



**STANDING COMMITTEE ON
PETROLEUM & NATURAL GAS
(2006-07)**

FOURTEENTH LOK SABHA

MINISTRY OF PETROLEUM & NATURAL GAS

**ACTIVITIES OF DIRECTORATE GENERAL OF
HYDROCARBONS – A REVIEW**

TWELFTH REPORT



**LOK SABHA SECRETARIAT
NEW DELHI**

November, 2006/Kartika, 1928 (Saka)

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Presented to Lok Sabha on 28.11.2006

Laid in Rajya Sabha on 28.11.2006



**LOK SABHA SECRETARIAT
NEW DELHI**

November, 2006/Kartika, 1928 (Saka)

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CONTENTS

		Page
COMPOSITION OF THE COMMITTEE (2005-06) & (2006-07)		5
INTRODUCTION		8
PART – I		
REPORT		
CHAPTER-I	INTRODUCTORY	9
	Mandate of DGH.....	10
CHAPTER-II	MAJOR ACTIVITIES OF DGH	12
	<i>(a) Review & Monitoring of Petroleum Exploration Licences (PELs)</i>	12
	<i>(b) Upgradation of Information about Exploration Blocks through Geoscientific Surveys</i>	13
	<i>(c) Implementation of New Exploration Licencing Policy (NELP)</i>	14
	<i>(d) Monitoring of Production Sharing Contracts</i>	16
	<i>(e) Field Development, Reservoir and Production Monitoring</i>	17
	<i>(f) Review of Reserves of New Discoveries</i>	17
	<i>(g) Establishment of National Knowledge Hub (NKH)</i>	21
	<i>(h) National Gas Hydrate Programme (NGHP)</i>	23
	<i>(i) Coal Bed Methane (CBM)</i>	25
	<i>(j) Safety and Environment</i>	26
CHAPTER-III	MISCELLANEOUS	29
	<i>(a) India Hydrocarbon Vision 2025</i>	29
	<i>(b) Production of Oil and Gas</i>	30
	<i>(c) Manpower Requirement</i>	31
	<i>(d) Financial Allocations and Expenditure</i>	32
	<i>(e) Objectives of DGH</i>	33
PART-II		
Observations/Recommendations of the Committee		35
APPENDICES		
I.	Minutes of the Fourth Sitting of the Standing Committee on Petroleum & Natural Gas (2005-06) held on 22.12.2005.....	44
II.	Minutes of the Fifth Sitting of the Standing Committee on Petroleum & Natural Gas (2005-06) held on 24.01.2006.....	47
III.	Extracts of the Minutes of Second Sitting of the Standing Committee on Petroleum & Natural Gas (2006-07) held on 06.10.2006.....	50

COMPOSITION OF THE STANDING COMMITTEE ON PETROLEUM & NATURAL GAS
(2005-06)

Shri N. Janardhana Reddy - Chairman

Members

Lok Sabha

- | | |
|----|---------------------------------|
| 2 | Shri Anandrao Vithoba Adsul |
| 3 | Dr. Rattan Singh Ajnala |
| 4 | Shri R. Dhanuskodi Athithan |
| 5 | Shri Ramesh Bais |
| 6 | Shri Kirip Chaliha |
| 7 | Shri Lal Muni Choubey |
| 8 | Dr. Tushar A. Chaudhary |
| 9 | Shri Santosh Gangwar |
| 10 | Shri Jai Prakash |
| 11 | Shri Hari Rama Jogaiah |
| 12 | Adv. Suresh Kurup |
| 13 | Shri Lakshman Singh |
| 14 | Shri Sukdeo Paswan |
| 15 | Dr. Prasanna Kumar Patasani |
| 16 | Shri Rajiv Ranjan 'Lalan' Singh |
| 17 | Shri Ramjilal Suman |
| 18 | Shri Vanlalzawma |
| 19 | Shri Ratilal Kalidas Varma |
| 20 | Shri Rajesh Verma |
| 21 | Shri A.K.S. Vijayan |

Rajya Sabha

22	Shri Satish Chandra Misra
23	Shri Ahmed Patel
24	Shri C. Perumal
25	Shri Rajeev Shukla
26	Shri Subash Prasad Yadav
*27	Ms. Mabel Rebello
*28	Shri Ramdas Agarwal
*29	Shri Tapan Kumar Sen
**30	Shri M. Rajasekara Murthy
31	vacant

Secretariat

1.	Shri S.K.Sharma	-	Additional Secretary
2.	Shri R.C.Kakkar	-	Deputy Secretary
3.	Shri P.C.Tripathy	-	Under Secretary
4.	Smt. Reena Gopalakrishnan	-	Committee Officer

* Nominated to the Committee w.e.f. 02.06.2006.

** Ceased to be a Member of the Committee w.e.f. 10.11.2005 consequent upon his resignation from the membership of Rajya Sabha. Re-nominated to the Committee w.e.f. 02.06.2006.

Dr. Alladi P. Rajkumar, Shri Kripal Parmar and Shri Dipankar Mukherjee ceased to be Members of the Committee consequent upon their retirement from the membership of Rajya Sabha w.e.f. 02.04.2006.

Shri Moolchand Meena ceased to be a Member of the Committee consequent upon his retirement from the membership of Rajya Sabha w.e.f. 03.04.2006.

COMPOSITION OF THE STANDING COMMITTEE ON PETROLEUM & NATURAL GAS
(2006-07)

Shri N. Janardhana Reddy - **Chairman**

Members

Lok Sabha

- | | |
|----|---------------------------------|
| 2 | Shri M.Appadurai |
| 3 | Shri R. Dhanuskodi Athithan |
| 4 | Shri Ramesh Bais |
| 5 | Shri Kirip Chaliha |
| 6 | Dr. Tushar A. Chaudhary |
| 7 | Shri Lal Muni Choubey |
| 8 | Shri Ravinder Naik Dharavath |
| 9 | Dr. M. Jagannath |
| 10 | Shri Jai Prakash (Hissar) |
| 11 | Adv. Suresh Kurup |
| 12 | Shri Sudam Marandi |
| 13 | Shri P. Mohan |
| 14 | Shri Sukdeo Paswan |
| 15 | Shri Nakul Das Rai |
| 16 | Shri Lakshman Singh |
| 17 | Shri Rajiv Ranjan 'Lalan' Singh |
| 18 | Shri Ramjilal Suman |
| 19 | Shri Ratilal Kalidas Varma |
| 20 | Shri A.K.S. Vijayan |
| 21 | Shri Ram Kripal Yadav |

Rajya Sabha

- | | |
|----|---------------------------|
| 22 | Shri Ahmed Patel |
| 23 | Ms. Mabel Rebello |
| 24 | Shri Rajeev Shukla |
| 25 | Shri Suresh Bhardwaj |
| 26 | Shri Ramdas Agarwal |
| 27 | Shri Amir Alam Khan |
| 28 | Shri Tapan Kumar Sen |
| 29 | Shri C. Perumal |
| 30 | Shri Subhash Prasad Yadav |
| 31 | Shri Satish Chandra Misra |

Secretariat

- | | | | |
|----|---------------------------|---|-----------------------------|
| 1. | Shri S.K. Sharma | - | <i>Additional Secretary</i> |
| 2. | Smt. Anita Jain | - | <i>Deputy Secretary</i> |
| 3. | Shri P.C. Tripathy | - | <i>Under Secretary</i> |
| 4. | Smt. Reena Gopalakrishnan | - | <i>Committee Officer</i> |

INTRODUCTION

I, the Chairman, Standing Committee on Petroleum and Natural Gas (2006-07) having been authorised by the Committee to submit the Report on their behalf present this Twelfth Report on 'Activities of Directorate General of Hydrocarbons – A Review'.

2. The Committee took evidence of the representatives of the Ministry of Petroleum and Natural Gas and the concerned Public Sector Undertakings/Organisations at their sitting held on 24.1.2006.

3. The Committee considered and adopted this Report at their sitting held on 6th October, 2006.

4. The Committee wish to express their thanks to the representatives of the Ministry of Petroleum and Natural Gas and Public Sector Undertakings/Organisations for placing their views before them and furnishing the information desired in connection with examination of the subject.

NEW DELHI;

November 9, 2006
Kartika 18, 1928(Saka)

N. JANARDHANA REDDY,
Chairman,
Standing Committee on
Petroleum & Natural Gas.

PART-I
REPORT
CHAPTER I

INTRODUCTORY

1.1 The Directorate General of Hydrocarbons (DGH) was established under the administrative control of Ministry of Petroleum & Natural Gas by a Government of India Resolution in 1993 to promote sound management of the Indian petroleum and natural gas resources having balanced regard to the environment, safety, technological and economic aspects of the petroleum activity and to review the exploration programmes of companies and advise the Government on the adequacy of these programmes. It is also mandated to advise on development plans for commercial discoveries, audit petroleum reservoirs, regulate preservation, up-keep and storage of data, give advice to Government on compliance issues of safety norms, environmental pollution, etc., in oilfield operations. Additional tasks also include preparation of updated Basin Information Dockets pertaining to different blocks to be offered under various New Exploration Licensing Policy (NELP) rounds.

1.2 Explaining the circumstances under which the Government considered it appropriate to create the Directorate General of Hydrocarbons, the Secretary, Ministry of Petroleum & Natural Gas stated during oral evidence as under:-

“From 1950 to 1980, basically, Oil and Natural Gas Corporation and Oil India Limited were in charge of exploration, exploitation and production. In 1974, the greatest discovery, Bombay High, was made. In 1984-86, there were a number of occasions when Parliamentary Questions were raised, namely, whether Bombay High was being flogged in an attempt to over produce oil. The Government was naturally concerned because a good oil-producing field should not be misused. So, they appointed a Committee called the Dasgupta Committee to go into the entire question of Bombay High reservoir management and on whether the reservoir was being managed well. In fact, the Dasgupta Committee, after going into the entire thing, stressed the need to

have an appropriate agency to regulate the upstream oil activities. They said that reservoirs of this nature should be managed well. So, they said to have an independent agency to look into the management of reservoirs. Then, the Dasgupta Committee was followed by the Kaul Committee which went into the organisational structure of ONGC. They also said that an independent regulatory body called the Directorate General of Hydrocarbons be established in order to take care of upstream oil activity of the country. In 1991, we started with the liberalisation move and in the next two to three years, a number of joint ventures and private companies were also permitted to enter oil and gas exploration in the country. When the private and joint sector companies also entered into the scene, the Government thought it necessary to establish an independent agency to effectively supervise the activities of these companies and also offer technical advice to the Government on how to explore and optimally exploit the hydrocarbons resources. These were the circumstances under which the Directorate General of Hydrocarbons was established in 1993.”

Mandate of DGH

1.3 The Government of India Resolution of April 8, 1993 delineates the functions and responsibilities of DGH as under:-

- “(a) to provide technical advice to the Ministry of Petroleum and Natural Gas on issues relevant to the exploration and optimal exploitation of hydrocarbons in the country and on the strategy of taking up exploration and exploitation of oil and gas reserves abroad by the national oil companies;
- (b) to review the exploration programmes of companies operating under Petroleum Exploration Licenses granted under the oilfields (Regulation and Development) Act, 1948 and the Petroleum and Natural Gas Rules, 1959 with a view to advising Government on the adequacy of these programmes;
- (c) to reassess the hydrocarbon reserves discovered and estimated by the operating companies in discussion with them;
- (d) to advise the Government on the offering of acreages for exploration to companies as well as matters relating to relinquishment of acreages by companies;

- (e) to review the development plans for commercial discoveries of hydrocarbon reserves proposed by the operating companies and advise Government on the adequacy of such plans and the exploitation rates proposed and matters relating thereto;
- (f) to review and audit concurrently the management of petroleum reservoirs by operating companies and advise on any mid course correction required to ensure sound reservoir management practices in line with the optimal exploitation of reserves and the conservation of petroleum resources;
- (g) to regulate the preservation, upkeep and storage of data and samples pertaining to petroleum exploration, drilling, production of reservoirs etc. and to cause the preparation of data packages for acreages on offer to companies;
- (h) to advise Government on the laying down of safety norms and framing regulations on safety in oilfield operations, prescribe pollution control measures and assist in inspection and periodic safety audit;
- (i) all other matters incidental thereto and such other functions as may be assigned by Government from time to time.”

CHAPTER-II

MAJOR ACTIVITIES OF DGH

(a) Review & Monitoring of Petroleum Exploration Licences (PELs)

2.1 DGH reviews the Petroleum Exploration Licences (PELs) held by National Oil Companies on nomination basis. DGH also monitors the progress and work programme in these PELs and also the Petroleum & Mining Lease (PML) areas. During the last 3 years DGH monitored the progress of 149 PELs on a half yearly basis. When asked about the details and the present status of the nomination blocks awarded to ONGC and OIL, the Ministry of Petroleum & Natural Gas in a written reply stated as under:-

“Petroleum Exploration Licenses (PEL) were awarded to NOCs viz. ONGC and OIL prior to the announcement of NELP. Oilfields (Regulation and Development) Act, 1948 and the Petroleum and Natural Gas Rules, 1959, have the provisions, inter-alia, for regulation of petroleum operations and the grant of licenses and leases for exploration and development of Petroleum in India. The Rules provide for the grant of exploration licenses and mining leases in respect of the Territorial Waters and Continental Shelf by the Government of India and in respect of land vested in a State Government by that State Government with the prior approval of the Central Government. Accordingly, NOCs were granted exploration licenses on nomination basis to carry out exploration operations before the implementation of NELP.

Under the nomination regime, the area covered by license for carrying out exploration was in the first instance, valid for a period of four years with two subsequent renewals of one year each. On completion of the six years PEL cycle, the area was either relinquished or applied with either reduced or enhanced or existing area for carrying out further exploration with the fresh grant of license. In case of discovery, the specified area was upgraded to lease for mining and development.

To allow the completion of ongoing exploration activities in the existing nomination licenses, Government of India issued

relinquishment norms, which allowed a one time re-grant of PEL for a period of 4 years to complete ongoing exploration activities with further extension of not more than two years for appraisal of leads obtained or discovery (ies) made. At present, ONGC holds 112 PEL Blocks covering an area of 1,30,229 Sq. kms. on nomination basis. OIL holds 18 PEL blocks under nomination covering an area of about 12,713 Sq. kms. In the last 5 years, ONGC and OIL have surrendered 16 PEL blocks and 3 PEL blocks respectively, mainly due to low prospectivity envisaged by them. All the existing PELs of NOCs as on date are presently running in their re-grant PEL cycles and expire between 2007 and 2010. Government of India also offer the relinquished blocks by ONGC and OIL to other exploration companies under NELP for further exploration.”

(b) Upgradation of Information about Exploration Blocks through Geoscientific Surveys

2.2 DGH studies various sedimentary basins of the country geologically for their prospectivity and carves out the acreages in the form of exploration blocks for offering under various NELP & CBM rounds for global bidding by various E&P companies. For this, DGH carries out speculative geophysical/geochemical surveys. The data acquired through these surveys is studied by DGH scientists & engineers and based on the interpretations, data docketts and data packages are prepared. These data are purchased and referred by various E&P companies for studying the prospectivity of various blocks before they make up their mind for bidding of such blocks. Such knowledge building activities are carried out in various basins on regular basis.

2.3 The Committee note that in hitherto unexplored/less explored areas, DGH has carried out, either alone or in collaboration with reputed companies, several projects to upgrade information. These total to 2 million sq kms. and cover both offshore (84%) and onland (16%). The DGH conducts surveys which include Satellite Gravity Surveys, Seismic Surveys, Geochemical Surveys, Geophysical Surveys, Aero-Magnetic Surveys, Magneto-Telluric Surveys, etc.

2.4 The Committee have been informed that in the year 2004-05 DGH could not carry out seismic acquisition of 500 GLK in Rajasthan, acquisition of 900 LKM seismic data in Rann of Kutch and 400 GLK of 2D seismic data of

unexplored volcanic covered areas of Vindhyan basin falling in Madhya Pradesh due to poor performance of the party to whom the job was contracted and that the possibilities of speculative survey in these areas are being looked into.

(c) Implementation of New Exploration Licencing Policy (NELP)

2.5 The Committee have been informed that the Government of India had been inviting private investment in exploration of oil and gas in the country since early 1980's. However, initial efforts to attract private investments did not have continuity until 1991. Since 1991, Government of India began offering exploration blocks on a regular basis. Between 1991 and 1995, Government invited Six bidding rounds which included both offshore and onland blocks. But it is the New Exploration Licencing Policy (NELP) formulated by Government of India in February, 1997 that provided an international class fiscal and contract framework for Exploration and Production of Hydrocarbons in the country.

2.6 Since 1997, till date, six rounds of NELP biddings have been held and all activities upto the Vth round Round have been completed. It is the responsibility of DGH to evaluate the bids and the bid evaluation reports are submitted to Ministry of Petroleum and Natural Gas. Thereafter, Production Sharing Contracts (PSCs) are signed with successful bidders.

2.7 The Committee have been informed in a brief note that 28 Exploration Blocks have been contracted in pre-NELP rounds of bidding between 1993 to 2000. A total of 144 exploration blocks have been offered under the first five rounds of NELP spanning 2000-2005 and contracts for 110 exploration blocks have been signed.

2.8 While replying to a query regarding the sedimentary areas that were brought under active exploration during the last five years and at the end of 1990 and 1995, the Ministry inter-alia, furnished as follows:-

“The details of exploration areas offered and contracted in Pre-NELP and NELP rounds, year wise, are as under:-

Year	Area offered under various rounds (Sq. Km)	Remarks
1990	-	DGH established in 1993
1995	34251	Four blocks contracted under pre-NELP rounds.
2000	291961	24 blocks contracted under NELP-I round in the year 2000 and 19 blocks contracted under pre-NELP round during the year 1996-2000.
2001	274069	23 blocks contracted under NELP-II rounds and one block contracted under pre-NELP round.
2002	NIL	No new blocks awarded.
2003	205865	23 blocks contracted under NELP-III and one block contracted under pre-NELP round.
2004	192810	20 blocks contracted under NELP-IV.
2005	115180	20 blocks contracted under NELP-V

As on 1.4.2005, about 1.09 million Sq. kms. of Indian sedimentary basin was under active exploration. The break-up of exploration areas retained by ONGC, OIL and Private/JV companies is given below:

(a)	ONGC	:	572331 Sq.Kms.
(b)	OIL	:	39637 Sq. Kms.
(c)	Private/JV	:	478955 Sq. Kms.”

2.9 Furnishing details about the Fifth round of NELP, the Ministry of Petroleum and Natural Gas has, inter-alia, stated as under: -

“Under the fifth round of NELP, total 20 exploration blocks were offered. Out of these blocks, 2 blocks were in shallow water, 6 blocks in deep water and 12 blocks were in onland area. All the 20 blocks were awarded to successful bidders and contracts have been signed for all the blocks.”

2.10 The Committee have further been informed about the Sixth round of NELP as under:-

“Under the sixth round of NELP, 55 exploration blocks (24 deepwater, 6 shallow water and 25 onland blocks) were offered on

23rd February, 2006 covering an area of 3,52,191 Sq. Km. Bid closing date of NELP exploration blocks is 15 September, 2006. The bid evaluation for NELP-VI blocks will take about two months. The final award of exploration blocks offered under NELP-VI is likely to be in November, 2006. The signing of Production Sharing Contracts will be over by January, 2007.”

(d) Monitoring of Production Sharing Contracts

2.11 DGH monitors the execution and management of the Production Sharing Contracts on behalf of GOI through Management Committees set up for each block/field. This involves indepth review of annual work programmes, project monitoring, calculation of reserves and production profile, making simulation model of the field, review and approval of development plan, budget and safety management system.

2.12 In this regard, the Committee have been informed through a brief note that some of the most critical functions of DGH in the Management Committee as a Government representative are to protect the Government interests by way of properly reviewing the profit petroleum and cost recovery aspects. Profit Petroleum is one of the significant components of the Government revenues from fields, operated under Production Sharing Contracts. From the 29 producing fields, the profit petroleum amount has increased from 951.099 crores in 2002-03 to Rs. 2453.04 crores in 2004-05. This amount will further increase as more and more PSCs will be brought under production. In fact, 30 new discoveries have already been reported out of which 7 are commercial discoveries. It is essential that admissible costs petroleum data is thoroughly examined not only after expenditure has been incurred but even at the stage of making provisions in the budget and giving expenditure sanctions in the Management Committee. Up to March, 2005 total expenditure in exploration blocks under NELP & Pre-NELP has been US\$ 3887.45 million and in discovered fields US\$ 1756.14 million. Further, total commitment under various NELP Rounds is US\$ 5.1 billion (under all the 3 phases). The minimum committed expenditure in each block up to Phase-I

ranges from US\$ 10 to 20 million. The workload involved in the process of final approval to the work programme includes various stages, namely, technical and financial scrutiny of work programme and related budget.

(e) Field Development, Reservoir and Production Monitoring

2.13 Regarding the monitoring of the development activities of various fields under the Production Sharing Contracts, the Committee have been informed that various fields such as Panna-Mukta, Ravva, Tapti, Hazira, Laksmi, Gauri, Kharsang, PY –3, Dholka and 20 other fields are being monitored by DGH. They have also been informed that the Redevelopment Plans of Mumbai High North and South which are under implementation by ONGC, the field performance based on Redevelopment Plans, progress of EOR pilot projects, G&G and other studies are being monitored by DGH on a regular basis. To analyse the field performance, voluminous data of more than 700 wells of Mumbai High field is being updated on a regular basis in DGH.

2.14 Amplifying these aspects the Ministry, in a brief note, stated as follows:-

“DGH approves the development plan and keeps strict watch on the reservoir management. While approving the production plans, care is taken by DGH to see that no contractor is allowed to over produce from the fields. Usually contractors have tendency to quickly produce the oil and gas without much regard to reservoir potential for getting quick profits. Such an over production of reservoirs may lead to damage of reservoirs and may leave oil and gas behind which may never be recovered. Hence, the role of DGH is very important in regular monitoring and management of the fields/reservoirs.”

(f) Review of Reserves of New Discoveries

2.15 The goal of carrying out exploration in the country is to increase oil and gas reserves to bridge the ever increasing demand and supply gap. Through exploration, new discoveries are made and new reserves are added by various

companies. Any new discovery of reserves has an impact on company's stock if it is a listed company. Considering the importance of quantum of reserves and its implications, DGH plays a vital role whenever any new discovery is announced by any company in the country. It is a general tendency of every company to announce exaggerated reserves of new discoveries to boost their stock values in the market. DGH reviews the reserves of new discoveries through internal scientific studies so that accurate reserves are estimated. The accuracy of reserves is very important from national planning point of view also. Therefore, DGH acts as a regulator of technical functions of E&P operations in India.

2.16 When the Committee specifically desired to know about the instances in which oil companies announced oil/gas discoveries without awaiting verification/vetting by DGH, the Ministry of petroleum & Natural Gas furnished the following reply:-

“Recently, 2 major discoveries have been announced to the media by companies operating in India, one by Gujarat State Petroleum Corporation (GSPC) in June 2005, wherein the discovery of the order of 20 trillion cubic feet (tcf) gas was announced, and the other by ONGC in September '05, which announced a discovery of 6 tcf. The announcements were made violating the norms set in the PSC wherein the hydrocarbons volume of discovery are to be vetted by DGH/Government before making an announcement as per the procedure set in the Article 21 of Production Sharing Contract (PSC). In both the cases the set procedures of the PSC were not followed.

As stipulated in the Production Sharing Contracts (PSCs), the companies are required to inform the Government/Management Committee immediately when the discovery is made, followed by detailed testing and appraisal of the discovery, to determine the volume of hydrocarbons, which should be submitted for review to the government/MC, before disclosing the size of the discovery.

In both the above cases, they were announced to public without furnishing to DGH the details of various parameters required for such evaluation.

DGH on behalf of MOP&NG can take action against such companies under the terms of Production Sharing Contracts signed between GOI and contracting companies.

Under the provisions of PSC, if and when Discovery is made within the Contract Area, the Contractor shall inform the Government of the discovery and then in no event later than a period of 30 days from the discovery date, furnish all details in writing of the discovery, subsequently on completion of necessary tests for potential commercial interest, within 60 days the contractor should submit a report containing data obtained with full analysis & interpretation stating whether the discovery is of potential interest and merits appraisal.

Under the provisions of PSC and Article on 'Term and Termination of Contract', the contract may be terminated if any contractor fails to comply with or has contravened the provisions of the contract in a material particular."

2.17 On being asked whether a uniform policy on classification of reserves and detailed guidelines for declaration of significant discoveries has been formulated, the Ministry stated as under:-

"PSCs already have the required provisions for disclosures of reserves for the blocks awarded under NELP and Pre-NELP. To make applicable uniform norms for nomination exploration blocks awarded to ONGC and OIL also, guidelines framed by DGH are being examined in the Ministry. These guidelines have been prepared based on the views given by the respective operators/stakeholders."

2.18 When asked as to what action was taken by the Ministry/DGH against Gujarat State Petroleum Corporation (GSPC) and ONGC for violating the norms in announcing the discoveries by them without the mandatory vetting by DGH, the Ministry of Petroleum & Natural Gas informed in a written reply as under:-

"DGH strongly objected to the methodology of declaring the reserves of the discoveries made by GSPC and ONGC. DGH wrote letters to Managing Director, GSPCL on 28.06.05 and to Basin Manager, KG offshore, ONGC on 6.9.05 informing that announcing the reserves to the media when production testing is still in progress is against the terms of Production Sharing Contract. Reserves should have been announced after following the norms

set in PSC. DGH also wrote letters to Securities and Exchange Board of India (SEBI) on 8.9.2005 and 9.9.2005 informing that reported discovery by ONGC and GSPC are premature as detailed testing is still to be carried out.”

2.19 Amplifying on these issues Director General of Hydrocarbon, deposed before the Committee as under:-

“I would like to submit that as per the production sharing contract, any discovery which is announced has to have the Government’s approval and of the DGH. It should come in writing. The companies coming under DGH are either from ONGC or the OIL India Limited or joint venture/private companies. So, we have told that whenever a discovery is there, we should go through the technical details and see whether this discovery is there or not and until and unless Government’s approval is given, it is not a discovery. Out of the two discoveries which were announced, in the first discovery, it was announced that it is 20 TCF. But there was no data to prove that it is such a big discovery. When we questioned about the data, they could not provide it. In fact, I would tell the Committee that the well could not be completed and as per the data, there was not even two to three TCF of gas but they were claiming it as 20 TCF. Secondly, there was a speculative news which talked about 6 TCF. Even that well had to be abandoned by ONGC because of some complication. When I joined, I said that this is a national asset and the people of India must know about it. Certain things are under my purview as DG or within the production-sharing contract. But some things like terminating or punishing somebody is not under me. I have to take the permission of the Government of India and the Joint Secretary (Exploration) who is the nodal officer in this regard. In both the discoveries which we questioned, the well had to be abandoned and they have the drilling replacement well which is still not complete. I would also like to bring to the notice of the Committee that DGH is a technical regulator. It is not a market regulator. Minerals, oil and gas are the property of this sovereign country. It has to be brought within the minimum value upto the surface and it is the responsibility of the DGH. We see to it that every company brings out the mineral, oil and gas to the surface with a minimum value so that the maximum value is added to the nation. That is the role of DGH.”

2.20 On the same issue, Secretary, Ministry of Petroleum & Natural Gas added the following:-

“Announcement of a reserve and the clauses governing are very clearly laid down in the production sharing contract. Article

1.38 very clearly lays down the definition of discovery and at what stage the contract or the operating company is permitted to announce it as a discovery. Most of the companies which operate in exploration production are listed in the stock exchanges. But some companies which operate in India are not yet listed in our stock exchanges but listed in London, New York, etc. When they announce a discovery and this being a price sensitive information, the stock value jumps up. If they are doing it just to manipulate the market, then several hundreds and thousands of investors get affected and as a result burn their fingers. That is why, we have put in a technical regulator to ensure that there is no premature announcement of a discovery by any operating company on the technical side. In addition to that, SEBI, the financial regulator also warn these people. Price sensitive information should not be announced without due diligence.

If without meeting the requirements stipulated in the production sharing contract, a company, whether it is a public sector company or a private sector Indian company or a foreign multi-national company, makes an announcement, action can be taken, including termination of the contract. It is a very neutral thing. It does not say that public sector will be given protection or private sector will be given protection. Just because we want to attract more FDI, we do not want to give special protection to foreign companies either. Application of this guideline or article of the production sharing contract is under the Contract Act and it is applied uniformly. But still we have not gone to the extent of terminating any contract for the simple reason that everybody is on the learning curve, including the SEBI.”

(g) Establishment of National Knowledge Hub (NKH)

2.21 During exploration and development activities for oil & gas in the country, various private and joint venture operators and national oil companies acquire a large quantum of scientific data. All these data are very vital and invaluable (costing more than 50 to 60 billion US\$) and should also be easily accessible to various users and public after initial phase of confidentiality. As the data are acquired in stages over different areas of operations, it is necessary that these should be stored in a digital format so that the same may be utilized easily by various users and are archived safely for times to come. Moreover, all these

data belong to Government as the cost recovery is given to companies/contractors by the Government for acquisition of data. DGH, being Government's representative has embarked upon the project of setting up of National Knowledge Hub (NKH) of Geo-science data for E&P industry in India.

The NKH will:

- Enable evaluation of the total hydrocarbon potential of the country by integrating geo-scientific data;
- Protect past investment, attract new investments and thus promote desired growth in future by leveraging on modern technology;
- Improve the efficiency of hydrocarbon prospecting in the country by providing integrated and synergetic environment;
- Provide level playing field to small players to take part in E&P activities by providing NKH facilities at nominal cost; and
- Create Geo-scientific ambience and establish a link among the Geo-scientists, Petroleum engineers both from industry and academia to strengthen over-all Geo-scientific activities in India.

2.22 The National Knowledge Hub (NKH) will comprise the following for use by the industry:

- The National Data Repository (NDR)
- The National G&G Processing Centre (NGPC)
- The National Visualization and Application Centre (NVAC)
- The National Training Centre (NTC) and
- The National E&P Knowledge Portal (NKP)

2.23 When asked about the current status of the National Exploration and Production Data Base and Archive System, the Ministry gave the following reply:-

“Two meetings of NDR (National Data repository, which is the National Exploration and Production Database and Archival System) so far have been held. The meetings have been attended by Directors and nominated coordinators from the participating organisations. Nine organisations engaged in acquisition and

interpretation of Geoscience data have become members of NDR in India till date. These organisations are:-

1. Oil and Natural Gas Corporation Ltd. (ONGC)
2. Oil India Limited (OIL)
3. Geological Survey of India (GSI)
4. National Geophysical Research Institute (NGRI)
5. National Remote Sensing Agency (NRSA)
6. National Institute of Oceanography (NIO)
7. Indian Institute of Geo Magnetism (IIGM)
8. Centre for Earth Science Study (CESS)
9. Wadia Institute of Himalayan Geology (WIHG)

The project of setting up of NDR was appreciated by all participating organisations and as a first step towards implementation of the project it was unanimously decided to prepare the metadata dictionary of the Geo-science data. Members of the NDR core team from DGH visited NRSA, NGRI, OIL where-in meetings with all the Heads of all disciplines were held and Meta data attributes were identified for preparation of metadata.”

2.24 The Committee have also been informed that the proposal for setting up of NKH/NDR has been approved by Advisory Council and the detailed proposal has been put up before Ministry. The process of including private oil companies in the NKH would be initiated whereby the private oil companies also would be made member of NKH. The draft guidelines and modalities of membership for NKH are also under preparation.

(h) National Gas Hydrate Programme (NGHP)

2.25 Government of India formulated a National Gas Hydrate Programme (NGHP) in 1997 for exploration and development of gas hydrates resources of the country. The DGH is actively involved in the programme. In fact, the Director General is the coordinator of the Technical Committee of NGHP. Following reconstitution of the NGHP in the year 2000 by MOP&NG, a new sense of urgency was imparted to the programme and it was put on a fast track

implementation. Under this programme, pilot studies for Gas Hydrates production were planned in the road map for the year 2007-08.

2.26 On being asked as to whether the work on NGHP is going on as per road map, the Ministry in a written reply stated the position as follows:-

“The work under NGHP roadmap was progressing well as per schedule. By End 2003, drilling/coring for gas hydrates in three Indian offshore areas was to be undertaken for establishing the presence of gas hydrates in these areas as well as for resource estimation and gas hydrate characterisation studies, which would have enabled to understand this large unconventional future resource of energy. The drilling coring/logging of gas hydrates is a very specialised activity and services for the same are not available commercially anywhere in the world except with Integrated Ocean Drilling Programme (IODP), an international scientific body.

DGH as coordinator of NGHP had been making all efforts since year 2002 to get the services of a suitable deepwater drill-ship with onboard laboratories having experienced science support for drilling/coring in three Indian offshore areas, from various possible sources, but could not succeed due to non availability of such services. Recently DGH has been successful in obtaining in drilling/coring proposal from a US Consortium consisting of Ocean Drilling Limited (ODL), Fugro McClelland Marine Geosciences and Geotek Limited are main players in this specialised field. It is now likely that drilling/coring for gas hydrates may begin by March 2006 in these offshore areas.

In the meantime under NGHP detailed geo-scientific studies have been carried out in the Krishna-Godavari, Mahanadi basins, Andaman sea in East Coast and Kerala Konkan basin in West coast. Moreover, the seismic data of entire offshore area have also been studied by NGHP scientists for identifying the suitable drill sites. International cooperation for getting scientific know-how and technology for production of gas from gas hydrate is also continuing.

It is worth mentioning here that India has made good progress in gas hydrate studies and will be third country in the world after USA and Japan to endeavor such advanced scientific activity.”

(i) Coal Bed Methane (CBM)

2.27 Coal Bed Methane (CBM) is an environment friendly clean fuel with properties similar to Natural Gas. The commercial production of CBM is a proven technology and CBM is now considered as a major source of gas supplementing the production of hydrocarbon gas from petroleum sources. The considerations that weigh for development of CBM resources are:

- The produced gas is clean source of energy and if not extracted prior to or during mining would vent out resulting in increased greenhouse gas emission detrimental to atmosphere and at the same time loss of valuable resources.
- Extraction of CBM makes coal mining safe, economic and profitable.
- There is also a pressing need for harnessing this alternate source of natural gas, as there is quantum jump in demand of Natural Gas in the country.

2.28 India having the sixth largest proven coal reserves and being the third largest coal producer in the world hold significant prospects for commercial recovery for Coal Bed Methane. The bulk of the coal resources of around 250 billion tones is contained in older basins. Substantial lignite deposits also occur in younger basins of Gujarat, Rajasthan and Tamil Nadu. These coal & lignite deposits contain varying amount of CBM depending on the rank of the coal, depth of burial and geo-tectonic settings of the basins. Large resources of high rank coal in the country provide ample opportunities for harnessing this unconventional source of energy.

2.29 In order to harness CBM potential in the country, Government of India formulated a CBM Policy in 1997. The CBM policy provided for attractive fiscal and contract terms, which are considered one of the best in the world. The successful bidder would be required to enter into a contract with Government of India (GOI).

2.30 In May 2001, based on the initiative taken by DGH, for the first time in the country, CBM blocks were offered through international bidding for exploration and production of CBM in the country. As on date, under two rounds of CBM bidding, the Government has awarded 16 CBM blocks to National, Private & Joint Venture Companies for exploration and production of CBM in the country. The total CBM resources in the 16 awarded blocks covering an area of around 7800 km² are estimated to be 820 BCM and expected total production from these blocks is estimated at 23 MMSCMD at their peak production level. During the last 3 years more than 75 Exploratory/Test Wells have been drilled in the awarded blocks. Some operators have already completed their Phase-I exploration activities in some of the blocks. The results in some of the blocks are very encouraging and there have been significant finds in Eastern & Central part of India.

2.31 Regarding the progress made in the blocks awarded under CBM policy so far, the Ministry of Petroleum & Natural Gas in a written reply informed the Committee that the Petroleum Exploration License (PEL) has so far, been issued for 14 blocks (5 under CBM-I round, 3 under Nomination basis and 6 under CBM-II round). As per the committed work programme and time schedule in the contract and keeping in view the status of work progress in the awarded CBM blocks, commercial production of CBM in the country is likely to commence by 2007-08.

(j) Safety and Environment

2.32 Safety and Environment related aspects of Private/joint venture fields are being monitored by DGH through periodic safety audits/inspections. This is to ensure that contractor is following all safety and environmental norms, stipulated in PSCs as well as law of the land. To undertake these activities DGH has prepared guidelines for the assessment of Health, Safety and Environmental Management System specifying minimum safety norms.

2.33 While replying to a query on the norms/regulations suggested by DGH in regard to safety of oil fields operations, the Ministry stated as under:-

“As per Production Sharing Contract (PSC), the Operator of a field/block shall conduct its petroleum operations within the contract area diligently, expeditiously, efficiently and in a safe and workmanlike manner in accordance with modern oil field and petroleum industry practices and standards and modern safety management system. The operator has also to comply with all the relevant norms/standards/regulations/acts for safe petroleum operations. During the periodic Health, Safety and Environment (HSE) audit carried out by DGH/OISD, the measures adopted by the operator to comply with the stipulated safety norms/regulations/acts are monitored.”

2.34 Regarding the measures prescribed by DGH for pollution control in hydrocarbon operations, the Committee have further been informed as follows:-

“As per the Article 14 of the Production Sharing Contract (PSC), the operator of a field/block shall conduct petroleum operation with due regard to concerns with respect to protection of the environment and conservation of natural resources, in order to prevent/minimise environmental damage and any adverse impact on environment to the best possible extent, by employing modern oilfield and petroleum industry practices and standards.

In line with the above, the operator has to carry out Environment Impact Assessment (EIA) followed by Environment Impact Management Plan before commencing any E&P activities and should get necessary approvals/clearances from the concerned regulatory authorities such as State Pollution Control Board, Ministry of Environment and Forests (MOEF) for obtaining environment clearances to commence the activities.”

2.35 When the Committee desired to know about the major findings of DGH in their periodic Safety and Environment Audit of field installations in the last five years, the Ministry replied as under:-

“As per the PSC provisions, the Operators should follow the best international practices as far as HSE is concerned. Under the Production Sharing Contract (PSC), DGH has been carrying out

periodic Health, Safety and Environment (HSE) audits of producing fields/blocks operated by Private/JV companies as per the PSC provisions. During the audit procedure, the shortcomings if any are pointed out and recommendations are given to improve the existing HSE system. The compliance status of the earlier audit recommendations are checked during the process of auditing installations and fields. During the audit process, it has been observed that the Operators are following good HSE practices and there have been no critical findings during the audit process by DGH with respect to violation of HSE norms.

At present, the OISD has been assigned the job of carrying out HSE audits of Pvt companies/JVs in coordination with DGH.”

CHAPTER – III

MISCELLANEOUS

(a) India Hydrocarbon Vision 2025

3.1 Exploration of hydrocarbons, including aggressively pursuing extensive exploration in non-producing and frontier areas is a major thrust of the Government of India. In the year 2001, the Government of India had evolved a long-term vision known as “India Hydrocarbon Vision 2025” which lays down the framework to guide the policies relating to the hydrocarbon sector of the country for the next 25 years. This vision envisages, inter-alia, a programme for the systematic appraisal of the country’s sedimentary basinal areas with the ultimate objective of complete exploration coverage of the sedimentary basins by 2025. DGH by virtue of its responsibilities is in the forefront of the efforts to bring more and more areas under exploration thereby enhancing the indigenous production and availability of hydrocarbons in the country.

3.2 The Committee desired to know the status of unexplored/poorly explored areas in the country during the last 5 years. The Ministry in a note furnished the details which are as follows:-

Year	% Unexplored	% Poorly explored
1999-2000	41	17
2002-03	32	19
2003-04	30	19
2004-05* (Provisional)	22	22

3.3 On being asked whether the quantitative/qualitative upgradation of geo-scientific database of the country’s poorly explored/unexplored sedimentary basins done by DGH is progressing as per the targets set in the ‘Hydrocarbon Vision, the Ministry stated in a reply as under :-

“As a result of the efforts of geoscientific surveys and studies, about 8,70,503 Sq. km. area is under NELP exploration and 75,360 Sq. km. are under Pre-NELP. ONGC and OIL have

about 1,30,000 Sq. km. and 12,713 Sq. km. exploration area awarded on nomination basis respectively. Thus, a total of 10,90,923 Sq. km. is under exploration, which is 34.7% of the total sedimentary area of 3.14 million Sq. km. including deepwater areas. In addition, Government of India, have offered 55 exploration blocks covering an area of 3,52,191 Sq. km. under sixth round of NELP on 23rd February, 2006. Thus, Government of India will surpass the exploration coverage target of 35% up to end of X Five Year Plan, 2007.”

(b) Production of Oil and Gas

3.4 When asked about the current oil & gas production in the country vis-a-vis the production figures in 1992-93, the Ministry of Petroleum & Natural Gas submitted in a written reply as under:-

“The oil & gas production in 2004-05 was 33.976 MMT and 31.762 BCM respectively. The comparison of oil and gas production in 1992-93 vis-a-vis 2004-05 is as under:

Crude Oil Production

(MMT)

	ONGC	OIL	Private/JV Companies	Total
1992-93	24.43	2.523	-	26.953
2004-05	26.48	3.196	4.3	33.976

Natural Gas Production

(BCM)

	ONGC	OIL	Private/JV Companies	Total
1992-93	16.49	1.563	-	18.053
2004-05	22.97	2.009	6.783	31.762

The main reason of no substantial gain in oil and gas production is the ageing oil and gas fields of ONGC and OIL as well as no major discoveries in the past by NOCs.”

3.5 The Ministry of Petroleum & Natural Gas has also informed that as far as Private companies/JVs are concerned, Oil and Gas production by them commenced only from 1994-95. Crude Oil production by them in 2004-05 was 4.300 MMT as against 0.255 MMT in 1994-95 and production of Gas has gone up in these ten years to 6783.8 MMSCM in 2004-05 from 88.01 MMSCM.

(c) Manpower Requirement

3.6 Directorate General of Hydrocarbon has evolved into a multi-faceted organisation carrying out multifarious activities relating to the upstream sector of India’s Oil Industry with a manpower of about a hundred only.

3.7 When asked about the existing staff strength of DGH vis-à-vis the sanctioned strength the Ministry of Petroleum & Natural Gas gave the following data in a written reply:-

“The existing staff strength of DGH vis-a-vis sanctioned strength has been raised as under:

Manpower	Sanctioned	Present
Executives	148	100*
Non executives	12	8

* Including trainee officers and consultants

- Additional 10% manpower can be engaged on need basis in consultation with MOP&NG
- Trainee officers/consultants are being taken on need basis on contract & they would be within the sanctioned strength.”

3.8 The Committee have also been informed that one of the constraints/hurdles faced by DGH in discharge of its duties effectively especially in the areas like exploration review, development plan review, reservoir management audit & review, PSC monitoring, etc, is the shortage of manpower. It has been submitted that the activities of DGH have increased multifold in the

past few years due to award of more and more exploration blocks in consecutive rounds of NELP bidding. As most of the blocks are now entering appraisal and development phases, the work load for proper monitoring and coordination has increased. Though the present strength is only 100 officers (including trainee officers and consultants), the requirement is about 160-180 officers.

(d) Financial Allocations and Expenditure

3.9 The activities of DGH are fully funded by grants from OIDB. During the year 2005-06 DGH had a Plan allocation of Rs. 8802.20 lakhs. When asked about the details of financial allocations made to the organisation during the last five years, the spending made by the organisation and the reasons for variations between allocation and expenditure, the Committee were informed through a written reply as under:-

“Comparative statement of Plan and Actual expenditure in last 5 years is as under:

(Rs. Lakhs)

Year	Plan	Actual
2000-01	3603.69	1771.98
2001-02	4139.48	4118.34
2002-03	4585.95	4499.78
2003-04	4787.87	2698.02
2004-05	5295.20	2539.22
2005-06	8802.20	918.69 (up to Dec, 2005)

The main variation between allocation and expenditure in the year 2003-04 and 2004-05 is mainly because of:

- Exploration activities were deferred from 2004-05 to 2005-06, as the successful bidder did not initiate the jobs awarded to him in Mizoram and Arunachal Pradesh. Thus the further Letter Of Indent (LOI) for exploration activities for other parts of country not issued to the contractor.

- Setting up of National Data Repository was deferred due to issues relating to technological compatibility and review thereafter. (Approx Rs. 10 crores).
- The NGHP activities budget 2005-06 was shifted to next year, which will now be directly funded by OIIB (approx Rs. 40 crores).
- Exploration activities could not be initiated, as the contractors did not take up the job of exploration awarded to them.
- Activities regarding office equipments, furniture and E&P data base project were also shifted from 2004-05 to 2005-06.

Efforts are being made to change the criteria for carrying out exploration work by awarding the job to National Institute of repute, such as NGRI and NIO for speedy, timely and quality work. Job has been initiated in this regard.

Speculative surveys along the offshore from shallow water to deepwater east and west coast have been awarded to GX technology. Survey may commence in January 2006.”

3.10 When asked as to how DGH proposes to spend the allocated amount of Rs. 8802.20 lakhs for 2005-06, when the actual expenditure upto December, 2005 has only been Rs. 918.69 lakhs, the Ministry informed as follows:-

“The amount of Rs. 8802.20 lakhs indicated for the year 2005-06 was budget estimates which has been revised in RE 2005-06 as Rs. 3945.20 lakh. The expenditure incurred up to 31st Jan. 2006 is 1346 lakhs and the balance amount of Rs. 2599.20 lakh will be spent before 31st March, 2006. Main activities where the amount will be spent is development and promotion of NELP-VI and CBM-III and geoscientific surveys which are now under progress.”

(e) Objectives of DGH

3.11 The Committee sought to know the objectives set by DGH for itself during the last five years and achievements made by the organisation in this regard. They were, inter-alia, informed through a written reply that during the last several years, the following achievements have been made by DGH:-

- “- Unexplored/poorly explored area in the country has been reduced from 58% in 1999-2000 to 44% in 2004-05.
- Under five NELP rounds, 110 exploration blocks have been awarded covering an area of 0.87 million sq. km
- Monitoring of 167 PSCs as of now as against 57 PSCs prior to NELP
- 34% of the country’s sedimentary area is under active exploration as of March 2004.”

3.12 The objectives of the organisation for the next few years are as under:-

- “- Appraisal of the entire sedimentary area of the country
- Offering remaining areas for exploration bidding including areas relinquished by companies through NELP & Open acreage system.
- Upgradation of the country’s poorly explored/unexplored areas to the maximum extent through geo-scientific surveys.”

3.13 The Committee have further been informed by the Ministry of Petroleum & Natural Gas that some tasks assigned to DGH need greater focus. The expectation vis-à-vis performance in respect of such tasks is as under:-

“SI. No.	Function	Expected	Achieved	Gap
1.	Exploration Review	100%	50%	50%
2.	Acreage Offering	100%	75%	25%
3.	Development Plan Review	100%	10%	90%
4.	Reservoir Management Audit & Review	100%	75%	25%
5.	Review/Reserves Assessment	100%	10%	90%
6.	E&P Data Repository	100%	-	100%
7.	PSC Monitoring	100%	100%	-
8.	HSE Norms & Audit ®	100%	10%	90%
9.	Strategy For Ventures Abroad	100%	-	100%”

PART II**OBSERVATIONS / RECOMMENDATIONS OF THE COMMITTEE**

1. The Directorate General of Hydrocarbons (DGH) was established under the administrative control of Ministry of Petroleum & Natural Gas by a Government of India Resolution in 1993. The objectives of DGH are to promote sound management of the Indian Oil and Natural Gas resources having a balanced regard for environment, safety, and technical and economic aspects of the petroleum activity. DGH has been entrusted with responsibilities concerning exploration and exploitation of hydrocarbons in the country, offering of acreages for exploration, development plans for commercial discoveries of hydrocarbon reserves, management of petroleum reservoirs, storage of exploration related data, safety in oilfield operations, etc. Keeping in view the huge mandate given to the organisation, the Committee desire the Government to provide all necessary assistance to DGH so as to enable the organisation to discharge all its duties effectively and play a more active role in the optimal exploitation of hydrocarbons in the country.

2. The Committee note that under the nomination regime, the area covered by licence for carrying out exploration was valid for an initial period of four years with two subsequent renewals of one year each. On completion of six years' Petroleum Exploration Licence (PEL) cycle, the area was either relinquished or applied for grant of fresh licence to carry out further exploration. In case of any discovery, the specified area was upgraded to lease for mining and development. The Committee take note of the fact that to allow completion of ongoing exploration activities in the existing nomination licences, relinquishment norms have been issued by the Government which allow a one time re-grant of PEL for 4 years with further extension of not more than 2 years. The Committee find that during the last five years ONGC has relinquished 16 blocks due to low

prospects/environmental constraints while OIL relinquished 3 exploration blocks, two in Rajasthan and one in Saurashtra offshore. They further find that all the existing PELs of ONGC and OIL are presently running in their re-grant PEL cycle which would expire between 2007 and 2010. The Committee, therefore, would desire the Government to direct ONGC and OIL to accelerate the pace of exploration activities in these PELs and complete the process before the deadline so as to ensure that these nomination blocks are not relinquished without valid reasons.

3. DGH carries out, either alone or in collaboration with reputed companies, various projects/surveys to upgrade information about unexplored/less explored areas. These surveys include Satellite Gravity Surveys, Seismic Surveys, Geophysical Surveys, Aero-magnetic Surveys, Geochemical Surveys, etc. The data acquired through these surveys are studied by DGH scientists and engineers and based on the interpretations, data docket and data packages are prepared which are purchased and referred to by various E&P companies for studying the prospects of various blocks before they make up their mind for bidding of such blocks. The Committee are unhappy to learn that though DGH had planned to acquire, process and interpret some seismic data in Rajasthan, Rann of Kutch and Madhya Pradesh during 2004-05, the organisation could not acquire the said data due to poor performance of the party to whom the job was awarded. The Committee desire that suitable action against the defaulting party should be taken. As surveys play a very important role in the identification of hydrocarbon resources, the Committee desire DGH to ensure the completion of each survey within the time frame. The Committee would also like to be apprised of the action taken against the defaulting party.

4. The Committee consider the New Exploration Licensing Policy (NELP) of the Government as an important milestone in the country's

hydrocarbon exploration programme. The Committee note that since 1997, till date, six rounds of NELP biddings have been held and a total of 144 blocks have been offered under the first five rounds spanning from 2000 to 2005 and contracts for 110 exploration blocks have been signed. The Committee have been informed that under the sixth round, 55 exploration blocks have been offered on 23rd February, 2006 and the completion of formalities under this round leading to signing of Production Sharing Contracts may take time upto January, 2007. The Committee hope that all work connected with the 6th round of NELP should be completed expeditiously so as to enable the operators to start their exploration activities as soon as possible. The Committee also desire DGH to monitor the execution of Production Sharing Contracts meticulously without allowing any flaw on the part of the contractors.

5. The Committee note that DGH approves/monitors the development plans/activities of various fields under the Production Sharing Contract and keeps a strict watch on the management of reservoirs. The Committee have been informed that while approving production plans, care is taken by DGH to see that no contractor is allowed to overproduce from the fields eyeing quick profits without regard to reservoir potential. The Committee appreciate the extensive work being carried out by DGH in the areas of field development, reservoir and production monitoring. Since over production may cause damage to reservoirs besides leading to loss of some precious oil/gas for ever, the Committee desire the organisation to pay adequate attention to this area of activity through constant vigil, mid-course corrections, etc.

6. As per provisions of the Production Sharing Contract, hydrocarbon volumes of a discovery are required to be vetted by the Government/DGH prior to its announcement by the operating companies. The Committee have been informed that in the year 2005, Oil & Natural Gas Corporation

(ONGC) and Gujarat State Petroleum Corporation (GSPC) made pre-mature announcement of gas discoveries without following the procedure laid down in PSC. Though the PSC provides for termination of contracts for violation of the provisions contained therein, such a course of action was not resorted to by the Government/DGH. Since pre-mature announcement of discoveries have a bearing on the value of companies' stocks, thereby affecting thousands of investors, the Committee desire the Government/DGH to strictly adhere to the provisions of PSC in such cases in future.

As regards nomination exploration blocks awarded to ONGC and OIL, the Committee have been informed that DGH has framed guidelines for applicability of uniform norms for such blocks which are being examined by the Government. The Committee desire the Government to finalise and put in place the same without further delay. The Committee would like to be informed of the action taken in this regard.

7. The Committee are happy to know that steps are being taken by DGH for setting up of a National Knowledge Hub (NKH) of Geo-science data for E&P industry which would be tremendously useful in increasing the hydrocarbon exploration efficiency in the country. The project envisages to collect/store in digital format large quantum of invaluable scientific data obtained during exploration and development activities for future use. In view of the fact that NKH would improve the efficiency of hydrocarbon prospects in the country by providing integrated synergetic environment, creating geo-scientific ambience and establishing a link among R&D institutes, academic institutions and industry, the Committee recommend that the Government should take all possible steps to put in place NKH at the earliest. The Committee also desire that the draft guidelines/modalities of membership for NKH should also be finalised at the earliest and that the

process of including private oil companies in the NKH should be initiated immediately, if not already done.

8. The Committee have been informed that the National Gas Hydrate Programme (NGHP) was formulated by the Government in 1997 for exploration & development of Gas Hydrate resources of the country and this programme was put on a fast track implementation in the year 2000. DGH, as coordinator of NGHP, had been making all out efforts since 2002 to get the services of a suitable deepwater drill-ship with on-board Laboratories, from various sources for drilling/coring purpose but the organisation could not succeed due to non-availability of such services. However, the Committee have been informed that recently DGH has been successful in obtaining a drilling/coring proposal from a US Consortium for the said purpose. They would like to be apprised of the status of the deepwater exploration drilling/coring and gas hydrate analysis as on date.

The Committee would also like the organisation to attempt a systematic study to assess the total gas hydrate resources in the country and complete the same within a fixed time frame. As development of alternative sources of hydrocarbons is vital for our country's oil security, the Committee recommend that the pursuit for evolving the right technology should be carried forward vigorously with the aim to start pilot production of gas from gas hydrate as per the NGHP road map.

9. Under the Coal Bed Methane (CBM) Policy formulated in 1997, blocks are being offered through international bidding for exploration and production of CBM in the country. Under the two rounds of CBM bidding, the Government has awarded 16 CBM blocks to National, Private & Joint Venture companies. The Committee have been informed that in the last three years, more than 75 exploratory wells have been drilled in these awarded blocks with very encouraging results. The total CBM resources in

these blocks covering an area of around 7800 sq. km are estimated to be 820 BCM and the total expected production from these blocks is estimated at 23 MMSCMD at their peak production level. The Committee, in their 7th and 11th Reports (14th Lok Sabha), had desired the Government to have a complete assessment of the total CBM resources in the country and to evolve a long-term strategy for the exploitation of such resources. They would like to be apprised of the factual details in this regard. As exploration and exploitation of coal bed methane are extremely important for bridging the ever-widening gap between the supply and demand of gas in the country, the Committee desire DGH to ensure that the committed work programme and time schedule in the contracts are adhered to by the companies so that the commercial production of CBM in the country commences by 2007- 08 as envisaged.

10. As exploration of oil and gas reserves has some ecological and sociological side effects from oil spills, accidents, fires, etc., provisions have been made in the Production Sharing Contracts in regard to Health Safety and Environmental (HSE) standards of oil fields operations. As per these provisions, the operator has to comply with the relevant norms/standards/regulations/acts for safe petroleum operations. The Committee find that DGH/OISD has been monitoring the safety and environment related aspects of private/joint venture fields through periodic safety audits/inspections. They are happy to learn that the operators are following good HSE practices and that there have not been any critical findings during the audit process by DGH with respect to violation of HSE norms. The Committee desire DGH to ensure that the operators use the best international practices in their fields. They further desire that the frequency of such audits/inspections be enhanced.

11. The Committee find that DGH during the last several years of its existence has been instrumental in reducing the unexplored/poorly

explored area in the country from 58% in 1999-2000 to 44% in 2004-05. They also find that as a result of the pivotal role played by DGH, a total of 10,90,923 Sq. km. area has been brought under exploration, which is 34.7% of the total sedimentary area of 3.14 million Sq. km. The target for exploration coverage set by the 'India Hydrocarbon Vision 2025' Document is 35 per cent upto the end of 10th Plan and the Committee are happy that the Government is confident of surpassing this target. The Committee appreciate the efforts made by DGH in the direction of exploration coverage and desire the organisation to keep up the good work and meet or even surpass the future targets for exploration coverage as laid down in the Vision Document.

12. The Committee are unhappy to note that there has not been any substantial increase in oil and gas production in the country in the last 10/12 years by the National Oil Companies viz. ONGC and OIL. The growth in oil production between 1992-93 and 2004-05 by ONGC was 2.05 MMT and by OIL was 0.673 MMT only. Similarly, in case of gas, the growth in these 12 years was 6.48 BCM for ONGC and 0.446 BCM for OIL. The main reasons for this low growth in production of oil and gas have been cited as the ageing oil and gas fields of ONGC and OIL as well as the lack of major discoveries in the recent past by National Oil Companies. The Committee are perplexed by the inability of NOCs to substantially increase the rate of production, especially oil production, in a span of 12 years and desire these companies to prepare result-oriented strategies in this regard. They also desire the Government/DGH to impress upon NOCs to intensify exploration in deep water areas, vigorously implement EOR/IOR measures and take other corrective measures that would lead to increase in production.

13. The Committee note that the existing staff strength of DGH including trainee officers and consultants is 108, as against the sanctioned strength

of 160. They have been informed that in the past few years, due to award of more and more exploration blocks in consecutive rounds of NELP, the activities of DGH has increased multifold and that the requirement of manpower for the organisation is about 160-180 officers. The Committee have further been informed that the activities of DGH in some of the areas like exploration review, development plan review, reservoir management audit & review, PSC monitoring, etc. are being affected mainly due to the shortage of manpower. The Committee, therefore, recommend that the Government should take steps to fill up the gap in manpower requirements at the earliest so as to enable the organisation to perform such activities more efficiently.

14. The Committee are unhappy to find that there has been lower expenditure by DGH vis-à-vis Plan allocations during the last six years. While the shortfall in expenditure in 2001-02 and 2002-03 was negligible, the same in the remaining years has been substantial. The shortfalls in the years 2003-04 and 2004-05 have been attributed to deferment /shifting of various activities to the subsequent year viz. exploratory activities, setting up of National Data Repository, National Gas Hydrates Programme, etc. In the year 2005-06, the Committee are surprised to find that the Budget Estimates of Rs 8802.20 lakhs has been revised to Rs 3945.20 lakhs and that out of the said RE amount, up to 31st January, 2006, an amount of only Rs 1346 lakhs has been spent leaving almost 65% of RE to be spent in the last two months of the financial year. The Committee do not approve of the repeated failure of the organisation to fully utilise the allocated amounts. They desire the organisation to make an in-depth analysis of the situation and take remedial measures for optimum/full utilisation of allocations.

15. The Committee have been informed that the performance of DGH in respect of tasks such as acreage offering, development plan review, E&P data repository, strategy for ventures abroad, etc. has not matched the

expectation. The gap between expectation and achievement in respect of these items varies from 25 to 100 per cent. The Committee desire the Government/DGH to make an in-depth analysis of each such task and take remedial measures to improve the performance.

The Committee have further been informed that DGH has certain objectives such as appraisal of the entire sedimentary area of the country, offering remaining areas for exploration bidding and upgradation of the country's poorly explored/unexplored areas to the maximum extent, for the next few years. They would like to be apprised of the measures being taken by the organisation to achieve these objectives and the progress made in the direction of meeting such objectives so far.

NEW DELHI;

November 9, 2006
Kartika 18, 1928 (Saka)

N. JANARDHANA REDDY,
Chairman,
Standing Committee on
Petroleum & Natural Gas.

APPENDIX I
MINUTES
STANDING COMMITTEE ON PETROLEUM & NATURAL GAS
(2005-06)

FOURTH SITTING
(22.12.2005)

The Committee sat on Thursday, December 22, 2005 from 1530 hrs. to 1700 hrs. in Room No. `139', Parliament House Annexe, New Delhi.

PRESENT

Shri N. Janardhana Reddy - Chairman

MEMBERS

Lok Sabha

2. Shri Anandrao Vithoba Adsul
3. Shri R. Dhanuskodi Athithan
4. Dr. Tushar A. Choudhary
5. Shri Santosh Gangwar
6. Shri Jaiprakash
7. Shri Hari Rama Jogaiah
8. Shri Rajiv Ranjan 'Lalan' Singh
9. Shri Vanlalzawma
10. Shri A.K.S. Vijayan

Rajya Sabha

11. Shri Rajeev Shukla
12. Shri Dipankar Mukherjee
13. Shri C. Perumal

Secretariat

1. Shri S.K. Sharma - Additional Secretary
2. Shri Ashok Sarin - Director
3. Shri P.C. Tripathy - Under Secretary

Representatives of Ministry of Petroleum & Natural Gas and Public Sector Undertakings/ Organisations

- | | | | |
|----|----------------------|---|--|
| 1. | Shri M.S. Srinivasan | - | Special Secretary |
| 2. | Shri Sunjoy Joshi | - | Joint Secretary |
| 3. | Shri P.K.Sinha | - | Joint Secretary & Financial Advisor |
| 4. | Shri V.K. Sibal | - | DG, Directorate General of Hydrocarbons. |
| 5. | Shri Subir Raha | - | CMD, ONGC |
| 6. | Shri R.K. Dutta | - | CMD, OIL |
| 7. | Shri S.K.Pujari | - | Deputy Chief, F&AO, OIL Industry Development Board |

2. At the outset, the Hon'ble Chairman welcomed the Special Secretary of the Ministry of Petroleum and Natural Gas and other accompanying officials of the Ministry as well as Public Sector Undertakings/Organisations to the sitting of the Committee.

3. Thereafter, the Special Secretary made some introductory remarks on the subject under examination viz. 'Activities of Directorate General of Hydrocarbons- A Review' which was followed by a detailed presentation by the Director General of Hydrocarbons highlighting the various activities of the Directorate General of Hydrocarbons(DGH). During the course of the briefing/presentation, the Members were enlightened on different aspects pertaining to the subject such as the role of DGH, achievements made under the New Exploration Licensing Policy(NELP), pre-NELP scenario, Exploration & Production Strategy adopted by various oil companies, unconventional hydrocarbon resources, production of oil and gas in the country, blocks allotted to ONGC/OIL on nomination basis, unexplored/poorly explored areas in the country, etc.

4. The Members sought clarifications on some issues relating to the subject and the representatives responded to some of them. The representatives

assured the Committee that the information which was not readily available, would be submitted shortly.

5. A verbatim record of the proceedings has been kept.

The Committee then adjourned.

APPENDIX II
MINUTES
STANDING COMMITTEE ON PETROLEUM & NATURAL GAS
(2005-06)

FIFTH SITTING
(24.1.2006)

The Committee sat on Tuesday, January 24, 2006 from 1530 hrs. to 1645 hrs. in Committee Room 'E', Parliament House Annexe, New Delhi.

PRESENT

Shri N. Janardhana Reddy - Chairman

MEMBERS

Lok Sabha

2. Shri Anandrao Vithoba Adsul
3. Shri R. Dhanuskodi Athithan
4. Shri Kirip Chaliha
5. Shri Santosh Gangwar
6. Shri Suresh Kurup
7. Shri Sukdeo Paswan
8. Dr. Prasanna Kumar Patasani
9. Shri Vanlalzawma
10. Shri Ratilal Kalidas Varma
11. Shri Rajesh Verma
12. Shri A.K.S. Vijayan

Rajya Sabha

13. Shri Moolchand Meena
14. Shri Kripal Parmar
15. Shri Dipankar Mukherjee
16. Dr. Alladi P. Rajkumar
17. Shri Satish Chandra Misra

Secretariat

1. Shri S.K. Sharma - Additional Secretary
2. Shri Ashok Sarin - Director
3. Shri P.C. Tripathy - Under Secretary

Representatives of Ministry of Petroleum & Natural Gas and Public Sector Undertakings/ Organisations

1. Shri M.S. Srinivasan - Secretary
2. Shri Sunjoy Joshi - Joint Secretary
3. Shri V.K. Sibal - DG, Directorate General of Hydrocarbons.
4. Shri R.K. Dutta - CMD, OIL
5. Shri A.K. Balyan - Director(HR),ONGC
6. Shri N.K. Mitra - Director(Offshore), ONGC
7. Shri Sam Bob - Secretary, Oil Industry Development Board

2. At the outset, the Hon'ble Chairman welcomed the Secretary of the Ministry of Petroleum and Natural Gas and other accompanying officials of the Ministry as well as Public Sector Undertakings/Organisations to the sitting of the Committee and explained the purpose of the sitting viz. to take oral evidence of the Ministry and concerned Public Sector Undertakings on the subject 'Activities of Directorate General of Hydrocarbons – A Review'.

3. The Committee then took oral evidence of the Ministry/ PSUs. The major points which came up for discussion in course of oral evidence included nomination blocks with ONGC/ OIL, declaration of oil/ gas discoveries by companies without the vetting of Government/ DGH, Production Sharing Contracts (PSCs) relating to exploration blocks, etc. The Members sought clarifications on some points which were responded to by the representatives.

4. The Committee decided to undertake an on-the-spot Study visit to Mumbai and Bangalore during the second week of February, 2006.
5. A verbatim record of the proceedings has been kept.

The Committee then adjourned.

**APPENDIX - III
EXTRACTS OF MINUTES**

**STANDING COMMITTEE ON PETROLEUM & NATURAL GAS
(2006-07)**

SECOND SITTING

(06.10.2006)

The Committee sat on Friday, October 06, 2006 from 1100 hrs. to 1330 hrs. in Committee Room No. 139, Parliament House Annexe, New Delhi.

PRESENT

Shri N. Janardhana Reddy - Chairman

MEMBERS

Lok Sabha

- 2 Shri Kirip Chaliha
- 3 Dr. Tushar A. Chaudhary
- 4 Shri Lal Muni Choubey
- 5 Shri Ravinder Naik Dharavath
- 6 Dr. M. Jagannath
- 7 Shri Jai Prakash
- 8 Adv. Suresh Kurup
- 9 Shri Sukdeo Paswan
- 10 Shri Ramjilal Suman
- 11 Shri Ratilal Kalidas Varma
- 12 Shri A.K.S. Vijayan
- 13 Shri Ram Kripal Yadav

Rajya Sabha

- 14 Shri Rajeev Shukla
- 15 Shri Suresh Bhardwaj
- 16 Shri Ramdas Agarwal
- 17 Shri Amir Alam Khan
- 18 Shri Tapan Kumar Sen
- 19 Shri Subhash Prasad Yadav

Secretariat

1. Smt. Anita Jain - Deputy Secretary
2. Shri P.C. Tripathy - Under Secretary

List of Witnesses

Representatives of Ministry of Petroleum & Natural Gas

1. Shri M.S. Srinivasan - Secretary
2. Shri Anil Razdan - Additional Secretary
3. Shri Ajay Tyagi - Joint Secretary

Representatives of PSUs/Organisations

1. Shri V.K. Sibal - Director General, DGH
2. Shri R.K.Dua - Director, PCRA
3. Shri R.S.Sharma - CMD, ONGC
4. Shri S.P.Rao - CMD, GAIL
5. Shri M.B.Lal - CMD, HPCL
6. Shri M.R.Pasricha - MD, OIL
7. Shri S. Radhakrishnan - Director (Marketing), BPCL
8. Shri B.M.Bansal - Director (P&BD), IOCL

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7. The Committee, thereafter, considered and adopted the draft Report on the subject 'Activities of Directorate General of Hydrocarbons – A Review' without any modifications. The Committee authorised the Chairman to make any verbal or consequential changes on receipt of the factually verified copy of the Report from the Ministry.

8. A verbatim record of the proceedings of the sitting has been kept.

The Committee then adjourned.

** Matters not related to this Report.