NINTH REPORT

COMMITTEE ON PUBLIC UNDERTAKINGS

(2005-2006)

(FOURTEENTH LOK SABHA)

OIL EXPLORATION - DOMESTIC AND OVERSEAS PROJECTS

(MINISTRY OF PETROLEUM AND NATURAL GAS)

(Action Taken by the Government on the recommendations contained in the 2nd Report of the Committee on Public Undertakings (14th Lok Sabha) on –Oil Exploration – Domestic and Overseas Projects)



Presented to Lok Sabha on 23-12-2005 Laid in Rajya Sabha on 23-12-2005

> LOK SABHA SECRETARIAT NEW DELHI

December 2005 / Agrahayana 1927 (S)

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COMPOSITION OF COMMITTEE ON PUBLIC UNDERTAKINGS

<u>(2005 – 2006)</u>

CHAIRMAN

Shri Rupchand Pal

MEMBERS, LOK SABHA

- 2. Shri Manoranjan Bhakta
- 3. Shri Gurudas Dasgupta
- 4 Shri P. S. Gadhavi
- 5. Shri Suresh Kalmadi
- 6. Dr. Vallabhabhai Kathiria
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- 15. Shri Ram Kripal Yadav

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- 16. Prof. Ram Deo Bhandary
- 17. Shri Ajay Maroo
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- 20. Shri Shahid Siddiqui
- 21. Smt. Ambika Soni
- 22. Shri Dinesh Trivedi

SECRETARIAT

1.	Shri S Bal Shekar	Joint Secretary
2.	Shri J.P.Sharma	Director
3.	Shri N.C. Gupta	Under Secretary
4.	Shri H. Ram Prakash	Committee Officer

INTRODUCTION

- I, the Chairman, Committee on Public Undertakings having been authorized by the Committee to submit the Report on their behalf, present this Ninth Report on Action Taken by the Government on the recommendations contained in the Second Report of the Committee on Public Undertakings (Fourteenth Lok Sabha) on Oil Exploration Domestic and Overseas Projects.
- 2. The Second Report of the Committee on Public Undertakings (2004-05) was presented to Lok Sabha on 22nd December, 2004. Action Taken Replies of the Government to the recommendations contained in the Report were received on 13.7.2005. The Committee on Public Undertakings considered and adopted this Report at their sitting held on 21st December, 2005. The Minutes of the sitting are given in Appendix I.
- 3. An analysis of the action taken by the Government on the recommendations contained in the Second Report (2005-06) of the Committee is given in Appendix -II

New Delhi: 21st December, 2005 30 Agrahayana 1927(S) Rupchand Pal Chairman, Committee on Public Undertakings

CHAPTER - I

REPORT

The Report of the Committee deals with the action taken by Government on the recommendations contained in the Second Report (Fourteenth Lok Sabha) of the Committee on Public Undertakings on Oil Exploration which was presented to Lok Sabha on 22nd December, 2004.

- Action Taken Notes have been received from Government in respect of all the 26 recommendations contained in the Report. These have been categorized as follows:-
 - (i) Recommendations/Observations that have been accepted by Government (Chapter II)

Sl. Nos. 1, 4, 6, 7, 8, 9 & 12

(Total: 7)

- (ii) Recommendations/Observations which the Committee do not desire to pursue in view of Government's replies. (Chapter III)SI. Nos. 3,10, 11, 13, 14, 19, 20, 21, 25 & 26 (Total: 10)
- (iii) Recommendations/Observations in respect of which replies of Government have not been accepted by the Committee.(Chapter IV)

SI. Nos. 2, 5, 15, 18, & 24

(Total:5)

(iv) Recommendations/Observations in respect of which final replies of Government are still awaited. (Chapter V)

SI. Nos. 16, 17, 22, 23

(Total: 4)

- 3. The Committee desire that the final replies in respect of the recommendations contained in Chapter V for which only interim / no replies have been furnished by the Government should be furnished expeditiously.
- 4. The Committee will now deal with the action taken by the Government on some of the recommendations in succeeding paragraphs:-

RECOMMENDATION SL. NO. 2

DIRECTORATE GENERALOF HYDROCARBONS (DGH)

5. The Committee in their second Report had recommended the following in regard to functioning of Directorate General of Hydrocarbons (DGH).

"The Committee note that Government by a Resolution in 1993 established Directorate General of Hydrocarbons (DGH) under administrative control of Ministry of Petroleum and Natural Gas with the following objectives:

- 1. To provide technical advice to Ministry of Petroleum & Natural Gas on exploration and exploitation of hydrocarbon in India and abroad;
- 2. To review the exploration programme of companies engaged in E&P activities:
- 3. To reassess the hydrocarbon reserves discovered and estimated by the operating companies;
- 4. To advise the Government on the offering of acreage for exploration;
- 5. To review the development plans for commercial discoveries of hydrocarbon reserves and advise Government on the adequacy of such plan and on future exploitation strategies;
- 6. To review and audit the management of Petroleum reservoirs;
- 7. To maintain the E&P data base; and
- 8. To advise Government on the laying down of safety norms in oil field operations, prescribe pollution control measures and to assist in inspection and periodic safety audit.

The Committee have been informed by some of the PSUs who have recently ventured into E&P activities that non availability of data of adjoining blocks at the time of data viewing of a particular block on offer by Government and delay in availability of technical data of awarded blocks were some of the major constraints being experienced by them in undertaking Exploration and Production activities. There is no denying the fact that access to adequate data is necessary for making a proper assessment of the blocks offered.

Non availability of data at the disposal of oil exploration companies will dissuade them to undertake E&P activities in the Country. To obviate such a situation, the Committee recommends that DGH should possess data on all Indian basins by obtaining it from all the explorers. The Committee also feels that there is an imperative need for setting up of the National E&P data base. The Committee notes that DGH has taken some measures in this regard by conducting a feasibility study. The Committee desire that based on the outcome of such a study, expeditious steps may be taken to set up the National data base and archives. It should be made mandatory for all companies to hand over a set of data collected by them to the archives, as this will help DGH and other companies to make a realistic assessment of the reserves of blocks offered to them.

Despite being entrusted with very important activities of monitoring and regulating India's Hydrocarbon reserves, Exploration and Production activities within the country and abroad, the Committee note that DGH does not have a cadre of its own and its manpower is drawn from various PSUs, mainly ONGC and OIL on deputation. ONGC and OIL are the two premier oil companies engaged in most of the Exploration and Production activities in the country and abroad. The Committee feels that the manpower drawn on deputation from the same Organization, working of which DGH is mandated to review and monitor, can hardly provide any effectiveness to the functioning of DGH. Moreover, an Organization, solely being manned by deputationists cannot provide continuity to its functioning. In view of the important role entrusted to DGH, the Committee recommends that DGH should have its own separate, independent cadre of staff and should be empowered to take all decisions on the functions assigned to it."

6. The Ministry of Petroleum and Natural Gas in their Action Taken Reply with regard to the above recommendation have stated as follows:-

"In order to assess the hydrocarbon potential of the blocks being offered by GOI under NELP rounds, information on the regional geology of the basin, wherein the offered blocks are located, is essential. The availability of more and more geological data will definitely increase the confidence level of the companies and will help in understanding the geology and tectonics which govern hydrocarbon distribution in various areas/ basins.

Regional data has been made available to E&P companies under the ongoing 5th round of NELP in the form of data packages & information dockets. Data of old wells, in the adjoining blocks, drilled prior to the award of blocks under Pre-NELP and NELP rounds are also provided to the interested companies. In this way, it is ensured that all the related data is made available to E&P companies.

A National Data Repository of geo-scientific data, acquired by different agencies in the country is proposed to be set up by DGH. Policy for making the data available in the public domain will be worked out. It would be mandatory for all the E&P companies to give a copy of the data to DGH. Once the National Data Repository is set up an open acreage system can be adopted wherein companies will have the freedom to choose an area of their interest from the available acreages.

Directorate General of Hydrocarbons (DGH) was established through a Government Resolution in 1993 under the administrative control of the Ministry of Petroleum & Natural Gas. DGH is carrying out its functions & responsibilities as per the terms of resolution as assigned by the Ministry from time to time. The main activities include opening up of new/unexplored areas for exploration review of reservoir performance of major fields, contract management of various exploration and exploitation activities of operating companies, evaluation process of various exploration & field development bidding rounds and recommendations to Government, implementation of NELP, monitoring of safety & environment aspects & other related activities.

DGH does not have a cadre of its own and its manpower is drawn from various PSUs, mainly ONGC & OIL, on short term deputation. Various exploration blocks and discovered fields operated by Private Companies/Joint ventures are being monitored by DGH as per Production Sharing Contracts (PSCs). Each block/field has a minimum work programme which is to be completed within the stipulated time frame. All the major decisions pertaining to the block/field are taken by the Management Committee of the block /field within powers given to it under the PSC. MOP&NG is in the process of rationalizing the staff requirements of DGH."

(Ministry of Petroleum and Natural Gas O.M. No. O-27012/1/2005-ONG/US (EO) dated 13th July, 2005)

COMMENTS OF THE COMMITTEE

7. The Committee are happy to note that the Government has taken steps to set up a National Data Repository for geo-scientific data and to evolve a policy on data availability. However, the Committee are disappointed that the Ministry has not given a proper reply to the other part of their recommendation, namely, the need for separate independent cadre of staff for DGH.

Observing that DGH had been entrusted with very important task of monitoring and regulating India's hydrocarbon reserves, exploration and production activities within the country and abroad, the Committee had in their original report recommended that it should have its own separate and independent cadre of staff which should be empowered to take all decisions on the functions assigned to it. The reply of the Ministry is vague and inadequate as it merely states that Ministry of Petroleum & Natural Gas is in the process of rationalizing the staff requirements of DGH.

In the opinion of the Committee this practice of manning of DGH by deputationists mainly drawn from ONGC and OIL Companies whose

activities they will be supposed to regulate is not tenable. The Committee, therefore, while reiterating their recommendation desire that the Ministry should take steps to set up a separate and independent cadre of staff for DGH so as to bring about continuity and effectiveness in its functioning.

RECOMMENDATION SL. NO.5 UNDER ACHIEVEMENT OF SEISMIC SURVEY AND DRILLING TARGETS

8. The Committee in their Report had recommended with reference to under achievement of Seismic Survey and Drilling Targets as follows:

"The Committee note that targets for seismic survey and drilling laid by ONGC during IX Plan could not be achieved and implemented in the States of Assam, Nagaland, Tripura and Himachal Pradesh due to one reason or the other. Shortfall in achievement of targets in Assam State has been attributed to laying of greater emphasis on covering the entire area with a blanket 3D seismic survey which resulted in compromising of 2D seismic survey planned targets. In Nagaland, envisaged programme could not be implemented due to nonavailability of Production Exploration License (PEL). The planned contractual seismic survey could not be implemented in Tripura owing to non-finalisation of the contract. In Himachal Pradesh, besides delay of PEL grant in Ganga NELP block, slow performance of shot-hole drilling and farmer's agitation have been cited as the reasons for non achievement of the targets. Shortfall in drilling targets in North Eastern States and Himachal Pradesh have also been attributed to the delays in the exploration plan implementation in environmentally sensitive and logistically difficult areas, drilling of increasingly deeper wells, less rig availability, down hole complication, etc.

To obviate the delay on account of non availability of PEL, the Committee recommend that the Union Government should analyse this problem in detail so that State Governments are made aware that certain blocks are proposed to be awarded for exploration and a way should be found out by which State Governments readily facilitate the exploration immediately after the award of a block to an explorer by granting the necessary approvals for land acquisition, forest clearance etc. expeditiously. In grant of PEL for onland blocks, the effort of the Union Government should be focused on prior clearance or consent from the State Governments concerned at the time of offer under NELP, so that PEL is granted in the shortest possible time.

Other causes for delay as enumerated above viz. non finalization of contract, carrying out exploration in environmentally sensitive and logistically difficult areas, etc may be identified and corrective steps be taken to prevent occurrence of delays in achievement of targets on such accounts in future.

From the details regarding status of Hydrocarbon finds/leads made during IX Plan, the Committee note that in many of the fields in western offshore, 3D seismic API is still in progress. The Committee desire that the survey should be completed within a time bound programme and further steps be taken for interpretation of data and production of blocks/fields with due promptitude. The Committee also desire that the fields in respect of which 3D surveys have been carried out, but which have been not yet put on production, expeditious steps be taken for interpretation of the data and putting these field on production.

The Committee note that there was a shortfall in actual achievement vis-à-vis targets laid by Oil for seismic survey and drilling, during IX Plan. Various reasons which led to shortfall in achievement of targets stated are- deferring of survey for Brahmaputra River Bed due to inability to finalise contract, environmental problems, bandhs, blockades, land acquisition problems, poor state infrastructure, delay in acquisition of seismic data, problems pertaining to environmental clearance, land acquisition and contractors. The Committee feel that these bottlenecks should be anticipated and corrective measures be taken in advance so that delays on such accounts do not recur in future. The Government should ensure that the best of state-of-the-art technology is made available to our oil E&P companies to enable them to achieve their targets."

9. The Ministry of Petroleum and Natural Gas in their Action Taken Reply on the above recommendation have stated as follows:

"Oil PSUs are free to choose state-of-the-art technology to be used in E&P. Investment decisions on technology are taken by respective PSUs and expenditure in this regard is financed through the internal resources generation or external borrowings. By introducing NELP Government has tried to ensure that new technologies are being inducted in E&P sector through participation of private/foreign companies. The efforts have already stated yielding results as 24 discoveries have so far been announced under NELP blocks."

(Ministry of Petroleum and Natural Gas O.M. No. O-27012/1/2005-ONG/US (EO) dated 13th July, 2005)

COMMENTS OF THE COMMITTEE

10. In their original report, the Committee had noted that non-availability / delay in availability of Production Exploration Licence (PEL) from State Governments was one of the major causes due to which ONGC was not able to achieve targets for seismic survey and drilling. The Committee had therefore recommended that the efforts of Union Government should be focused on prior clearance/consent of State Governments concerned at the time of offer under NELP so that PEL was granted in the shortest possible time. The Committee had also recommended for finding a way by which the State Government would facilitate the exploration immediately after the award of a block to an explorer by granting necessary approvals for land acquisition, forest clearance etc.

Besides, the Committee had also recommended that 3D surveys carried out by ONGC should be completed within a time bound programme and expeditious steps be taken for interpretation of the data and putting those fields on production. The Committee are constrained to note that the Ministry has not given pointed reply to the recommendation concerning delay in availability of PEL. The Committee highly deplore the approach of the Ministry in furnishing an incomplete reply to their recommendation. The Committee desire that they may be apprised of action taken by Ministry on their recommendation without further delay.

RECOMMENDATION SL. NO. 15

CORPORATE AND STRATEGIC PLAN OF OIL

11. The Committee in their second Report, in regard to the corporate plan of OIL had recommended as follows:

"The Committee note that OIL has formulated strategic and corporate plan with the goal of more than doubling the production level within ten year. The Committee desire that adequate steps should be taken to implement these plans so as to achieve the targets fixed. The progress of the two plans should be monitored periodically to ensure their full implementation. Besides formulating strategic and corporate plan, OIL has also taken initiatives which focus on intensification of exploration and development activities in its areas of operation through additional 2D and 3D Surveys and drilling; undertaking exploration activities in far-flung logistically difficult and geologically complex areas, acquisition of NELP Blocks on offer, intensification of drilling activities, reasoning of prospects, reserves assessment; optimistic field development; revitalization of old and depleted fields, and development of marginal fields. The Committee desire that all these initiatives which are, in hand, be undertaken within a time bound programme.

The Committee would also like to be apprised of the impact of such measures in additional reserve accretions and augmentation of production."

12. The Ministry of Petroleum and Natural Gas in their Action Taken Reply have stated as follows:-

"OIL has undertaken the following initiatives for intensification of exploration and development activities for additional reserves accretion and augmentation of production:

- (i) Intensification of exploration and development activities through additional 2D and 3D seismic survey and drilling.
- (ii) Undertaking exploration activities in far-flung logistically difficult and geologically complex area as Brahmaputra River bed, Belt of Schuppen, Manabum and Pasighat areas in the North-East.
- (iii) Acquisition of NELP blocks on offer through competitive bidding.
- (iv) Intensification of drilling activities, both exploratory and development.

The salient details of production (oil & gas), reserves accretion, drilling metreage etc. are shown below for the last three years:

	2002-03	2003-04	2004-05
Seismic Survey			
2D (GLKM)	1949.59	2088.22	1978.59
3D (SQKM)	349.50	352.02	889.44
Drilling ('000 Mtrs)			
Exploratory	42.201	49.283	37.890
Development	87.834	59.340	115.673
Total	130.035	108.623	153.563
Production			
Crude Oil (MMT)	2.95	3.002	3.196
	1.743	1.887	2.009
Natural Gas (BCM)			
Reserves Accretion (O+OEG) (In-Place) – (MMT)	21.87	18.54	21.07

(Ministry of Petroleum and Natural Gas O.M. No. O-27012/1/2005-ONG/US (EO) dated 13th July, 2005)

COMMENTS OF THE COMMITTEE

13. While taking note of the fact that Oil India Limited had formulated strategic and corporate plan with the goal of more than doubling the production level within ten years, the Committee had desired that adequate steps should be taken for periodic monitoring and implementation of these plans. The Committee are constrained to note that the Ministry instead of addressing all the issues highlighted in this recommendation has furnished only the details of initiatives taken for augmentation of production which is inadequate. The Committee view this very seriously and desire that the Ministry of Petroleum & Natural Gas should apprise them of the action taken by Oil India Limited for implementing its strategic and corporate plan.

RECOMMENDATION SL. NO. 18

<u>GRANTING OF INFRASTRUCTURE STATUS TO E&P PROJECTS/</u> ACTIVITIES

14. The Committee in their second Report had recommended with regard to the need for grant of infrastructure status to E&P Projects / activities as follows:

"The Committee note that, as of now, E&P Activities qualify only for a 7 year tax holiday from the date of commercial production. But these activities do not qualify for infrastructure/ industry status to avail of tax holiday under Section 801A and also do not have the option to choose the block of 10 year tax holiday out of 15 years, which is not necessarily linked to commencement of commercial production. The Committee feel that if the 7 year tax holiday necessarily starts from the commencement of commercial production, the advantage of tax holiday is lost because of carried forward losses of the previous years on account of large investment. Therefore, the Committee recommend that the Government should grant infrastructure industry status to E&P projects/ activities because of the significance of oil discovery for the national economy."

15. The Ministry of Petroleum and Natural Gas in their action taken reply on the above recommendation have stated as follows:

"ONGC has been requesting the Government for grant of infrastructure status to E&P industry, since February, 2002. This matter was also part of the suggestions (pre-budget) for Union Budget 2005. However, the issue has not been addressed in the Union Budget 2005."

(Ministry of Petroleum and Natural Gas O.M. No. O-27012/1/2005-ONG/US (EO) dated 13th July, 2005)

COMMENTS OF THE COMMITTEE

16. After perusing the reply, the Committee note that although the Ministry had taken up the issue of granting of infrastructure status to E&P activities / projects in their pre budget suggestions of Union Budget 2005, the same could not be addressed in the budget. The Committee find that no reason has been furnished for the same. In the opinion of the Committee, attractive incentives should be provided to investors who invest in Oil Exploration and production activities. The Committee, therefore, reiterate their recommendation and desire that the issue of granting infrastructure status to E&P projects should be forcefully pleaded at the appropriate level for its acceptance and implementation.

RECOMMENDATION SL. NO. 24

AUTONOMY FOR OIL EXPLORING PSUs

17. With regard to Autonomy for all exploring PSU's, the Committee had in their second Report recommended as follows:

"The Committee note that the oil sector PSUs have been performing commendably. All the PSUs except OIL enjoy Navratna status. The navratna status allows the delegation of enhanced powers subject to certain conditions and guidelines. In an era of competition due to liberalisation policies, the oil PSUs have to compete with multinationals and private Indian companies. As the PSUs operating in the oil sector have to scout globally for technology, for procurement and to offer global tender for their works etc., these matters need decisions to be taken on commercial and technical aspects quickly.

Though the navratna status confers certain powers on them, the Committee note that in actual practice, the PSUs lack autonomy to decide on matters affecting their performance. In an era where most of the oil PSUs equity has been divested and there are various stakeholders, the PSUs are answerable to them as well. The Committee regret to note that the autonomy already available is inadequate.

The Committee feel that the Government should consider granting autonomy to the Board of Directors even to the extent of deciding a particular kind of business that they deem fit to undertake."

18. The Ministry of Petroleum and Natural Gas, in their action taken reply on the above recommendation have stated as follows:

"The Government has set up Oil PSUs both in Upstream & Downstream sectors. These PSUs have been set up with certain objectives such as Upstream sector PSUs are required to explore oil & gas of the country as their core activity and Downstream sector is engaged in Refining and Marketing. The Government has given full financial delegation of powers as well as decision-making powers to Navratna Oil PSUs and there are well laid down guidelines on delegation.

The Government is of the view that Oil PSUs first priority should be to focus in their respective areas of core competence for which they have been set up and in case there are surpluses and synergy then they can explore alternative business opportunities."

(Ministry of Petroleum and Natural Gas O.M. No. O-27012/1/2005-ONG/US (EO) dated 13th July, 2005)

COMMENTS OF THE COMMITTEE

19. The Committee are not convinced by the reply of the Government on the issue of granting autonomy to the Board of Directors of Public Sector Oil Companies. The Committee are fully aware that there are well laid down guidelines on delegation of financial as well as decision-making powers to Navratna Oil PSU's. However, since these powers were inadequate, the Committee had desired that the Government should consider granting autonomy to the Board of Directors even to the extent of deciding a particular kind of business that they deemed fit to undertake. The Committee are unhappy to note that Ministry of Petroleum & Natural Gas without considering their recommendation for granting of more autonomy to oil PSU's has merely informed them of the existing position.

The Committee need not emphasize the fact that in an era of competition due to liberalisation policies, the oil PSUs have to compete with multinationals and private Indian companies and hence the question of grant of more autonomy specifically to Oil PSU's merits serious consideration. The Committee, therefore, emphasize once again that the Ministry should consider de-novo the entire matter of granting more autonomy to Board of Directors of Oil Sector PSU's and also take up this matter with DPE and other concerned authorities.

CHAPTER II

RECOMMENDATIONS THAT HAVE BEEN ACCEPTED BY GOVERNMENT RECOMMENDATION SL. NO. 1

FORMULATION / IMPLEMENTATION OF NATIONAL INTEGRATED ENERGY POLICY

The Committee note that current level of per capital consumption of primary energy in India being at 285 kg of oil equivalent is amongst the lowest in the world. However, the primary energy requirement of our country is increasing year after year. While in 1999 primary energy requirement was 304.0 million tonnes of equivalent (mtoe), in 2003 the requirement increased to 345.3 mtoe and the energy demand is projected to be 780 mtoe in 2020, which will make us along with China, US and Japan amongst the largest energy consumers globally.

At present, India's energy requirement is mainly met by fossil fuel i.e. oil, gas and coal. It is estimated that to meet its energy requirement by 2020, India will be required to get 730 mtoe from fossil fuels. Amongst the three fossil fuel, the demand for oil and gas would be more, as they are relatively cleaner fuels. 30% of current demand of oil in the country is being met through indigenous production and the rest i.e. 70% through imports.

As per India Hydrocarbon Vision 2025, 25% of total energy needs of the country would be met by oil sector by 2020. The Committee note that despite the fact that there has been a continuous surge in demand of crude oil, its production has remained almost static in the last five years, thereby further widening the gap between demand and supply and making a big dent on country's scarce foreign exchange reserves. During 2003-04, the estimated amount spent on import of crude oil was 18268 US million dollar, which was more than double of the amount spent on import of crude oil in 1999-2000. Growing dependence on imported crude oil and soaring price of crude oil in international market which touched an all time high at 55 \$ per barrel, will not only drain our resources but also further fritter away our scarce foreign exchange reserves. Needless to say that India's economy is most vulnerable to high oil prices and this vulnerability

will increase as the economy grows in size and power. Besides the vulnerability of economy, huge dependence on imported crude oil may undermine national security in case of sudden disruption of supply through import which cannot be ignored on account of events and happenings in the regions from where crude supply is predominant. Viewed in this context, the energy security of the country is of paramount importance. The Committee, therefore, feel that a National Integrated Energy Policy for the country should have been formulated and implemented long back to stem the ongoing drift towards energy crisis.

Surprisingly the issue of National Integrated Energy Policy-an integrated approach' is still at a nascent stage as only discussions, being coordinated by Planning Commission, are being held. A standing committee of Group of Ministers under the Chairmanship of the Minister of Power has also been constituted to study and formulate an energy policy, which would include the implementation aspect also.

The Committee are, therefore, constrained to observe that since dependence, the Government had not addressed this issue of grave national importance having a bearing on economy and security of the country with the attention it deserved.

The Committee desire that expeditious steps should be taken to formulate and implement a dynamic National Integrated Energy Policy within a definite time-frame, so that the country moves away from excessive dependence on fossil-fuels based energy. The Committee feel that such a policy would ensure the security of our energy supplies and also would make it sure that our country does not become vulnerable to the vagaries of the global oil market.

Reply by the Government

Formulation of Integrated Energy Policy

The National Common Minimum Programme of the Government (NCMP) has prioritized enhancement of country's energy security particularly in the area of oil. It intends to put in place policies that encourage overseas investments in the hydrocarbon industry. The Government also intends to pursue a host of initiatives signed at ensuring the nation's assured access to energy resources in view of their criticality in the economic growth. Rising to this call of the Government, the Ministry of Power under the Allocation of Business Rules 1961, and as per their responsibility for formulation, acceptance, implementation and reviews of any policy relating to energy sector which cuts across sectors like fuel regions, etc has set up a Task Force for the purpose. It is proposed by the Ministry of Power that all aspects relating to energy security as enunciated by the Hon'ble Prime Minister shall be addressed by the Task Force. The results of the engagement of the Task Force would seek to address the national energy security issues imparting their due priority with appropriate inputs from the MOP&NG.

In addition, an Expert Committee to formulate Energy Policy has been set up under the chairmanship of Dr. Kirit Parikh, Member (Energy), Planning Commission.

(Ministry of Petroleum and Natural Gas O.M. No. O-27012/1/2005-ONG/US (EO) dated 13th July, 2005)

RECOMMENDATION SL. NO.4

SEDIMENTARY BASINS

The Committee note that India has an endowment of 26 sedimentary basins stretching over an area of 1.39 million sq.km on land and 1.75 million sq km. offshore, including the vast stretch of sedimentary basin area measuring 1.35 million sq.km. in deep water areas. All these basins are prognosticated to hold about 28 billion tonnes of hydrocarbon resources. Out of a total of 26 sedimentary basins, so far seven basins are in commercial production stage. These basins categorized as category I basin covering 16% of total basinal area, hold about 66% of prognosticated resources of the country and account for almost entire hydrocarbon discovered so far. Besides category I basins, category II basins have also got hydrocarbon but are yet to be commercially exploited. The Committee desire that concerted efforts should be made by using state-of-the art technology to commercially exploit these basins as well. Basins under category III & IV which are total 17 in number are still under/unexplored basins. To assess and locate additional potential resources of these basins, the Committee note that DGH is carrying out a number of geo-scientific surveys, either alone or in collaboration with national/international companies. Committee desire that the surveys should be completed expeditiously and efforts for exploration of these basins, be intensified so that their hydrocarbon potential is fully tapped as early as possible. The Government should also award more and more blocks under NELP to various companies in the less explored areas and offer more incentives for the companies who undertake exploration in these blocks.

Due to increase in demand for oil and persistently mounting oil prices which have been inflating our oil imports bill year after year, its is imperative that efforts should be intensified to increase indigenous production and for this all sedimentary basins need to be fully explored. The Committee note that Hydrocarbon Vision 2025 envisages total appraisal of sedimentary basins of India by the year 2025 and in order to meet the objectives of the Hydrocarbon Vision 2025, action plans are stated to have been drawn up to achieve the following appraisal programme:-

- 25% by 2005
- 50% by 2015
- 100% by 2025

The Committee desire that progress of action plan should be monitored strictly so that the targets laid down for appraisal of basins are adhered to.

Reply by the Government

In order to achieve the set goal for appraisal of Indian sedimentary basins as indicated in India Hydrocarbon Vision – 2025, 10th Five Year Plan was formulated to get exploration coverage upto 35% of sedimentary basins by 2006-07.

Government of India has so far concluded four rounds of NELP offers, wherein a total of 90 exploration blocks have been awarded to various companies, both NOCs and private parties, which will substantially enhance the basin appraisal. In the fifth round of NELP, 20 blocks have been offered. With future offers of NELP blocks and implementation of the exploration programme chalked out by the NOCs and the Pvt. Parties , the basinal areas that are covered by the programme would be more than 35% by the end of the 10th Plan period (2002-07).

In the medium -to long-term, continuation of the efforts through NOCs and private parties with the firming up of the knowledge building activities in frontier basins will lead to further upgradation of appraised basinal areas.

With the above efforts put in place, appraisal of the hitherto poorly explored areas of the Indian sedimentary basins will gradually improve; and by 2025, the total basinal area of the country is likely to be appraised by different players in the Indian upstream sector.

(Ministry of Petroleum and Natural Gas O.M. No. O-27012/1/2005-ONG/US (EO) dated 13th July, 2005)

RECOMMENDATION SL. NO.6

NEED FOR PERIODICAL REVIEW OF EXPLORATION PROGRAMME

The Committee note that to identify more hydrocarbon reserves and to augment production of crude oil, ONGC has formulated its exploration programme which is reportedly being pursued by it vigorously. The X Plan exploration programme of ONGC encompasses the carrying out of exploratory activities on a time bound manner both in pre NELP acreages and the exploration blocks acquired during the four rounds of the NELP. The Committee note that the exploration inputs put in place during the first two years of X Plan have resulted in 12 new hydrocarbon finds which have opened up new sectors for further exploration and a potential for accretion of new hydrocarbon. The Committee desire that progress of the X Plan exploration programme should be reviewed periodically to ensure that there are no slippages of targets.

Reply by the Government

The performance of ONGC is monitored and reviewed periodically during the year by DGH and MoPNG and final evaluation, in terms of reserve accretion as part of the performance of ONGC, is done at the end of year by DPE. The plan performance and mid- term review is carried out by the Planning Commission.

DGH monitors and reviews the exploration performance with respect to the committed work programme for the acreage during its exploration cycle.

Based on the MoU by ONGC annually with MoPNG, a comprehensive performance evaluation is done by DPE in respect to different parameters, which include reserve accretion as exploration performance parameter besides other physical and financial performance parameters, dynamic efficiency parameters like HR initiatives, R&D activities, gas flaring reduction, production costs, accident containment, process safety audits, ISO 14001 certification, employee

productivity, manpower redeployment plan, IT upgradation and modernisation, evolution of benchmarks, etc.

The Mid Term Review (MTR) of the 10th Plan exploration programme has been undertaken considering the results obtained during first two years of 10th plan (2002-2004). The exploration programme for the period 2004-07 has been drawn to optimise the efforts in acreages under various dispensations. During the remaining period of 10th plan (2004-07), certain areas of higher prospectivity have been accorded focused input planning. Based on the mid-term review of the X-plan, the overall targets for physical inputs for ONGC have been enhanced, so as to achieve the set objectives.

The details of planned exploratory inputs and those envisaged in draft MTR* for the period 2004-07, in ONGC operated domestic acreages are given below.

Exploratory Inputs and Accretion	First two years of X- Plan (2002-04)		Remaining three years of X- Plan (2004-07)	
Accietion	STP (Upside)	Actual	STP (Upside)	MTR
2D Seismic Data (GLK/LK)	39680	27052	6175	40505
3D Seismic Data (sq km)	24377	28530	13732	66833
Exploratory Wells (No.)	267	274	327	401-471

^{*} Note: MTR yet to be approved by the ONGC Board.

STP: Start of Term Project

(Ministry of Petroleum and Natural Gas O.M. No. O-27012/1/2005-ONG/US (EO) dated 13th July, 2005)

RECOMMENDATION SL. NO.7

NEED FOR EXPEDITIOUS IMPLEMENTATION OF THE STRATEGIES

The Committee note that ONGC has formulated short, medium and long term exploration and production strategies, for next 20 years, which envisage doubling of in-place volume of hydrocarbons from 6BT to 12BT, improving the recovery factor and augmentation of production. The Committee desire that

ONGC should initiate steps with due promptitude to implement these strategies and monitor their progress periodically to ensure that achievements are in consonance with the strategies planned.

Reply by the Government

To sustain this growth, ONGC has drawn up ambitious strategic objectives, which include doubling the oil and gas in place volume. Having accreted six billion tonnes in place hydrocarbons (O+OEG) in its first 45 years of operations, ONGC now aims to double the in-place volume of hydrocarbons in the next 15 years by 2020. The second strategic objective is to augment the global recovery factor from the existing 28 per cent to the global norm of 40 per cent in the next 20 years.

The short -and medium - to - long term strategy of ONGC has two components. The short term component has been dovetailed into the X Plan and is under implementation. As part of 10th Plan, stress is being laid to intensify exploration in hitherto less explored/unexplored deepwater areas, have seismic surveys conducted in key growth areas and knowledge building in new sectors of producing as well as frontier basins.

To improve the recovery factor from the existing fields, ONGC has identified 19 IOR-EOR schemes in 15 major fields which hold a major part of the company's reserves. 16 of these schemes are already under implementation, including the ambitious redevelopment of its largest field, viz., Mumbai High. Besides, ONGC is extending the IOR/EOR techniques to other fields as well. Six more fields, namely, Linch, Nandasan, Wasna, Limbodra, Gamij and South Kadi have been brought under the IOR schemes and EOR pilots are under implementation in Viraj, Ankleshwar, Jhalora, Becharaji, Lakwa, Padra, Badarpur and Kosamba fields. ONGC has been continuously incorporating new drilling, completion, production and work-over techniques as part of these efforts.

The programme beyond X-Plan period forms part of medium – long term strategy. The exploration strategy envisioned beyond 2007 will be in continuum with the present strategy focusing more on the new sectors/basins in the yet-to-

be-established basins and deepwater/frontier areas/sectors. Technology will play a leading role in the implementation of the exploration strategy.

(Ministry of Petroleum and Natural Gas O.M. No. O-27012/1/2005-ONG/US (EO) dated 13th July, 2005)

RECOMMENDATION SL. NO. 8

NEED FOR IMPROVED OIL RECOVERY (IOR)/ENHANCED OIL RECOVERY (EOR) INITIATIVES

The Committee note that ONGC and OIL have taken up IOR/EOR initiatives for increasing Hydrocarbons reserves. As far as ONGC is concerned, the Committee note that in April 2002, ONGC screened 41 fields for implementation of IOR/EOR schemes. Though these fields were studied during last two years, the Committee note that the major inputs for these fields are yet to be firmed up. It is also noted that studies in respect of many fields are either in progress or yet to be planned. It is needless to mention that without completion/initiation of IOR/EOR studies, it would not be possible to implement IOR/EOR programme and develop the fields as per time bound action plan. The Committee, therefore, desire that the studies which are incomplete, and are yet to be carried out, should be initiated and steps be taken for further exploration and development of these fields so as to achieve the objectives laid down during X five year plan.

Reply by the Government

ONGC

ONGC has firmed up plans to implement IOR/ EOR schemes for 41 fields identified during April 2002. All the fields have been taken up and studies are at various stages. For the following fields, inputs have already been identified and they are under various stages of implementation. These are:

- 1) Linch
- 2) Nandasan
- 3) Wasna
- 4) Limbodra
- 5) Gamij
- 6) South Kadi

Action has already been initiated for other fields specially to achieve the production target set forth in the five- year plan.

<u>OIL</u>

Various IOR/EOR steps which were implemented by Oil India Ltd. (OIL) over the years were polymer flooding, peripheral water injection, crystal gas injection, water flooding etc.

At the beginning of 2005-06, water injection is ongoing in 13 out of 24 identified reservoirs and it is planned to enhance water injection in these reservoirs. OIL also has plans to start water injection in 9 new reservoirs with following break up:-

Field	No. of new reservoirs	Oil In Place (MMT)
Nahorkatiya	3	7.22
Moran	1*	14.61
Jorajan	5	23.03
Total	9	44.86

* Gas Injection was done in this reservoir earlier

By end of X Plan, 31 reservoirs would be subjected to IOR/EOR with total Oil in-Place of 214.22 MMT. Water injection rate is planned to be enhanced from the present level of around 8,500 KLPD to 13,000 KLPD by the end of X Plan. The target laid out for the next two years (upto end of X Plan) is as follows:

Year	Water Injection Target (KLPD)	Financial Outlay (Rs. Crores)	Total No. of Wells
2005-	11,200	18.00	64
06			
2006-	13,000	8.38	77
07			

In addition, action has also been taken to improve production by addressing well bore problems in producing wells plagued with premature water production, sand ingression, wax deposition in production tubing etc.

The services of the Institute of Reservoir Studies (IRS), ONGC, Ahmedabad were requisitioned by OIL for examining the suitability of Alkali-Surfactant-Polymer (ASP) flooding in OIL's fields. In the study carried out in a single reservoir, viz., Nahorkatiya Barail IV+V sand, Nahorkatiya well no. 1 block, the improvement in oil recovery with ASP chemicals was found not encouraging enough to warrant a field trial.

The help of IRS, ONGC, Ahmedabad is also being taken for implementation of MEOR techniques, i.e., EOR using micro-organisms and/or bio-surfactants in 3 wells of OIL on an experimental basis. Field implementation has commenced in 2 wells and the first well has shown encouraging results.

OIL also discovered heavy oil in the Bikaner-Nagaur Basin in Rajasthan. OIL has signed an agreement with PDVSA, Intevep Venezuela on 29-11-2002 to assess a suitable technology and then implement a field scale pilot plant to assess techno-commercial feasibility for field implementation. The Phase-I work, viz., selection/study of the method has been completed. Works are initiated for Phase-II of the project which envisages drilling of two wells (1 inclined & 1 vertical), cyclic injection of steam (huff and puff) and setting up of Pilot scale production facilities for experimental production of heavy oil/bitumen as recommended by PDVSA, Intevep.

(Ministry of Petroleum and Natural Gas O.M. No. O-27012/1/2005-ONG/US (EO) dated 13^{th} July, 2005)

RECOMMENDATION SL. NO.9

SCHEMES FOR REDEVELOPMENT OF MUMBAI HIGH FIELD

ONGC has also drawn up plans for redevelopment of Mumbai High field and implementation of Improved Oil Recovery (IOR) in 14 other major fields through 19 schemes, out of which 16 schemes are under various stages of implementation. The Committee desire that other 3 schemes should also be formulated and implemented expeditiously. Above all, the Committee note that ONGC has planned specific measures for maintaining/enhancing oil and gas production in the fields being operated by it. The Committee desire that these measures should be finalised and implemented with due promptitude. The Committee would also like to be apprised of the impact of these measures in enhancing oil production.

Reply by the Government

The 16 schemes which have been finalized as a part of IOR programme are at various stages of implementation. The status of the remaining three schemes is as follows.

1) North Kadi Phase-II:

The feasibility report for Phase-II was approved by ONGC on 30th Dec 2004 envisaging ultimate recovery of 21.226 MMt oil corresponding to 0.363 MMt incremental oil. The inputs envisaged are 21 new wells and scheduled completion is March 2007. The total cost of the project is 32.22 Crores. The project is under implementation.

2) Additional development of Part-II Heera and South Heera:

Two platforms, namely, HZ and HG, have been proposed in this project after completion of the reservoir simulation studies by ONGC. These projects envisage drilling of 12 wells at a cost of 580.27 Crores. The cumulative gain from HZ platform is 2.645 MMt of oil and 0.736 BCM of gas by 2020-21. From HG platform the cumulative free gas is 3.017 BCM by 2015-16. The likely date of

completion of inputs is Feb. 2007. The project has been approved by ONGC. However, PAC approval is yet to be obtained.

3) Lanwa EOR:

Concern for enhancing recovery necessitated the identification and application of a suitable thermal EOR method in the field. Extensive laboratory studies established the technical viability of thermal EOR processes like in-situ combustion and steamflooding. However, in-situ combustion process was preferred over steamflood due to high depth (1050 m), high reservoir pressure (105 kg/cm2) and inadequate regular source of fresh water around the field.

An in-situ pilot was initiated in 1992. Air injection in the pilot was stopped after injection of 63.5 million cubic metre of air in November 1999. The performance of the pilot indicated that:

- In-situ combustion process could be sustained and propagated.
- Pilot was technically successful resulting in incremental oil production of 24,000 tons by November 1999.
- Potential of the process in terms of recovery and optimization of Air to Oil ratio could not be established due to operational constraints like
 - Interruption of air injection in the initial phases due to sanding in injector
 - Compressor problem resulting in inadequate air supplies as compared to designed rates.
 - Frequent closure of pilot producers due to operational problems. Low liquid withdrawal rates due to problems in artificial lifts
- The economics of the pilot, considering all the expenditure incurred, is far from expectations, partly due to the extended period of the pilot project.

In view of the above, an additional pilot was approved not only to bridge the gap in practical knowledge & experience, but also to know the exact potential of the process. The additional pilot project has been approved by EC in October 2000 at a cost of Rs 560 lakhs. The pilot is under implementation.

ISC process is under application on commercial scale in the adjacent Balol field. As there is no geological boundary between Lanwa and Balol fields, the effect of ongoing air injection in Balol is being felt in Lanwa in terms of improvement in oil production. As such, it is contemplated to commercialize the process in Lanwa field, dovetailing the additional pilot project.

Additionally, one more IOR scheme is under implementation.

1. Additional development of MHN L-II reservoir:

The study in respect of additional development of MHN L-II has been completed by IRS and feasibility report is yet to be formulated. The inputs identified for this development envisages installation of two platforms, drilling of 14 new wells and sidetracking of 11 wells in addition to redistribution of water injection by converting 4 additional producers to injector. The envisaged incremental oil is 2.81 MMT by 2030.

(Ministry of Petroleum and Natural Gas O.M. No. O-27012/1/2005-ONG/US (EO) dated 13th July, 2005)

RECOMMENDATION SL. NO.12

COST OF PRODUCTION

The committee note that ONGC compared the cost of different oil majors, as reported by Deustche Bank in their report `Major oils 2003' with its own cost for a five year period and found that the cost of ONGC was quite comparable to international standards. The committee are of the view that there should be no room for complacency in making efforts to further reduce the cost of production. The committee note that ONGC & OIL are taking certain steps to reduce the cost of production. The committee desire that these steps should be implemented expeditiously and monitored periodically to attain the desired results.

Reply by the Government

ONGC

Steps to reduce cost of production, as noted by the Committee in its report, are already under implementation in ONGC. These steps are continuous in nature for optimisation of cost of production and are under continuous focus of management for deriving maximum benefit. Some of the major production/ operational related steps are outlined below:

- Enhancing oil and gas production through implementation of Improved Oil Recovery/Enhanced Oil Recovery schemes, additional development of existing fields and putting new fields on production as quickly as possible.
- Increasing gas sales/utilisation and reducing gas flaring, thereby increasing revenue and reducing overheads & operating cost per unit of saleable product.
- 3. Introduction of state of the art technologies
- 4. Operational de-bottlenecking, systems optimisation and efficiency enhancement

Amongst the major focus areas for reduction in cost of production is continuous induction of state-of-the-art technology. Major initiatives taken, for induction of new advanced equipment as well as upgradation of existing resources with state-of-the-art equipment, are as under:

- 1. The offshore rigs are being sent for dry-docking at a scheduled interval for refurbishment and major lay up programme.
- 2. ONGC has already initiated action to refurbish and upgrade its onland drilling rigs in phases. Upgradation and refurbishment of 12 onland drilling rigs was taken up through M/s BHEL in the first phase. Till date 11 rigs have been completed and put back in operation. Further, 37 drilling rigs

- have also been identified to be taken up in phase II & III through BHEL / ICB after completion of phase I
- Workover rigs are also being refurbished in phases through Central workshops at Baroda & Sivasagar, till date refurbishment of 08 rigs has been completed. Further programme of refurbishment of 17 rigs during 2005-07 has also been finalized.
- 4. Supply order for 25 new state-of-art rigs was placed to M/s UPET, Romania. Delivery of these rigs has commenced from Feb'04. Till date 5 rigs have been received and are in operation. Delivery of remaining rigs is scheduled to be completed by Dec'2005.
- 5. 6 No. High pressure advanced Cementing units with state of art equipment have been purchased and commissioned.
- 6. Refurbishment & upgradation of cementing units through internal/external agencies is in hand apart from replacement of old Cementing units with new high-pressure Cementing units. Till date 23 cementing units have been refurbished, another 10 units would be refurbished by March'2006. Plan has also been drawn for taking up remaining 24 units through ICB.
- 7. New state-of-art logging units are also being procured for replacing old onshore units. Supply order has already been placed for 5 open-hole units and 10 cased-hole units. Units are expected by December 2005. Supply order has also been placed for 4 offshore logging units; Units are expected by March 2006.
- 8. Supply order for 33 new stimulation units has also been placed during the year; units are expected by end 2005.

ONGC is also taking steps to optimize the Human Resources so as to reduce the cost of production and remain competitive. In this regard, ONGC has taken several initiatives:

- a) Introduction of Voluntary Retirement Scheme
- b) Redeployment of surplus manpower from one discipline to another based on organizational need in addition to the job rotation and transfer policy of the organization.

c) In order to facilitate redeployment of surplus manpower in certain cadres due to changes in technology and improved work processes, an initiative has been taken to revise the manning norms for various activities/work processes under ARCUBE (R³) Project encompassing three Rs as Role, Roster and Responsibility. A consultant of International repute has been hired for this purpose.

The study is under progress and final recommendations are expected by end of August, 2005. The implementation of the same shall be carried out through out the organization within one year of approval of the recommendations. The identified surplus manpower shall be trained for their gainful utilization for the categories where shortages are there

There is a conscious effort in all activities to keep costs to the minimum so as to achieve the best possible lowest unit cost of production. However, due to aging of fields, more efforts are required to maintain/augment production level resulting in increased cost of operation.

It may also be added that globally, the cost of oil field services (like drilling rigs, logging services, etc.,) normally moves in tandem with oil prices. Since the global oil prices are at present at a very high level, the cost of oil field services has also gone up. This has an upward impact on the cost of production of ONGC.

Further, it may be brought out that efforts to improve the 'Recovery factor' of fields lead to higher per unit cost of production. Similarly, production from marginal fields has higher per unit cost of production. Such efforts are, however, undertaken in the economic interests of the country, because of the even higher cost of oil imports.

<u>OIL</u>

Oil India Ltd. has identified the following key steps for reducing the cost of crude oil production :

- i) Technology induction for production augmentation to increase employee productivity.
- ii) Outsourcing of operational services for water injection stations, scrapping of wells etc.
- iii) Switching over from road transportation mode to pipeline mode in remote areas for crude transportation.
- iv) Judicious utilization of infrastructure facilities to share cost of exploration and production activities.

(Ministry of Petroleum and Natural Gas O.M. No. O-27012/1/2005-ONG/US (EO) dated 13^{th} July, 2005)

CHAPTER III

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

RECOMMENDATION SL. NO.3

NEW EXPLORATION LICENSING POLICY (NELP)

The Committee note that India today remains one of the least explored regions with well density per thousand sq. km being among the lowest. To boost the level of exploration activity in the country so that new finds can be made and level of crude oil and gas produced may be increased, the New Exploration Licensing Policy (NELP) was formulated by Government of India in 1997. NELP was operationalised in 1999. The Committee have been informed that NELP has considerably increased the exploration activities of Indian sedimentary basins. However, from the details of work programme and achievement of exploration blocks offered under NELP-I to IV, the Committee note that there was a huge shortfall in achievement of target pertaining to seismic survey and drilling of blocks awarded under NELP-II, III and IV. As against the targets of conducting 10415, 16320 and 12655 sq.kms of 3D seismic survey the actual achievements were 11752 and 8072 and NIL sq. km. respectively. Position with regard to drilling of wells is no better either. As against the targets of drilling of 52 and 57 wells under NELP II & III the actual numbers of exploratory wells drilled were 34 and 1 respectively. The Committee are unhappy over the slow pace of work being undertaken in seismic survey and drilling activities, and desire that DGH which is mandated to monitor and review the exploration programme of Companies engaged in E&P activities, should closely monitor the progress of exploration of all the blocks offered under NELP-I to IV and suggest corrective measures so that targets laid are achieved.

On NELP, Public sector companies engaged in E&P activities have informed the Committee that they are experiencing certain difficulties due to its present provisions. They have suggested certain changes like providing of more incentives for frontier basins, more powers for approval to Management Committee related to phase extension assignments, special incentives for development of marginal fields, timely availability of data of blocks offered, according infrastructure industry status of E&P projects, granting of PEL in shortest possible time, environmental clearance, and awarding of blocks on the basis of minimum work programme carried out.

The Committee desire that Ministry of Petroleum and Natural Gas should review all the suggestions with an open mind and take appropriate steps to modify NELP so as to make it more attractive and conducive to the needs of the companies engaged in E&P activities. The Committee also desire that NELP should be reviewed and modified periodically to ensure that terms of Production

Sharing Contract (PSC) are comparable to the best of terms of PSC offered by any country in the world-so that more and more companies from India and abroad could be attracted to bid for exploration blocks offered under NELP.

NELP should be reviewed in such a way that all PSUs engaged in E&P activities should be given preference over other companies in the bidding taking into account their capabilities to undertake the venture. Thereafter preference may be accorded to domestic private sector E&P companies over foreign companies in the matter of awarding of blocks under NELP.

Reply by the Government

Under New Exploration Licensing Policy (NELP), the minimum work programme (MWP) is committed by the operators to be completed in three phases. Phase-I is of 3 to 4 years of duration while phases II and III are of 2 to 3 years duration. Operator has the option of entering the next phase based on the results of the previous phase. Thus, it may not be appropriate to compare the total work committed in all three phases of all the blocks with the actual work carried out, as the operator may not enter Phase II and III in all the blocks. The actual work of a phase is to be compared with work commitment only for that particular phase.

Also, in the initial years of the first phase, the operator mainly interprets, reinterprets and does special processing of the existing data. Thus a true comparison can be made only after the completion of that phase.

If the committed work programme is compared in the above manner, it is observed that phase wise work progress is satisfactory.

It may be noted that most of the NELP II blocks are still in phase I and only two blocks have entered phase II. None of the NELP II blocks have entered phase II.

All the NELP III blocks are in exploration phase I. The exploration phase I is upto December 2006 for onland blocks, April 2006 for shallow water blocks and April 2007 for deep water blocks.

At present, all the NELP IV blocks are also in exploration phase I. The exploration phase for a majority of NELP IV blocks is upto March 2007 for onland blocks and March 2008 for deep water blocks.

The work progress in the blocks is satisfactory and committed work is expected to be carried out before completion of respective phases. Exploratory drilling work would be at a faster pace in the final years of the phases, as the interpreted data will be available for deciding the drilling locations.

DGH closely monitors the work progress of each block and endeavors that the committed work programme of every phase is completed within the stipulated time. It may also be noted that as per the terms of the Production Sharing Contracts, contractors cannot enter the next phase of exploration without completing the Minimum Work Programme of the previous phase. Also they are bound to complete the MWP commitments under the contract failing which they have to pay the Government for the uncompleted part of the MWP.

Review of NELP to provide preference to PSUs:

Government of India formulated New Exploration Licensing Policy (NELP) in the year 1997 with attractive terms and conditions for global bidding. Basic thrust of NELP is to provide a level playing field so that global technology and knowledge is made available for exploration and exploitation of hydrocarbons in India. Under the NELP rounds, the blocks are being offered by Government of India through international competitive bidding, where all the companies whether Indian or foreign, private or NOC, have to submit their bids in the form of Minimum Work Programme (MWP) commitment and fiscal terms. The bids carry different marks for onland, shallow water and deep water blocks. The blocks are awarded to the successful bidders irrespective of their status as PSU's as or national or international companies. NELP round V has been offered with more attractive terms and transparent evaluation criteria. In NELP-V, 69 bids were received for the 20 exploration blocks on the bid closing day i.e. 31st May, 2005. The bids evaluation is in progress.

After each round of NELP the terms are reviewed with inputs from all potential bidders. Such inputs are also invited from the PSUs. This exercise will also be undertaken for the next round and feedback from all companies will definitely be valuable in further improving the quality of future rounds.

RECOMMENDATION SL. NO. 10

NEED TO ENHANCE THE RECOVERY FACTOR BY ONGC

The Committee note that current average recovery factor from the producing fields of ONGC is 28%. Though the recovery factor of ONGC is comparable to the recovery factor being achieved by oil companies in USSR and China, it is well below the recovery factor of US which is of the order of 32% to 33% and Norwegian Companies which have the recovery factor of the order of 45% to 55%. The Committee note that ONGC has set a goal to increase average recovery factor from 28% to 40% by 2020. The increase in the average recovery factor from the current 28% to 40% will appreciably augment India's hydrocarbon reserves and will help in reducing the widening gap between oil supply and demand. The Committee desire that ONGC should not only strive to achieve the laid down objective of achieving recovery factor of 40% by 2020 but also analysis the field cycle concept which have helped Norwegian Companies to achieve a recovery factor of the order of 45% to 50% and follow a suitable concept to achieve the recovery factor of the order of 45% to 50%.

Reply by the Government

Recovery factor is dependent on several parameters. Some of the key ones are:

- Reservoir rock, its property, heterogeneity, etc.
- Properties of reservoir fluids.
- Energy system operating in the reservoir which is responsible in expulsion of the oil.
- Depth, logistics.
- Techno-economic consideration.

In fact, no two reservoirs are identical in nature and, therefore, it is not possible to draw a corollary between them. The study by National Petroleum Council of USA in 1984 has concluded "Really definable correlation of recovery efficiency cannot be provided as quantification of reservoir heterogeneity is not possible".

Even among ONGC's assets from some of the fields like Ankleshwar and Narimanam recovery expectation is of the order of 60%. ONGC is formulating IOR and EOR plans for achieving the overall corporate goal of 40% recovery by 2020. However, a few of the fields have been analyzed for the field cycle concept and inputs are being continuously planned and production plans drawn up to 2030. ONGC is not restricting itself to 40% recovery but all out efforts are being made to achieve a recovery of more than 40%. For example, in some of the pays of Gandhar Field more than 40% recovery is already expected. In GS-12 sand of Gandhar field, the recovery expected is around 58% and efforts are still continuing to further improve this figure. Major Fields of ONGC will be taken up for field cycle concept in due course of time. The concept involves identification of inputs, application of suitable EOR methods and other technology induction for achieving optimum recovery.

(Ministry of Petroleum and Natural Gas O.M. No. O-27012/1/2005-ONG/US (EO) dated 13^{th} July, 2005)

RECOMMENDATION SL. NO. 11

DEEP WATER EXPLORATION

The Committee note that the deep water basinal area constituting about 43% of the sedimentary area of the Country is estimated to contain about seven billion tons of hydrocarbon resource. So far India's exploration and production activities were concentrated mainly on category I basins which have almost fully been exploited by now. Obviously, there is no choice but to change the present exploration strategies and concentrate on deep waters which hold a large potential of hydrocarbons. The Committee note that though ONGC started its deep water exploration programme during seventies but success has been eluding it so far. To give an impetus to its deep water exploration, ONGC launched 'Sagar Sammridhi' project in August, 2003. The Committee find that after the launch of this project, ONGC has achieved success by finding hydrocarbons from on of the two wells, discovered so far. ONGC has set a target of achieving another 6 billion tones of hydrocarbons by 2020, and 2/3 of the reserves are expected to be discovered from deep waters. As exploration in

deep water basins involve huge expenditure, it should be ensured that exploration activities in deep waters do not slow down for want of funds.

Reply by the Government

The exploration programme of ONGC is being implemented as per the X-Plan exploration programme (2002-07). The deepwater component of the total X Plan programme includes acquiring 14000 LK of 2D, 17900 sq km of 3D and drilling of 34 exploratory wells. Of these envisaged inputs, as on 1.04.2005, ONGC has already completed acquisition of 19348 LK of 2D and 17141 sq km of 3D seismic data and drilled 21 wells. Additionally, three wells (G-4-4, L-1-1A and Vashista-2) were under drilling as on 01.04.2005.

ONGC currently holds 28 deepwater PEL acreages, of which 19 have been awarded under the four rounds of new exploration licensing policy (NELP). ONGC has completed the minimum work programme under Phase-I in three deepwater blocks, namely, KG-DWN-98/4, KG-DWN-98/5, MN-DWN-98/3, awarded under NELP-I and has entered the Phase-II of exploration in these blocks. ONGC has completed the seismic data acquisition in the six deepwater blocks awarded under NELP-II within the timeframe as per the Phase-I committed minimum work programme. In the two blocks awarded under NELP-III and five blocks awarded under NELP –IV, seismic data acquisition is in full swing to fulfill the committed work programme. The drilling in deepwater exploration campaign is progressing with 3 drill ships, Belford Dolphin, Discoverer Seven Seas and ONGC's own rig Sagar Vijay.

The New Exploration Licensing Policy (NELP) of the Government has given a special thrust to deepwater exploration by putting in place special terms for deepwater blocks.

RECOMMENDATION SL. NO. 13

SHORTAGE OF FUNDS

The Committee have been informed that ONGC propose to raise the 10th plan outlay as the funds initially provided are likely to fall short for the more intensified plan activities likely to be undertaken by it. The Committee, however, note that the extent of shortage of funds is yet to be firmed up. The Committee desire that ONGC should make an assessment of its additional requirement of funds during 10th plan and find ways and means to meet the requirement of funds. The Committee recommend that the Government and the Planning Commission should allocate fully the additional funds required by ONGC during the Mid-Term Review of the Plan without making any cuts in the proposals of ONGC.

Reply by the Government

The exercise for mid-term review of 10th Plan is in progress. On finalization of the same, exact quantum of funds requirement shall be ascertained. ONGC does not require any allocation of funds by either the Planning Commission or the Government. Any additional requirement of funds, if any, can be met through internal accruals or though commercial borrowings without seeking budgetary support from the Government.

RECOMMENDATION SL. NO. 14

LIMITED HORIZON OF OIL

Oil India Limited was incorporated as a joint venture company between the Government of India and Burmah Oil Company (BOC) with equal share holding in the year 1959. The company was nationalised in 1981. The Committee note that despite being one of the two premier national oil companies engaged in the work of exploration and production, OIL does not have a presence at all India level which a national company is expected to have, and its most of the exploration and production operations are mainly confined to North-East part of the country.

One of the main reasons for OIL's limited operations was on account of awarding of most of the blocks to OIL in North-East region before nationalisation on the ground that BOC, who was 50% owner of OIL, was already operating in North-East, therefore, new exploration acreages contiguous to BOC's area of operations in the region were awarded to OIL.

The Committee, however, note that even after nationalisation of OIL in 1981, a step-motherly treatment was meted out to OIL, and they were awarded blocks in North-East coast and in Mahanadi offshore basins, Ganga Valley basin, Andaman offshore and Saurashtra basin which were relinquished by ONGC for lack of commercial prospectivity. Thus, it is noted that OIL did not get blocks of their choice even after nationalisation. The Committee feel that in the era of global competition, stifling the operations of a company by thrusting upon it blocks which had earlier been relinquished by another company for lack of prospectivity is least desirable. Before awarding a block, the Government should also take into consideration the choice of companies and their capability to undertake exploration and production activities in such blocks so as to enable them perform optimally. After advent of NELP, the Committee hope that all the companies will be treated on equal footing and OIL would be able to enlarge its operations uniformally all over the country which will make it a national oil company in true sense.

Reply by the Government

In order to broaden its horizon, Oil India Ltd. is undertaking the following initiatives:

- Participation in the NELP Exploration blocks, offered in various competitive rounds of bidding. At present OIL has participating interest in 13 NELP blocks with operatorship in 5 onshore blocks.
- ii) OIL is putting emphasis to venture into overseas oil/gas exploration blocks, production / acquisition of producing properties in consortium with other partner's or independently.
- iii) Joint bidding, both with foreign E&P companies as well as Indian Oil PSU's, for joint operation both in India and overseas. OIL entered into a Strategic Alliance with Indian Oil Corporation on 08.12.2004 for pursuing E&P opportunities overseas.
- iv) Equity participation in downstream industries. OIL intends to enhance its equity in Numaligarh Refinery Limited from the existing 12.35%.

(Ministry of Petroleum and Natural Gas O.M. No. O-27012/1/2005-ONG/US (EO) dated 13th July, 2005)

RECOMMENATION SL. NO. 19

<u>SPECIAL TRANSPARENT PROCUREMENT PROCEDURES FOR OIL EXPLORING COMPANIES</u>

The Committee note that exploration activities require cutting edge technology for certain goods and services and hardware/ software. It has been brought to the notice of the Committee that by following the normal procurement procedures it has not been feasible for the oil companies to source the best technology because of the implicit incremental cost. The Committee feel that if normal procurement procedure is disadvantageous to be followed, then the oil exploring PSUs should be allowed to evolve a special mechanism for procurement of cutting edge technology, as long as the new procedure sought to

be followed is characterized by transparency, equity and fairness which are the underlying principles of the usual procedure.

Reply by the Government

Exploration activities require cutting edge technology for certain goods and services and hardware/ software and it may not be feasible to source the best in class technology by following the normal procurement procedure where the lowest bidder has to be the proposed one.

ONGC has been asked to suggest alternative procurement procedures which can be fair, equitable and transparent while addressing its concerns in this area.

(Ministry of Petroleum and Natural Gas O.M. No. O-27012/1/2005-ONG/US (EO) dated 13th July, 2005)

RECOMMENDATION SL. NO. 20

ONGC VIDESH LIMITED

ONGC Videsh Limited, a wholly owned subsidiary of ONGC is engaged in overseas exploration and production of oil and gas to supplement the reserves of the parent company i.e. ONGC and to augment the national energy security. The company was incorporated on 5th March, 1965 as Hydrocarbon India Private Limited and renamed as "ONGC Videsh Limited" (OVL) in 1989. The Committee are, however, constrained to note that despite being in operation for almost three decade, now OVL's share in World's oil and gas reserves is minuscule being 0.0825 percent only. The Committee are constrained to note that OVL's share in oil rich Middle East region which have reserves to the tune of 63% is zero. The position is equally bad as regard to the share in North, South and Central American regions, which have a total of 14.40% of the world reserves. Needless to mention that OVL's efforts in supplementing countries oil reserves have been highly pathetic.

While the world's major oil companies like Shell and B.P. have operating in 80-100 countries, OVL's E&P activities are confined to only 10 countries. The Committee are constrained to note that despite being in overseas E&P activities for the last three decades, OVL has not done much to acquire oil fields overseas.

Reply by the Government

Till financial year 2003-04, ONGC Videsh Limited (OVL) had presence in 8 countries. In 2004-05 OVL acquired exploration blocks in another 4 countries, thus taking the total to 12 countries, viz., Russia, Sudan, Vietnam, Egypt, Cote' d Ivoire, Australia, Libya, Iran, Iraq, Qatar, Syria and Myanmar. In addition, OVL is also pursuing its efforts for acquisition of E&P assets in 47 countries. In effect OVL's efforts only took real shape in the beginning of the century with the acquisition of interest in Sakhalin-I in Russia, as the country's foreign exchange reserves were not of the magnitude they are looking. For most of its earlier history OVL had to operate in an environment where foreign exchange reserves were not available to fund an aggressive overseas programme. Being a late entrant into the field of equity oil, OVL has to compete aggressively with other international companies and has achieved a fair measure of success in a relatively short time in view of this.

(Ministry of Petroleum and Natural Gas O.M. No. O-27012/1/2005-ONG/US (EO) dated 13th July, 2005)

RECOMMENDATION SL. NO. 21

ASSOCIATION OF MINISTRY OF EXTERNAL AFFAIRS FOR OIL RELATED ECONOMIC DIPLOMACY

As our domestic reserves are limited and present proven fields have been developed to optimal levels, there is no alternative but to be in the forefront in the race for acquiring equity oil from abroad.

The Committee note that OVL is facing stiff competition from oil companies of Malaysia and China in its bid to acquire overseas oil equity. The Companies from developed world such as USA, Canada & Europe are also posing competition to OVL. OVL recently lost two good oil and gas acquisition opportunities in Sudan and Angola. While Sudan block was lost on account of delay in obtaining decision of CCEA, Angola deal could not be acquired, as the deal was pre-empted and given to China.

The Committee recommend that the system of single window clearance through ECS should be reoriented in a manner that would ensure that no delay is caused in securing the oil deals.

To obviate loss of deals on such accounts, the Committee recommend that OVL's efforts should be supplemented by Ministry of Petroleum and Natural Gas and by Ministry of External Affairs.

To clinch big deals in its quest for global energy, Ministry of Petroleum and Natural Gas should work in close tandem with the Ministry of External Affairs.

The Committee understand that for extending guidance and advice to Indian oil companies in their efforts to acquire equity oil abroad, the Government have constituted an advisory Committee on Oil Diplomacy for Energy Security comprising experts with specialized knowledge of the countries and regions with whom the oil companies are expected to interact. The Committee desire that the Ministry of Petroleum and Natural Gas and other PSUs involved in E&P activities abroad should maintain a regular liaison with this Committee, apprise them about their future plans/ proposals for acquiring oil equity abroad and seek their help to clinch the deals.

Reply by the Government

Given the increasing gap between demand and domestic availability of crude oil, besides taking appropriate measures to accelerate exploratory activities for enhancing domestic oil and gas production, it has become essential, for enhancing our energy security, to step up efforts overseas in search of equity oil and supplementary sources of oil and gas.

Towards this end, and in keeping with the relevant objectives of the National Common Minimum Programme, ONGC Videsh Ltd. (OVL), as well as other national oil companies such as IOC, OIL and GAIL, have been pursuing the acquisition of equity oil abroad, as well as the acquisition abroad of oil and gas exploration acreages and producing properties. These companies have Participating Interests in oil and gas projects

located in Vietnam, Sudan, Russia, Iraq, Iran, Myanmar, Libya, Syria, Australia, Ivory Coast, Qatar and Egypt.

OVL, in association with other oil sector PSUs, is aggressively scouting for E&P opportunities in countries such as Venezuela, Kazakhstan, Kuwait, Yemen, Chad, Niger, Nigeria, Angola, Cuba, Sierra Leone and Ecuador in addition to efforts to acquire more E&P assets in the countries where it is operating currently.

For extending guidance and advice to the Indian oil companies in their efforts to acquire equity oil abroad, Government have constituted an Advisory Committee on Oil Diplomacy for Energy Security comprising experts with specialized knowledge of the countries and regions with whom the oil companies are expected to interact.

Discussions about possible areas of collaboration between India and Russia have been held at ministerial, official and commercial levels, and the progress has been encouraging.

Besides, negotiations have been opened with Iran for supply of natural gas by a transnational pipeline through Pakistan. Also, a trilateral Ministerial meeting in Yangon in January, 2005 agreed in principle on import of gas from Myanmar to India through Bangladesh.

RECOMMENDATION SL. NO. 25

COLLECTIVE BARGAINING MECHANISM FOR OIL IMPORTING COUNTRIES

Currently oil markets are supply-led market and prices are determined by market forces. The oil producing countries have formed an ORGANISATION OF PETROLEUM EXPORTING COUNTRIES (OPEC) which cater to the interests of the oil producers. It is seen that no formal mechanism for collective bargaining exists among the oil importing countries. The Committee desire that Government may initiate steps to form an understanding with major oil importing countries to create a forum to get reasonable prices for oil imports from OPEC and to protect the oil importing countries from being hit by high oil prices.

Reply by the Government

With Asian destinations emerging as the principal consumers for Asian production and the share of Asia in global production and consumption likely to progressively increase, cooperation between Asia producers and consumers is crucial to ensuring stability, security and sustainability. The fundamental to such cooperation must include moderation, dialogue, mutual understanding and respect, security of international supplies, demand supply equilibrium and strategic partnerships based on reciprocity of interests. In view of above, Ministry of Petroleum and Natural Gas had initiated an Asian dialogue aimed at evolving and elaborating an Asian consensus through the first Round Table of Asian Oil Ministers held in January, 2005 at New Delhi.

During the bilateral meeting held on the sidelines of the Round Table of Asian Oil Ministers held in January, 2005 chaired by the Minister of Petroleum and Natural Gas, the chairman had emphasized the need for an effective buyers forum where the buyers of Asia particularly, China, Japan, India and Korea could get together to develop common approach and uniform understanding. He had suggested that this forum could start with an informal gathering in Seoul in the near future. The visiting Minister from Korea took note of the suggestion and assured that the matter would be considered with keen indulgence. It is,

therefore, expected that the major oil importers will continue to meet to exchange information and work in a concerted manner.

(Ministry of Petroleum and Natural Gas O.M. No. O-27012/1/2005-ONG/US (EO) dated 15th July, 2005)

RECOMMENDATION SL. NO. 26

ALTERNATE SOURCES OF ENERGY

Primary energy requirement of our country is growing continuously. As noted earlier, energy requirement which was 304.0 mtoe in 1999 rose to 345.3 mtoe in 2003. The energy demand is expected to grow at the rate of 4.1% over the next two decades. At present, India's main sources of energy are fossil fuels i.e. oil, gas and coal. India has only 0.4% of oil and gas reserves of world. In view of increasing demand for oil and gas which is projected to go to 350 MT by 2025 from the present level of 120MT, it seems that it may not be possible for India to become self reliant in oil and gas. To meet the country's growing need for energy, the only alternative is to develop energy from other sources like coal hydel, nuclear, solar and other non conventional sources of energy. The committee note that two unconventional sources of hydrocarbons viz. Coal Bed Methane and Gas Hydrate have been identified by DGH for development. The Committee hope that these sources would improve our energy requirement considerably.

Besides development of alternate sources, measures pertaining to energy conservation are equally important. The Committee, therefore, desire that the policy for energy conservation and their efficient use, should be brought out within a definite time frame so as to reduce the country's dependence of Hydrocarbons to the barest minimum.

Reply by the Government

Govt. has till date awarded 16 CBM blocks through international bidding for exploration and production of CBM in the country. Total CBM resources in 16 awarded blocks under CBM-I & CBM-II Rounds and on Nomination basis are assessed at 820 BCM and expected total production from these blocks at 23 MMSCMD at their peak production level. The commercial production from coal bed methane (CBM) is expected to commence from the year 2007.

As far as gas hydrates are concerned, this source of energy is still in the R&D stage in the world and India is an active participant in this research programme internationally. In addition ONGC and GAIL are also exploring possibilities in the area of Underground Coal Gassification (UCG). Commercial production from gas hydrate in India is not envisaged in the near future.

Thus, it may be stated that although sincere efforts are being made to harness the alternate sources of energy like UCG & Gas Hydrate, the commercial production of gas in sufficient quantities from these sources will take several years to commence. In view of the above, it seems that although the availability of alternate sources of energy will improve our energy requirement as expected by the committee, it would take some time.

CHAPTER IV

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

RECOMMENDATION SL. NO. 2

<u>DIRECTORATE GENERALOF HYDROCARBONS (DGH)</u>

The Committee in their second Report had recommended the following in regard to functioning of Directorate General of Hydrocarbons (DGH).

"The Committee note that Government by a Resolution in 1993 established Directorate General of Hydrocarbons (DGH) under administrative control of Ministry of Petroleum and Natural Gas with the following objectives:

- 1. To provide technical advice to Ministry of Petroleum & Natural Gas on exploration and exploitation of hydrocarbon in India and abroad;
- 2. To review the exploration programme of companies engaged in E&P activities:
- 3. To reassess the hydrocarbon reserves discovered and estimated by the operating companies;
- 4. To advise the Government on the offering of acreage for exploration;
- 5. To review the development plans for commercial discoveries of hydrocarbon reserves and advise Government on the adequacy of such plan and on future exploitation strategies;
- 6. To review and audit the management of Petroleum reservoirs;
- 7. To maintain the E&P data base; and
- 8. To advise Government on the laying down of safety norms in oil field operations, prescribe pollution control measures and to assist in inspection and periodic safety audit.

The Committee have been informed by some of the PSUs who have recently ventured into E&P activities that non availability of data of adjoining blocks at the time of data viewing of a particular block on offer by Government and delay in availability of technical data of awarded blocks were some of the major constraints being experienced by them in undertaking Exploration and Production activities. There is no denying the fact that access to adequate data is necessary for making a proper assessment of the blocks offered.

Non availability of data at the disposal of oil exploration companies will dissuade them to undertake E&P activities in the Country. To obviate such a situation, the Committee recommends that DGH should possess data on all Indian basins by obtaining it from all the explorers. The Committee also feels that there is an imperative need for setting up of the National E&P data base. The Committee notes that DGH has taken some measures in this regard by conducting a feasibility study. The Committee desire that based on the outcome

of such a study, expeditious steps may be taken to set up the National data base and archives. It should be made mandatory for all companies to hand over a set of data collected by them to the archives, as this will help DGH and other companies to make a realistic assessment of the reserves of blocks offered to them.

Despite being entrusted with very important activities of monitoring and regulating India's Hydrocarbon reserves, Exploration and Production activities within the country and abroad, the Committee note that DGH does not have a cadre of its own and its manpower is drawn from various PSUs, mainly ONGC and OIL on deputation. ONGC and OIL are the two premier oil companies engaged in most of the Exploration and Production activities in the country and abroad. The Committee feels that the manpower drawn on deputation from the same Organization, working of which DGH is mandated to review and monitor, can hardly provide any effectiveness to the functioning of DGH. Moreover, an Organization, solely being manned by deputationists cannot provide continuity to its functioning. In view of the important role entrusted to DGH, the Committee recommends that DGH should have its own separate, independent cadre of staff and should be empowered to take all decisions on the functions assigned to it."

Reply by the Government

The Ministry of Petroleum and Natural Gas in their Action Taken Reply with regard to the above recommendation have stated as follows:-

"In order to assess the hydrocarbon potential of the blocks being offered by GOI under NELP rounds, information on the regional geology of the basin, wherein the offered blocks are located, is essential. The availability of more and more geological data will definitely increase the confidence level of the companies and will help in understanding the geology and tectonics which govern hydrocarbon distribution in various areas/ basins.

Regional data has been made available to E&P companies under the ongoing 5th round of NELP in the form of data packages & information dockets. Data of old wells, in the adjoining blocks, drilled prior to the award of blocks under Pre-NELP and NELP rounds are also provided to the interested companies. In this way, it is ensured that all the related data is made available to E&P companies.

A National Data Repository of geo-scientific data, acquired by different agencies in the country is proposed to be set up by DGH. Policy for making the data available in the public domain will be worked out. It would be mandatory for all the E&P companies to give a copy of the data to DGH. Once the National Data Repository is set up an open acreage system can be adopted wherein companies will have the freedom to choose an area of their interest from the available acreages.

Directorate General of Hydrocarbons (DGH) was established through a Government Resolution in 1993 under the administrative control of the Ministry of

Petroleum & Natural Gas. DGH is carrying out its functions & responsibilities as per the terms of resolution as assigned by the Ministry from time to time. The main activities include opening up of new/unexplored areas for exploration review of reservoir performance of major fields, contract management of various exploration and exploitation activities of operating companies, evaluation process of various exploration & field development bidding rounds and recommendations to Government, implementation of NELP, monitoring of safety & environment aspects & other related activities.

DGH does not have a cadre of its own and its manpower is drawn from various PSUs, mainly ONGC & OIL, on short term deputation. Various exploration blocks and discovered fields operated by Private Companies/Joint ventures are being monitored by DGH as per Production Sharing Contracts (PSCs). Each block/field has a minimum work programme which is to be completed within the stipulated time frame. All the major decisions pertaining to the block/field are taken by the Management Committee of the block /field within powers given to it under the PSC. MOP&NG is in the process of rationalizing the staff requirements of DGH."

(Ministry of Petroleum and Natural Gas O.M. No. O-27012/1/2005-ONG/US (EO) dated 13th July, 2005)

COMMENTS OF THE COMMITTEE

Please see paragraph 7 of Chapter I of the Report

RECOMMENDATION SL. NO.5 UNDER ACHIEVEMENT OF SEISMIC SURVEY AND DRILLING TARGETS

The Committee in their Report had recommended with reference to under achievement of Seismic Survey and Drilling Targets as follows:

"The Committee note that targets for seismic survey and drilling laid by ONGC during IX Plan could not be achieved and implemented in the States of Assam, Nagaland, Tripura and Himachal Pradesh due to one reason or the other. Shortfall in achievement of targets in Assam State has been attributed to laying of greater emphasis on covering the entire area with a blanket 3D seismic survey which resulted in compromising of 2D seismic survey planned targets. In Nagaland, envisaged programme could not be implemented due to non-availability of Production Exploration License (PEL). The planned contractual seismic survey could not be implemented in Tripura owing to non-finalisation of the contract. In Himachal Pradesh, besides delay of PEL grant in Ganga NELP block, slow performance of shot-hole drilling and farmer's agitation have been cited as the reasons for non achievement of the targets. Shortfall in drilling

targets in North Eastern States and Himachal Pradesh have also been attributed to the delays in the exploration plan implementation in environmentally sensitive and logistically difficult areas, drilling of increasingly deeper wells, less rig availability, down hole complication, etc.

To obviate the delay on account of non availability of PEL, the Committee recommend that the Union Government should analyse this problem in detail so that State Governments are made aware that certain blocks are proposed to be awarded for exploration and a way should be found out by which State Governments readily facilitate the exploration immediately after the award of a block to an explorer by granting the necessary approvals for land acquisition, forest clearance etc. expeditiously. In grant of PEL for onland blocks, the effort of the Union Government should be focused on prior clearance or consent from the State Governments concerned at the time of offer under NELP, so that PEL is granted in the shortest possible time.

Other causes for delay as enumerated above viz. non finalization of contract, carrying out exploration in environmentally sensitive and logistically difficult areas, etc may be identified and corrective steps be taken to prevent occurrence of delays in achievement of targets on such accounts in future.

From the details regarding status of Hydrocarbon finds/leads made during IX Plan, the Committee note that in many of the fields in western offshore, 3D seismic API is still in progress. The Committee desire that the survey should be completed within a time bound programme and further steps be taken for interpretation of data and production of blocks/fields with due promptitude. The Committee also desire that the fields in respect of which 3D surveys have been carried out, but which have been not yet put on production, expeditious steps be taken for interpretation of the data and putting these field on production.

The Committee note that there was a shortfall in actual achievement vis-à-vis targets laid by Oil for seismic survey and drilling, during IX Plan. Various reasons which led to shortfall in achievement of targets stated are- deferring of survey for Brahmaputra River Bed due to inability to finalise contract, environmental problems, bandhs, blockades, land acquisition problems, poor state infrastructure, delay in acquisition of seismic data, problems pertaining to environmental clearance, land acquisition and contractors. The Committee feel that these bottlenecks should be anticipated and corrective measures be taken in advance so that delays on such accounts do not recur in future. The Government should ensure that the best of state-of the are technology is made available to out oil E&P companies to enable them to achieve their targets."

Reply by the Government

The Ministry of Petroleum and Natural Gas in their Action Taken Reply on the above recommendation have stated as follows:

"Oil PSUs are free to choose state-of-the-art technology to be used in E&P. Investment decisions on technology are taken by respective PSUs and expenditure in this regard is financed through the internal resources generation or external borrowings. By introducing NELP Government has tried to ensure that new technologies are being inducted in E&P sector through participation of

private/foreign companies. The efforts have already stated yielding results as 24 discoveries have so far been announced under NELP blocks."

(Ministry of Petroleum and Natural Gas O.M. No. O-27012/1/2005-ONG/US (EO) dated 13th July, 2005)

COMMENTS OF THE COMMITTEE

Please see paragraph 10 of Chapter 1 of the Report.

RECOMMENDATION SL. NO. 15

CORPORATE AND STRATEGIC PLAN OF OIL

The Committee in their second Report, in regard to the corporate plan of OIL had recommended as follows:

"The Committee note that OIL has formulated strategic and corporate plan with the goal of more than doubling the production level within ten year. The Committee desire that adequate steps should be taken to implement these plans so as to achieve the targets fixed. The progress of the two plans should be monitored periodically to ensure their full implementation. Besides formulating strategic and corporate plan, OIL has also taken initiatives which focus on intensification of exploration and development activities in its areas of operation through additional 2D and 3D Surveys and drilling; undertaking exploration activities in far-flung logistically difficult and geologically complex areas, acquisition of NELP Blocks on offer, intensification of drilling activities, reasoning of prospects, reserves assessment; optimistic field development; revitalization of old and depleted fields, and development of marginal fields. The Committee desire that all these initiatives which are, in hand, be undertaken within a time bound programme.

The Committee would also like to be apprised of the impact of such measures in additional reserve accretions and augmentation of production."

Reply by the Government

The Ministry of Petroleum and Natural Gas in their Action Taken Reply have stated as follows:-

"OIL has undertaken the following initiatives for intensification of exploration and development activities for additional reserves accretion and augmentation of production:

(i) Intensification of exploration and development activities through additional 2D and 3D seismic survey and drilling.

- (ii) Undertaking exploration activities in far-flung logistically difficult and geologically complex area as Brahmaputra River bed, Belt of Schuppen, Manabum and Pasighat areas in the North-East.
- (iii) Acquisition of NELP blocks on offer through competitive bidding.
- (iv) Intensification of drilling activities, both exploratory and development.

The salient details of production (oil & gas), reserves accretion, drilling metreage etc. are shown below for the last three years:

2002-03	2003-04	2004-05
1949.59	2088.22	1978.59
349.50	352.02	889.44
42.201	49.283	37.890
87.834	59.340	115.673
130.035	108.623	153.563
2.95	3.002	3.196
1.743	1.887	2.009
21.87	18.54	21.07
	1949.59 349.50 42.201 87.834 130.035 2.95 1.743	1949.59 2088.22 349.50 352.02 42.201 49.283 87.834 59.340 130.035 108.623 2.95 3.002 1.743 1.887

COMMENTS OF THE COMMITTEE

Please see paragraph 13 of Chapter 1 of the Report.

RECOMMENDATION SL. NO. 18

GRANT OF INFRASTRUCTURE STATUS TO E&P PROJECTS/ ACTIVITIES

The Committee note that, as of now, E&P Activities qualify only for a 7 year tax holiday from the date of commercial production. But these activities do not qualify for infrastructure/ industry status to avail of tax holiday under Section 801A and also do not have the option to choose the block of 10 year tax holiday out of 15 years, which is not necessarily linked to commencement of commercial production. The Committee feel that if the 7 year tax holiday necessarily starts from the commencement of commercial production, the advantage of tax holiday is lost because of carried forward losses of the previous years on account of large investment. Therefore, the Committee recommend that the Government should grant infrastructure industry status to E&P projects/ activities because of the significance of oil discovery for the national economy.

Reply by the Government

ONGC has been requesting the Government for grant of infrastructure status to E&P industry, since February, 2002. This matter was also part of the suggestions (pre-budget) for Union Budget 2005. However, the issue has not been addressed in the Union Budget 2005.

COMMENTS OF THE COMMITTEE

(Please see paragraph 16 of Chapter I of the Report.)

RECOMMENDATION SL. NO. 24

AUTONOMY FOR OIL EXPLORING PSUs

The Committee note that the oil sector PSUs have been performing commendably. All the PSUs except OIL enjoy Navratna status. The navratna status allows the delegation of enhanced powers subject to certain conditions and guidelines. In an era of competition due to liberalisation policies, the oil PSUs have to compete with multinationals and private Indian companies. As the PSUs operating in the oil sector have to scout globally for technology, for procurement and to offer global tender for their works etc., these matters need decisions to be taken on commercial and technical aspects quickly.

Though the navratna status confers certain powers on them, the Committee note that in actual practice, the PSUs lack autonomy to decide on matters affecting their performance. In an era where most of the oil PSUs equity has been divested and there are various stakeholders, the PSUs are answerable to them as well. The Committee regret to note that the autonomy already available is inadequate.

The Committee feel that the Government should consider granting autonomy to the Board of Directors even to the extent of deciding a particular kind of business that they deem fit to undertake.

Reply by the Government

The Government has set up Oil PSUs both in Upstream & Downstream sectors. These PSUs have been set up with certain objectives such as Upstream sector PSUs are required to explore oil & gas of the country as their core activity and Downstream sector is engaged in Refining and Marketing. The Government has given full financial delegation of powers as well as decision-making powers to Navratna Oil PSUs and there are well laid down guidelines on delegation.

The Government is of the view that Oil PSUs first priority should be to focus in their respective areas of core competence for which they have been set up and in case there are surpluses and synergy then they can explore alternative business opportunities.

(Ministry of Petroleum and Natural Gas O.M. No. O-27012/1/2005-ONG/US (EO) dated 13th July, 2005)

COMMENTS OF THE COMMITTEE

(Please see paragraph 19 of Chapter I of the Report.)

CHAPTER V

RECOMMENDATIONS IN RESPECT OF WHICH FINAL REPLIES OF GOVERNMENT ARE STILL AWAITED

RECOMMENDATION SL. NO. 16

REVIEW/ REASSESSMENT OF IN-PLACE RESERVE

The Committee in their second Report on Oil Exploration in regard to Review/Reassessment of in place reserves have noted that:-

"The Committee note that both ONGC and OIL have contractual system to review/releases the in place hydrocarbon reserves every year. Besides internal review, ONGC has also taken a decision to have its reserve base audited by an internationally reputed independent external agency once in every five years. However, OIL has not so far adopted the system of regular audit of its reserves from independent agencies, though they intermittently undertake such audit by commissioning the service of internationally reputed consulting firms. The Committee note that while no significant variations have been found in the reserve base of ONGC by external auditor, in case of OIL there has been a variation to the extent of 10-15% which is quite significant. The Committee feel that to have a realistic assessment of its reserve, it is imperative that besides internal audit, audit by independent agencies should be made a regular feature. The Committee, therefore, desire that OIL on the lines of ONGC also should evolve a system to have a regular external audit of its reserve base."

In their Action Taken Reply dated 13th July, 2005. The Ministry of Petroleum & Natural Gas have replied as follows:-

"In order to carry out audit of the hydrocarbon reserves by an internationally reputed independent external agency and to carry out reassessment of its reserves, Oil India Ltd. in March, 2005 engaged the services of Reserve Audit firm, M/s. Gaffney, Cline & Associates, Singapore for external audit of oil and natural gas reserves of OIL's such reserves in Assam, Arunachal Pradesh and Rajasthan. LOI was issued on 09.03.2005. Work is in progress since 5th April, 2005 and report is expected by Sept, 2005."

RECOMENDATION SL. NO. 17

OIL EXPLORATION BY ALL PSUS

The Committee while examining the issue of oil exploration came across the interest of PSU's like HPCL, BPCL, IOC, GAIL in pursuing oil exploration as a strategy to diversity their operations and also to maximize their profit. In this contest, the Committee in the Report stated as follows:-

"The Committee note that besides ONGC and OIL which have been undertaking exploration and production activities for more than half a century, the following PSUs which were hitherto performing activities pertaining to marketing of crude oil and supply of gas, have also made forays into the Exploration and Production activities:

- 1. GAIL (India) Limited (GAIL);
- 2. Indian Oil Corporation Limited (IOC);
- 3. Bharat Petroleum Corporation Limited (BPCL); and
- 4. Hindustan Petroleum Corporation Limited (HPCL)

The Committee note that these companies have entered into upstream activities to have their own equity oil so as to safeguard their business interests against the highly volatile oil market, to have reasonable supply security and to achieve greater stability of revenues/profits. The Committee note that due to lack of experience in undertaking E&P activities, most of these companies have collaborated with experienced companies like ONGC, OVL and OIL.

The Committee have been informed by one of the down-stream company i.e. IOC that from the very beginning, it was working with OVL for the overseas E&P business activities. However, the current participation is not commensurate with IOC's upstream business aspirations. OVL has been designated as nodal agency by Ministry of Petroleum and Natural Gas for overseas upstream opportunities and IOC participation is limited to equity only. IOC has desired that it should be allowed to pursue E&P opportunities independently, while avoiding any competition/ conflict of interests with other PSUs. It has further suggested that to avoid conflict/ competition OVL, the regions/countries where the two entities will pursue opportunities, may be divided, based on geographical boundaries. The Committee desire that the suggestions of IOC should be examined by Ministry of Petroleum & Natural Gas, and appropriate steps be taken to provide some form of independence to other companies in undertaking their overseas E&P activities.

The Committee are of the view that to meet the aspirations and interests of other companies, feasibility of forming a new joint venture in which equity may be held by all the PSUs, may be explored. It should also be examined as to whether the consortium approach, where all the players in oil market would have stakes, could provide better results in pursuing overseas E&P activities."

The Ministry of Petroleum & Natural Gas in their Action Taken Reply stated as follows:-

"Oil India Limited (OIL) and Indian Oil Corporation (IOC) have entered into an alliance to pursue overseas E&P activities jointly. The consortium has taken one exploration block in Libya OIL-IOC has approached to Ministry of Petroleum & Natural Gas (MOP&NG) for the similar powers as available with ONGC Videsh Limited (OVL). The proposal in this regard is being considered for Cabinet approval."

(Ministry of Petroleum and Natural Gas O.M. No. O-27012/1/2005-ONG/US (EO) dated 13th July, 2005)

RECOMMENDATION SL. NO. 22

NEED OF STRENGHTEN THE POWERS OF OVL

On the need to strengthen the powers of ONGC Videsh Limited (OVL), the Committee in their Second Report have recommended the following:

"Besides lack of diplomatic support, the Committee have been informed that OVL is facing constraints in undertaking activities due to less number of Directors in its Board, less financial powers, and non confidentiality of the acquisition.

To enable OVL to establish its significant presence in upstream activities abroad, it is imperative that OVL be strengthened both in administrative and financial terms. The Committee, therefore, desire that Ministry of Petroleum and Natural Gas should analyse the problems of OVL and take remedial steps to remore them."

In the Action Taken Reply on the above Recommendation, the Ministry of Petroleum and Natural Gas have stated as follows:

"The issue of enhancing financial power was brought before the Government and in February 2005, the Government has enhanced the empowerment of OVL. Earlier the Board of Directors of OVL was empowered to approve projects involving investments upto Rs 200 crores, which has now been enhanced to approve projects upto 300 crores.

For the manpower requirements of OVL, OVL and ONGC are working towards suitably manning OVL for its international business. The matter pertaining to creation of posts of Directors in OVL is under consideration."

RECOMMENDATION SL. NO. 23

ECS MECHANISM FOR CLEARANCE TO ALL OVERSEAS E&P PROJECTS

The Committee while examining the ECS mechanism for clearance to all overseas E&P Projects have recommended in their Second Report as given below:

"The Committee are of the view that ECS (Empowered Committee on Secretaries) mechanism which is a single window clearance for OVL for overseas projects should also cover all other PSUs as well immediately, so that any overseas E&P projects by any PSU is routed through ECS for faster decision making in order to avoid losses due to procedural limitations/delays.

They desire that the system of single window clearance through the empowered Committee of Secretaries should be reoriented in such a manner so that no delay is caused in securing the oil deals."

In their Action Taken Replies, on the above recommendation, the Ministry of Petroleum and Natural Gas have stated the following:

"Oil India Ltd. has been making concerted efforts to acquire E&P opportunities overseas. OIL signed Memorandum of Understanding with Indian Oil Corporation on 08.12.2004 to jointly pursue E&P opportunities overseas. It may be mentioned that OIL-IOC combine has been successful in bidding and being awarded Block-86 in Libya in EPSA-IV, Bid Round-1, 2005. The proposal for ECS mechanism for OIL-IOC alliance is under the consideration of the Government."

(Ministry of Petroleum and Natural Gas O.M. No. O-27012/1/2005-ONG/US (EO) dated 13th July, 2005)

New Delhi: 21st December, 2005 30 Agrahayana 1927(S) Rupchand Pal Chairman, Committee on Public Undertakings

APPENDIX -1

MINUTES OF THE 13th SITTING OF THE COMMITTEE ON PUBLIC UNDERTAKINGS HELD ON 21st DECEMBER, 2005

The Committee sat from 1500 hrs to 1550 hrs.

CHAIRMAN

Shri Rupchand Pal

MEMBERS LOK SABHA

- 2. Shri Manoranjan Bhakta
- 3. Shri Gurudas Dasgupta
- 4. Shri P.S. Gadhavi
- 5. Shri Suresh Kalmadi
- 6 Dr. Vallabhabhai Kathiria
- 7. Shri Shriniwas Patil
- 8. Shri Kashiram Rana
- 9. Shri Mohan Rawale
- 10. Shri Bagun Sumbrui
- 11. Shri Parasnath Yadav

MEMBERS RAJYA SABHA

- 12. Shri Ajay Maroo
- 13. Shri K. Chandran Pillai
- 14. Smt. Ambika Soni

SECRETARIAT

1. Shri S. Bal Shekar, Joint Secretary

2. Shri J. P.Sharma, Director

3. Shri N. C. Gupta, Under Secretary

OFFICE OF THE COMPTROLLER & AUDITOR GENERAL OF INDIA

Shri Sunil Chander, Principal Director (Commercial)

2. The Committee considered the Draft Action Taken Report (ATR) on action taken by the Government on the recommendations contained in the 2nd Report of the COPU (14th Lok Sabha) on Oil Exploration – Domestic and Overseas projects and adopted the same with minor modifications.

XXXX XXXX XXXX

- 3. The Committee authorized the Chairman to finalise the Reports for presentation.
- 4. XXXX XXXX XXXX

The Committee then adjourned.

APPENDIX II

(Vide para 3 of the Introduction)

Analysis of the Action Taken by Government on the recommendations/observations contained in the Second Report of the Committee on Public Undertakings (Fourteenth Lok Sabha) on "Oil Exploration – Domestic and Overseas Projects."

I.	Total number of recommendations	26
II	Recommendations that have been accepted by the Government [vide recommendations at SI. Nos I, II and III(i)]	7
	· /-	26.9%
Ш	Percentage of total Recommendation which the Committee do not desire to pursue in view of Government's replies [vide recommendation at SI. No III(ii)]	10
	Percentage of total	38.4%
IV	Recommendations in respect of which replies of the Government have not been accepted by the Committee(vide recommendations at SI. No IV)	5
	Percentage of total.	19.2%
V	Recommendations in respect of which final replies of Government are still awaited	4
	Percentage of total	15.5%