGIPT Assam is at a standstill due to non-release of capital funds for construction. The capital funds are to be released by the oil PSUs and OIDB after the approval of expenditure by the Expenditure Finance Committee (EFC).

The Committee are concerned about the poor progress being achieved in the two RGIPT projects at Raibareli and Sivasagar and would like to know the reasons for such long delays causing significant cost overruns in both the projects. The Committee, however, recommend that the Ministry should closely monitor the progress of both the projects so that these are completed without any further time or cost overruns. The Committee also desire that the Ministry should ensure to provide adequate financial allocations and timely release of funds for these projects".

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

"The main academic centre of RGIPT is being constructed on 47 acres of land at Jais, District Amethi (Uttar Pradesh). Initially, the Capital Expenditure was made through Govt of India budgetary support of Rs. 285.00 Crore and partially from grant of Rs.150.00 Crore from Oil Industry Development Board. The Institute has commenced its academic activities from 2008-09. Currently, 6 batches of MBA, 4 batches of B. Tech and M. Tech students have passed out.

The construction of the campus suffered setback as the job awarded to M/s. Punj Lloyd Limited (PLL) on the recommendation of PMC, Engineers India

limited (EIL) stopped in the year 2013 due to the contractor's un-reasonable demands leading to Arbitration and cost escalation.

It is pertinent to note that due to non-payment of contractor's bills from January 2015 to July 2015, the contractor, M/s. NCCL had stopped the work at Jais Site which has resulted in time overrun beyond the scheduled date of completion of March 2016. The construction work has restarted and is targeted to be completed by September, 2016. The money so far released from GBS for Jais project is Rs. 181.00 crore (Rs.86.00 crore + Rs.48.00 crore + Rs.47.00 crore = Rs.181.00 crore) whereas Rs. 188.10 crore (Rs.369.10 crore – Rs.181.00 crore = Rs 188.10 crore) is yet to be released for completion of the project.

The execution of the project at Sibsagar is delayed due to site related issues requiring large quantity of earth filling and piling work which has since been completed in April, 2014. Meanwhile the project cost has gone up from the original estimate of Rs. 143 crore to Rs. 235 crore".

16. The Committee had recommended for a close monitoring of the RGIPT projects at Jais (Amethi District, UP) and Sibsagar in Assam to avoid any further time or cost overrun. The Committee had also recommended allocation of adequate funds and its timely release for these projects. In its reply, the Ministry has stated that the initial Capital Expenditure for RGIPT, which is being constructed on 47 acres of land at Jais, was made through Govt. of India budgetary support of Rs. 285.00 crore and partially from grant of Rs.150.00 crore from Oil Industry Development Board. Explaining the time overruns, the Ministry has replied that the construction of the campus suffered setback due to contractual issues. According to Ministry, the construction work has restarted and the work is targeted to be completed by September, 2016. Further, Rs 188.10 crore is reportedly yet to be released for completion of the project. The Committee find that the EIL, which is the PMC for the project, should have performed its responsibilities effectively thereby avoiding repeated delays to the project as well as cost escalation. The Committee deplore the cost and time overrun being faced by this important project due to administrative delays in release of fund and hope that the project is completed by the new extended time line positively without any further delay on account of such constraints.

Similarly, the progress of RGIPT, Sibsagar is very tardy on account of site related issues and this project has also faced huge cost and time overrun. About this project, Ministry has informed that the work has been delayed due

to site related issues but has not pronounced any completion schedule for this project even when these issues were resolved long back in April 2014. The Committee, therefore, reiterate their recommendation that the RGIPT, Sibsagar project should start at the earliest with a defined time line and it should be closely monitored with a view to ensure that there is no further time and cost overruns and the funds for the project are also released in a timely manner.

Recommendation No. 8

Petroleum University in Andhra Pradesh

17. The Committee had recommended as under:

"The Committee note that an Indian Institute of Petroleum and Energy (IIPE) is to be established in a 150 acre land in Subhavam Mandal in Vishakhapatnam in accordance with the Andhra Pradesh Reorganisation Act, 2014. The objective of the University is to meet the quantitative and qualitative gap in the supply of skilled manpower in the petroleum sector and promote research activities. Total capital expenditure for the project is estimated at Rs. 855.46 crore. A token provision of Rs. one crore each under plan and non-plan has been provided in BE 2016-17.

The Committee also observe that the land identified for the project is being acquired and until the campus is ready, arrangements have been made with the Andhra University to use their resources for starting classes. The Committee also note that Rs. 23.50 crore has been provided by the OIDB to start the academic session from the temporary campus.

The Committee, however, are not satisfied with the progress made so far in setting up the Institute only through a token amount and recommend that work on the construction should be taken up expeditiously after completing land acquisition work of the site in consultation with the State Government and allocation of more funds. The Committee also desire that the Institute should start functioning from its own campus at the earliest and availability of funds should not be a constraint for the project".

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

"As per the 13th Schedule of Andhra Pradesh Reorganization Act, 2014, Indian Institute of Petroleum and Energy (IIPE) has been set up with the objective to meet the quantitative and qualitative gap in the supply of skilled manpower for the petroleum sector and to promote research activities needed for the growth of the sector. The Government of Andhra Pradesh has made available an area measuring about 200 acres of land in Anthakapalli Village, Sabbavaram Mandal, Visakhapatnam District for the Institute which is free of cost. IIPE Society has been registered on 18.04.2016.

College of Engineering (Autonomous) situated in Andhra University at Visakhapatnam has provided the resources to start the IIPE sessions during

the academic year 2016-17 in two B.Tech. Programmes viz., Petroleum Engineering and Chemical Engineering. Rank list from JEE-Advanced, 2016 (IIT-Guwahati) has been received and Rank holders have been invited to apply for admission to IIPE. IIT- Kharagpur has been roped in to act as a Mentor Institution for starting the academic session 2016-17.

The capital expenditure for the project is estimated to be around Rs.655.46 crore (Rs.432.37 crore for the 1st Phase and Rs.223.09 crore for the 2nd Phase). Deficit funding against recurring Expenses for 2016/17 to 2024/25 period would be Rs.334.84 crore. The source of funding for the proposal would be through Government Budgetary Support (GBS). EFC Meeting was held on 21.06.2016 under the Chairmanship of Finance Secretary & Secretary (Expenditure) which has recommended the GBS funding of Rs.655.46 crore as a Capital Expenditure of Rs.400 crore of Endowment Fund (Rs.200 Crore under GBS and Rs.200 crore to be contributed by oil PSU's).

19. The Committee appreciate that the 200 acres land has been made available for construction of the Indian Institute of Petroleum and Energy (IIPE) in Andhra Pradesh and funding pattern for the university has been approved. But no commitment has been shown by the Ministry for an expeditious completion of the project within a fixed time-frame in accordance with the Andhra Pradesh Re-organisation Act, 2014. The Committee, therefore, desire that the work on the project should start at the earliest and be closely monitored by the Ministry to ensure that it is completed without any further time or cost overrun and timely release of the fund should also be ensured. The Committee would like the Ministry to share the detailed schedule for completion of construction of the campus of IIPE with it.

Recommendation No. 11

National Gas Hydrate Programme (NGHP)

20. The Committee had recommended as under:

"The Committee note that the NGHP was initiated in 1997 with participation from institutions/agencies such as Directorate General of Hydrocarbons, Upstream oil PSUs such as ONGC, IOCL, GAIL and IOC and National Research Institutions like National Institute of Oceanography, National Geophysical Research Institute and National Institute of Ocean Technology. The Committee observe that second phase of NGHP expedition was completed in July 2015 in Krishna-Godavari (KG) and Mahanadi offshore basin. The Committee are happy to note initial results of the NGHP-02 expedition are very encouraging and gas hydrates have been discovered in KG deep offshore areas in sand reservoirs which are reported to be the thickest gas hydrate reservoir system in the world. The Committee note that based on data obtained during the expedition, sites for pilot production testing

are to be identified and pilot production of gas hydrate deposits are planned to be carried out under the third phase of expedition. The Committee note that while the prospects of Gas Hydrates are encouraging, there has to be a cost benefit analysis before committing investments. The Committee, therefore, recommend that the Ministry should conduct a thorough review through an independent agency before carrying out further works under NGHP".

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

"The results of NGHP-02 were very encouraging as two quality Gas Hydrate Reservoirs have been discovered. The cost benefit analysis is also highly favourable. About 134 TCF gas in about 8400 sq km area in KG Deep Offshore is likely to be present. Studies are in progress".

- 22. The Committee observe that initial studies in the direction of discovery of gas hydrates have been very encouraging and the cost benefit analysis is also found favourable. However, it is not clear that what further studies are under progress and also whether for such studies any independent agency has been engaged or not for further studies under NGHP as recommended by the Committee. The Committee, therefore, urge the Ministry to ensure that further studies are done only after review of the programme by an independent agency and adequate investments are made in technologies relating to evacuation of natural gas from such deposits.**

Recommendation No. 12

Ethanol Blended Petrol

23. The Committee had recommended as under:

"The Committee note that the Ethanol Blended Petrol (EBP) programme is being implemented since 2003. Selling of Petrol blended with ethanol upto 10% has been envisaged for the year 2016-17. For achieving 10% blending, the requirement of Ethanol would be approximately 266 crore litres against which only 136 crore litres is available for blending within the country. Despite repeated rounds of floating Expression of Interest (EoI), the required additional Ethanol supply is not available in the country so far. The Committee are concerned that the Ministry has not been able to procure sufficient quantity of Ethanol even though India is one of the largest Sugarcane producing countries of the world. The Committee note that unless concerted efforts are made by the Ministry, it would be difficult to attain the target of 10% EBP, particularly in those states which are not major sugarcane producing areas. The Committee desire that the Ministry has to focus on the issue of availability of Ethanol in the country so that the targeted blending of Ethanol in petrol it has envisaged for could be achieved. The Committee would advise the Ministry to work sincerely on alternate sources for ethanol including the

production of ethanol directly from sugarcane juice so as to incentivize farmers. The Committee recommend that a comprehensive plan be made by the Ministry for increasing availability of Ethanol for blending with petrol".

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

"The Government has taken a number of initiatives to improve the availability of ethanol for blending with Petrol under Ethanol Blended Petrol (EBP) Programme. Some of them are as under:

(i) On 10.12.2014, the delivered price of ethanol has been fixed in the range of Rs.48.50 per litre to 49.50 per litre, depending upon the distance of distillery from the depot/installation of the OMCs. The Government has allowed procurement of ethanol produced from other non-food feedstocks besides molasses, like cellulosic and ligno cellulosic materials including petrochemical route, subject to meeting the relevant BIS Standards.

(ii) Oil Marketing companies (OMCs) have been asked on 21.10.2015 to establish a project each of reasonable scale for producing ethanol from multi-feedstock lignocelluloses using indigenous technology. A demonstration plant of 10 Tonnes Per Day (TPD) capacity at Kashipur, Uttarakhand, has been operationalised on 22.4.2016

(iii) Ministry of Petroleum and Natural Gas (MoP&NG) has been taking up the State specific issues with the concerned State Governments for hassle free inter-State and intra-State movement of ethanol. For better coordination with the States, Sugar Mills and other stakeholders, MoP&NG has appointed nodal Officers from OMC's, for effective implementation of EBP programme.

2. The impact of these decisions is evident from the fact that ethanol supplies increased to 67.4 crore litres for the sugar year 2014-15 from 38 crore litres during 2013-14. During the current sugar year 2015-16 OMCs have finalized over 135 crore litres of ethanol supplies.

25. **In view of the failure of the Government in procurement of adequate ethanol for blending in petrol, the Committee had recommended that a comprehensive plan be made by the Ministry for increasing availability of Ethanol as the targeted blending of Ethanol in petrol has not been achieved upto the envisaged level of 10%. The Committee had also suggested that production of ethanol directly from sugarcane juice may be considered so as to incentivize farmers. In its reply, the Ministry has stated that a number of steps have been taken to improve the availability of Ethanol for blending including increase in ethanol prices, establishing projects for producing ethanol from alternative sources in coordination with State Governments for streamlining the movement of ethanol across states, etc. But the Ministry has neither prepared any specific plan to achieve the target nor has shown any**

intention to consider to promote the production of ethanol directly from sugarcane. The Committee, therefore, reiterate their recommendation asking the Government to formulate a comprehensive plan to augment production of ethanol primarily from sugarcane and alternatively from non-food feedstocks and ensure its availability in the Country with an objective of reaching the goal of 10% blending under a defined time-frame and convey the outcome to the Committee at the earliest.

Recommendation No. 15

Reserve Replacement

26. The Committee had recommended as under:

"The Committee note that Reserve Replacement Ratio is an important parameter for Exploration & Production companies. This indicates that amount of oil added to the reserves vis-a-vis production. It is generally expected that the ratio to be more than 1 which indicates that more reserves are being added than being taken out through production. The Committee note that in 2012-13, RRR based on 1P (1P = proven reserves) reserve for ONGC was 1.08 while in the years 2013-14 and 2014-15 the figure was 0.62 and 0.70 respectively. In case of OIL, the corresponding figures were 1.17, 0.80 and 1.22 respectively. The Reserve Replacement Ratio (RRR) on 1P basis has been consistently below 1 in case of ONGC and about 1 in case of Oil.

The Committee are concerned that the RRR of the Nation's Oil Companies (NOC's) are about 1 or less than 1. This indicates these companies are producing crude oil from their existing reserve without adding new reserves. The Committee apprehends that the exploration activities are not being undertaken as intensively as is required in a energy-deficient country like India. The Committee, therefore, recommend that the oil companies undertake exploration of promising areas more intensively so that the crude oil production remains sustainable and recommend allocation of sufficient funds by NOCs for undertaking such activities. The Committee also desire that the Ministry should explore all the overseas acquisition opportunities to augment the reserves and improve RRR".

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

"Exploration activities in the country were shrinking during last 5 years owing to the fact that no new exploration blocks were awarded from 2010 onwards. Now, Government has approved Hydrocarbon Exploration and Licensing Policy (HELP), through which new exploration blocks will be awarded in near future. With opening of new area for exploration, reserve replacement ratio (RRR) is likely to improve further and may be more than one on discovery of new hydrocarbon reserves.

The reserve accretion in ONGC Videsh Limited (OVL) is a mix of exploratory accretions and inorganic acquisitions. As acquisitions do not happen at regular intervals, instead of Year wise, Cumulative RRR may be considered as an indicator of the performance. Production in OVL has commenced in 2002-03 and the cumulative production from the start of production to 2015-16 is 100.468 MMTOE while the accretion of reserves in terms of 1P and 2P during the same period is 180.576 MMTOE and 548.242 MMTOE respectively resulting in overall RRR of 1.80 for 1P case and 5.46 for 2P.

Oil India Limited (OIL) has also, over the past decade, acquired participating interests in exploration acreages in countries, namely, Libya, Gabon, Yemen, Bangladesh, Myanmar and discovered/producing asset in Nigeria, Venezuela, USA, Mozambique and Russia. These initiatives are expected to help improving the overall RRR of OIL in the near to medium-term".

28. Expressing their concern over the declining Reserve Replacement Ratio (RRR), the Committee had recommended that the oil companies should undertake exploration of promising areas more intensively so that the crude oil production remains sustainable and also allocation of adequate funds for the purpose. The Committee had also desired that the Ministry should explore all the overseas acquisition opportunities to augment the reserves and improve RRR. Ministry, in its reply, has stated that the decline in exploration activities is due to the fact that no new exploration blocks were awarded from 2010 onwards. They have expressed hope that exploration activities will pick up in coming years following the finalisation of Hydrocarbon Exploration and Licensing Policy (HELP), through which new exploration blocks are to be awarded in future. This will help in increasing RRR in future following expected discoveries in new blocks. The Committee would like to point out that launching of licensing regime such as HELP is not a solution to the problem of declining RRR in the near to medium term rather in long term only. The Committee are constrained to note that long gestation period for exploration activities and also the fact that no production has started from the blocks that were allotted under earlier NELP rounds are also factors in the declining of RRR of ONGC. Improvement in RRR in near and medium term is possible only through increased exploration of new areas, using state of the art technology both for exploration as well as improving extraction from existing reserves, etc. The Committee, therefore, reiterate their recommendation and desire that intensive exploration activities should be

enhanced in promising areas and adequate financial resources should be allocated for the same.

Recommendation No. 16

City Gas Distribution (CGD)

29. The Committee had recommended as under:

"The Committee note that the City Gas Distribution (CGD) network supplies gas to four separate segments- Compressed Natural Gas (CNG) for automobiles, Piped Natural Gas (PNG) in domestic, commercial and Industrial segments. The Committee also note that further rounds of bidding for expansion of CGD network to 34 GAs were conducted by PNGRB and have received 56 bids for 24 GAs which are under evaluation. The Committee note that 28 new GAs in the CGD network have been added in the last two years. At present about 30.93 lakh households in 11 states are availing the PNG supplies. The Committee observe that the Ministry had targeted that by the year 2015-16, the total number of PNG customers would be about 50 lakhs, whereas the actual number is about 31 lakhs which indicates substantial shortfall in the target and need to scale up its effort to increase the number of connections. The Committee desire that the PNGRB/Ministry should complete the evaluation of the bids received under sixth round at the earliest and also ensure that the work already awarded under earlier rounds are monitored regularly and commissioned. The Committee note that , therefore, feel that the expansion efforts of the CGD network has to increase expeditiously and recommend that Government/PNGRB should make more coordinated efforts to expand the CGD network to more States and GAs".

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

"PNGRB received 56 bids for 20 Geographical Areas (GAs) (and not 24 GAs as mentioned in recommendation no. 16) out of the 34 GAs put on bid in 6th round of bidding. Out of the received bids in 6th round, PNGRB has awarded total 13 new GAs/Districts namely Saharanpur (Uttar Pradesh), Amreli (Gujarat), Patan (Gujarat), Bhatinda(Punjab), Rupnagar (Punjab), Dahej Vagra Taluka (Gujarat), Fatehgarh Sahib District (Punjab), North Goa (Goa), Dahod(Gujarat), Banaskantha (Gujarat), Ahmedabad (Gujarat), Anand (Gujarat) and Panchmahal (Gujarat). Further, PNGRB has issued Letter of Intent for 2 more GAs namely Ratnagiri (Maharashtra) and Ahmednagar (Maharashtra) to the successful bidders. Grant of authorization for one more GA namely Rohtak (Haryana) is kept on hold due to pending legal case in the court. Decision regarding remaining 4 GAs is expected to be taken shortly. PNGRB monitors the performance of the CGD entities on quarterly basis. In this regard, PNGRB has given the quantitative targets (e.g. inch-Kilometer and number of PNG connections etc.) for 3 to 5 calendar years from the date of authorization. The CGD entities furnish the Quarterly Progress Report (QPRs) to PNGRB in terms of PNGRB's regulations. The non-performing/under-performing CGD operators are called for statutory hearing by PNGRB. In addition, MoP&NG is also periodically reviewing the progress of PNG network expansion with CGD entities. During the review meetings, CGD

entities have attributed the following factors for slow progress of PNG coverage such as (i) In-ordinate delays in granting permission by Civic/Local bodies and levy of exorbitant charges for laying of networks and restoration of road, (ii) Differential taxes (i.e. VAT on CNG) in adjoining states and multiple taxation impacting price competitiveness of PNG and CNG and (iii) PNG connectivity to individual consumers depends on availability of pucca houses and minimum width of roads that permits laying of pipelines etc. MoP&NG has also taken up these issues with the concerned State Governments and local bodies for expediting the PNG network expansion.

31. While appreciating the effort of the Ministry towards bringing new areas under CGD through 6th round of bidding for expansion of CGD network, the Committee has expressed their unhappiness that out of 34 Geographical Areas (GAs) which were included for inviting bids by the PNGRB, bids for only 20 GAs were received. The Committee had viewed it as poor planning on the part of PNGRB/Ministry and had recommended that the Ministry/PNGRB should make more coordinated efforts to expand the CGD network to more States and GAs in order to make the use of natural gas more evenly spread across the country. The Action Taken Reply states that PNGRB has given the quantitative targets for 3 to 5 calendar years from the date of authorisation. The reply also states that CGD entities have attributed inordinate delays in granting permission by Civic/ local bodies and demanding excessive taxes, levies, etc. for slow progress. The Committee are unhappy at such lopsided expansion of CGD network in the Country. While the western and Southern regions of the Country have forged ahead in this area, the Northern and Eastern regions have lagged behind. The Committee, therefore, urge upon the Ministry to make efforts for expanding CGD network in more States and GAs to achieve the target of reaching the 50 lakh households. The Committee also reiterate that Ministry/PNGRB should hold meetings with State Governments and their agencies to ensure that CGD Projects are completed well in time and factors impeding the progress of CGD Projects are resolved and inform the Committee about the outcome.

Recommendation No. 17

Internal Extra Budgetary Resources (IEBR)

32. The Committee had recommended as under:

"The main activities relating to petroleum sector are carried out by the Oil PSUs out of funds generated from their own resources known as Internal and

Extra Budgetary Resources (IEBR). The PSU's BE 2016-17 has been pegged at Rs. 87214.56 crore showing about 15% increase from the BE 2015-16. At the RE stage of 2015-16, the total outlay of PSUs was Rs. 68536.52 crore showing under-utilisation to the tune of 10%. Even out of this amount, only Rs. 45028.24 crore were utilised in the first three quarters.

The Committee note that budget for exploration activities of upstream oil companies like ONGC, OIL and GAIL has been going down substantially over the years. Moreover, the PSUs are not able to utilise even the reduced allocations. In case of ONGC, the BE 2015-16 for exploration activities was Rs. 14269.27 crore out of which they could utilise only about Rs. 7000 crore. BE for 2016-17 has been kept at Rs. 9150.56 crore. Similarly for GAIL the BE 2016-17 has been kept at Rs. 77.55 crore which is about half of BE 2015-16. GAIL could utilise less than 40% of the amount in the first three quarters of the previous year.

As regards downstream oil PSUs, the Committee note that 09 refineries under Indian Oil Corporation Ltd. (IOCL) achieved the crude throughput of 53.59 MMT during 2014-15 while during first three quarters of 2015-16 the crude throughput was 41.68 MMT. The estimates for 2016-17 has been fixed at 57.51 MMT while the target for 2016-17 is 62.5 MMT. Therefore, the total increase from 2014-15 to 2016-17 is about 20%. The plan outlay of IOCL in 2014-15 (actual) was Rs.14314 crore while RE for 2015-16 is Rs.11503 crores. The Committee note that in the first three quarters of 2015-16 the actual expenditure is Rs.6962 crores which is only about 65% of the annual estimates. The BE for 2016-17 has been fixed at Rs.13773 crores an increase of almost 20% over the previous year figures.

In case of HPCL, its total refinery throughput in 2014-15 was 16.18 MMT. In first three quarters of 2015-16 it achieved refinery throughput of 12.53 MMT. the target for 2016-17 is 16.27 MMT. The Committee note that HPCL refineries are working at more than 100% capacity. Plan outlay for 2014-15 (actual) in case of 97 HPCL was Rs.1767 crores against the BE of Rs.1792 crores. The RE for 2015-16 is Rs.1540 crores while in the first three quarters Rs.1084 crores has been utilised. The BE for 2016-17 is fixed at Rs.1974 crores which indicates more than 25% increase from the previous year.

The Committee note that BPCL has two refineries with combined capacity of 21.5MMTPA. During 2013-14, the BPCL refineries processed 23.35 MMTs which is more than 100% of their capacity. During 2014-15 in the first six months the total of 11.23 MMT crude oil was produced in two refineries. The target for refining throughput for 2015-16 is to 22.50MMT. The Committee observe that refineries in case of BPCL are also operating at more than 100%. In 2014-15 RE at Rs.5794 crores was about 10% higher than BE of Rs.5250 crores. RE for 2015-16 was fixed at Rs. 7250 crores and BE for 2016-17 was Rs. 10597 crore which indicates substantial increase.

The Committee are concerned that the upstream oil PSUs are going slow on the exploration and development works even when the need is to work on exploration and development work intensively. The Committee recommend that the Ministry should direct PSUs to increase exploration activities in various parts of the Country and to allocate adequate funds for that purpose.

The Committee note that the downstream oil PSUs show significant variation in their estimates and actual utilisation of funds. The Committee would expect the oil PSUs to prepare their estimates with utmost care and stick to it. Ministry may monitor the actual utilisation of outlay by the PSUs regularly and suggest periodic course corrections".

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

"Internal and Extra Budgetary Resources (I&EBR):

Total BE of I&EBR of the CPSEs under the Ministry of Petroleum and Natural Gas during 2015-16 and 2016-17 was ₹76565.46 crore (revised to ₹76874.75 crore) and ₹87214.56 crore respectively. However, Plan Outlay (BE) from I&EBR for 2015-16 was ₹75185.72 crore and RE was ₹68252.35 crore, against which actual expenditure incurred was ₹66118.29 crore. Plan outlay (BE) from I&EBR for 2016-17 is ₹77600.42 crore.

Plan Outlays for Exploration and Production:

Plan outlay (BE) from I&EBR during 2015-16 under the head 'Exploration and Production' was ₹55079.53 crore, which was revised to ₹48434.63 crore at RE stage. Actual expenditure under this head during 2015-16 was ₹44196.55 crore. During 2016-17, plan outlay under the head 'Exploration and Production' has been kept at ₹52618.71 crore.

Plan Outlays for exploration activities by upstream oil companies:

ONGC:

Plan outlay (BE) of ONGC for exploration activities was ₹14269.27 crore during 2015-16 which was revised to ₹11523.53 crore at RE stage. Against this actual expenditure incurred under this head was ₹9162.91 crore. Plan outlay (BE) for exploration activities during 2016-17 is ₹9150.56 crore.

ONGC:

Reasons for underutilisation of allocated budget by ONGC during 2015-16: Budget allocation for exploratory activities by ONGC is reducing year by year because of reduction in exploratory acreages as no acreage has been offered/awarded since NELP IX round in 2012.

Shortfall in expenditure in exploratory activities is due to environmental & contractual issues along with mandatory clearance issues in seismic surveys. In exploratory drilling, shortfall has occurred due to environmental, mandatory clearance issues as well as down-hole complications during drilling/testing of wells leading to time loss. More specifically, lower utilisation in exploratory drilling is on account of

- Less number of wells drilled during the period due to low availability of rig months.
- 3D seismic work awarded to the company could not be initiated/completed due to outstanding contractual issues.

ONGC is making all out efforts to resolve such issues / problems so that the efficiency of exploratory activities can be improved.

Reasons for decline in BE 2016-17 vis-à-vis BE 2015-16:

- Survey budget has declined marginally on account of reduction in physical targets of 2D and 3D Survey by 320 Ground Line KMs. (GLK) and 1353 Square Kilometer (SKM) respectively.
- The decline is on account of NIL target for deep-water exploratory drilling in BE 2016-17, as against a target of 7 wells in BE 2015-16.
- The BE for shallow water exploratory drilling in 2016-17 was reduced mainly due to anticipated reduction in oil field services cost (rigs, etc.), due to persistent decline in global crude prices.
- The outlay for onland exploratory drilling has also been reduced on account of reduction in input costs of resources for 93 wells.

Measures taken to increase exploration activities:

To intensify its exploratory activities, various concerted measures are being taken by ONGC including inter-alia, focusing on exploration of deeper plays in the existing fields, carrying out exploration in geologically complex and logistically challenging areas and exploiting alternate sources of energy like shale gas, gas hydrate, etc. Further, pursuant to the formal launch of Hydrocarbon Exploration & Licensing Policy (HELP), the exploratory acreages / area portfolio are expected to improve. In addition, resource appraisal of the un-appraised areas of Indian Sedimentary Basins would help in identification and prioritization of the areas.

OIL:

Plan outlay (BE) of OIL for exploration activities during 2015-16 was ₹1594.00 crore which was revised to ₹1395 crore at RE stage. Actual expenditure incurred in exploration activities during 2015-16 was ₹1364 crore. OIL has increased its allocation for exploration activities on year on year basis. During 2016-17, plan outlay (BE) for exploration activities is ₹1793.50 crore.

Reasons for underutilisation of allocated budget during 2015-16:

The major reasons for lower utilisation of allocated budget for exploratory drilling by OIL during 2015-16 are as under:

- (i) During financial year 2015-16, OIL completed drilling of 16 exploratory wells against targeted 32 wells.
- (ii) Higher rig resource was allocated for development drilling in OIL's Petroleum Mining Lease (PML) areas of Assam in order to arrest declining oil production.
- (iii) Drilling of two exploratory wells in OIL's PML area in Rajasthan was deferred to 2016-17 as the same is linked to Heavy Oil Monetization in the area for which efforts are in progress
- (iv) Drilling of four wells in NELP blocks could not be undertaken due to delay in statutory / regulatory permissions/clearance.
- (v) Exploratory drilling campaign in the block KG-ONN-2004/1 suffered due to delay in deployment of rig as use of a bridge was resisted by local people. The drilling operation could start only w.e.f. 12th January, 2016.

Measures taken to achieve targets by OIL:

Planning and monitoring mechanisms for implementation of planned projects/programmes are in place in OIL for achieving the set targets and the same are reviewed on a regular monthly basis.

GAIL:

Plan outlay (BE) of GAIL during 2015-16 under the head 'Exploration and Production' was ₹147.94 crore which was revised to ₹82.29 crore at RE stage due to rescheduling of activities by different operators. Actual expenditure incurred under this head during 2015-16 was ₹72 crore. Plan outlay under this head during 2016-17 has been kept at ₹77.55 crore which is based on projected expense under Minimum Work Programme, as per production sharing contract of various blocks. Blocks were last awarded under last bid round (NELP-IX) during March 2012 and since then, no new bid rounds have been announced. Various blocks have moved ahead in E&P life cycle leading to production in 4 blocks and thus the capital expenditure commitments are reducing in these blocks.

IOCL

During 2015-16, IOCL incurred plan expenditure of ₹11484.74 crore against BE and RE of ₹10540.00 crore and ₹11502.91 crore respectively. IOCL has kept BE for 2016-17 at ₹13772.87 crore. While finalising the BE, detailed analysis of each ongoing and new project and those proposed, is carried out. Although intensive monitoring of physical and financial progress of projects is carried out, in certain cases like exploration and production related schemes, which are significantly affected by the global developments related to oil and gas industry, variation between estimated and actual utilisation of funds does come in.

HPCL

During 2015-16, HPCL incurred actual plan expenditure of ₹ 1429.49 crore against BE and RE of ₹ 1,791.85 crore and ₹1539.78 crore respectively. The shortfall in the utilisation of budget allocation was due to the following reasons:

- (i) Late receipt of Environment Clearance for Visakh Refinery Modernisation Project
- (ii) RoU disruption at Mangalore and Hassan for Mangalore-Hassan-Mysore LPG pipeline project
- (iii) Delayed receipt of permission from Forest and National Wild Life Board and agitation by villagers against pipeline laying for Uran-Chakan LPG pipeline project

Reasons for higher budget allocation during 2016-17

HPCL has kept BE at ₹ 1,974.26 crore for 2016-17 as compared to BE of ₹1,791.85 crore (an increase of about 10%) and RE of ₹1539.78 crore during 2015-16. Budget estimates for 2016-17 have been increased due to some of the new activities to be taken up in Mumbai and Visakh refineries during

2016-17 and as per work plan received from the operator under exploration sector.

As far as utilisation of budget allocation is concerned, HPCL is monitoring physical and financial progress of the projects with respect to critical milestones on a monthly basis. The key progress made every month, reasons for delay and areas of concerns are identified and analysed for resolution on priority basis.

BPCL

During 2015-16, BPCL incurred actual plan expenditure of ₹ 8257.00 crore against BE and RE of ₹ 6,501.32 crore and ₹7250 crore. Higher budget utilisation by BPCL during 2015-16 was mainly to speed up the commissioning of Integrated Refinery Expansion Project in Kochi and for Catalytic Reformer Unit (CRU) Isomerization project in Mumbai Refinery, in line with modification required as per Auto Fuel Policy and early commissioning of the unit.

Reasons for keeping higher BE during 2016-17

BPCL has kept BE 2016-17 at ₹10597 crore which indicates a substantial increase as compared to BE 2015-16. This is mainly due to higher budget allocation to 'Refining and Marketing' head (₹9797 crore includes pipelines, JV with BORL, etc.). During 2016-17, major projects are planned under 'Refining' head to meet the Government directive and deadline for ensuring production of BS V/VI fuels and also Petchem project in Kochi Refinery. For evacuation of additional 6 MMT petroleum products from Integrated Refinery Expansion Project in Kochi, CAPEX expenses under marketing sector (major pipelines and infrastructure) have been planned in the southern region.

Although all CPSEs had put in their best efforts to ensure expenditure in accordance with the targets during 2015-16, reasons reported by each of them for the shortfall, wherever relevant have been detailed. The Ministry is also putting all out efforts to ensure that realistic targets are fixed at the BE stage so that the gap, if any, between the budgeted and incurred expenditure, after following due diligence is minimized.

ONGC and OIL are carrying out exploration through their internal generated resources/revenue. No budgetary allocation is made to oil PSUs for carrying out exploration and production activities. However Ministry monitor their exploration activities periodically.

In order to accelerate exploration activities in the country for appraisal of the Indian sedimentary basin, an area of 1.502 Million Sq. Km is identified by DGH. To appraise these areas, Government has formulated a plan to conduct 2D seismic surveys of volume of 48,243 LKM in 22 sedimentary basins of India where no/scanty data is available.

Total estimated cost of the project is about Rs. 2932.99 Crore for conducting 2D Seismic survey API of 48,243 line kilometer (LKM) upto 2019-20 in Indian sedimentary basins".

34. The Committee had recommended that the Ministry should direct PSUs to increase exploration activities in various parts of the Country and to allocate adequate funds for that purpose. The Committee had also noted significant variation in the estimates and actual utilisation of funds by the downstream oil companies. The Committee had further recommended that the Ministry should monitor the actual utilisation of outlay by the PSUs regularly and suggest periodic course corrections. In its Action Taken Reply, the Ministry has stated that in case of ONGC, the underutilisation was due to reduction in budget allocation for exploratory activities by ONGC year by year as no acreage has been offered/awarded since NELP IX round in 2012. The shortfall in expenditure in exploratory activities is attributed to environmental & contractual issues along with mandatory clearance issues in seismic surveys. In case of underutilisation by GAIL, the Ministry have explained that it was due to rescheduling of activities by different operators and also as blocks were awarded under last bid round (NELP-IX) during March 2012 and since then, no new bid rounds have been announced. Further, as various blocks have moved ahead in E&P life cycle leading to decline in production in the blocks and thus the capital expenditure commitments are reducing in these blocks.

The Committee are not convinced with the justification offered by the Ministry for the underutilisation of allocated budget for the ONGC and GAIL and deplore their lackadaisical approach in utilisation of allocated funds. The Committee understand that these companies must have prepared their estimates keeping all these factors into account. There is no new reason for pathetic under-utilisation of Budget Estimates. The Committee, therefore, would reiterate that these PSUs must prepare their estimates appropriately keeping all the factors in view and every effort must be undertaken to utilise the available funds by them and the Ministry must monitor the fund utilisation on regular basis. The Committee may accordingly be informed about the change in policy in preparation of estimates.

Recommendation No. 24

India-Africa Cooperation in Hydrocarbon

35. The Committee had recommended as under:

"The Committee note that Fourth India-Africa Hydrocarbon Summit was organised in New Delhi where the issues relating to increase in Hydrocarbon trade and investments in African countries were discussed. Africa has become an important source of crude oil for India and we are currently importing about 26 per cent of our crude oil requirements from African countries. The Committee note that Africa is blessed with vast hydrocarbon resources, substantial areas of which remain unexplored and the potential for future collaborations with Africa is very high. This opens substantial exploration and production opportunities for Indian companies. While Africa can be reliable source of our hydrocarbon needs, India is in a good position to offer its expertise in capacity building and other related fields in hydrocarbon sector. India can also develop other ancillary industries in African countries such as fertilizer factories which can then be exported to India leading to mutual prosperity.

India's demand for hydrocarbons and Africa's supply of the same is expected to grow and it is possible to harness the complementarities in this sector to ensure economic development in both India and Africa. The Committee, therefore, recommend that the Government should prioritize its bilateral cooperation with African countries in the hydrocarbon sector with emphasis on exploration and production activities in unexplored areas specially in sub-Saharan Africa".

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

"The 4th India-Africa Hydrocarbons Conference was organized in New Delhi from January 21-22, 2016. The delegations of 9 African countries viz. Mauritius, Morocco, Algeria, Sudan, South Sudan, Tunisia, Senegal, Equatorial Guinea and Liberia were led by respective Ministers. Senior officials led the delegations from Nigeria, Ghana, South Africa, Egypt, Tanzania, Kenya, Mozambique, Uganda, Libya, Cote d'Ivory, Gabon & Sierra Leone.

India's engagement with African countries in the petroleum sector has been on an upswing in the past few years with nearly 16% of India's crude oil import coming from Africa, majority coming from Nigeria and Angola.

During the bilateral meeting, Ministry of Industry, Commerce and Consumer Protection of Mauritius requested India's assistance in developing Mauritius as a regional hydrocarbon hub. In this regard, a visit to Mauritius of Shri Dharmendra Pradhan, MoS (I/C), MoPNC was scheduled in April, 2016. However, the said visit was postponed. Equatorial Guinea and ONGC Videsh Ltd. (OVL) signed a Memorandum of Understanding on exploring potential investment opportunities within the hydrocarbons sector in Equatorial Guinea. India announced additional 250 fully funded scholarships for African nationals

for technical and professional courses in the Hydrocarbons sector in India institutes.

In the first half of 2014, two Indian national oil companies ONGC Videsh Limited (OVL) and Oil India Limited (OIL) completed the acquisition of 20% participating stake in Area 1 of the Rovuma gas block, Mozambique at a cost of US\$ 5.115 billion. This is in addition to 10% already held by another national oil company, Bharat Petro Resources".

37. The Committee had recommended that the Government should prioritize its bilateral cooperation with African countries in the hydrocarbon sector with emphasis on exploration and production activities in unexplored areas specially in sub-Saharan Africa as India's demand for hydrocarbons and Africa's supply of the same is expected to grow in the forthcoming years and there exist significant complementarities between the two partners in this sector. The Action Taken Reply of the Ministry has stated the various steps being taken to increase cooperation by the Government with African countries in the field of hydrocarbon. The Committee appreciate the attempts of the Government to increase its footprints in Africa in the sector and desire the same needs to be sustained in concrete terms so as to improve the availability of hydrocarbon to the country.

CHAPTER II

RECOMMENDATIONS/OBSERVATIONS WHICH HAVE BEEN ACCEPTED BY THE GOVERNMENT

Recommendation No. 1

Utilisation of Budget Allocations

The Committee note that the total budget of the Ministry of Petroleum and Natural Gas for the year 2016-17 is Rs. 29160.62 crore out of which plan outlay is Rs. 2050 crore and non-plan outlay is Rs. 27110.62 crore. The non-plan outlay consists mainly of subsidies on LPG and Kerosene. Of the plan outlay of Rs. 2050 crore, Rs. 2000 crore has been earmarked for scheme for LPG connection to 1.5 crore poor households. The Committee note that in the year 2015-16, RE under plan and non-plan were Rs. 1203 crore and Rs. 30146.35 crore, respectively and the actual expenditure under plan and non-plan head was Rs. 1201 crore and Rs. 30085 crore, respectively. The BE 2016-17 figures show 10% decline in non-plan expenditure when compared to RE 2015-16. The Committee further note that the Annual plan for 2016-17 of the Oil PSUs, which pre-dominantly comprises the Internal and Extra Budgetary Resources (IEBR) of Oil PSUs, is Rs. 87214.56 crore compared to Rs. 75565.46 crore in 2015-16. The Committee appreciate that the Ministry could fully utilise the RE budget allocations during 2015-16.

The Committee observe that the Ministry has allocated Rs. 2000 crore for a plan scheme to provide free LPG connection to 1.5 crore BPL households during 2016-17. The Committee further note that within plan outlay of MoPNG for 2016-17, Rs. 47 crore has been allocated to the Rajiv Gandhi Institute of Petroleum Technology (RGIFT). A token amount of Rs. one crore each has been allocated to Indian Strategic Petroleum Reserves Limited (ISPRL), setting up Petroleum University in Andhra Pradesh and for ISPRL Phase-II. The Committee are concerned that the RGIFT project relating to setting up the Petroleum University in Andhra Pradesh has failed to take off so far. The Committee are also concerned that the outlay budgeted by the PSUs from their internal resources are not being properly utilised. The Committee, therefore, recommend that the Ministry should exercise suitable monitoring in order to ensure that the outlays are utilised properly.

Reply of the Government

Annual plan outlay (BE) of the CPSEs under the Ministry of Petroleum and Natural Gas during 2015-16 was ₹75185.72 crore which was revised to ₹ 68252.35 crore at the RE stage, against which actual expenditure incurred was ₹66118.29 crore. In so far as I&EBR of CPSEs is concerned, BE for 2015-16 was ₹.76565.46 crore (and not ₹75565.46 crore) and RE was ₹76874.75 crore. Plan outlay (BE) of CPSEs during 2016-17 is ₹77600.42 crore and Internal & Extra Budgetary Resources (I&EBR) is ₹.87214.56 crore.

In order to ensure that the outlays are utilised properly, the performance of each PSU (including CAPEX) is being extensively monitored in the Ministry and also reviewed in the monthly review meetings, in order to ensure that each CPSE is able to achieve the target by the year. Further, Hon'ble Minister of State (I/C), PNG also reviews CAPEX performance of major CPSEs and necessary instructions/suggestions are issued to all concerned to achieve targets as proposed for different activities/projects.

The approved revised cost estimate for RGIPT, JAIS centre is Rs. 538 cr. against original cost of Rs. 435 cr. Government had to provide Rs.369.10 cr. and Rs.134 cr. was released till 2015-16. To complete the project, MoPNG had requested MoF to provide Rs. 235.10 cr. each in the first, the second and the third supplementary of 2015-16. No fund was provided by Ministry of Finance in any supplementary.

MoPNG had requested MoF to provide Rs.199 cr., including Rs.48 cr. in BE 2015-16, in RE 2015-16 and Rs.84.1 cr. in BE 2016-17. MoF did not provide any fund in RE 2015-16, over and above Rs. 48 cr. provide in BE 2015-16. Against the request of Rs.84.1 cr. in BE 2016-17, Ministry of Finance provided only Rs. 47 cr. In the first supplementary of 2016-17 MoF has been requested for Rs. 188.1 cr. Completion of the project is contingent upon availability of funds for which MoPNG has been regularly requesting MoF.

Ministry of Petroleum & Natural Gas
O.M.No.G-38011/29/2016-Fin.I dated 3 August, 2016

Recommendation No. 2

Exploration and Production Scenario of Crude oil and Natural Gas

The Committee note that strengthening 'Energy Security' is one of the mandates of the Ministry of Petroleum and Natural Gas (MoPNG) and exploration and production of crude oil and natural gas is one of the most important ways of providing this security. The fortuitous circumstance of the low international prices of crude oil and gas has given some respite. But it cannot be a substitute for domestic sources of energy developed through exploration and bringing them online. As the nation moves forward on the high growth trajectory and prosperity levels of the citizens increase, the demand of crude oil and gas is going to increase rapidly. At current levels of consumption, about 80% of our crude oil requirements are being met through imports. The Committee note that the production of crude oil is stagnant in the last few years while the natural gas production has actually gone down. The Committee further note the recent initiatives of the Ministry to simplify the rules involving exploration of crude oil and natural gas in the country including formulation of the Hydrocarbon Exploration Licensing Policy (HELP). The Committee, however, find that from discovery of oil fields to production is a long drawn process involving substantial time frame and capital expenditure. Moreover, clearances from various Ministries/Departments are also required. Therefore, the Committee feels that it is very important to lay down a consistent and predictable licensing environment in the country in order to attract interest from national as well as global players who can bring much needed capital and technology to invest in the sector. The Committee, therefore, recommend that the Ministry should make focused effort to increase

exploration and production by stimulating investment in the sector and prescribing a stable and transparent licensing/regulatory regime geared to face challenges of the sector and ensure increase in crude oil production. The Committee also desire that the Ministry should make sincere efforts to obtain all necessary clearances from different agencies for the blocks that have been stalled due to various reasons for initiating E&P activities.

Reply of the Government

100% Foreign Direct Investment (FDI) is allowed in exploration & production sector. Government awards exploration licenses through international competitive bidding process wherein National oil Companies, Indian private and foreign companies have to bid on equal footing. No preferential treatment is given to any company either foreign or Indian. Government has taken recent Policy initiatives with the following guiding objectives:

- Enhance Domestic oil and gas production
- Bring substantial investment
- Generate sizeable employment
- Enhance Transparency
- Reduce Administrative Discretion

The visible impact of these policy decisions will be seen in couple of years. Some of the recent policy initiatives are as under:

- Hydrocarbon Exploration Licensing Policy (HELP) for award of Hydrocarbon acreages with new contractual system and fiscal model coupled with the open acreage policy that provides right to investors to explore and produce all type of hydrocarbons including non-conventional such as CBM, shale gas, gas hydrates, etc.
- Discovered Small Fields Policy - 69 oil & gas fields which have been held by ONGC and OIL for many years, but have not been exploited, is to be opened for competitive bidding. Government has already announced the Policy on 25th May, 2016 for bidding of 67 oil and gas fields. Bid closing date under this policy is 31st October, 2016.
- Marketing and Pricing freedom for new gas production from Deepwater, Ultra Deepwater and High Pressure-High Temperature Areas with ceiling Price. This policy decision is expected to monetize 28 number of discoveries having reserves of 6.75 trillion cubic feet (TCF).
- Policy for grant of extension to the Production Sharing Contracts – Provision for extension of time period for another 10 years or till the economic life of the field for 28 Small and medium sized discovered fields.
- Monetization of the Ratna offshore field – ONGC has initiated actions for development of this field.
- Drill Stem Test (DST) Policy - Monetization of 10 hydrocarbon discoveries in 5 NELP blocks by resolving the long pending dispute associated with testing requirements.
- Permission of Extraction of CBM to Coal India Limited (CIL) & its subsidiaries in coal Mining area. This decision will help in enhancement of production of coal as well as coal bed methane (CBM).

- New Domestic Natural Gas price Guidelines, 2014: Under these guidelines, prices of domestically produced natural gas has been linked to prices of natural gas at important markets/hubs.
- Policy Framework for relaxation, extensions and clarifications at the development and production stage under PSC regime for early monetization of hydrocarbon discoveries: Government approved this policy on 10.11.2014, and the same is being implemented. Under this policy, about 40 pending cases have been resolved.

As regards to various statutory clearances such as EC-FC is concerned, on some occasions the statutes provides for operator only to apply. As such, it becomes difficult to obtain full clearance before the blocks are awarded. However, Government takes in-principle approvals / clearances from different agencies such as - Ministry of Defence, Ministry of Environment, Forest & Climate Change, etc. before offering new blocks to the investors. Moreover, DGH and Ministry are helping the investors in getting clearances from different agencies as and when required.

Ministry of Petroleum & Natural Gas
O.M.No.G-38011/29/2016-Fin.I dated 3 August, 2016

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

Recommendation No. 4

LPG connection for households below poverty line

The Committee note that Government has announced a scheme as a part of 'Pradhan Mantri Ujjwala Scheme' which will be implemented in three years (2016-17, 2017-18 and 2018-19) to give 5 crore new LPG connections in the name of women members of BPL households. An amount of Rs. 2000 crore has been allocated for the scheme to provide free LPG connection to 1.5 crore BPL households during 2016-17. The Committee note that the Socio- Economic Caste Census (SECC) 2011 will be used to identify the BPL households and the States which are below the national average in the LPG coverage will be given preference. The Committee however, desire that the LPG connections surrendered under 'Give it Up' scheme should also be brought into the ambit of this scheme and targets be revised suitably. The Committee appreciate launching of this pro-poor measure of the Government and hope that if the new scheme is successfully implemented, it can go a long way in providing clean energy to the poor households and also contribute to empowerment and health care of women. The Committee, however, note that the implementation of the scheme may face difficulties due to lack of adequate infrastructure including LPG dealerships, bottling plants, pipelines across the country, availability of adequate quantity of LPG in the country, supply of reasonably priced LPG stoves, etc. The Committee, therefore, desire that Ministry should fine tune the processes linked to implementation of the Scheme particularly the development of delivery infrastructure in the remote and border areas. The Committee suggest that the services of public representatives may be utilised in implementation of the scheme.

Reply of the Government

The Government has recently launched “Pradhan Mantri Ujjwala Yojana” for providing LPG connections to 5 crore women belonging to the Below Poverty Line (BPL) families over a period of 3 years starting from FY 2016-17. Hon’ble Prime Minister of India has formally launched the scheme on 01.05.2016.

Under the GiveItUp Scheme, a customer surrenders his LPG subsidy only and not the LPG connection. Earlier, LPG connections linked to ‘GiveItUp’ campaign were released to BPL households from the available CSR funds of Oil PSUs.

Government is planning to set up 10,000 new distributorships. Presently, the process for setting up of more than 1800 new LPG distributorships is at different stages of selection across the country. Majority of these distributorships will come in rural areas to cater to unserved consumers. Further, advertisement for new locations will be issued to appoint new distributorships.

OMCs have projected 20722 TMT demand of LPG in the year 2016-17 and it will go up to 28988 TMT in 2021-22. Capacity augmentation of existing Bottling Plants and setting up of new Bottling Plants is in progress to meet the projected demand till 2021-22. OMCs are planning to set-up 54 grass root Bottling Plants upto 2020-21. As on 01.04.2016 there are 188 Bottling Plants with bottling capacity of 15172 TMT.

The availability of indigenous LPG in the country is insufficient to cater the demands of the LPG. To meet this demand, OMCs import the LPG and imports are tied with different countries well in advance. Hence, OMCs do not see any shortage of LPG in the country.

OMCs are providing two burner star rating gas stoves to beneficiaries under Pradhan Mantri Ujjwala Scheme @ Rs. 990/- per unit, which is cheaper than the one sold in open market.

OMCs will organise ‘Melas’ at various locations for release of connections to BPL families. This will be done in the presence of public representatives and distinguished personalities of the area. The presence of public representative will enhance the awareness of the scheme. Further, District Nodal Officers (DNOs) have been appointed to co-ordinate with elected representatives for smooth implementation of the scheme.

Ministry of Petroleum & Natural Gas
O.M.No.G-38011/29/2016-Fin.I dated 3 August, 2016

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

Recommendation No. 5

Hydrocarbon Exploration Licensing Policy (HELP)

The Committee observe that the Government has formulated a Hydrocarbon Exploration Licensing Policy (HELP) with simplified rules governing exploration and production of all hydrocarbons in the country. The new policy will govern all

hydrocarbon fields which will henceforth be brought under production under a single licensing framework. This special dispensation will be available to future discoveries as well as existing discoveries which have not commenced commercial production as on 1/1/2016. The Committee also note that to address the issue of lack of interest in investment in the previous years in difficult areas such as deep water and ultra-deep water areas, a calibrated marketing and pricing freedom has been provided for incentivizing oil and gas production in the deep water, ultra deep water, high temperature-high pressure areas to the entities subject to a ceiling based on prices of alternate fuels. The Committee desire that the Ministry should leave the least scope for misinterpretation of the policy so that situations leading to disputes may not arise.

Reply of the Government

Under the policy on 'Marketing including Pricing Freedom for gas to be produced from discoveries in Deepwater, Ultra Deepwater and High Temperature – High Pressure areas, enough safeguards have been provided to avoid misinterpretation of the policy.

The Policy specifically provides that for the purpose of availing special dispensation including marketing freedom, fields having at least 2/3rd of total number of appraisal and development wells in that field in deepwater/ultra deepwater/high pressure- high temperature area shall be considered as eligible for special dispensation for entire output from such fields. The classification for deepwater areas, ultra deepwater areas and high pressure- high temperature areas have also been made in the policy. Also, the formula for calculating the price ceiling has been clearly specified. Efforts have made to ensure that there is no ambiguity on any aspect and thus chances of disputes are minimized.

Ministry of Petroleum & Natural Gas
O.M.No.G-38011/29/2016-Fin.I dated 3 August, 2016

Recommendation No. 6

Indian Strategic Petroleum Resolve Limited (ISPRL)

The Committee note that ISPRL was formed as a Special Purpose Vehicle (SPV) in order to address the oil supply security concerns of the country. The strategic caverns were planned to be established initially in Vishakhapatnam, Mangalore and Padur under Phase-I with a capital cost of Rs.3985 crores. The Committee are happy to note that while Vishakhapatnam cavern has been commissioned and the other two caverns in Mangalore and Padur are likely to be commissioned in May 2016. The Committee also note that in the second phase, four more caverns are to be established in Chandikhol, Bikaner, Rajkot and Padur. Detailed feasibility report for the second phase has been prepared. A token amount of Rs. 1 crore has been allocated to ISPRL as BE 2016-17. The Committee desire that Phase-II of the project needs to be started without any delay along with adequate allocation of funds. The Committee further note that the Government is exploring alternative options of financing part of the cost of crude oil to fill the Mangalore and Padur caverns which include commercial utilisation by other interested parties. The Committee understand that negotiations with Abu Dhabi National Oil Company (ADNOC) are underway in this regard. The Committee, desire

that strategic interest of the country behind construction of caverns should be protected and recommend that Ministry may ensure that oil stored in those caverns should always be available for the nation in emergency situations.

Reply of the Government

As regards the Phase-II of Strategic Storage of Crude Oil, a Detailed Project Report have been prepared for establishing additional crude reserves of 12.5 MMT at Chandikhol (3.75 MMT), Padur (2.5 MMT) and Bikaner (3.75 MMT). For this purpose, meeting of Expenditure Finance Committee was held on 29.7.2016. EFC, in-principle, recommended construction of caverns at Chandikhol and Bikaner. Minutes are awaited.

The Government is maintaining the Strategic Crude Oil Reserves for greater energy security. Although the MoP&NG, is looking at alternative models of filing the caverns of Mangalore and Padur, yet its availability for strategic need of the country would be ensured.

Ministry of Petroleum & Natural Gas
O.M.No.G-38011/29/2016-Fin.I dated 3 August, 2016

Recommendation No. 8

Petroleum University in Andhra Pradesh

The Committee note that an Indian Institute of Petroleum and Energy (IIPE) is to be established in a 150 acre land in Subhavam Mandal in Vishakhapatnam in accordance with the Andhra Pradesh Reorganisation Act, 2014. The objective of the University is to meet the quantitative and qualitative gap in the supply of skilled manpower in the petroleum sector and promote research activities. Total capital expenditure for the project is estimated at Rs. 855.46 crore. A token provision of Rs. one crore each under plan and non-plan has been provided in BE 2016-17.

The Committee also observe that the land identified for the project is being acquired and until the campus is ready, arrangements have been made with the Andhra University to use their resources for starting classes. The Committee also note that Rs. 23.50 crore has been provided by the OIDB to start the academic session from the temporary campus.

The Committee, however, are not satisfied with the progress made so far in setting up the Institute only through a token amount and recommend that work on the construction should be taken up expeditiously after completing land acquisition work of the site in consultation with the State Government and allocation of more funds. The Committee also desire that the Institute should start functioning from its own campus at the earliest and availability of funds should not be a constraint for the project.

Reply of the Government

As per the 13th Schedule of Andhra Pradesh Reorganization Act, 2014, Indian Institute of Petroleum and Energy (IIPE) has been set up with the objective to meet the quantitative and qualitative gap in the supply of skilled manpower for the

petroleum sector and to promote research activities needed for the growth of the sector. The Government of Andhra Pradesh has made available an area measuring about 200 acres of land in Anthakapalli Village, Sabbavaram Mandal, Visakhapatnam District for the Institute which is free of cost. IIPE Society has been registered on 18.04.2016.

College of Engineering (Autonomous) situated in Andhra University at Visakhapatnam has provided the resources to start the IIPE sessions during the academic year 2016-17 in two B.Tech. Programmes viz., Petroleum Engineering and Chemical Engineering. Rank list from JEE-Advanced, 2016 (IIT-Guwahati) has been received and Rank holders have been invited to apply for admission to IIPE. IIT-Kharagpur has been roped in to act as a Mentor Institution for starting the academic session 2016-17.

The capital expenditure for the project is estimated to be around Rs.655.46 crore (Rs.432.37 crore for the 1st Phase and Rs.223.09 crore for the 2nd Phase). Deficit funding against recurring Expenses for 2016/17 to 2024/25 period would be Rs.334.84 crore. The source of funding for the proposal would be through Government Budgetary Support (GBS). EFC Meeting was held on 21.06.2016 under the Chairmanship of Finance Secretary & Secretary (Expenditure) which has recommended the GBS funding of Rs.655.46 crore as a Capital Expenditure of Rs.400 crore of Endowment Fund (Rs.200 Crore under GBS and Rs.200 Crore to be contributed by oil PSU's).

Ministry of Petroleum & Natural Gas
O.M.No.G-38011/29/2016-Fin.I dated 3 August, 2016

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

Recommendation No. 9

Marginal Fields Policy

The Committee note that the Marginal Fields Policy has been formulated by the Ministry in order to monetize oil blocks lying unutilised with ONGC and OIL because of reasons such as remote locations, small size, financial unviability and technological constraints. The policy aims at involving private sector including global players in the field for increasing domestic production in short-term. The Committee observe that the operators will be provided single license to explore and extract hydrocarbon resources alongwith pricing and marketing freedom. The operators will also be exempted from oil cess and custom duty on machinery and equipments. The aim is to simplify procedures in order to attract investment in exploration and production. The Committee note that there are about 67 fields which are to be offered under this policy and the bids for these oil and gas fields are likely to be launched in the current year. The Committee recommend that the bids for the blocks should be launched so that the discoveries can be brought into production at the earliest. The Committee appreciate the policy which aims to evacuate oil and other hydrocarbons from the discoveries made by ONGC and OIL which were not monetized for reasons including viability. However, the Committee feel that the policy needs to remove any subjective interpretation of rules and guidelines. The

Committee recommend that the Ministry should issue clarifications in order to remove any scope of disputes.

Reply of the Government

Government of India has announced the commencement of the 'Discovered Small Fields Bid Round-2016' on 25th May 2016. Under this Policy, 46 Contract Areas consisting of 67 different small fields have been offered to investors through international bidding process. Bid closing date is 31st October, 2016. The introduction of Revenue Sharing Contract will minimize the number of disputes as there is no cost recovery element which invariably has led to many disputes in NELP regime.

Road shows were organised at Delhi, Mumbai, Guwahati, Houston (USA) and Calgary (Canada) in which the doubts of the investors were clarified and they were encouraged to participate in the bid.

Ministry of Petroleum & Natural Gas
O.M.No.G-38011/29/2016-Fin.I dated 3 August, 2016

Recommendation No. 10

Construction of pipelines under National Gas Grid through PPP & Viability Gap Funding (VGF)

The Committee note that 15000 kms of pipelines were to be added to the existing pipelines as part of National Gas Grid. Out of these, three pipelines of the length of about 2500 kms were to be executed through PPP mode with Viability Gap Funding (VGF) option. GAIL, which was the 'Sponsoring Authority' to implement the pilot PPP project completed route survey and Detailed Feasibility Report (DFR). The Committee observe that work on these three pipelines has been stalled as gas pipeline projects do not meet the criteria of the PPP projects under the VGF scheme. The Committee are concerned that such an important project has been handled in a lackadaisical manner by the Ministry resulting in substantial time and cost overrun of the projects and in completion of National Gas Grid. The Committee note that the Ministry is considering to approach Ministry of Finance for direct budgetary support for meeting the viability gap for the gas pipelines. The Committee, therefore, recommend that the Ministry should take urgent measures to finalise the funding pattern and ensure that work on these pipelines under the National Gas Grid is completed at the earliest.

Reply of the Government

The Ministry of Petroleum and Natural Gas (MoP&NG) identified various pipelines and spur-line pipeline sections to develop additional 15000 Km of gas pipeline for completing the National Gas Grid. Out of this 15000 Km, three pipeline sections of total length of about 2500 Km were identified to be developed through PPP & Viability Gap Funding (VGF). To start with the development of gas pipeline projects in PPP mode, MoP&NG approved Ranchi-Talcher-Paradip pipeline section as a Pilot PPP project and GAIL was appointed Sponsoring Authority for this Pilot PPP project. The remaining two identified PPP gas pipeline project was to be taken up for implementation only after the successful execution of pilot PPP project. GAIL completed the detailed route survey and other pre-project work for Pilot PPP project.

Based on survey report, the route of the pilot PPP project has also been revised to Bokaro-Ranchi-Talcher-Angul/Dhamra pipeline section for optimizing pipeline infrastructure in the region. However, over the period of pre-project activities of Pilot PPP project, it emerged that PPP route will not be feasible for the "Gas pipeline infrastructure" and alternate viability gap funding mechanism need to be explored for developing gas pipelines projects in the country. In view of this, MoP&NG has clubbed the pilot PPP project (i.e. Bokaro-Ranchi-Talcher-Angul/Dhamra pipeline) with GAIL's authorized Phulpur-Haldia Gas Pipeline Project. Government is under active consideration to provide necessary financial assistance to GAIL for implementing Phulpur-Halida Gas Pipeline including Bokaro-Ranchi-Talcher-Angul/Dhamra pipeline (PDHPL). Public Investment Board (PIB) convened a meeting on 6th July 2016 and has recommended for 40% viability gas funding for entire PDHPL project.

Ministry of Petroleum & Natural Gas
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Recommendation No. 11

National Gas Hydrate Programme (NGHP)

The Committee note that the NGHP was initiated in 1997 with participation from institutions/agencies such as Directorate General of Hydrocarbons, Upstream oil PSUs such as ONGC, IOL, GAIL and IOC and National Research Institutions like National Institute of Oceanography, National geophysical Research Institute and National Institute of Ocean Technology. The Committee observe that second phase of NGHP expedition was completed in July 2015 in Krishna-Godavari (KG) and Mahanadi offshore basin. The Committee are happy to note initial results of the NGHP-02 expedition are very encouraging and gas hydrates have been discovered in KG deep offshore areas in sand reservoirs which are reported to be the thickest gas hydrate reservoir system in the world. The Committee note that based on data obtained during the expedition, sites for pilot production testing are to be identified and pilot production of gas hydrate deposits are planned to be carried out under the third phase of expedition. The Committee note that while the prospects of Gas Hydrates are encouraging, there has to be a cost benefit analysis before committing investments. The Committee, therefore, recommend that the Ministry should conduct a thorough review through an independent agency before carrying out further works under NGHP.

Reply of the Government

The results of NGHP-02 were very encouraging as two quality Gas Hydrate Reservoirs have been discovered. The cost benefit analysis is also highly favourable. About 134 TCF gas in about 8400 sq km area in KG Deep Offshore is likely to be present. Studies are in progress.

Ministry of Petroleum & Natural Gas
O.M.No.G-38011/29/2016-Fin.I dated 3 August, 2016

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

Recommendation No. 13

Coal Bed Methane (CBM)

The Committee note that India possesses world's fourth largest proven coal reserves and holds substantial prospects for exploration and exploitation of CBM. It also notes that the Ministry of Coal has given No-Objection Certificate for a total of 26,000 sq. km area of coal basins for CBM explorations. The estimated CBM resources in the identified area is about 91.8 Trillion Cubic Feet (TCF). The Committee observe that, till date, four rounds of CBM bidding have been undertaken by the MoP&NG under its CBM policy which resulted in awarding of 33 CBM blocks in the total identified area. Out of the 33 awarded blocks, only one is in production phase while seven and five are in development and exploration phase, respectively. 16 blocks are in the process of being relinquished on the ground of having poor CBM potential. The Committee are concerned about poor progress achieved so far in the exploration and exploitation of the CBM. Even after nearly a decade of start of commercial production, only one block is under production. The Committee note that Government has issued notification on 3.11.2015 granting rights to Coal India Ltd. and subsidiaries for exploration and exploitation of CBM in coal basins on nomination basis for which the CIL possess lease for mining coal. The Committee note that DGH has estimated that CBM production in 2017-18 may reach 5.77 MMSCMD from present level of 1.1MMSCMD in the country. The Committee recommend that the exploration and exploitation activities of CBM should be expedited in order to maximize production of this source.

Reply of the Government

The reasons for low CBM production may be attributed to the following issues faced by CBM block contractors:

1. Overlap Issues with existing awarded coal blocks, Oil & Gas blocks, Forest area and other projects
2. Land Acquisition problems as large number of wells have to be drilled in order to effectively drain CBM from the reservoir
3. CBM productivity per well is lower than the conventional gas well. Hence, large number of wells have to be drilled and dewatered over a considerable period to commence CBM production at commercial level
4. Delay in grant of statutory clearances viz. PEL/PML/CTE (Consent to Establish)/ CTO (Consent to Operate) from respective state government and Environment Clearance (EC) from MoEF
5. Other issues such as -Law and Order problems, Gas pricing and allocation, etc.

Government is actively engaged to enhance CBM production in India by removing all impediments in consultation with stakeholders/State Governments and also through various reforms and policy initiatives as given below:

1. To bring more area under CBM production Government has already announced right to CBM extraction by Coal India Ltd and its subsidiaries in

its lease hold areas for coal vide notification dated 3.11.2015. To operationalize the notification first meeting in this respect was already held. The issues raised by CIL in this respect being deliberated for resolution.

2. To resolve the issue of co-development of CBM and coal in the same area, Ministry is actively engaged in resolution of co-development issue by forming Core-Group on Co-development under the chairmanship of Additional Secretary (Exploration). Core-group has deliberated on the issue and effort is on to give final shape to a Co-development agreement between coal miners and CBM operator working in the same area by incorporation of relevant safety modalities.
3. Government is actively considering other initiatives e.g. removal of rigidity in CBM Contract terms and reform in CBM pricing and allocation.
4. This Ministry is also actively pursuing the pending PEL (Petroleum Exploration License)/ML (mining Lease) grant from different state Governments. On such intervention last year, 3 MLs for North Karanpura, Bokaro and Jharia CBM Blocks were issued by the State Government of Jharkhand.
5. Minister of State (IC), P& NG has reviewed the progress of CBM operation by convening a meeting of CBM Operators on 17.05.2016 and assured all possible assistance to Operators for enhancing CBM production in India.

In last two years CBM production in the country has more than doubled from 0.59 MMSCMD in May 2014 to 1.38 MMSCMD in May 2016. Around 250 new development wells were drilled in last 2 years. With exploratory and development efforts taken by the CBM operating Companies, CBM production is likely to increase further to 5.77 MMSCMD by the end of 2017-18.

Ministry of Petroleum & Natural Gas
O.M.No.G-38011/29/2016-Fin.I dated 3 August, 2016

Recommendation No.14

Pricing of Oil and Diesel

The Committee note that the crude oil prices have come down in the international market. However the Committee also note that the reduction in petrol and diesel prices in India have not been commensurate with the fall in international oil prices. In July 2014 when the Indian basket of crude oil used to cost US\$ 106.3 /bbl, the retail cost of petrol and diesel in Delhi was Rs. 73.54/litre and 57.84/litre, respectively. In February 2016 the cost of Indian crude oil was US\$ 30.33 which means the international prices fell by about 76%. However, during the same time-frame the retail prices of petrol and diesel were reduced only by 13.86% and 12.86% respectively (in Delhi). The Committee observe that the retail prices of petrol and diesel in the country have not been reduced to the extent of the reduction in international prices as a result of increase in central and state taxes' component on petroleum products. The Committee note that in February 2014 the excise duty levied by the Central Government on per litre petrol was Rs 9.48 which was increased to 21.48 in February 2016. In case of diesel, the increase during the same period was from Rs. 3.56 to Rs. 17.33. Some of the State Governments also increased sales tax/VAT etc. during the same period which caused less than expected reduction in retail petrol and diesel prices. The Committee appreciate the

efforts of the Government to maintain stability in the retail prices of petrol and diesel and keep a cushion in anticipation of future price increases in the international market.

Reply of the Government

In this regard, the Ministry has submitted that they have "noted" the recommendation of the Committee.

Ministry of Petroleum & Natural Gas
O.M.No.G-38011/29/2016-Fin.I dated 3 August, 2016

Recommendation No. 16

City Gas Distribution (CGD)

The Committee note that the City Gas Distribution (CGD) network supplies gas to four separate segments- Compressed Natural Gas (CNG) for automobiles, Piped Natural Gas (PNG) in domestic, commercial and Industrial segments. The Committee also note that further rounds of bidding for expansion of CGD network to 34 GAs were conducted by PNGRB and have received 56 bids for 24 GAs which are under evaluation. The Committee note that 28 new GAs in the CGD network have been added in the last two years. At present about 30.93 lakh households in 11 states are availing the PNG supplies. The Committee observe that the Ministry had targeted that by the year 2015-16, the total number of PNG customers would be about 50 lakhs, whereas the actual number is about 31 lakhs which indicates substantial shortfall in the target and need to scale up its effort to increase the number of connections. The Committee desire that the PNGRB/Ministry should complete the evaluation of the bids received under sixth round at the earliest and also ensure that the work already awarded under earlier rounds are monitored regularly and commissioned. The Committee note that , therefore, feel that the expansion efforts of the CGD network has to increase expeditiously and recommend that Government/PNGRB should make more coordinated efforts to expand the CGD network to more States and GAs. 96

Reply of the Government

PNGRB received 56 bids for 20 Geographical Areas (GAs) (and not 24 GAs as mentioned in recommendation no. 16) out of the 34 GAs put on bid in 6th round of bidding. Out of the received bids in 6th round, PNGRB has awarded total 13 new GAs/Districts namely Saharanpur (Uttar Pradesh), Amreli (Gujarat), Patan (Gujarat), Bhatinda(Punjab), Rupnagar (Punjab), Dahej Vagra Taluka (Gujarat), Fatehgarh Sahib District (Punjab), North Goa (Goa), Dahod(Gujarat), Banaskantha (Gujarat), Ahmedabad (Gujarat), Anand (Gujarat) and Panchmahal (Gujarat). Further, PNGRB has issued Letter of Intent for 2 more GAs namely Ratnagiri (Maharashtra) and Ahmednagar (Maharashtra) to the successful bidders. Grant of authorization for one more GA namely Rohtak (Haryana) is kept on hold due to pending legal case in the court. Decision regarding remaining 4 GAs is expected to be taken shortly. PNGRB monitors the performance of the CGD entities on quarterly basis. In this regard, PNGRB has given the quantitative targets (e.g. inch-Kilometer and number of PNG connections etc.) for 3 to 5 calendar years from the date of authorization. The CGD

entities furnish the Quarterly Progress Report (QPRs) to PNGRB in terms of PNGRB's regulations. The non-performing/ under-performing CGD operators are called for statutory hearing by PNGRB. In addition, MoP&NG is also periodically reviewing the progress of PNG network expansion with CGD entities. During the review meetings, CGD entities have attributed the following factors for slow progress of PNG coverage such as (i) In-ordinate delays in granting permission by Civic/Local bodies and levy of exorbitant charges for laying of networks and restoration of road, (ii) Differential taxes (i.e. VAT on CNG) in adjoining states and multiple taxation impacting price competitiveness of PNG and CNG and (iii) PNG connectivity to individual consumers depends on availability of pucca houses and minimum width of roads that permits laying of pipelines etc. MoP&NG has also taken up these issues with the concerned State Governments and local bodies for expediting the PNG network expansion.

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

Recommendation No.18

3-D Seismic Survey and Drilling

The Committee note that the upstream PSUs such as ONGC and OIL have not performed as per expectations in exploratory activities in petroleum sector. In 2012-13 the 3-D seismic survey was undertaken in 11402 sq. km area against the target of 5840 sq. km. In 2013-14 and 2014-15, 3-D Seismic survey was undertaken by ONGC in 8371 & 9176 sq. km, respectively, while the targets set were higher. In 2016-17, the target area is fixed much lower at 7060 sq. km. Similarly the number of exploratory wells drilled were 106 against the target 153 in 2013-14 and 108 against the target of 155 in 2014-15.

In case of OIL, the 3-D Seismic survey was undertaken in 1796 sq. km area in 2012-13 which was more than 30% in excess of target fixed. However, in 2014-15, the 3-D Seismic survey could be undertaken only in 1234 sq. km against the target of 2050 sq. km which is about 60% of the target fixed. In 2016-17, 3-D Seismic survey is to be undertaken only in 300 sq. km.

The Committee observe that exploration activity by oil PSUs needs to be stepped up significantly in order to achieve increase in production. The Committee, therefore, desire that ONGC and OIL should increase oil exploration activities including 3-D Seismic survey and digging of exploratory wells with deployment of latest technologies and recommend that adequate budget for the same may also be allocated and the performance of PSUs in oil exploration should be closely monitored by the Ministry.

Reply of the Government

Oil PSUs are making all out efforts to step up its exploratory activities utilizing its resources judiciously in exploration & development activities. ONGC/OIL are also implementing various state-of-the-art technologies available in industry in the field of seismic data acquisition (like Controlled Source Electromagnetic, Ocean bottom cable, Long Offset, Broad band etc), Passive Seismic Tomography (PST), seismic data processing (Common Reflection Angle Migration processing, Beam Processing, etc.) and software for interpretation of Geological & Geophysical data. ONGC is also using latest technologies (like Top drive system, Air Hammer drilling, Steerable mud motors, Synthetic oil based mud system etc) available in drilling of exploratory wells for smooth & fast drilling operation, drill hole stabilization while drilling, well logging tools etc.

Due to shrinkage of exploratory areas with Oil PSUs as operator year by year, 3D seismic acquisition is being acquired as per need base. In absence of grant of new exploration acreages / areas, 3D seismic acquisition is constrained. Accordingly, exploratory drilling is targeting deeper plays and unconventional plays like basement, shale gas, etc. in same available areas.

Recently Government of India has announced new Hydrocarbon Exploration & Licensing Policy (HELP). ONGC/OIL expect that its exploratory acreages / area portfolio and will have scope of step up exploratory activities in terms of seismic surveys and exploratory drilling. ONGC and OIL do not have any financial constraints about budget allocations for carrying out exploration activities including 3D seismic survey and drilling of exploratory wells. The performance of Oil PSUs are being monitored by the Ministry on monthly basis apart from performance monitoring at field level and corporate level by respective management.

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Recommendation No. 19

Oil and Natural Gas Commission (ONGC)

The Committee note that the ONGC was incorporated in 1993 under Companies Act and is the largest company in the country engaged in exploration and exploitation of hydrocarbons. The Committee note with concern that the production of crude oil by ONGC is stagnant for the past several years and at a standstill. The production of natural gas has also registered a decline. The BE target of crude oil production in 2016-17 has been fixed at 22.76 MMT which is about same as in 2015-16, i.e., 22.68 MMT. The BE target of natural gas production for 2016-17 is 24617 MMSCM which shows about 15% increase over RE 2015-16 (21840 MMSCM). The Committee also note that the plan outlay for 2016-17 has been kept at Rs. 29307 crore. During 2015-16 the plan outlay at BE stage was Rs. 36249 while at RE stage it was reduced to Rs. 31467 crore.

The Committee feel that the target for crude oil production in the year 2016-17 shows that the ONGC is not expecting any increase in the production. However, the target for natural gas production shows that about 15% increase is expected. It is not

clear from where this increase is being expected as the plan outlay (BE) for the next year is kept at a lower level than the corresponding figures for the previous year by about 20%. The Committee feel that the target for natural gas production has been kept unreasonably high. Similarly, the budgeting of plan outlays show that ONGC is not expecting any expansion of its operations in the next year. Rather the plan outlay has been reduced from the previous year.

The Committee, therefore, recommend that ONGC should evolve a better system of setting targets so that realistic figures are projected. The Committee are concerned at the lack of increase in production of crude oil planned for the next year and desire that for energy security of the country, exploration and production activities are intensified by making more allocations for it. The Committee also recommend that the ONGC should improve its budgeting so that the allocation and utilization of financial resources are more accurate. The Committee further recommend that ONGC should develop a monitoring mechanism to ensure that funds are adequately allocated to the priority areas and properly utilized. 100

Reply of the Government

Oil and Natural Gas Corporation (ONGC)

Annual Plan outlay BE, RE and actual expenditure of ONGC during 2015-16 was ₹36249.37 crore, ₹ 31,467.45 crore and ₹30110.43 crore respectively. Annual plan outlay (BE) during 2016-17 has been kept at ₹ 29307.20 crore.

It is further submitted that ONGC is making consistent endeavors of improving its budgeting and planning exercise by keeping the cost of activities into focus, rather than the summation of resource requirement for procurements etc. In this mechanism, budget is allocated to various defined activities viz. Survey, Exploratory Drilling, Development Drilling, Side-tracking of Wells, JV Investments and Capital expenditure towards creation of OIL & Gas facilities & various other capital purchases, which are to be deployed for exploration and production of Oil and Gas. This methodology ensures that the Capex estimation is backed up with realistic and achievable physical targets. A case in point is the utilization against the RE 2015-16 budget wherein against the approved Capex of Rs. 31,467 Crore, actual utilization is Rs. 30110 Crore (96% achievement).

In order to monitor the utilization status, monthly progress reports are sought from all budget units. They are required to explain reason for any underutilization and corrective measures taken.

So far as exploratory activities are concerned, ONGC is making all out efforts, through exploratory activities, to maximize its reserves base through discoveries as well as field growth. Contribution of exploratory efforts helps in arresting production decline also. Exploratory activities are envisaged to be intensified in coming years after operationalization of new Hydrocarbon Exploration& Licensing Policy (HELP).

ONGC's actual standalone crude oil (including condensate) and natural gas production during the F.Y. 2013-14 to 2015-16 and projection for FY 2016-17 (as per approved BE / Draft MOU) along with percentage variation w.r.t. previous year are as under:

Year	Crude oil		Natural Gas	
	Production (MMT)	% Variation w.r.t previous year	Production (BCM)	% Variation w.r.t previous year
2013-14	22.247	--	23.284	--
2014-15	22.264	0.08	22.023	-5.42
2015-16	22.368	0.47	21.177	-3.83
2016-17 (BE)	22.761	1.76	24.657	16.42
2016-17 (Draft MOU)	22.420	0.23	22.746	7.39

During FY 2016-17, ONGC gas production as per BE estimates is 24.657 BCM which includes ~1.94 BCM (5.3 MMSCMD) of gas from ongoing offshore projects including Development of WO-16 cluster fields, Development of C-26 Cluster fields, Additional development of B55 field, Enhanced recovery from Bassein field through Integrated Development of Mukta, Bassein and Panna Formations, Additional development of Vasai East and Daman Development in Western Offshore and Early monetization of Deep water well S2AB in Eastern Offshore. Further 0.04 BCM (0.109 MMSCMD) gas is also expected from Coal Bed Methane in Bokaro.

However, considering the prevailing trend of production and status of projects, ONGC has estimated 22.42 MMT of oil (inclusive of condensate) and 22.746 BCM gas production. Therefore, the projected increase in ONGC's oil (inclusive of condensate) and gas production in 2016-17 (Draft MOU) vis-a-vis FY 2015-16 would be 0.23% and 7.39% respectively.

ONGC has also constituted a sub-committee to the board to monitor the progress of important projects.

Major efforts to enhance Crude Oil and Natural Gas production

ONGC has taken various actions for augmenting/maintaining the crude oil and natural gas production. In addition to focus on repair of existing wells, artificial lift and stimulation of wells, following various efforts are done / being made for enhancing crude oil and natural gas production in the fields being operated by ONGC in the Offshore and Onshore areas of the country.

OFFSHORE:

Completed Projects

1. Mumbai High South Redevelopment Project Phase-II: The project envisages an incremental oil and gas production of 18.31 MMT and 2.70 BCM respectively by 2029-2030. The project was completed in June 2014.
2. Mumbai High North Redevelopment Project Phase-II: The project envisages an incremental oil and gas production of 17.354 MMT and 2.987 BCM respectively by 2029- 2030. The project was completed in June 2014.
3. Redevelopment of Heera and South Heera Fields Phase-II: The project envisages incremental oil gain of 13.361 MMT and 1.665 BCM of gas by 2034-35. The project was completed in August 2015.

Projects under Implementation

1. Development of Western Periphery of Mumbai High South field: ONGC Board has approved investment proposal on 25.04.2012. This scheme envisages an incremental production of 1.031 MMT of oil and 0.214 BCM of gas in 15 years. The overall project, including drilling, is expected to be completed by June 2017.
2. Mumbai High North Redevelopment Project Phase-III: ONGC Board has approved the investment proposal on 27.06.2014. The scheme envisages an incremental oil & gas production of 6.997 MMT and 5.253 BCM respectively by the year 2029-2030. The overall project, including drilling, is expected to be completed by May 2017.
3. Mumbai High South Redevelopment Project Phase-III: ONGC Board has approved the investment proposal on 14.11.2014. The scheme envisages an incremental oil & gas production of 7.547 MMT and 3.864 BCM respectively by the year 2029-2030. The overall project, including drilling, is expected to be completed by March 2019.
4. Neelam Redevelopment Plan for Exploitation of Bassein&Mukta pay-Neelam field: ONGC Board has approved the investment proposal on 13.08.2015. The scheme envisages an incremental oil & gas production of 2.76 MMT and 4.786 BCM respectively by the year 2034-35. The overall project, including drilling, is expected to be completed by May 2019.

Marginal Fields

Completed Projects

1. North Tapti gas field Development: The project envisages production of 4.116 BCM of Gas in 10 years. Production commenced from June 2012. Project was completed in May 2013.
2. Development of BHE and BH-35: The project envisages 0.422 MMT of oil & condensate and 0.529 BCM of gas over a period of 8 years. Production commenced from Feb 2014. The project was completed in February 2014.
3. Development of B-46 Cluster fields (B-46, B-48, B-105 and B-188): The project envisages production of 5.273 BCM gas & 1.68 MMm³ condensate in 12 years. Production commenced from Feb'2013. The project was completed in May 2014.
4. Development of SB-14: The project envisages 0.197 MMm³ of condensate & 1.641 BCM in 12 years. The project was completed in March 2014.

5. Additional Development of NBP (D-1) field: The project envisages incremental oil production of 8.298 MMT oil by 2024-25. Production commenced from Aug 2012. The project was completed in July 2014.
6. Development of C-24 cluster (C-22, C-24, C-39-I, C-39-A): The project envisages gas production of 10.771 BCM and 2.166 MM Cubic meter of condensate by 2024-25. Production commenced from Sept 2009. The project was completed in July 2014.
7. Development of B-22 Cluster fields (B-22, BS-12, BS-13, B-149): The project envisages production of 2.46 MMT of oil, 1.13 MMT of condensate and 6.56 BCM gas in by 2021-22. Production commenced from Aug 2011. The project was completed in July 2014.
8. Development of B-193 Cluster fields (B-193, B-172, B-178, B-179, B-180, B-28A, B-23A, B-28): The project envisages production of 5.57 MMT oil, 0.75 MMT of condensate & 5.12 BCM gas by 2025-2026. Production commenced from October 2013. The project was completed in May 2015.
9. Development of Cluster-7 (B-192, B-45 & WO-24 structures): The project envisages production of oil & condensate is 9.73 MMT and gas 4.52 BCM over a period of 16 years. Production commenced from Sept 2013 through alternate arrangements. The project was completed in May 2015.
10. Development Plan for lower pays in NBP-14 block of NBP field (D-1): The project envisages 2.52 MMT of crude oil by 2029-30. The project was completed in Nov'2015.
11. Development of WO-16 Cluster fields (WO-5, WO-15, and WO-16 along with B-119/121): The project envisages production of 2.83 MMT of crude oil & condensate and 8.58 BCM of gas by 2025-26. The project facilities have been completed in January 2016 (except MOPU), however, production from the project commenced from June 2015 through alternate arrangements. MOPU SagarSamrat is likely to be commissioned by December 2016.

Projects under implementation

1. Development of C-26 Cluster fields (C-23, C-26 & B-12-1): The project envisaged gas production of 5.94 BCM and 0.644 MMm³ of condensate by 2024-25. The project is likely to be completed by May 2016 except MOPU.
2. Development of B-127 Cluster fields (B-127, B-157 & B-59) and additional development of B-55: Project envisages production of 1.836 MMT of crude oil & condensate and 2.093 BCM of gas in 10 years from B-127 cluster. Also production of 0.155 MMT of condensate & 2.583 BCM of gas in 13 years from B-55 field. The project is likely to be completed by June 2017.
3. Development of B-173A field: The project envisages 0.567 MMT of crude oil & 0.071 BCM of gas by 2025-26. The project is likely to be completed by May 2016.
4. Enhanced recovery from Bassein field through Integrated Development of Mukta, Bassein and Panna Formations: ONGC Board has approved the investment proposal on 14.11.2014. The scheme envisages an incremental production of 18.830 BCM of gas, 1.90 MMm³ of condensate and 0.183 MMT of oil by the year 2027-2028 (as per revised approval in Jan'15). The overall project, including drilling, is expected to be completed by December 2017.

5. Additional Development of Vasai East: The project envisages an incremental oil & gas production of 1.827 MMT and 1.971 BCM respectively by the year 2029-2030. The project is likely to be completed by December 2018.
6. Daman Development Project (C-24 Additional & B-12 fields): The project envisages cumulative gas & condensate production of 27.67 BCM and 5.01 MMm³ respectively by 2034-35. The project is likely to be completed by May 2019.

Development of Eastern Offshore Oilfields

Completed Projects

1. Integrated Development of G-1 & GS-15: Integrated development of these fields envisages production of 0.693 MMT of oil and 4.307 BCM of gas by 2026-27. Production commenced from Aug 2011. The project was completed in June 2015.

Projects under implementation

1. Development of Vashista& S-I Fields: The project is expected to result in gas production of 15.96 BCM in 11 years. The project is likely to be completed by December 2017.
2. Development of shallow water wells in Eastern Offshore through mud line completions: The project is expected to result in gas production of 1.702 BCM in 9 years. The project is likely to be completed by May 2017.
3. Field Development Plan (FDP) for Development of Cluster 2 fields of NELP Block KG-DWN-98/2: The project envisages production of 23.526 MMT of oil and 50.706 BCM of gas in 16 years. The project is likely to be completed by June 2020.

ONSHORE:

Completed Projects

1. Lakwa-Lakhmani IOR Scheme was completed in September 2013.The scheme envisages an incremental oil production of 3.061 MMT and gas production of 0.36 BCM by 2023-24.
2. Geleki IOR Scheme was completed in August 2013.The scheme envisages an incremental Oil & gas production of 4.761 MMT and 1.589 BCM (revised) respectively upto 2023-24.
3. Rudrasagar IOR Scheme was completed in March 2014. The scheme envisages an incremental Oil & gas production of 2.507 MMT and 0.393 BCM (revised) respectively up-to 2023-24.

Initiatives to enhance production:

1. Comprehensive redevelopment of Gamij Field through 'Stage Gate' process is under progress.
2. NELP discoveries in onshore such as Karnnagar, West Patan&Vadatal in March'2015 and Nadiad in April'15 and Madanam in October'15 are monetized.
3. Development of Malleswaram field in KG Asset and Nagayalanka JV block of KG onshore is in progress.
4. Development of HPHT reservoirs in Cauvery and Rajahmundry Assets through outsourcing of services from International companies / experts.

5. Various projects have been taken up in Onshore Assets with the aim of removing surface bottlenecks to improve productivity, product quality, system integrity and meeting environmental norms.

Other initiatives:

1. Technology Induction/adoption/absorption and engaging international experts in the area of Drilling, Well completion, Artificial lift, Well stimulation, facility construction etc. is being done regularly according to the technical requirement of the wells / fields and feasibility.
2. Considering the importance of sustenance / arresting decline of production from a field, company is always on the lookout for latest technology to minimize cost of new wells, better placement of wells, improve productivity of existing and new wells, revive old or closed wells etc. so that production possibilities from the fields is maximized.

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Recommendation No. 20

Oil India Limited (OIL)

The Committee note that OIL is a PSU engaged in exploration of hydrocarbons, extraction of LPG by fractionalization of natural gas and transportation of crude oil produced by itself and ONGC in north-east region to the refineries located in that region. It also transports crude oil to Bongaigaon refinery. The Committee also note that the production of crude oil by OIL in the last two years was about at the same level of around 3.5 MMTs. The production has been reported to be affected because of local issues such as bandhs and blockades and ageing of old wells. The production of natural gas and LPG has also more or less stagnated. As regards financial outlays, the Committee note that plan outlay for 2016-17 is kept at Rs. 4020 crore which is about 15% more than the RE 2015-16. The Committee note that during the BE 2015-16, the plan outlay was Rs. 3918 crore but the OIL could utilize only Rs. 3537 crore.

The Committee are concerned that there has been no increase in production of crude oil in the last two years and the production target has been kept at roughly the same level for the current year. The total plan outlay for OIL during 12th plan was Rs. 19003 crore out of which Rs. 16015 crore (84%) have been utilized in the first three years suggesting overutilization. The Committee note that Rs. 6413 crore has been used for acquiring overseas assets. The Committee also note that higher outlay by about 15% (BE 2016-17 compared to RE 2015-16) has been kept in the current year because of higher targets of exploratory drilling.

The Committee recommend that OIL should take all necessary measures for increasing production of crude oil. While appreciating higher outlay in BE 2016-17 for undertaking exploratory activities including developmental drilling, the Committee are unhappy to note that in previous years, the target for drilling has not been met. The Committee recommend suitable monitoring to ensure that the targets of exploratory and developmental drilling for the current year is fulfilled. 101

Reply of the Government

Annual plan outlay (BE) of the OIL during 2015-16 was ₹3917.64 crore which was revised to ₹3537.27 crore at the RE stage, against which actual expenditure incurred was ₹3622.25 crore. Annual plan outlay for 2016-17, is proposed at ₹4019.71 crore which is about 14% and 3% higher than RE and BE respectively for 2015-16. It may be mentioned that at the beginning of 12th Five Year Plan, OIL has proposed ₹18986.06 crore. However, as per Annual Plan proposals Plan Outlay is ₹18528.62 crore. During the three years of 12th Five Year Plan, OIL has utilised ₹16014.76 crore. However, during the last four years, OIL has utilised ₹19637.01 crore. The higher utilisation is primarily on account of overseas acquisition in 2013-14.

Reasons for underutilisation of allocated budget during 2015-16:

The major reasons for lower utilisation of allocated budget for exploratory drilling by OIL during 2015-16 as already furnished in reply to Recommendation No.17, are reiterated as under:

- (i) During financial year 2015-16, OIL completed drilling of 16 exploratory wells against targeted 32 wells.
- (ii) Higher rig resource was allocated for development drilling in OIL's Petroleum Mining Lease (PML) areas of Assam in order to arrest declining oil production.
- (iii) Drilling of two exploratory wells in OIL's PML area in Rajasthan was deferred to 2016-17 as the same is linked to Heavy Oil Monetization in the area for which efforts are in progress
- (iv) Drilling of four wells in NELP blocks could not be undertaken due to delay in statutory / regulatory permissions/clearance.
- (v) Exploratory drilling campaign in the block KG-ONN-2004/1 suffered due to delay in deployment of rig as use of a bridge was resisted by local people. The drilling operation could start only w.e.f 12th January, 2016.

OIL's crude oil production is from old fields which are in depletion phase and the small new structures that exist in the vicinity of the producing major fields. Therefore, due to non-availability of new large finds, present discovery of small structures is inadequate to compensate the decline of major fields on account of reservoir related issues like rising water cut, failures like sand ingressions associated with water cut etc.

OIL has kept a target of 3.30 MMT (3.28 MMT from OIL + 0.02 MMT from JV Contribution) for the year 2016-17. Crude oil production plan for the year 2016-17, has been prepared based on contributions from different sources, namely, wells that were on production as on 01.04.2016, production addition through sick well liquidation through work over operations and contribution from new wells added through drilling during the currency of the year.

In order to improve upon the hitherto challenging situation in crude oil production, certain action plans were chalked out and current status of the same as given below.

1. Installation of ESP

With an aim to improve production from depleted reservoirs, installation of Electrical Submersible Pumps(ESP) as a means of Artificial Lift Pumps has been planned. A

total of 10 ESP will be installed in OIL's oilfield which will be carried out in four phases. In the first phase two wells were completed. The completed wells are showing encouraging result.

2. Matrix Acidization

For enhancement of production from wells with formation damage, matrix acidization job has been taken up. For the first phase, only water disposal wells and water injection wells are taken up for acidization which will indirectly help in maintaining crude oil production and reservoir management. In the present phase, matrix acidization job completed in three nos. of wells and the wells are showing increased infectivity.

3. Radial Drilling

For enhancement of crude oil production from old fields like Naharkatiya and Jorajan, Radial Drilling has been planned in phased manner so that the gain in crude oil could be achieved through testing of higher up sands. In the current phase, Radial drilling activity has already been completed in 4 wells. Based on success in the first phase, a new contract will be formulated to complete more wells by radial drilling.

4. Gravel Pack

Sand ingressions has become a major issue in reducing crude oil production in OIL's major oilfields like Makum&Hapjan and gas fields like Lohali, Deohal etc. Gravel pack campaign for total 20 nos. of wells has already been initiated. Out of 20 wells, the gravel pack jobs at 4 wells have already been completed.

5. Chemical Water Shut-off

In the recent times, water cut has been increasing significantly from OIL's matured fields like Naharkatiya, Makum, Bhogpara etc. To arrest the increasing trend of water cut and thus increasing the longevity of the producing wells, implementation of chemical water shut off technology is being envisaged in Bhogpara and a couple of Eocene wells.

6. Hydraulic Fracturing

In the initial phase of the hydro fracturing campaign of OIL, 5 nos. of wells across its oilfields were taken up. The total gain of crude oil and gas production after hydraulic fracturing was 61 KLPD and 49500 SCMD respectively. In view of the encouraging results in the campaign the contract has been extended for another 5 more wells. In the present phase, hydro fracturing has already been completed in three wells.

7. Setting up of security camps at various strategic locations to prevent environmental losses.

Environmental issue like Bandh, Blockades and miscreant activity have adversely affected crude oil production of OIL. To minimize the loss due to environmental reasons, security in oilfields has been intensified by setting up additional security camps in strategic localities.

Drilling activities by OIL

Although OIL could not achieve its drilling target for the year 2015-16, OIL was able to improve its drilling performance year over year basis both in no. of wells and drilling meterage since 2013-14. In 2015-16, OIL achieved a drilling meterage of

1,54,874metres., which is highest in last decade and 8% higher than its achievements during the year 2014-15.

Above improvement is despite having to face challenges in land acquisition, hostile terrains of frontier areas, more deviation wells with high angle & high displacement to mitigate the challenges in land acquisition leading to increasing down-hole complications, environmental issues, small weather window in North East because of extended monsoon in the region and resulting flood in operational areas,

However, with increase in no. of drilling rigs and more rig years, OIL has planned to drill 68 wells (Exploratory – 29 wells, Development – 39 wells) and shall make all endeavours to achieve the same.

Monitoring of progress of exploratory and development drilling are being carried out both at field level and corporate level. Monthly progress on these activities are being monitored by the Ministry.

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Recommendation No. 21

Gas Authority of India Limited (GAIL)

The Committee note that GAIL is the Country's principal natural gas transmission and marketing company. GAIL has expanded its presence in power, LNG re-gasification, City Gas Distribution and exploration and production through equity and Joint Venture (JV) participation.

The Committee are concerned that the figures relating to natural gas marketing, natural gas transmission, Liquid Hydrocarbon and LPG transmission has either remained static or gone down during the last three years. Only the polymer production has increased in the last three years. The production which was 440 MMT in 2013-14 increased to 490 MMT at RE stage in 2015-16 against BE of 580 MMT. The BE 2016-17 for production is 670 TMT. The Committee are also concerned that the turnover of the Company has gone down from Rs. 57245 crore in 2013-14 to Rs. 56569 crore in 2014-15. The turnover for the first three quarters of 2015-16 is Rs. 39987 crore. This is accompanied with decrease in gross margin. Against the gross margin of Rs. 5620 crore in 2014-15, it was Rs. 3681 crore in the first three quarters of 2015-16. These decreases have been attributed to low product prices. The Committee feel that the reasons cited for decline in the figures are not justified as India is still an under-penetrated market and any fall in product price should have been adequately made up by expansion in operations.

The Committee desire that the expansion of GAIL operations need to be undertaken on priority basis and the implementation of projects such as National Gas Grid need to be expedited. The Committee recommend that GAIL, in consultation with the Ministry, develop a consultative mechanism to engage with local people and agencies to redress the issue of local disruptions to its work. 102

Reply of the Government

GAIL is committed to play a key role in nation-building by expanding infrastructure in the Natural Gas value chain and beyond as per the mandate entrusted upon it. GAIL took the pioneering step to promote and accelerate the growth of natural gas in the country through its pipeline infrastructure including initiatives for cross-country pipelines, extraction & production of value added products i.e., Liquid Hydrocarbons & Petrochemicals from natural gas, long term tie-up for LNG import from various international sources, LNG Terminal & Regasification infrastructure for importing LNG, investments in Exploration & Production, Renewables etc.

GAIL, being a midstream oil & gas company, depends on upstream companies like ONGC, Reliance, JVs, etc. for supply of domestic gas for Marketing and Transportation. Domestic Gas production has gone down from peak of 140 MMSCMD in 2010-11 to 85 MMSCMD in 15-16 and hence gas transmission and marketing volumes handled by GAIL have substantially come down.

Huge Investments have been made by GAIL for the development of pipeline infrastructure in anticipation of increase in domestic gas production after gas discovery from RIL KG D6 & other fields. However, due to steep fall in production from KG-D6 and fall in production from ageing ONGC / PMT fields, capacity utilization of pipelines has substantially gone down from around 70 % in FY: 2010-11 to merely 45 % in FY: 2015-16. New pipelines of GAIL including Dadri-Bawana-Nangal Pipeline which was taken up on priority by GAIL as per government directive for Commonwealth games are now operating at 10-15% of installed capacity. Underutilization of most of the recently executed pipelines due to non-availability of domestic gas, affordability issues w.r.t imported LNG for anchor customers and reduction in pipeline tariffs by PNGRB are severely affecting profitability of GAIL.

Primary anchor load consumers of Natural Gas i.e. Fertilizer and Power have not grown in the last few years. No new Fertilizer plants have been set up since 1999. In the Power sector, out of 24200 MW of gas based power generation capacity connected to the pipeline grid, 9800 MW is receiving limited volume of domestic gas and operating at low PLF (~32%). 14,000 MW of gas based capacity is totally stranded and not able to operate sustainably on account of non-availability of domestic gas & pending power sector reforms. Ministry of Power has advised developers not to plan any new projects based on domestic gas, till further notice.

Further, in addition to decrease in domestic gas availability, quality of gas has also changed with higher fractions like C3/C4 (propane / butane) content required for LPG production decreasing over the years. As a result, GAIL's Gas Processing Units at Usar (Maharashtra) and Vaghodia (Gujarat) are idling while others are operating at sub-optimal capacities. GAIL's LPG recovery unit at Lakwa, Assam has been handed over to Brahmaputra Cracker & Polymer Limited for recovering feedstock for petrochemical complex. Hence, LHC production from GAIL's plants has gone down from 1302 TMT in 2013-14 to 1088 TMT in 2015-16.

Availability of adequate quantity of rich gas is essential for running GAIL's landlocked gas based petrochemical complex at Pata, UP. Due to change in gas allocation policy effective from April 2014, allocation of domestic gas for Pata unit has gone down substantially and consequently consumption of expensive RLNG which is the feedstock for the plant has increased (from 37% in 2013-14 to 94% in

2016-17). With the plant running on LNG, input cost has gone up substantially (feed gas cost increased by Rs. 25,781/MT in 2015-16 compared to 2013-14) thereby substantially increasing the cost of production and severely affecting the profitability of the segment.

Further, Gas industry is facing a complex and difficult environment today, with historically low commodity prices reflecting rampant supply and weak global demand amid concerns over slowing economic growth across the world resulting in steep fall in Liquid Hydrocarbon (~ 40 % fall in LPG price w.r.t FY:15) & Polymer prices (~15 % in petrochemicals w.r.t FY:15). This has severely affected Revenue and Profitability of GAIL.

GAIL has also taken up many projects including RGPPL, Brahmaputra Cracker & Polymer Limited in Assam, several Pipeline projects etc. as per directives of the Government for strategic interest of the nation. Investments made by GAIL in these avenues are not generating returns.

Crude prices starting falling from 2014 onwards resulting in cheap availability of alternate feedstock / fuels like Naphtha / Furnace Oil, etc. Due to this, Long-term RLNG price became unviable in the market. Discoms are not scheduling gas based power generation due to higher cost of power generated with RLNG and as a result Power sector customers defaulted on their RLNG off-take / purchase contractual commitments. To overcome this low demand of RLNG, pro-active actions have been taken by GAIL during FY 2015-16 to increase the RLNG consumption:

- For a viable RLNG supply, a scheme was notified by Ministry of Power for supply of E bid RLNG by GAIL to stranded Gas based power plants through a reverse auction mechanism from June'15 onwards. This has been successfully implemented by GAIL, as the operator of scheme. Two rounds of the said scheme have been already completed and currently third round is under progress. This has resulted in increase of approx. 5.8 MMSCMD of RLNG sale during FY 2015-16.
- A scheme was notified by MoP&NG pursuant to which GAIL as the pool operator has been arranging RLNG requirement of fertilizer plants. RLNG pooling scheme has been successfully implemented by GAIL from July'15 onwards. GAIL had achieved average RLNG sales volume of ~2.5 MMSCMD under fertilizer pooling scheme for FY 2015-16.
- Long-term RLNG (LTRLNG) sales volume for FY 2015-16 had reduced primarily due to high contract price till Dec.'15. Contract price was renegotiated with LNG supplier and subsequently, price has been linked with Brent crude from Jan.'16 onwards. This has led to LTRLNG sales volume increase, up to a level of 16-17 MMSCMD during Jan-March 2016 compared to average LTRLNG sale of ~ 8-9 MMSCMD during preceding financial quarters.
- In addition to the above, GAIL is continuously taking up for supply of RLNG to small/medium size customers and providing last mile connectivity to them for increase in Gas sales. GAIL is also discussing for supply of RLNG to the proposed brownfield/greenfield fertilizer plants both on the existing network and along GAIL's Jagdishpur - Haldia pipeline.

Other Initiatives:

A) LPG transmission:

- Expansion of LPG transmission business is being undertaken by way of augmenting the capacity of Jamnagar Loni LPG Pipeline (JLPL) from 2.5MMTPA to 3.25MMTPA. Necessary authorization has been obtained from PNGRB and implementation of the project is underway. It is expected that the augmented capacity of JLPL would be commissioned by the end of 2017-18.

B) Polymer and Liquid Hydrocarbon products:

- The polymer production capacity of GAIL has gone up from 4,10,000 to 8,10,000 MTPA by installing the new polymer plant of 4,00,000 MTPA capacity at Pata which has been commissioned recently. In the FY 2016-17,
- the expected production from Pata shall be 6,50,000 MTPA. Out of this 6,50,000 MTPA, 4,10,000 MTPA shall be contributed by the existing Polymer plants whereas 2,40,000 MTPA shall be contributed from the new plant.
- In addition to the above, GAIL shall also be marketing 100% products from petrochemical plant set up by GAIL's subsidiary M/s Brahmaputra Crackers & Polymers Ltd (BCPL), Assam. BCPL has recently commissioned the cracker as well as downstream plants. BCPL has capacity to produce 2,20,000 MTPA of HDPE/LLDPE & 60,000 MTPA of Polypropylene besides other liquid hydrocarbons.
- Following Liquid Hydrocarbons as by-products of polymer plants shall also be available from Pata- Expansion and BCPL plants:

Sl. No.	Product	Designed Capacity (TMTPA)	Source
1	Benzene Rich Product (BRP)	32.8	Pata-II
2	Pyrolysis Fuel Oil (PFO)	12	Pata-II
3	Polymer Grade Propylene	49	Pata-II
4	Hydrogenated Pyrolysis Gasoline (HPG)	43	BCPL, Lepetkata
5	Carbon Black Feed Stock (CBFS)	9	BCPL, Lepetkata

With the above actions undertaken by GAIL, The Polymer & Liquid hydrocarbon scenario will undergo a sea change in the coming years.

C) National Gas Grid:

- The implementation of projects such as National Gas Grid is being taken up by GAIL in a time bound manner synchronizing with (i) progress of development of upstream sector for increased gas availability through domestic sources and RLNG from international markets (ii) downstream sector development along the pipeline route and (iii) commercial viability or capital grant by the Government.
- With regard to development of consultative mechanism with local people and agencies to redress through local disruptions, GAIL & MoP&NG has taken up the RoU acquisition issue with the State of Kerala with the State Administration of Kerala & favourable result are observed.
- GAIL through MoP&NG intends to consult Chief Secretary of the respective states, for identification of community development Programmes in consultation with District Collectors and public representatives in the districts enroot the pipeline for creating positive environment in local populace for smooth implementation of the pipeline projects.

- Further, it is prudent that Natural Gas Pipeline Projects be treated as infrastructure projects at par with Highways, Railway Lines etc. by respective State Governments and the respective State Governments shall own the responsibility of ensuring timely availability of hindrance free Right of Use, encumbrance free permanent land and timely availability of various statutory permissions under the control of State Governments to ensure smooth execution and timely completion of Projects. Efforts are being made by GAIL, with the support of MoP&NG in influencing the State Governments to own these activities.

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Recommendation No. 22

Indian Oil Corporation Limited (IOCL)

The Committee note that the Indian Oil Corporation Limited (IOCL) which was formed in 1964, is the largest downstream oil PSU of the country. It is a diversified, transnational, integrated energy company with activities in refining, pipelines, marketing and cryogenics and explosives. There is an full-fledged R&D Centre in Faridabad for improving the refining process to conserve oil and for development/improvement of lubricants/petroleum products. It owns 11 refineries including those located in Guwahati, Barauni, Vadodara, Haldia, Mathura, Digboi, Panipat, Bongaigaon and Paradip. The Committee also note that the Paradip refinery was finally inaugurated in March 2016 after long delays resulting in huge cost overruns.

The Committee note that the total crude throughput of the refineries in 2014-15 was 53.59 MMT while the projected throughput for 2015-16 and 2016-17 are 57.51 MMT and 62.25 MMT respectively. Total throughput during first 3 quarters of 2015-16 was 41.68 MMT which is about 72% of the projected throughput. The Committee observe that pipeline throughput in 2014-15 was 75.68 MMT which is projected to marginally increase at 76.65 MMT in 2015-16. The pipeline throughput stood at 77.5% of the total during the first three quarters of 2015-16. BE 2016-17 for refinery throughput has been kept lower by 5% from the previous year at 73.33 MMT. The sales figures of the Company stood at 76.51 MMT in 2014-15. Projected figures for 2015-16 and 2016-17 are 75.43 MMT and 75.60 MMT respectively. In the first three quarters of 2015-16 the sales figure stood at 59.15 MMT which is about 79% of the projected figure for the year. The Committee note that the plan outlay for 2014-15 was Rs. 14314 crore which decreased by about 20% in 2015-16 to Rs. 11503 crore. However, in the first 3 quarters the expenditure was Rs. 6962 crore which is only 60.5% of the outlay. The plan outlay figures for BE 2016-17 is projected at Rs. 13773 crore showing an increase of almost 20%. The Committee feel that the figures for 2016-17 appears highly ambitious because the IOCL has been able to utilize only about half of this amount in three quarters of previous year.

The Committee recommend that budgeting practices of IOCL needs improvement to ensure that realistic figures are projected keeping in view the capacities of the Company. The IOCL also needs to monitor its financial utilization so that the funds available are actually used by the Company and not kept idle. The

Committee further recommend that the state-of-the-art refinery at Paradip may be operated to the maximum extent of its capacity at an early date.

Reply of the Government

Currently various processing units of Paradip Refinery are under stabilization stage after commissioning. Further following activities are under progress:

1. Commissioning of Alkylation unit (Which produces MS blend component) is scheduled for Aug'16
2. Commissioning of following facilities for finished products evacuation are scheduled for Sep' 16
 - a) Track electrification and double spur rake loading facility at Paradip Terminal for increased rail rake loading of products
 - b) Commissioning of Paradip-Raipur-Ranchi product pipeline (PRRPL) till Raipur
 - c) Commissioning of South Oil Jetty (SOJ) at Paradip port for products evacuation through coastal movement

With completion of above mentioned activities/projects, crude processing at Paradip is planned to be scaled up gradually to the maximum extent of its capacity.

IOCL

Annual Plan outlay of IOCL for 2014-15 was ₹11375 crore against which ₹14313.68 crore was utilised. BE for 2015-16 at ₹11540 crore was about 1% higher than BE for 2014-15 and expenditure was ₹11484.74 crore. IOCL has kept BE for 2016-17 at ₹13772.87 crore. The BE increase during 2016-17 is due to the following projects:

- (i) Polypropylene project at Paradip Refinery.
- (ii) Distillate Yield Improvement (Coker) at Haldia Refinery
- (iii) BS IV project at Gujarat and Barauni Refinery
- (iv) Petcoke Evacuation Project at Paradip Refinery
- (v) LPG Import Facility at Kochi
- (vi) Paradip-Hyderabad Pipeline.

While finalising the BE, detailed analysis of each ongoing and new project proposed, is carried out. Although intensive monitoring of physical and financial progress of projects is carried out, in certain cases like exploration and production related schemes, which are significantly affected by the global developments related to oil and gas industry, variation between estimated and actual utilisation of funds does come in.

Recommendation No. 24

India-Africa Cooperation in Hydrocarbon

The Committee note that Fourth India-Africa Hydrocarbon Summit was organised in New Delhi where the issues relating to increase in Hydrocarbon trade and investments in African countries were discussed. Africa has become an important source of crude oil for India and we are currently importing about 26 per cent of our crude oil requirements from African countries. The Committee note that Africa is blessed with vast hydrocarbon resources, substantial areas of which remain unexplored and the potential for future collaborations with Africa is very high. This opens substantial exploration and production opportunities for Indian companies. While Africa can be reliable source of our hydrocarbon needs, India is in a good position to offer its expertise in capacity building and other related fields in hydrocarbon sector. India can also develop other ancillary industries in African countries such as fertilizer factories which can then be exported to India leading to mutual prosperity.

India's demand for hydrocarbons and Africa's supply of the same is expected to grow and it is possible to harness the complementarities in this sector to ensure economic development in both India and Africa. The Committee, therefore, recommend that the Government should prioritize its bilateral cooperation with African countries in the hydrocarbon sector with emphasis on exploration and production activities in unexplored areas specially in sub-Saharan Africa.

Reply of the Government

The 4th India-Africa Hydrocarbons Conference was organized in New Delhi from January 21-22, 2016. The delegations of 9 African countries viz. Mauritius, Morocco, Algeria, Sudan, South Sudan, Tunisia, Senegal, Equatorial Guinea and Liberia were led by respective Ministers. Senior officials led the delegations from Nigeria, Ghana, South Africa, Egypt, Tanzania, Kenya, Mozambique, Uganda, Libya, Cote d'Ivory, Gabon & Sierra Leone.

India's engagement with African countries in the petroleum sector has been on an upswing in the past few years with nearly 16% of India's crude oil import coming from Africa, majority coming from Nigeria and Angola.

During the bilateral meeting, Ministry of Industry, Commerce and Consumer Protection of Mauritius requested India's assistance in developing Mauritius as a regional hydrocarbon hub. In this regard, a visit to Mauritius of Shri Dharmendra Pradhan, MoS (I/C), MoPNG was scheduled in April, 2016. However, the said visit was postponed. Equatorial Guinea and ONGC Videsh Ltd. (OVL) signed a Memorandum of Understanding on exploring potential investment opportunities within the hydrocarbons sector in Equatorial Guinea. India announced additional 250 fully funded scholarships for African nationals for technical and professional courses in the Hydrocarbons sector in India institutes.

In the first half of 2014, two Indian national oil companies ONGC Videsh Limited (OVL) and Oil India Limited (OIL) completed the acquisition of 20% participating stake in Area 1 of the Rovuma gas block, Mozambique at a cost of US\$

5.115 billion. This is in addition to 10% already held by another national oil company, Bharat Petro Resources.

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

Recommendation No. 25

Reduction of Oil Import dependence

The Committee note that the Government has embarked upon the target of reducing imports in energy sector particularly the crude oil and gas by at least 10% by 2022. The Committee note that the Committee constituted by the Ministry, after deliberating on the subject, has submitted draft report for the consideration of the Ministry. The Committee has recommended five pronged strategy comprising of increasing production of oil and gas, energy consumption and energy efficiency, demand substitution, promoting alternate fuels/renewable and improvement in refinery process.

The Committee appreciate the initiative of the Government for reducing our import of petroleum products. However, it is surprised to note that energy conservation has not been included in the strategy for attaining the objective. Energy conservation should be an important part of any such strategy in a country having the size of population like India. The Committee recommend that energy conservation should be included in the strategy for reducing import of petroleum products in the country.

Reply of the Government

In the five pronged strategy recommended by the Committee constituted for “Preparing a Roadmap to reduce dependency on import in energy by 10 % by 2021-22”, Committee has included ‘Energy Conservation and Energy Efficiency as one of the key strategies for attaining the objectives. He above key area has been included at Chapter 5 of the Committee’s Report.

Steps taken for conservation and energy efficiency efforts of petroleum products and natural gas across various sectors of the economy like transport, industry, domestic and agriculture etc are captured in the Report.

It has been estimated in the Report that by the year 2021-22, targets of net incremental oil and gas savings of 2 Mtoe through PCRA’s efforts and 3.8 Mtoe through the efforts of BEE can be achieved by embracing current and planned measures for energy conservation and energy efficiency.

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CHAPTER III

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

Recommendation No. 23

International Gas Pipeline Projects

The Committee note that in order to address the growing energy needs of country's economy, Government has embarked upon projects aimed at bringing gas from gas-rich Central Asian countries to India. The Turkmenistan-Afghanistan-Pakistan-India (TAPI) -1814 km long pipeline project-to be built at a cost of US\$ 10 billion is one such important project. The Committee are happy to note that the project has finally taken off with the ground breaking ceremony held in Turkmenistan after resolution of all the major issues between the participating countries. The Committee also note that consortium leader for the TAPI project has already been selected and work has started in Turkmenistan. As per project report, the pipeline is likely to be completed by 2019. The Committee recommend that the TAPI project which aims at bringing much needed gas to the country should be pursued with a focused approach so that there is no time or cost overrun in the project.

The Iran-Pakistan-India (IPI) was planned for transportation of natural gas from Iran to India through Pakistan. The Committee note that about 30 MMSCMD natural gas will be supplied to India through the project after completion. The Committee also note that Iran has completed the pipeline (2700 km) up to its border with Pakistan and the onus is now on Pakistan to start work in their territory. The Committee desire that the project should be pursued to resolve outstanding issues and recommend that the project needs to be monitored closely as international conditions have become favourable following lifting of sanctions against Iran.

Reply of the Government

TAPI

The Ground Breaking ceremony to start the work on the Turkmen leg of the Turkmentistan-Afghanistan-Pakistan-India (TAPI) pipeline was held at Mary, Turkmenistanon 13th December, 2015. Following the feasibility report and technical study conducted by relevant agencies, the overall project duration is estimated to be 6 3/4 years from the start of the Front End Engineering Design (FEED) process till handing over of the pipeline for commercial operation. The pipeline will enter India at Fazika, Punjab.

The 247th Steering Committee meeting of TAPI Gas Pipeline project was held on 7th April, 2016 in Ashgabat, Turkmenistan. During the visit companies representing the four participating countries signed the Investment Agreement relating to initial equity infusion for the expenditure to be the pre-FID activities has been estimated Decision (FID) was signed. The cost of the pre-FID activities has been estimated as USD 218 million. The estimated cost as per the ADB commissioned M/S Pans pen Report for the project is US \$ 15 billion, including capital cost and funding cost.

IPI

Various Trilateral and Bilateral Joint Working Group meetings have been held in the past among Iran, Pakistan and India to finalize the issues like transportation cost, transit fee, price review, and governing law/seat of arbitration & delivery point. A JWG meeting between India -Pakistan was held in Islamabad in April 2008 which was followed by a Minister level meeting the same month at Islamabad and the issue related to GSPA, delivery point, structure of the project in Pakistan, Transportation tariff and Transit Free were discussed. No JWG meeting has been held since April 2008.

Due to the non-resolution of critical issues like the project structure, delivery period of gas, safety and security, pricing etc and the US sanctions on Iran, the IPI project did not move forward and no 'tripartite meeting could be held after 2008. However, during the 1st India-Iran Joint Working Group on Oil and Gas issues held in December 2015, both sides discussed evacuation of gas from Iran through various means including Iran -Pakistan - India (IPI) and sub-sea pipelines. However, no discussions took place on the IPI Pipeline project. During the visit of Hon'ble MoS(I/C) PNG to Iran in April 2016 and both sides agreed to continue examining various means of evacuation of gas from Iran to India, including through the proposed Iran-Pakistan-India pipeline and sub-sea pipelines.

MoPNG is in contact with Ministry of External Affairs on future course of action with regard to IPI Pipeline.

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CHAPTER IV

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

Recommendation No. 7

Rajiv Gandhi Institute of Petroleum Technology (RGIPT)

The Committee note that the Rajiv Gandhi Institute of Petroleum Technology (RGIPT) is in the process of being set up on 47 acres of land at Jais in Rai Bareli district of Uttar Pradesh (UP) as an Institute Of Excellence in the petroleum sector to cater to national and global educational and training requirements. Although it is operating from makeshift campus in the same district since 2008, there has been inordinate delays in the project. The new completion date for the project has been stated as June 2016. The total estimated cost for the Institute is Rs. 695.58 crore against the initial estimate of Rs. 435 crore in the year 2007. The Committee note that the progress in March 2015 was 86% while the progress in January 2016 is reported to be 93%. Thus in 11 months, the progress has been a mere 7% in the project which has been already suffering from substantial time and cost overruns.

The Committee also note that RGIPT Assam Project is under construction on 100 acres of land in Sivasagar district of Assam and very little progress has been made in the project with the estimates already gone up from Rs. 143 crore to Rs. 235 crore. The work of RGIPT Assam is at a standstill due to non-release of capital funds for construction. The capital funds are to be released by the oil PSUs and OIDB after the approval of expenditure by the Expenditure Finance Committee (EFC).

The Committee are concerned about the poor progress being achieved in the two RGIPT projects at Raibareli and Sivasagar and would like to know the reasons for such long delays causing significant cost overruns in both the projects. The Committee, however, recommend that the Ministry should closely monitor the progress of both the projects so that these are completed without any further time or cost overruns. The Committee also desire that the Ministry should ensure to provide adequate financial allocations and timely release of funds for these projects.

Reply of the Government

The main academic centre of RGIPT is being constructed on 47 acres of land at Jais, District Amethi (Uttar Pradesh). Initially, the Capital Expenditure was made through Govt of India budgetary support of Rs. 285.00 Crore and partially from grant of Rs.150.00 Crore from Oil Industry Development Board. The Institute has commenced its academic activities from 2008-09. Currently, 6 batches of MBA, 4 batches of B. Tech and M. Tech students have passed out.

The construction of the campus suffered setback as the job awarded to M/s. Punj Lloyd Limited (PLL) on the recommendation of PMC, Engineers India limited (EIL) stopped in the year 2013 due to the contractor's un-reasonable demands leading to Arbitration and cost escalation.

It is pertinent to note that due to non-payment of contractor's bills from January 2015 to July 2015, the contractor, M/s. NCCL had stopped the work at Jais Site which has resulted in time overrun beyond the scheduled date of completion of March 2016. The construction work has restarted and is targeted to be completed by September, 2016. The money so far released from GBS for Jais project is Rs. 181.00 crore (Rs.86.00 crore + Rs.48.00 crore + Rs.47.00 crore = Rs.181.00 crore) whereas Rs. 188.10 crore (Rs.369.10 crore – Rs.181.00 crore = Rs 188.10 crore) is yet to be released for completion of the project.

The execution of the project at Sibsagar is delayed due to site related issues requiring large quantity of earth filling and piling work which has since been completed in April, 2014. Meanwhile the project cost has gone up from the original estimate of Rs. 143 crore to Rs. 235 crore.

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

Recommendation No. 12

Ethanol Blended Petrol

The Committee note that the Ethanol Blended Petrol (EBP) programme is being implemented since 2003. Selling of Petrol blended with ethanol upto 10% has been envisaged for the year 2016-17. For achieving 10% blending, the requirement of Ethanol would be approximately 266 crore litres against which only 136 crore litres is available for blending within the country. Despite repeated rounds of floating Expression of Interest (EoI), the required additional Ethanol supply is not available in the country so far. The Committee are concerned that the Ministry has not been able to procure sufficient quantity of Ethanol even though India is one of the largest Sugarcane producing countries of the world. The Committee note that unless concerted efforts are made by the Ministry, it would be difficult to attain the target of 10% EBP, particularly in those states which are not major sugarcane producing areas. The Committee desire that the Ministry has to focus on the issue of availability of Ethanol in the country so that the targeted blending of Ethanol in petrol it has envisaged for could be achieved. The Committee would advise the Ministry to work sincerely on alternate sources for ethanol including the production of ethanol directly from sugarcane juice so as to incentivize farmers. The Committee recommend that a comprehensive plan be made by the Ministry for increasing availability of Ethanol for blending with petrol.

Reply of the Government

The Government has taken a number of initiatives to improve the availability of ethanol for blending with Petrol under Ethanol Blended Petrol (EBP) Programme. Some of them are as under:

- (i) On 10.12.2014, the delivered price of ethanol has been fixed in the range of Rs.48.50 per litre to 49.50 per litre, depending upon the distance of distillery from the depot/installation of the OMCs. The Government has allowed

procurement of ethanol produced from other non-food feedstocks besides molasses, like cellulosic and ligno cellulosic materials including petrochemical route, subject to meeting the relevant BIS Standards.

- (ii) Oil Marketing companies (OMCs) have been asked on 21.10.2015 to establish a project each of reasonable scale for producing ethanol from multi-feedstock lignocelluloses using indigenous technology. A demonstration plant of 10 Tonnes Per Day (TPD) capacity at Kashipur, Uttarakhand, has been operationalised on 22.4.2016
- (iii) Ministry of Petroleum and Natural Gas (MoP&NG) has been taking up the State specific issues with the concerned State Governments for hassle free inter-State and intra-State movement of ethanol. For better coordination with the States, Sugar Mills and other stakeholders, MoP&NG has appointed nodal Officers from OMC's, for effective implementation of EBP programme.

2. The impact of these decisions is evident from the fact that ethanol supplies increased to 67.4 crore litres for the sugar year 2014-15 from 38 crore litres during 2013-14. During the current sugar year 2015-16 OMCs have finalized over 135 crore litres of ethanol supplies.

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

Recommendation No. 15

Reserve Replacement

The Committee note that Reserve Replacement Ratio is an important parameter for Exploration & Production companies. This indicates that amount of oil added to the reserves vis-a-vis production. It is generally expected that the ratio to be more than 1 which indicates that more reserves are being added than being taken out through production. He Committee note that in 2012-13, RRR based on 1P (1P = proven reserves) reserve for ONGC was 1.08 while in the years 2013-14 and 2014-15 the figure was 0.62 and 0.70 respectively. In case of OIL, the corresponding figures were 1.17, 0.80 and 1.22 respectively. The Reserve Replacement Ratio (RRR) on 1P basis has been consistently below 1 in case of ONC and about 1 in case of Oil.

The Committee are concerned that the RRR of the Nation's Oil Companies (NOC's) are about 1 or less than 1. The indicates these companies are producing crude oil from their existing reserve without adding new reserves. The Committee apprehends that the exploration activities are not being undertaken as intensively as is required in a energy-deficient country like India. The Committee, therefore, recommend that the oil companies undertake exploration of promising areas more intensively so that the crude oil production remains sustainable and recommend allocation of sufficient funds by NOCs for undertaking such activities. The Committee also desire that the Ministry should explore all the overseas acquisition opportunities to augment the reserves and improve RRR.

Reply of the Government

Exploration activities in the country were shrinking during last 5 years owing to the fact that no new exploration blocks were awarded from 2010 onwards. Now, Government has approved Hydrocarbon Exploration and Licensing Policy (HELP), through which new exploration blocks will be awarded in near future. With opening of new area for exploration, reserve replacement ratio (RRR) is likely to improve further and may be more than one on discovery of new hydrocarbon reserves.

The reserve accretion in ONGC Videsh Limited (OVL) is a mix of exploratory accretions and inorganic acquisitions. As acquisitions do not happen at regular intervals, instead of Year wise, Cumulative RRR may be considered as an indicator of the performance. Production in OVL has commenced in 2002-03 and the cumulative production from the start of production to 2015-16 is 100.468 MMTOE while the accretion of reserves in terms of 1P and 2P during the same period is 180.576 MMTOE and 548.242 MMTOE respectively resulting in overall RRR of 1.80 for 1P case and 5.46 for 2P.

Oil India Limited (OIL) has also, over the past decade, acquired participating interests in exploration acreages in countries, namely, Libya, Gabon, Yemen, Bangladesh, Myanmar and discovered/producing asset in Nigeria, Venezuela, USA, Mozambique and Russia. These initiatives are expected to help improving the overall RRR of OIL in the near to medium-term.

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

Recommendation No. 17

Internal Extra Budgetary Resources (IEBR)

The main activities relating to petroleum sector are carried out by the Oil PSUs out of funds generated from their own resources known as Internal and Extra Budgetary Resources (IEBR). The PSU's BE 2016-17 has been pegged at Rs. 87214.56 crore showing about 15% increase from the BE 2015-16. At the RE stage of 2015-16, the total outlay of PSUs was Rs. 68536.52 crore showing under-utilisation to the tune of 10%. Even out of this amount, only Rs. 45028.24 crore were utilised in the first three quarters.

The Committee note that budget for exploration activities of upstream oil companies like ONGC, OIL and GAIL has been going down substantially over the years. Moreover, the PSUs are not able to utilise even the reduced allocations. In case of ONGC, the BE 2015-16 for exploration activities was Rs. 14269.27 crore out of which they could utilise only about Rs. 7000 crore. BE for 2016-17 has been kept at Rs. 9150.56 crore. Similarly for GAIL the BE 2016-17 has been kept at Rs. 77.55 crore which is about half of BE 2015-16. GAIL could utilise less than 40% of the amount in the first three quarters of the previous year.

As regards downstream oil PSUs, the Committee note that 09 refineries under Indian Oil Corporation Ltd. (IOCL) achieved the crude throughput of 53.59 MMT during 2014-15 while during first three quarters of 2015-16 the crude throughput was 41.68 MMT. The estimates for 2016-17 has been fixed at 57.51 MMT while the target for 2016-17 is 62.5 MMT. Therefore, the total increase from 2014-15 to 2016-17 is about 20%. The plan outlay of IOCL in 2014-15 (actual) was Rs.14314 crore while RE for 2015-16 is Rs.11503 crores. The Committee note that in the first three quarters of 2015-16 the actual expenditure is Rs.6962 crores which is only about 65% of the annual estimates. The BE for 2016-17 has been fixed at Rs.13773 crores an increase of almost 20% over the previous year figures.

In case of HPCL, its total refinery throughput in 2014-15 was 16.18 MMT. In first three quarters of 2015-16 it achieved refinery throughput of 12.53 MMT. the target for 2016-17 is 16.27 MMT. The Committee note that HPCL refineries are working at more than 100% capacity. Plan outlay for 2014-15 (actual) in case of 97 HPCL was Rs.1767 crores against the BE of Rs.1792 crores. The RE for 2015-16 is Rs.1540 crores while in the first three quarters Rs.1084 crores has been utilised. The BE for 2016-17 is fixed at Rs.1974 crores which indicates more than 25% increase from the previous year.

The Committee note that BPCL has two refineries with combined capacity of 21.5MMTPA. During 2013-14, the BPCL refineries processed 23.35 MMTs which is more than 100% of their capacity. During 2014-15 in the first six months the total of 11.23 MMT crude oil was produced in two refineries. The target for refining throughput for 2015-16 is to 22.50MMT. The Committee observe that refineries in case of BPCL are also operating at more than 100%. In 2014-15 RE at Rs.5794 crores was about 10% higher than BE of Rs.5250 crores. RE for 2015-16 was fixed at Rs. 7250 crores and BE for 2016-17 was Rs. 10597 crore which indicates substantial increase.

The Committee are concerned that the upstream oil PSUs are going slow on the exploration and development works even when the need is to work on exploration and development work intensively. The Committee recommend that the Ministry should direct PSUs to increase exploration activities in various parts of the Country and to allocate adequate funds for that purpose. The Committee note that the downstream oil PSUs show significant variation in their estimates and actual utilisation of funds. The Committee would expect the oil PSUs to prepare their estimates with utmost care and stick to it. Ministry may monitor the actual utilisation of outlay by the PSUs regularly and suggest periodic course corrections.

Reply of the Government

Internal and Extra Budgetary Resources (I&EBR)

Total BE of I&EBR of the CPSEs under the Ministry of Petroleum and Natural Gas during 2015-16 and 2016-17 was ₹76565.46 crore (revised to ₹76874.75 crore) and ₹87214.56 crore respectively. However, Plan Outlay (BE) from I&EBR for 2015-16 was ₹75185.72 crore and RE was ₹68252.35 crore, against which actual expenditure incurred was ₹66118.29 crore. Plan outlay (BE) from I&EBR for 2016-17 is ₹77600.42 crore.

Plan Outlays for Exploration and Production:

Plan outlay (BE) from I&EBR during 2015-16 under the head 'Exploration and Production' was ₹55079.53 crore, which was revised to ₹48434.63 crore at RE stage. Actual expenditure under this head during 2015-16 was ₹44196.55 crore. During 2016-17, plan outlay under the head 'Exploration and Production' has been kept at ₹52618.71 crore.

Plan Outlays for exploration activities by upstream oil companies:

ONGC:

Plan outlay (BE) of ONGC for exploration activities was ₹14269.27 crore during 2015-16 which was revised to ₹11523.53 crore at RE stage. Against this actual expenditure incurred under this head was ₹9162.91 crore. Plan outlay (BE) for exploration activities during 2016-17 is ₹9150.56 crore.

ONGC:

Reasons for underutilisation of allocated budget by ONGC during 2015-16:

Budget allocation for exploratory activities by ONGC is reducing year by year because of reduction in exploratory acreages as no acreage has been offered/awarded since NELP IX round in 2012.

Shortfall in expenditure in exploratory activities is due to environmental & contractual issues along with mandatory clearance issues in seismic surveys. In exploratory drilling, shortfall has occurred due to environmental, mandatory clearance issues as well as down-hole complications during drilling/testing of wells leading to time loss. More specifically, lower utilisation in exploratory drilling is on account of

- Less number of wells drilled during the period due to low availability of rig months.
- 3D seismic work awarded to the company could not be initiated/completed due to outstanding contractual issues.

ONGC is making all out efforts to resolve such issues / problems so that the efficiency of exploratory activities can be improved.

Reasons for decline in BE 2016-17 vis-à-vis BE 2015-16:

- Survey budget has declined marginally on account of reduction in physical targets of 2D and 3D Survey by 320 Ground Line KMs. (GLK) and 1353 Square Kilometer (SKM) respectively.
- The decline is on account of NIL target for deep-water exploratory drilling in BE 2016-17, as against a target of 7 wells in BE 2015-16.
- The BE for shallow water exploratory drilling in 2016-17 was reduced mainly due to anticipated reduction in oil field services cost (rigs, etc.), due to persistent decline in global crude prices.
- The outlay for onland exploratory drilling has also been reduced on account of reduction in input costs of resources for 93 wells.

Measures taken to increase exploration activities:

To intensify its exploratory activities, various concerted measures are being taken by ONGC including inter-alia, focusing on exploration of deeper plays in the existing

fields, carrying out exploration in geologically complex and logically challenging areas and exploiting alternate sources of energy like shale gas, gas hydrate, etc. Further, pursuant to the formal launch of Hydrocarbon Exploration & Licensing Policy (HELP), the exploratory acreages / area portfolio are expected to improve. In addition, resource appraisal of the un-appraised areas of Indian Sedimentary Basins would help in identification and prioritization of the areas.

OIL:

Plan outlay (BE) of OIL for exploration activities during 2015-16 was ₹1594.00 crore which was revised to ₹1395 crore at RE stage. Actual expenditure incurred in exploration activities during 2015-16 was ₹1364 crore. OIL has increased its allocation for exploration activities on year on year basis. During 2016-17, plan outlay (BE) for exploration activities is ₹1793.50 crore.

Reasons for underutilisation of allocated budget during 2015-16:

The major reasons for lower utilisation of allocated budget for exploratory drilling by OIL during 2015-16 are as under:

- (vi) During financial year 2015-16, OIL completed drilling of 16 exploratory wells against targeted 32 wells.
- (vii) Higher rig resource was allocated for development drilling in OIL's Petroleum Mining Lease (PML) areas of Assam in order to arrest declining oil production.
- (viii) Drilling of two exploratory wells in OIL's PML area in Rajasthan was deferred to 2016-17 as the same is linked to Heavy Oil Monetization in the area for which efforts are in progress
- (ix) Drilling of four wells in NELP blocks could not be undertaken due to delay in statutory / regulatory permissions/clearance.
- (x) Exploratory drilling campaign in the block KG-ONN-2004/1 suffered due to delay in deployment of rig as use of a bridge was resisted by local people. The drilling operation could start only w.e.f. 12th January, 2016.

Measures taken to achieve targets by OIL:

Planning and monitoring mechanisms for implementation of planned projects/programmes are in place in OIL for achieving the set targets and the same are reviewed on a regular monthly basis.

GAIL:

Plan outlay (BE) of GAIL during 2015-16 under the head 'Exploration and Production' was ₹147.94 crore which was revised to ₹82.29 crore at RE stage due to rescheduling of activities by different operators. Actual expenditure incurred under this head during 2015-16 was ₹72 crore. Plan outlay under this head during 2016-17 has been kept at ₹77.55 crore which is based on projected expense under Minimum Work Programme, as per production sharing contract of various blocks. Blocks were last awarded under last bid round (NELP-IX) during March 2012 and since then, no new bid rounds have been announced. Various blocks have moved ahead in E&P life cycle leading to production in 4 blocks and thus the capital expenditure commitments are reducing in these blocks.

IOCL

During 2015-16, IOCL incurred plan expenditure of ₹11484.74 crore against BE and RE of ₹10540.00 crore and ₹11502.91 crore respectively. IOCL has kept BE for 2016-17 at ₹13772.87 crore. While finalising the BE, detailed analysis of each ongoing and new project and those proposed, is carried out. Although intensive monitoring of physical and financial progress of projects is carried out, in certain cases like exploration and production related schemes, which are significantly affected by the global developments related to oil and gas industry, variation between estimated and actual utilisation of funds does come in.

HPCL

During 2015-16, HPCL incurred actual plan expenditure of ₹ 1429.49 crore against BE and RE of ₹ 1,791.85 crore and ₹1539.78 crore respectively. The shortfall in the utilisation of budget allocation was due to the following reasons:

- (iv) Late receipt of Environment Clearance for Visakh Refinery Modernisation Project
- (v) RoU disruption at Mangalore and Hassan for Mangalore-Hassan-Mysore LPG pipeline project
- (vi) Delayed receipt of permission from Forest and National Wild Life Board and agitation by villagers against pipeline laying for Uran-Chakan LPG pipeline project

Reasons for higher budget allocation during 2016-17

HPCL has kept BE at ₹ 1,974.26 crore for 2016-17 as compared to BE of ₹1,791.85 crore (an increase of about 10%) and RE of ₹1539.78 crore during 2015-16. Budget estimates for 2016-17 have been increased due to some of the new activities to be taken up in Mumbai and Visakh refineries during 2016-17 and as per work plan received from the operator under exploration sector.

As far as utilisation of budget allocation is concerned, HPCL is monitoring physical and financial progress of the projects with respect to critical milestones on a monthly basis. The key progress made every month, reasons for delay and areas of concerns are identified and analysed for resolution on priority basis.

BPCL

During 2015-16, BPCL incurred actual plan expenditure of ₹ 8257.00 crore against BE and RE of ₹ 6,501.32 crore and ₹7250 crore. Higher budget utilisation by BPCL during 2015-16 was mainly to speed up the commissioning of Integrated Refinery Expansion Project in Kochi and for Catalytic Reformer Unit (CRU) Isomerization project in Mumbai Refinery, in line with modification required as per Auto Fuel Policy and early commissioning of the unit.

Reasons for keeping higher BE during 2016-17

BPCL has kept BE 2016-17 at ₹10597 crore which indicates a substantial increase as compared to BE 2015-16. This is mainly due to higher budget allocation to 'Refining and Marketing' head (₹9797 crore includes pipelines, JV with BORL, etc.). During 2016-17, major projects are planned under 'Refining' head to meet the Government directive and deadline for ensuring production of BS V/VI fuels and also Petchem project in Kochi Refinery. For evacuation of additional 6 MMT petroleum products from Integrated Refinery Expansion Project in Kochi, CAPEX expenses

under marketing sector (major pipelines and infrastructure) have been planned in the southern region.

Although all CPSEs had put in their best efforts to ensure expenditure in accordance with the targets during 2015-16, reasons reported by each of them for the shortfall, wherever relevant have been detailed. The Ministry is also putting all out efforts to ensure that realistic targets are fixed at the BE stage so that the gap, if any, between the budgeted and incurred expenditure, after following due diligence is minimized.

ONGC and OIL are carrying out exploration through their internal generated resources/revenue. No budgetary allocation is made to oil PSUs for carrying out exploration and production activities. However Ministry monitor their exploration activities periodically.

In order to accelerate exploration activities in the country for appraisal of the Indian sedimentary basin, an area of 1.502 Million Sq. Km is identified by DGH. To appraise these areas, Government has formulated a plan to conduct 2D seismic surveys of volume of 48,243 LKM in 22 sedimentary basins of India where no/scanty data is available.

Total estimated cost of the project is about Rs. 2932.99 Crore for conducting 2D Seismic survey API of 48,243 line kilometer (LKM) upto 2019-20 in Indian sedimentary basins.

Ministry of Petroleum & Natural Gas
O.M.No.G-38011/29/2016-Fin.I dated 3 August, 2016

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

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

Recommendation No.3

Levy of cess on Crude Oil

The Committee observe that the Government has modified the levy of Oil Industries Development (OID) cess on domestically produced crude oil from oil PSU's from 4500/MT to 20% ad-valorem. This measure will result in saving of about Rs. 1150/MT at the crude oil rate of US\$ 35/bbl and at exchange rate of Rs.67 per US dollar. However, if the crude oil rates in the international markets rise, the burden of cess on the upstream oil companies like ONGC and OIL will increase. At the price point of US\$ 50/bbl and at exchange rate of Rs. 67 per US\$, the burden will be even more than the previously fixed cess of 4500/MT, which will defeat the purpose of rationalizing the cess and give relief to upstream oil PSUs. Keeping this fact in view, the Ministry have decided to take up the matter with the Ministry of Finance for reduction of the cess from the current 20% to reasonable levels. They have also requested for transfer of part of the funds collected as cess from the oil companies to the OIDB for taking up initiatives like appraisal of unappraised areas, for national data repository as well as for the development of gas pipeline infrastructure. The Committee fully support the lowering of ad valorem rate making it more practical and simpler to administer the cess. The Committee, therefore, strongly desire that the issue of present ad valorem cess of 20% proposed in the budget should be raised by the Ministry with the Ministry of Finance so that the oil cess is brought down preferably in the range of 10%. The Committee may be informed about the outcome in this regard.

Reply of the Government

Government has revised OID cess at the rate of 20% ad-valorem basis w.e.f. 1st March 2016 from the earlier rate of Rs. 4500 per tonne in respect of crude oil. The new cess rate is beneficial to the industry when crude oil price is below US\$45/bbl. However, the new rate of 20% cess will have negative impact on oil companies on increase of crude oil price beyond US\$ 45/bbl. Ministry of Petroleum& Natural Gas has taken up the matter with Ministry of Finance to reconsider the OID cess rate. The outcome in this regard will be apprised to the committee.

Ministry of Petroleum & Natural Gas
O.M.No.G-38011/29/2016-Fin.I dated 3 August, 2016

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

New Delhi;
8 December, 2016
17 Agrahayana,1938 (Saka)

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

MINUTES**STANDING COMMITTEE ON PETROLEUM AND NATURAL GAS (2016-17)****FIFTH SITTING**

(07.12.2016)

The Committee sat on Wednesday, the 7 December, 2016 from 1500 hrs. to 1630 hrs. in Committee Room 'B', Parliament House Annexe, New Delhi.

PRESENT

Sh. Pralhad Joshi - Chairperson

MEMBERS**LOK SABHA**

- 2 Dr. Ravindra Babu Pandula
- 3 Shri P. K. Biju
- 4 Shri Kalikesh N. Singh Deo
- 5 Smt. Pratima Mondal
- 6 Smt. Rama Devi
- 7 Dr. Thokchom Meinya
- 8 Smt. Jayshreeben Patel
- 9 Shri Rajendra Agrawal
- 10 Shri Arvind Ganpat Sawant
- 11 Shri Rajesh Verma
- 12 Shri Laxmi Narayan Yadav
- 13 Shri A.T. Nana Patil
- 14 Dr. Bhola Singh (Begusarai)
- 15 Shri Ashok Mahadeorao Nete
- 16 Shri Kamakhya Prasad Tasa

RAJYA SABHA

- 17 Shri V. Lakshmikantha Rao
- 18 Shri Dilipbhai Pandya
- 19 Shri V. Vijaysai Reddy

SECRETARIAT

- | | | |
|---------------------|---|---------------------|
| 1. Dr. Ram Raj Rai | - | Director |
| 2. H. Ram Prakash | - | Additional Director |
| 3. Shri Sujay Kumar | - | Under Secretary |

2. xxx xxx.

3. Thereafter, the Committee took up for consideration the draft Action Taken Report on the 12th Report on 'Demands for Grants (2016-17) of MoPNG' and adopted the same with some minor modifications.

4. xxx xxx.

5. xxx xxx.

The Committee then adjourned.

xxx: Matter not related to the subject.

Annexure II

(Vide Para 4 of the Introduction)

ANALYSIS OF THE ACTION TAKEN BY THE GOVERNMENT ON THE RECOMMENDATIONS CONTAINED IN THE TWELFTH REPORT (SIXTEENTH LOK SABHA) OF THE STANDING COMMITTEE ON PETROLEUM AND NATURAL GAS (2015-16) ON 'DEMANDS FOR GRANTS (2016-17)'.

I	<u>Total No. of Recommendations</u>	25
II	Recommendations/Observations which have been accepted by the Government (Vide Recommendations at Sl. Nos. 1, 2, 4, 5, 6, 8, 9, 10, 11, 13, 14, 16, 18, 19, 20, 21, 22, 24 and 25)	19
	Percentage to Total	76%
III	Recommendations/Observations which the Committee do not desire to pursue in view of Government's (Vide Recommendations at Sl. No. 23)	1
	Percentage of Total	4%
IV	Recommendations/Observations in respect of which replies of the Government have not been accepted by the Committee (Vide Recommendations at Sl. Nos. 7, 12, 15, and 17)	4
	Percentage of Total	16%
V	Recommendations/Observations in respect of which final replies of the Government are still awaited (Vide Recommendations at Sl. No. 3)	1
	Percentage of Total	4%