Preface

This Report of the Comptroller and Auditor General of India contains the results of the performance audit of Joint Venture Operations of ONGC Videsh Limited for the period April 2004 to March 2010 based on test audit of records available in India relating to acquisition, exploration, development and production of oil and gas fields overseas through its Joint Ventures and subsidiaries.

Executive Summary

ONGC Videsh Limited (Company) is a wholly owned overseas arm of Oil and Natural Gas Corporation Limited. It is engaged in oil and gas exploration and production (E&P) projects, with the objective of ensuring energy security for the country. Up to March 2010, the Company had acquired a total of 45 E&P assets with an investment of ₹ 52,491.90 crore in 16 countries worldwide. The Company has consistently earned increasing profits during five of the last six years. In 2009-10 its profit declined sharply to ₹ 4004 crore.

Performance audit[1] of 20 of the Company's 45 E & P assets for the period April 2004 to March 2010 identified two areas of its working that require strengthening, viz., the Company's systems for evaluation of investment opportunities for acquiring E&P assets and for formation of joint ventures as also its internal control systems.

Evaluation of Investment opportunities and formation of Joint Ventures

Investment in exploratory assets involves low cost but high risk. Out of 36 assets that the Company acquired at the exploration stage at an investment of ₹ 6,206.83 crore, only five have been successful. Eight of these assets with an investment of ₹ 1,066.17 crore had to be abandoned (in three of these abandoned assets, the company was the sole owner and operator) and the remaining 23 projects were still in the process of exploration. The Company is yet to succeed as an operator.

The Company's major investment of ₹ 46,285 crore (88 per cent) was in nine assets that were acquired at producing/discovered stage. As exploration & production is a high risk and capital intensive business, it is essential to mitigate the investment risk by exercising due diligence vis-à-vis investment opportunities and formation of joint ventures. It is desirable to have a documented and structured policy for evaluation as also for formation of JVs detailing the extent of acquisition of participation interest in offered E&P assets and farming-in and farming-out of participation interest. The Company, however, did not have such a policy which would have provided a framework for decision making and brought about greater consistency, assurance and transparency in the system.

In audit, inadequacies were noticed in nine out of 20 test cases, in the evaluation process of investment opportunities and formation of joint ventures. Significant shortcomings were:

- *The Company acquired exploration Block-5 B in Sudan despite its consultant's reservations on limited availability of reserve data as also security problems. The consortium could not implement the scheduled seismic and drilling plan and, in view of no hydrocarbon discovery, the block had to be relinquished resulting in unfruitful expenditure of ₹ 423.84 crore.*

- *The Company relied on the oil reserves estimated by Qatar Petroleum without revalidation of maps and data from an independent technical consultant in Najwat Najem Block, in Qatar. The drilling disclosed commercially unviable discovery of oil and the block had to be relinquished resulting in unfruitful expenditure of ₹ 369.45 crore.*

[1] based on the records available in India

The investment risk could have been mitigated at the initial stage itself if the Company had followed international best practices as laid down in the standard guidelines of Petroleum Resources Management System which dwells upon a prudent and consistent approach to reserve estimation and evaluation of developed projects.

- *In case of a producing asset acquired by the Company in Russian Federation (Imperial Energy Corporation Plc.) at a cost of ₹ 10,320 crore, the Company has been able to achieve production of only 15,803 barrels of oil per day (bopd) as against the envisaged production level of 35,000 bopd and has therefore, incurred a loss of ₹ 1182.14 crore during 15 months from January 2009 to March 2010.*
- *In case of a joint venture in Nigeria, the Company could not secure its interests against the violation of local law by the JV partner which had a financial implication of ₹ 77.63 crore and in yet another case, it decided to appraise the block by itself without formation of a JV and exposed itself to an avoidable risk.*

Internal Control

- *The Joint Venture agreements contained provisions for partners audit in all the cases. However, out of 29 E&P assets which were under JV arrangement, the Company exercised partner's audit rights available to it in 11 JVs after an average delay of one to three years. This resulted in irregularities not being noticed in time and consequently impacted timely corrective action.*
- *The internal audit system of the Company needs to be strengthened in view of the Company's presence in 16 countries in varied political environments and diverse array of portfolio, to provide assurance to the stakeholders.*

Recommendations:

- *The Company should formulate a policy and prepare standard guidelines in line with practices of Petroleum Resources Management System for evaluation of investment opportunities for acquisition of producing, discovered and exploration assets so as to mitigate the risks.*
- *The Company should frame a policy and prepare guidelines for formation of Joint Ventures so as to mitigate the risk, leverage the combined financial strength and share experience of the Joint Venture partner.*
- *As Exploration and Production business is high risk and capital intensive, there is an urgent requirement for the Company to strengthen its internal control system including its internal audit and ensure a strong monitoring mechanism with multi level controls for financial and operational activities. Also, the Company should put in place timely audit arrangements for audit of the JV partners.*

Chapter

1

Introduction

Chapter 1 Introduction

ONGC Videsh Limited (Company) was renamed on 15th June 1989 from the erstwhile Hydrocarbons India Private Limited, which was incorporated on 5th March, 1965 as a wholly-owned subsidiary of Oil and Natural Gas Corporation Limited (ONGC). The Company is the international arm of ONGC and is engaged in prospecting, acquisition, exploration, development and production of oil and gas acreages abroad with its operations spanning in Commonwealth of Independent States (CIS), Far East, Middle East, Africa and Latin America. The Company has incorporated/acquired four overseas wholly owned subsidiaries (ONGC Nile Ganga B.V., ONGC Narmada Limited, ONGC Amazon Alaknanda Limited and Jarpeno Limited) and one JV Company (ONGC Mittal Energy Limited) for acquiring stake in various blocks at producing, exploration and development stages. The Company had acquired 45 exploration and production (E&P) assets up to March 2010 (details in **Annexure**) as detailed below:

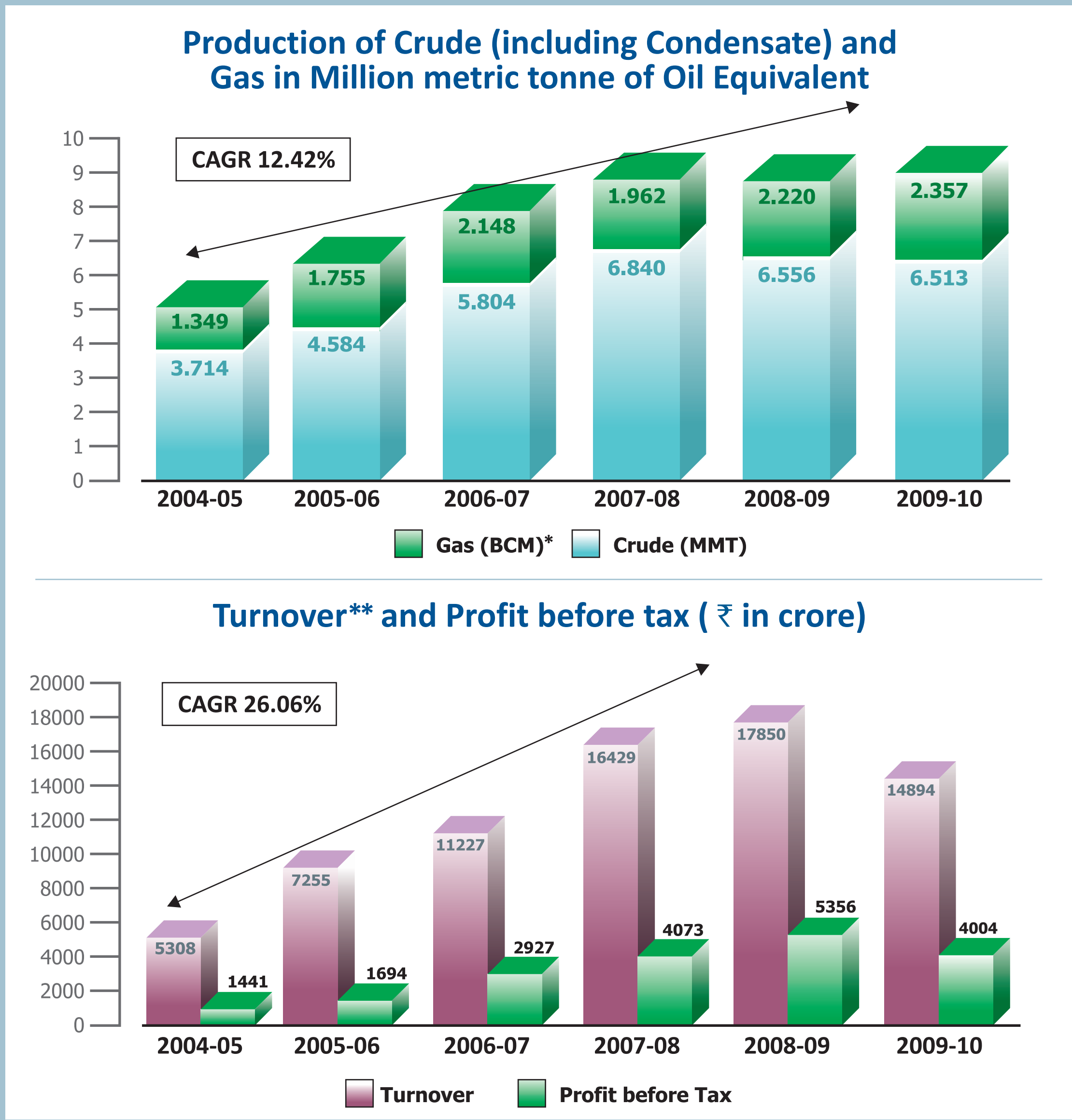
S. No.	Nature of holding	Number of assets	Investment (₹ in crore)
1.	Direct Holding 100 per cent	10	968.78
2.	Direct Holding 100 per cent through overseas Subsidiary	3	11,342.76
3.	Direct Holding through Un-incorporated JV	13	22,667.06
4.	Incorporated JV through Subsidiary Company	3	5,175.73
5.	Un-Incorporated JV through Subsidiary Company	6	10,703.36
6.	Un-Incorporated JV through Subsidiary Company of Joint Venture Company	2	568.04
7.	Abandoned Assets (including 3 Direct Holding 100 per cent)	8	1,066.17
	TOTAL	**45**	**52491.90**[1]

Out of 45 assets as above, 14 were producing, developing/discovered assets, 23 assets were under exploration and remaining eight had been abandoned by the Company up to March 2010 due to non-discovery of hydrocarbons. Producing and developed assets of the Company had proven hydrocarbon reserves of 185.995 Million Metric Tonne Oil Equivalent (MMTOE).

The affairs of the Company as of March 2010 were being managed by a Board of Directors consisting of 13 Directors including four functional directors, two Government Nominee Directors and seven part time directors who are whole time directors on the Board of ONGC. The Chairman and Managing Director (CMD) of ONGC is also the Chairman of the Company.

[1] *Excluding ₹ 850.81 crore on account of Farsi Project and Sudan Pipeline project. These projects are not covered in the Performance audit report because these are service contract and non-E&P project respectively.*

The growth in production, turnover and profit over past six years ending 2009-10 is depicted in the graphs given below. The production increased at Cumulative Average Growth Rate (CAGR) of 12.42 per cent while the corresponding rise in CAGR in the turnover was 26.06 per cent indicating a rise in price line in addition to production.



** 1BCM Gas = 1 MMTOE*
*** excluding construction contract revenue and transportation & other services.*

The Company acquired 36 assets having an investment of ₹ 6,206.83 crore at exploration stage and achieved success in only five projects (only one project is producing and remaining four are still under development) where it was the non-operator. Eight projects with a cost of ₹ 1,066.17 crore had to be abandoned and remaining 23 projects were still in the process of exploration. Thus, as a sole operator, the Company has not achieved any success so far and needs to improve its core competence in the evaluation of investment opportunities.

Chapter

2

Audit Framework

Chapter 2 Audit Framework

2.1 Scope of Audit

The performance audit of joint venture operations of the Company was taken up for the first time because since incorporation in 1965 to March 2004, the Company had acquired only eight Exploration and Producing (E&P) assets and its turnover was just ₹ 3,245 crore in 2003-04. However, during the period 2004-10, a total of 37 new E&P assets were acquired by the Company. Also, out of eight assets abandoned by the Company since incorporation, seven assets were abandoned during this period due to non discovery of hydrocarbons and after incurring an expenditure of ₹ 997.66 crore.

Audit reviewed the Company's transactions, on the basis of records available in India, relating to acquisition, exploration, development and production of oil and gas fields abroad through Joint Ventures (JVs) and through its subsidiary or JV Companies for the period from 2004-05 to 2009-10 and examined the adequacy of the systems for due diligence, formation of joint ventures and internal controls in respect of these overseas Exploration and Producing (E&P) assets.

2.2 Audit objectives

The Performance audit was conducted to assess:

- The adequacy of due diligence process for identification, appraisal and evaluation of investment opportunities in the E&P assets;
- The rationale behind formation of JVs and adequacy and reasonableness of terms and conditions of Joint Operating Agreement (JOA) and Exploration and Production Sharing Agreement (EPSA)/Production Sharing Contract (PSC) governing JV operations to safeguard financial interests of the Company; and
- The adequacy of internal control and internal audit arrangement to provide a reasonable assurance to the stakeholders on the investment.

2.3 Audit criteria and methodology

The following audit criteria were used;

- policies and guidelines of the Company and the Government of India for acquisition of E&P assets;
- legal provisions, rules and regulations of the host countries;
- terms and conditions of the contracts/agreements; and
- *international best practices as per the standard guidelines of Petroleum Resources Management System.*

Audit examined the records relating to acquisition of the blocks, processing and interpretation of seismic data and reserve estimation along with Agenda & Board Minutes, opinions of technical, legal and financial consultants, JOA, EPSA/PSC and records available at Corporate Office of the

Company. Subsequently, it was felt that the audit findings were required to be benchmarked with the standard practices followed by other E&P companies for acquisition of stakes in E&P blocks. Accordingly, two technical experts viz. Shri Y.B.Sinha, Ex-Director (Exploration), ONGC Ltd. and Shri P.K. Chandra, Former Vice Chairman and Advisor to ONGC Ltd were engaged who provided their expert opinion on the technical issues of this review. Their views have been appropriately incorporated in the performance audit report. After receipt of responses from the Ministry, a meeting was held on 24th November 2010 with the Ministry and Management and further clarifications and comments made by them during this interaction were also considered while finalizing this report.

A sample of 20 out of 45 E&P assets were taken up in Audit on Judgmental sample basis, classifying E&P assets into Producing, Developing, Exploration and Abandoned categories up to March 2010 as detailed below:

E&P Assets	No. of Assets	Total Investment as of March 2010 (₹ in crore)	No. of assets selected for audit	Total investment in assets selected for audit. (₹ in crore)	Percentage of investment in selected E&P assets to total investment
Producing, Developing/Discovered	14	49,195.79	7	44,196.06	89.84
Exploration	23	2,229.94	7	1,242.81	55.73
Abandoned	8	1,066.17	6	978.88	91.81
Total	**45**	**52,491.90**	**20**	**46,417.75**	**88.43**

Representative samples of the blocks were selected based on investment and risk factors involved. It was not possible to go for statistical sampling, as the risks involved between purchase of an exploration asset, a developing asset and a producing asset varied from very high to extremely low respectively.

In conclusion, the audit covered more than 50 per cent of the investment in producing, developing, exploration and abandoned E&P assets because producing and developing E&P assets led to maximum investment, while exploration assets which had a potential of an extremely high return on investment led to minimum expenditure and so did abandoned assets.

2.4 Acknowledgement

Audit is appreciative of the co-operation received from the Management of the Company with regard to providing information, records, clarifications, and for arranging discussions with the concerned officers from time to time.

2.5 Audit findings

Audit findings are discussed in three Chapters as detailed below:

- **Chapter 3** : flags due diligence processes relating to evaluation of Investment Opportunities
- **Chapter 4** : discusses issues while forming Joint Ventures
- **Chapter 5** : highlights inadequacies in the Internal Control System

Chapter

3

Evaluation of Investment Opportunities

Chapter 3 Evaluation of Investment Opportunities

3.1 Evaluation Process

The Company got investment opportunities through international bidding rounds invited by the host countries for exploration and production (E&P) activities, offers for farm out of participation interest from the existing consortium partners of a Block, information from empanelled Merchant Bankers/Consultants of the Company and diplomatic and other channels.

The Company, for acquisition of E&P assets, does not have a defined/documented policy. However, it constituted an Internal Multi Disciplinary team to evaluate the opportunities available to it and simultaneously engaged Legal, Technical and Financial consultants. The Multi Disciplinary team's advice along with the findings of the consultants is presented to the Management of the Company for decision making and approval by the Board for bidding in respect of those E&P assets which prima facie appeared viable to the Company. In case, the investment amount exceeded the financial competence of the Company i.e. USD 75 Million or ₹ 300 crore whichever is less, the proposal is forwarded for approval of Empowered Committee of Secretaries (ECS) and Cabinet Committee on Economic Affairs (CCEA).

The Ministry stated (October 2010) that there was neither a need nor was it considered desirable to have a defined procedure/policy for acquisition of oil and gas opportunities as each opportunity was a unique case.

The reply is not tenable as a documented policy will define the basic parameters around which the due diligence process could be carried out to appropriately mitigate the risk , as E&P business is capital intensive with uncertain returns.

Audit reviewed evaluation of investment opportunities in 20 out of 45 E&P assets. Certain inadequacies were noticed in evaluation of seven investment opportunities as discussed below.

3.2 Inadequate technical study and non-revalidation of data

The Company acquired (May 2004) Block-5 B, Sudan with 23.5 per cent participation interest at USD 24.06 million (₹ 109.44 crore) with "carry over finance" of 3.72 per cent participation interest of Sudapet (National oil Company of Sudan), as per sale/purchase condition, from OMV Aktiengesellschaft, Austria. Audit noticed that pre-acquisition technical study by the consultants - Gaffney, Cline & Associates (GCA), brought out that the assessed reserve in the block was based on limited data made available by the seller, without permission to copy data from the data room, limited available time (only two days) for review of data; and also pointed out the prevalent security problems in the designated Block area. Despite these reservations expressed by the consultant, the Company acquired this risky asset without revalidating the data.

Audit observed that the consortium upto the year 2006, could not implement the scheduled seismic and drilling plan for want of accessibility to the area and restrictions by the local authorities. Non-implementation of Minimum Work Commitment (MWC) led to additional security charges, idle hiring charges for drilling rig, other incidental and operational charges after acquisition of the block.

GCA had also prioritized three prospects for drilling namely; Wan Machar, Barada-I and Kasafa-I with "un-risked speculative recovery" potential of 1267.2 Metric Million Stock Tank Barrel (MMstb), 317.1 MMstb and 26.4 MMstb respectively. The operator drilled only one prioritized swamp "Wan Machar" in addition to two wells (Munny Deng and Nyal) in non- prioritized swamp during 2008. The drilling of two prioritized swamp wells was dropped due to less prospectivity of reserves in Kasafa-I and allotment of Barada-I to third party by the local authorities. The three wells drilled brought no hydrocarbon discovery, and thus forced the Company to relinquish the block (19 February 2009) after incurring an expenditure of USD 89.5 Million equivalent to ₹ 423.84 crore.

The Management stated (January 2010) that due diligence has to be carried out with limitation of time and on the basis of available data and seeking different opinions is neither feasible nor desirable as there is no specific technology which can predict availability of hydrocarbons at particular locations except by drilling. Further, the security risks of the Block were known at the time of acquisition and this was factored in while negotiating the acquisition price.

The Ministry endorsed (October 2010) the reply of the Management.

We do not agree with the Ministry/Management's viewpoint as reasons for overlooking significant reservations expressed by the consultant were not available on record. Considering the limitation of time and non availability of technical data, as the Company was not in a position to conduct due diligence, it should not have gone ahead in acquiring this asset which caused high risk.

Our technical expert opined that the Company's reply that security risk in the stock was known at the time of acquisition and was duly factored in; was not corroborated in view of increase in cost from USD 34 million to USD 89.5 million which showed lack of understanding of ground realities and project planning. The prospects are prioritized not by only un-risked resources but with due consideration of chance of success, i.e., risked resources. If Barada area had been allotted to third party by local authorities in violation of PSC and it had un-risked resources higher than Munny Deng and Nyal; then the Company should have asked for reduction in work commitment. This would have substantially reduced the Company's risk and money outgo.

3.3 Incorrect analysis and interpretation of data

Daewoo International Corporation (DIC) offered 20:10:10 farm-out participation interest (July 2008) out of its 100 per cent stake in Block AD7, Myanmar to its JV partners, i.e., the Company, KOGAS (Korean Gas Corporation) and GAIL respectively. Company's technical team of geoscientists assessed (11 August 2008) potential reserves of 6.5 Trillion Cubic Feet (TCF) but on the other hand its Geologist & Geophysicists (G&G) Group opined (18 August 2008) that sands, considered for reserve estimates, had shaled out in major part of A1/A3 block as a result of which established pools were not expected to be present and reserves evaluated by the technical team were based on untested and un-established sand and on thin study.

However, the Company approved (September 2008) acquisition of 20 per cent participation interest by ignoring the opinion of G&G Group, with investment up to USD 20.8 million (₹ 93.6 crore) including "past cost" under Minimum Work Commitment (MWC) with an exploration period of six years.

The operator drilled two exploratory wells under MWC and had given low priority to the third prospect based on the discouraging results of the drilled wells and the low reserve estimates of the third prospect. However, the Company before relinquishing the block, got seismic data and drilling results of two wells re-examined from its G&G Group, who reconfirmed its earlier recommendation that block did not seem attractive from the point of view of hydrocarbon discovery. The Company decided (January 2009) not to enter into the next exploration phase and relinquished the block after incurring an expenditure of US$ 15.26 million (equivalent to ₹ 74.99 crore).

The Management stated (January 2010) that G&G team opined that G3, G5 and G6 sands which were gas bearing in the Blocks A1 and A3 were not seen in Block AD7. The G7 Sand which was the target in Block AD7 was not established and not tested in that area. According to G&G team, the technical evaluation team had taken 233 square km area and 20 metre thickness of reservoir for computation of reserves, which prima-facie appeared to be a maximum reserve case. Thus, there was no contradiction in views of G&G Group and Technical team.

The Ministry added (October 2010) that the block was taken with the knowledge that the gas bearing pools in A1 and A3 sands were not extending to AD7 and primarily required for establishing a potential new pool in AD7.

We do not agree with the Ministry/Management's viewpoint as G&G Group had clearly informed in August 2008 that established pools of gas were not expected to be present. Further, our technical expert also opined that G3, G5 and G6 sands which were gas bearing in Blocks A1 and A3 were not extending to AD7 Block; hence the risk in hydrocarbon prospectivity of the Block in view of only single stratigraphic G7 play was very high. Further, he opined that the observations of G&G group contradicted the Technical Group and were not considered in the subsequent approval process.

3.4 Inadequate technical evaluation of Block in Libya

The technical team of the Company after visiting data room of the Operator Turkish Petroleum Overseas Company (TPOC) found both blocks, NC-188 and NC-189 in Libya, attractive with higher discovery and larger potential reserves in NC-188 as compared to NC-189 with presence of a good number of leads and recommended further detailing thereof.

The Company without further detailing or revalidation of team's report from an independent consultant approved (January 2002) acquisition of 49 per cent participation interest in the above assets and entered into farm-in agreement with TPOC (22 August 2002) on payment (April 2003) of USD 0.15 million for study expenses and USD 3.5 million towards 49 per cent of past cost. The operator after drilling two wells during November 2003 to June 2004 in Block NC-188 found it bearing high exploration risks with only small limited reserve structures and therefore, decided to relinquish it. The in-house technical team of the Company re-evaluated the data and opined (March 2008) that the Block did not have any significant left over potential and recommended no further activity. The Company decided (May 2008) to relinquish its 49 per cent participation interest in NC-188 after incurring total expenditure of ₹ 68.51 crore on survey, drilling and other miscellaneous activities, which could have been avoided had the recommendation of the technical team been revalidated before acquiring the block.

The Ministry stated (October 2010) that the team that visited Ankara in October 2001 had made preliminary evaluations and recommended further detailing for each block. However, another team that visited Ankara in January 2002 found that several leads identified earlier had been confirmed as prospects and did not recommend further detailing.

We do not agree with the Ministry's viewpoint as the Company did not engage any technical consultant to validate the prospects of the project assessed by the in-house team. Our technical expert also agreed with Audit and opined that the decision of the Management to go for Block NC-188 without further detailing, in view of no activity since 1993, was not a prudent decision.

3.5 Unfruitful expenditure due to improper evaluation of reserve estimates

The Company received (July 2006) farm in offer for 30 per cent participation interest in Blocks 11 and 12, Offshore, Turkmenistan from Tristone Capital, advisor to Maersk Oil (MO). At the time of offer the consortium (Maersk Oil & Wintershall) provided seismic data acquired by it from Western Geco in 2003 and drilling report of the first well (Garadashlyk-I) which was abandoned without testing in 2006 due to mechanical problems. The in-house team of the Company analyzed (August 2006) the seismic data & the information of the region as provided by the operator and felt sufficient hydrocarbon had migrated to the Garadashlyk prospect and also identified two large scale prospects with recoverable reserves of 186 Million barrel (MMb) of oil and recommended that the proposal was worth pursuing.

Audit noticed that the Company instead of following its prescribed procedure for evaluation of this investment opportunity through technical, legal and financial consultants, got the same evaluated by its in-house team which studied only old data and drilling report of first well which was abandoned without testing in respect of which no test report was available.

Had the Company done due diligence, the absence or presence of basic elements like charge, seal and reservoir in E&P assets, which are necessary for availability of viable reserves of hydrocarbons in a particular region or block could have been ascertained well in advance. However, the Company could find the absence of these basic elements only after drilling of the second prospect i.e. Darta Deniz-1 well.

The Management stated (January 2010) that detailed independent techno-economic analysis of the identified prospects based on the understanding of the prospectivity of Blocks 11 and 12 by the Company's technical team was carried out, and the latest technical data acquired by the seller was subsequently studied during due diligence by the Company's technical team.

The Ministry added (October 2010) that the technical team had discussed the hydrocarbon potential based on the parameters like reservoir quality, trap integrity, source and migration of hydrocarbon into the trap and prolific hydrocarbon presence towards south of the Block 11 and 12 was a valid indication that the block was within known possible hydrocarbon province. Since the OVL team was technically sound, the necessity to hire consultants was not felt.

We do not agree with the Management/Ministry's viewpoint as possible prospects available in Garadashlyk structure could not be tested in the abandoned well. The above facts revealed that the decision to acquire 30 per cent stake in 2006 based on estimated 186 MMb of oil recoverable reserves of the seller, was done without associating technical, legal and financial consultants for evaluation of an investment opportunity. Further, this was also based on old seismic data of 2003 and by relying only on drilling report of the first well which was abandoned without testing; thereby rendering the entire expenditure of USD 14.96 million (₹ 67.32 crore) unfruitful.

Our technical expert, while agreeing with the audit observation felt that basic elements like presence of charge, seal and reservoir were required to be necessarily present in any block but in this case, none of the three elements were present and hence, due diligence itself was defective.

3.6 Wasteful expenditure

The Company acquired 100 per cent participation interest through signing Appraisal, Development and Production Sharing Agreement (Agreement) (2005) with Qatar Government represented by Qatar Petroleum for Najwat Najem Block, (NN) Qatar which permitted only extraction of Crude Oil in case of discovery from the designated block and in case gas or any other mineral was discovered, access to that was contractually not allowed to the Company. Audit noticed that at the time of signing the agreement, the Company estimated volume of Original Oil in Place (OOIP) at 187.72 million metric barrel of oil equivalent (MMBO) (Proved Oil-98.159 MMBO + Possible Oil-89.561 MMBO). The estimation of Oil reserves was solely based on maps and data provided by Qatar Petroleum without revalidation of Company's estimated reserves from an independent technical consultant especially when the Company was aware that it does not have contractual right on gas, if any, discovered.

The Company on drilling discovered that two layers were bearing non-producible oil to the tune of 17.68 MMBO and 21.31 MMBO, one layer had only 14.6 MMBO oil as proved, out of that only 2.24 MMBO was recoverable, one was water bearing and another three layers were gas bearing on which contractually the Company did not have any right. Moreover, actual recoverable crude oil discovery of 2.24 MMBO as compared to its estimated OOIP of 187.72 MMBO was significantly low. As a result of commercially unviable discovery of oil and no contractual right on the gas, the block was relinquished (May 2008) rendering entire expenditure of ₹ 369.45 crore (USD 82.10 million @ ₹ 45/USD) infructuous, which could have been avoided had the Company preferred revalidation of the data for vetting of its estimated reserves from an independent technical consultant rather than solely relying on the maps and data provided by the Qatar Petroleum.

The Management stated (January 2010) that estimated 187.72 MMBO OIIP (Oil Initially in Place) (Proved Oil -98.159 MMBO + Possible Oil -89.561 MMBO) based on the data made available by Qatar Petroleum and the system used for estimation of reserves was as per industry standard and practice. One cannot specify beforehand as to how much deviation are permitted.

The Ministry endorsed (October 2010) the reply of the Management.

We do not agree with the Ministry/Management's viewpoint as reserves estimation by the Company were solely based on maps and data provided by Qatar Petroleum and despite knowing that the deviation can not be specified, the Management did not go for revalidation of data from independent technical consultant. Further, internationally accepted Petroleum Resources Management System also indicates that the resource evaluation process consists of identifying a project associated with petroleum accumulation(s), estimation of the quantities of Petroleum Initially-in-Place, estimating that portion of those in-place quantities that can be recovered by each project; while the Company estimated only reserves of oil and not gas and that too , exclusively based on maps and data provided by Qatar Petroleum.

Our technical expert opined that analysis estimated by the Company on 2D data indicated OIIP of the order of 188 MMBO out of which 98 MMBO was placed in proved category which got reduced to less than 15 MMBO on drilling of appraisal well. Such a situation is not expected in standard industry practice. Risk in final analysis could have been mitigated in the initial stage itself if standard definitions and guidelines of Petroleum Resource Management System had been practiced by the Company.

3.7 Inadequate technical study and non-revalidation of data

The Company acquired (February 2007) 20 per cent Participating Interest (PI) from ENI (Operator), who was holding 60 per cent PI in Block "Mer Tres Profonde Node" (MTPN) in Congo by swapping with ONGC's 34 per cent PI in Block MN-DWN – 2002/1 in India based on equitable technical worth and not governed by financial worth.

At the time of swapping, the Block was in 3rd phase of exploration with commitment of one well. Till the end of phase-II the consortium drilled two wells i.e. HTNM-I, and ZULU MARINE-I but both were plugged and abandoned due to non-discovery of hydrocarbons.

Audit noticed that in-house team while evaluating the investment opportunity mentioned in their report that Operator had provided 2D & 3D seismic data only for view purpose, and the parameters considered by them for volumetrics and estimated volumes calculated were based on earlier (2002) interpretation. With this limitation the team had estimated the total reserve of 634.75 MMb for the block as estimated by the operator in respect of five prioritized prospects i.e. Hiti East, Hiti Central, Nkasu, Ntangu and Tehitebi.

Despite these reservations expressed by the in-house team as well as disappointing results of earlier drilled two wells, the Company acquired this risky asset without revalidating the data, deviated from its prescribed procedure for evaluation of investment opportunity through technical, legal and financial consultants.

Further, it was observed that after revalidation of 3D data, operator had replaced the earlier prioritized five prospects as mentioned above with another prospect i.e. HVAM-1 and estimated total reserve of 322.8 MBOE in 5 layers in view of the discouraging results of already prioritized prospects. However, on drilling of HVAM-I prospect operator discovered only a reserve of 20.22 MBOE in one layer. The operator also could not achieve the targeted depth of 5024 meters due to operational problem as drilling was stopped at a target depth of 4,516 meters. Therefore, the potential of the Oligocene section of the Paloukou Formation which was a secondary exploration target was not explored.

As a result of commercially unviable discovery of oil, the block was relinquished (December 2009), thereby rendering the entire expenditure of USD 11.59 million equivalent to ₹ 67.78 crore by the Company and USD 8.65 Million equivalent to ₹ 36.11 crore by ONGC (USD 8.65 million @ ₹ 45/USD) infructuous, which could have been avoided, had the Company preferred revalidation of the data from an independent technical consultant rather than solely relying on the estimated reserve as provided by the operator.

Management stated (Dec. 2010) that the operator is the custodian of all data generated in a block and in any consortium both partners and host government rely on data/information generated by operator. Further, being a swap deal, the company decided to carry out internal technical evaluations without appointing a third party consultant and the company engages technical, financial and legal consultants for due diligence of only producing/discovered assets of significant value. As the investment in this exploration acreage is comparatively lower in comparison to discovered or producing assets, it was considered adequate to rely on in house assessment.

We do not agree with the Management's viewpoint as reserve estimation by the Company was solely based on data provided by the operator, which was only for viewing purposes while the latest data was also not provided for evaluation. Further, despite knowing the discouraging results of two drilled wells in the block, the Company relied on the old data provided by the operator without revalidation from outside consultants. The fact that technical, legal and financial consultants are engaged by the company for due diligence of only producing/discovered assets of significant value and not for exploration blocks, is not correct as the Company had engaged outside consultants for evaluation of many of its previous exploration blocks.

The technical expert while confirming the audit observation opined that swap deal done by the Company was on the basis of visual assessment of seismic data and the calculations were based on old 2002 data, while the deal took place only in 2007. The Company's in-house assessment was based primarily on the operators approach instead of going through third party consultation. Further, the Company ought to have a differential approach for a totally unexplored area vis-a-vis areas already having unfruitful results.

3.8 Deferment of production due to overlooking of due diligence during evaluation

Mansarovar Energy Columbia Limited (MECL), a 50:50 JVC with Sinopec (National Oil Company of China) was formed by the Company to acquire E&P assets of Omimex de Columbia in Columbia for USD 875 million, of which OVL's share was USD 437.5 million.

Before acquisition, Denton Wilde and Sapte, the consultant appointed by the Company for due diligence pointed out that the loss of Ecopetrol (National Oil Company of Columbia) as a sole buyer of the produce of Omimex field might be detrimental to field production; the seller did not have any ownership right over a part of real estate as the complete title including rights and obligations attached with the assets transferred from the erstwhile owner had not been passed to them.

Despite being aware of these points of caution expressed by the consultant, the Company went ahead with the acquisition but failed to insert an appropriate clause in agreement for safeguarding its interest in the event of non-lifting of crude oil by Ecopetrol in view of Ecopetrol being a single buyer of the entire production from the Omimex field.

In the absence of appropriate clause in the agreement, MECL had to defer production of 2,10,000 barrels of crude oil (Company's share was 1,05,000 barrels being 50 per cent) during 2009 due to non-lifting of crude oil by Ecopetrol on account of non-functioning of its refinery. Ecopetrol also expressed its inability to lift the entire quantity of heavy crude oil from the Omimex field in 2010.

The Management stated (January 2010) that the observations of due dilligence report as brought out, had never caused any operational problem in the field and the Company did not face any production restriction due to the same.

The Ministry stated (October 2010) that daily production of the field was affected due to an accident in the refinery, restrictions on the lifting of the product from the Ecopetrol refinery due to fall in the water level of the river.

We do not agree with the Ministry/Management's viewpoint as the Company did not safeguard its interests despite a caution from the consultant that any loss of Ecopetrol Refinery as a buyer of the field production would be a significant detriment to the Company.

Our technical expert felt that the Company had never faced any operational problem in the field nor faced any production restriction but the same does not rule out the possibility. Production due to non lifting of crude by Ecopetrol was a loss to the Company on account of non/delayed realisation of revenue.

In conclusion, certain inadequacies were noticed in due diligence process for evaluation of investment opportunities by the Company. As a result, the Company incurred loss of ₹ 1108 crore. These inadequacies could be attributed to absence of documented policy/procedures for evaluation of investment opportunities and non compliance of basic tenets of the standard guidelines and practices of Petroleum Resources Management System for mitigating the risks.

Recommendation # 1

The Company should formulate a policy and prepare standard guidelines in line with practices of Petroleum Resources Management System for evaluation of investment opportunities for acquisition of producing, discovered and exploration assets so as to mitigate the risks.

Chapter

4

Formation of Joint Ventures

Chapter 4 Formation of Joint Ventures

4.1 Introduction

Globally Joint Ventures are formed with the core intention of risk and experience sharing with joint ventures (JV) partners and the mode of formation varies strategically from country to country depending on the law of the land. Internationally, Incorporated/ Unincorporated Joint Ventures/Subsidiaries are created based on host country's statutory requirements; their petroleum laws; Production Sharing Contracts. Additionally, the structure for holding a participation interest in a particular asset is also a function of tax laws wherein the companies strive to determine the best structure for avoidance of double taxation considering Bilateral Investment Protection Agreements, Double Taxation Avoidance Agreements.

As exploration and production (E&P) business is high risk and capital intensive, so the Company also managed it either through incorporated or unincorporated JV to mitigate the risk, leverage the combined financial strength and share experience of the JV partner. JVs are also entered into for getting access to the resources of the JV partners which could be rigs, logistics, existing contracts, etc.

Every joint venture operation is always governed through a joint operating agreement (JOA) and a unanimous decision by the JV partners, but in E&P business the operator has ultimate control on each activity of the operation and other partners act as only non-operators and participate only in the Technical, Operational, Administrative and Financial meetings for decision making. Operator also has the authority to take the decisions on day-to-day activities and take assistance from its affiliated companies. E&P JVs are a jointly controlled operation but the role of other partners being passive is fraught with the risk of unilateral decisions being made for operating activities without the unanimous consent of the JV partners. Also other risks are violation of mandatory regulations of the regulator by the JV partner entailing unreasonable financial burden on the JV partners, non-compliance of the terms and conditions of JOA, etc.

The Company formed incorporated or unincorporated Joint Ventures in 29 E&P assets while the remaining assets remained wholly owned by the Company. Review also revealed that the Company had no specific policy detailing the considerations for extent of acquisition of participation interest in offered E&P assets. For farming-in and faming-out of participation interest, the Company was solely dependent on either participation interest offered to it or its own perception of risk and reward.

Out of 45 E&P assets, Audit reviewed 15 joint ventures and five owned E&P assets involving an investment of ₹ 46,417.75 crore. Inadequacies noticed in three are discussed below.

4.2 Un-realistic estimation of reserves/production

The Company acquired (January 2009) Imperial Energy Corporation Plc, (IEC) an Exploration and Production Company, which was operating in Tomskh region of Russian Federation through its subsidiary Jarpeno Limited, Cyprus, at a cost of USD 2.12 billion (Rs 10,320 crore) with CCEA approval (August 2008) subject to stipulation that the IRR should be more than 10 per cent and an option to farm out a part of its stake to a Russian firm.

Before acquisition, the technical consultant and the Company had estimated the 2P reserves of IEL at 790 MMBOE and 826 MMBOE respectively. With these estimates of reserves and long term crude price at USD 85/bbl, the Company assessed the project as viable with the average daily rate of production of 35,000 barrel oil per day (bopd) for 2009 and thereafter , to enhance the production upto 80,000 bopd by 2011 .

During review, it was observed that at the time of reassessment of the viability of the project due to fall in crude price, the actual daily rate of production for 2008 as on 20th October 2008 was only about 5,634 bopd as against the projected production of 11,000 bopd (which was what the Board was informed in April 2008 at the time of appraisal). Further , the actual average production during 2009 and 2010 (till August) was 9067 bopd and 14,724 bopd respectively against the projected production of 35,000 bopd, due to tight reserve position and delay in drilling the wells as envisaged even after 18 months of its acquisition. The Company also did not exercise the option of farming out a part of its stake to a local partner to leverage their combined financial strength and shared experience of the JV partner. This resulted in financial loss to the Company as discussed below.

Consequent to low production, the Company could not achieve IRR of 10 per cent and incurred losses of USD 37.892 million (Rs.174.15 crore @ Rs 45.983/USD) & USD 212.464 million (Rs 1007.99 crore @ Rs 47.443/USD) for the years 2008-09 & 2009-10 respectively. Besides, due to non-achievement of targeted production, the Company also suffered a production loss of about 10.8 million barrel. Moreover, the Company had to reduce the proven reserve size of the asset during 2009-10 by 1.527 Million Metric Tonne (MMT) indicating the inflated size of reserves as estimated by the Company at the time of its acquisition. The Company did not address the reservations expressed in 2007 by Russian Resources Ministry regarding inflated reserve position declared by IEC, at the time of evaluation of investment opportunity in 2008.

Thus, un-realistic estimation of reserves/production rate resulted in a huge loss of ₹ 1182.14 crore during the period 2008-09 (January to March' 09) to 2009-10 which could have been mitigated if the Company had farmed out a part of its stake to a local firm.

Management replied (Dec. 2010) that due to discouraging and very different drilling results of 28 wells in three fields in 2008 & 2009; production could not be achieved as envisaged at the time of acquisition. As a result of poor production, project cash flows were impacted and losses were incurred. Therefore, the Company is carrying out various studies to identify the problem which resulted in poor performance of the 28 drilled wells and to find solution. Unless these studies give some conclusive results, a realistic production profile can not be generated and hence an economic analysis can not be carried out to comment on a likely IRR. Further, management replied that there was no reason to doubt the correctness of reserves data used by OVL and reported to the Government as the reserves were calculated by companies of international repute.

Management's reply is not tenable as the subsequent drilling results and reduction of proved reserve size by 1.527 MMT during 2009-10 raises doubt about the reserve size of the IEC and economic viability of the take over. The fact that the Company even now is not in a position to generate a realistic production profile and bring out an economic analysis confirms that all the problems associated with these fields were not properly assessed at the time of evaluation of opportunity which led to poor production performance and consequent losses. Investment risk in the final analysis could have been mitigated in the initial stage itself by farming out a part of its stake and in view of discouraging results now, it will be difficult for the Company to farm out a part of its stake to a local firm. Thus, not creating a joint venture by farming out a part of its stake has worked to the detriment of the Company's interests here and left it to bear a loss of ₹ 1182.14 crore during 2008-09 to 2009-10 and; also the poor performance of the wells drilled during 2008-09 has left the Company in a position of unlikely generation of a realistic production profile and IRR.

The technical consultant while confirming the audit observation opined that it is a known fact that tight reservoir had poor productivity and also poorer recovery in comparison to a normal one. The prediction for production levels was highly optimistic rather than realistic. Therefore, the Company should have been more cautious when the seller had indicated a very rosy picture especially when Russian Ministry had expressed doubts about the reserves quoted by the seller.

4.3 Formation of JV without prior approval resulted in cost rejection

ONGC Mittal Energy Limited, Cyprus (OMEL) signed an MOU (November 2005) with Nigerian Government with an investment commitment of US$ 6.0 billion in the downstream project and other strategic sectors like railways, power, road, etc. in Nigeria for participating in the forthcoming exploration licensing in April 2006. In terms of MOU, OMEL was awarded (June 2006) two blocks viz. OPL 212 (now OPL 285) and OPL 209 (now OPL-279).

Block-279 with 40 per cent participation interest was awarded to OMEL along with 60 per cent carry finance condition of participation interest held by Exploration and Production Limited (EMO) at overall financial commitment of US$ 140 Million from OMEL. The Board of the Company approved (June 2006) its share of investment of US$ 44.63 million as signature bonus and Minimum Work Commitment (MWC) in the First Exploration Phase with an understanding of likely distribution of 37.5 per cent stake in favour of Shell and TOTAL (a French Oil Company).

OMEL signed an agreement with EMO for acquisition of additional 20 per cent participation interest (24 February 2007) for consideration of US$ 50 million within seven days from the date of PSC and the Board of the Company had to approve (26 February 2007) the same to avoid commitment failure on the part of OMEL. However, the additional stake increased the financial commitment of the Company to US$ 96.90 million, which was beyond the financial powers of the Company i.e ₹ 300 crore or US$ 75 million, whichever was less.

OMEL transferred (23 May 2007) 14.5 per cent participation interest along with proportionate carry finance share to TOTAL for US$ 29.07 million worked out at weighted average cost of its earlier 40 per cent participation interest and additional 20 per cent participation interest including carry finance participation interest of EMO without approval of CCEA/GOI. Transfer of 14.5 per cent participation interest at weighted average cost instead of higher cost of additional 20 per cent participation interest resulted in loss of US$ 7.18 million (₹ 32.31 crore). Audit noticed that transfer of stake to TOTAL by OMEL and formation of an unincorporated JV with TOTAL was done without mandatory prior approval of the Nigerian National Petroleum Company (Regulator).

TOTAL was authorized to carry out Geological & Geographical (G&G) activities as it had Nigeria Deep water terrain expertise. TOTAL carried out G&G activities in France which resulted in violation of Nigerian Law and led to disallowance of an expenditure of US$ 9.87 million for cost recovery purposes. Similar disallowance of equivalent amount was noticed in another Block OPL 212 (now OPL 285) which led to overall disallowance of US$ 19.74 million of which the Company's share was US$ 10.07 million equivalent to ₹ 45.32 crore @ ₹ 45/US$. Ultimately OMEL had to establish its own G&G centre at Lagos, Nigeria.

The Management stated (January 2010) that the Board approved participation in OPL-279 considering that the amount involved is within the approved limit as the JVC was in discussion with

TOTAL for farm-in of the block. The Management further stated that pro-rata share including carry finance was charged from TOTAL to utilize their over 40 years E&P experience in the Nigerian basins.

The Ministry endorsed (October 2010) the reply of the Management.

We do not agree with the Ministry/Management's viewpoint as the formation of JV with TOTAL by transfer of part stake at lower price by ₹ 32.31 crore with an aim to exploit TOTAL's 40 years of experience in Nigerian Basin also did not fructify because TOTAL carried out G&G activities outside Nigeria in contravention of Nigerian Law leading to cost rejection of ₹ 45.32 crore by the host Government. Also, ultimately to avoid further cost rejection; the Company had to set up a G&G centre in Nigeria. The Ministry/Management's reply that the Company approved the investment while probable transfer of participation interest to TOTAL was in the process of discussion indicates that investment beyond its financial powers was approved by the Management on the ground that total investment net of probable transfer of part participation interest would be within its financial competence.

Our technical consultant also opined that investment profile was known to the Company and approval of CCEA should have been obtained prior to signing of contract. Further, execution of G&G activities outside Nigeria in spite of TOTAL's long work experience in Nigeria brought out weak planning, project Management and lack of study/adherence to guidelines. Goodwill of TOTAL could not be equated with financial loss to the Company.

4.4 Avoidable exposure to risk due to non-forming of JV

The Company acquired 100 per cent participation interest in Najwat Najem Block, (NN) Qatar and estimated volume of Original Oil in Place (OOIP) at 187.72 million metric barrel of oil equivalent (MMBO) (Proved Oil-98.159 MMBO + Possible Oil-89.561 MMBO) and also noticed a risk of pre-existing poor event continuity attached with its reserves estimations.

Further, it was also noticed that the Company decided to appraise the block by itself despite knowing the fact that about 12-16 leading E&P international oil companies were interested in the Block as they had purchased bid documents in view of the potential of the field with huge reserves. Thus, the Company had a fair chance to mitigate the possible risk of poor event continuity attached with its own estimation of oil reserves through formation of a JV by transferring its part participation interest at a good price along with carry finance of its own share which was a prevalent practice in the international exploration business.

Hence, decision of the Company to appraise the block by itself despite knowing the risk and interest shown by other E&P international oil companies, was not prudent. This not only deprived the Company of mitigating the impact of risk known to it, leveraging the combined financial strength and sharing experience of the JV partners but also resulted in financial loss as discussed in para 3.6 (Supra).

The Management stated (January 2010) that the decision to share the risk or reward in respect of any project is always based on Geo-scientific studies and was project specific. Najwat Najem, Qatar Project was a discovered field, the Company decided to appraise the project itself and if found commercial to develop the same.

The Ministry endorsed (October 2010) the reply of the Management.

We do not agree with the Ministry/Management's viewpoint as risk sharing and experience sharing was more a matter of prudent financial management, particularly in projects involving high exploration risk and huge capital investment. The Company being aware of pre-existing poor event continuity should have sold out a part of its risk at a good price along with carry finance as it was a discovered field and could have minimized its losses.

Our technical expert opined that the estimate of 187.72 MMBO of OIIP with proved OIIP component of 98.159 MMBO does not conform to standards of petroleum resources management system. The investment risk in final analysis, could have been mitigated in the initial stage itself if standard definitions and guidelines of Petroleum Resource Management System had been practiced by the Company for reserve estimation and prospect evaluation.

In essence, in the absence of structured documented policy for exercise of due diligence process for formation of joint ventures, the Company was not able to mitigate the risk and leverage the benefits from the combined financial strength and expertise of the JV partners.

Recommendation # 2

The Company should prepare guidelines for formation of Joint Ventures so as to mitigate the risk, leverage the combined financial strength and share experience of the Joint Venture partner.

Chapter

5

Internal Control System

Chapter 5 Internal Control System

5.1 Introduction

In the international exploration and production business operations, partners safeguard their financial and non financial interests by ensuring a specific provision for partners' audit in the Joint Operating Agreement. The Company also followed this principle for its E&P assets acquired either through JVs or its subsidiary JVs.

In total, 29 E&P assets involving high risk and cost were acquired by the Company either through incorporated or unincorporated JVs or its subsidiary JVs, and 16 E&P assets were acquired with 100 per cent stake by itself or through its subsidiary. As the Company is not an operator in all these cases, it has to ensure that the decision of Operator is in line with broad parameters as fixed by the Government/other agencies and the assets acquired through JVs are secured. Hence, for such arrangements, internal control mechanism needs to be robust and should have inbuilt checks and balances on transactions/operations. Therefore, the rights, powers and periodicity of partners' audit as defined in the Joint Operating Agreements should be timely and effectively exercised by the Company either through its internal audit wing or through an external agency. As the Company was a non-operator in a majority of E&P assets and relied on the decision of the operator, there was a risk of losses arising out of unilateral imprudent decisions by the operator. Hence, in order to secure its interests, the Company should have a system of identification of key risks, mitigation plan as also monitoring of implementation and review.

The Ministry stated (October 2010) that a risk register consisting of ten risks along with the root causes and mitigation factors was compiled with the involvement of M/s KPMG and OVL team.

We do not agree with the reply of the Ministry because as per the papers furnished to Audit, while the Company had only identified the risk and mitigation factors; the action plan and implementation targets thereof were not formulated.

Inadequacies noticed in audit in the internal control system are discussed in the succeeding paragraphs. These inadequacies led to irregularities not being noticed in time and consequently corrective action got delayed.

5.2 Non formulation of risk mitigation plan

Review of records revealed that the Company despite being in the high risk and capital intensive overseas exploration and production business with a total investment of ₹ 52,491.90 crore had not formulated any risk mitigation plan (August 2010).

5.3 Non-exercising of partners' audit rights in time

Review of details of partners' audit in respect of 25 E&P assets where the Company was Non/Joint-Operator revealed that in 11 E&P assets, there was an average delay of one to three years in conducting partner's audit, though there was well defined provision and periodicity for partners' audit in JOA.

In Block 6 Egypt, we noticed that delay in conducting audit by the Company was attributable mainly to non-cooperative attitude of the operator and failure on its part to assert its contractual rights. Analysis of Draft Statement of Assets and Liabilities, as on 31 December 2008, submitted by Auditors revealed that contribution of IPR Energy (Joint Venture partner) for joint operations was not in proportion to its participation interest.

- The Company contributed US$ 40.94 million against its share of US$ 34.78 million leading to excess funding of US$ 6.16 million.
- During 2008, IPR Energy transferred US$ 1.91 million out of Joint Venture account to its own different affiliated companies without intimating the Company.
- Egyptian General Petroleum Corporation (EGPC), Egypt suspended reimbursement of the cost of US$ 9.89 million incurred by the joint venture, as it was incurred without their approval or without registration of the seismic contractor with the EGPC.

The Management stated (January, 2010) that partner's audit timings are decided based on the level of activities in the project, materiality of expenditure incurred, suitability of audit window to the other non operator parties, etc.

The Ministry added (October 2010) that the observations indicated in the above para had been taken up with the operator.

In sum, the fact is that the focus of partners' audit is not always on financial aspects and sometimes irregularities relating to non financial decisions do impact the project operations. Therefore, it is very essential to ensure regular audit to provide assurance to the stakeholders. Our technical experts also opined that for conducting partners' audit; periodicity needs to be fixed.

5.4 Financial control

- ***Inadequate budgetary control***

  An examination of the internal audit report of the Company for the year 2009-10 disclosed that the budget figures mapped in SAP was either 'NIL' or more or lesser than the budget approved by the Board, which shows wrong mapping of budget in SAP which was fraught with the risk of releasing excess payment or unnecessarily rejecting the payment.

- ***Release of payment beyond financial authority***

  Delegation of financial powers of the Company empowered the Board to sanction/ approve project wise investment upto ₹ 300 crore or US$ 75 million, whichever is less.

  - In Block-5B Sudan, the Board approved the planned expenditure of US$ 56.94 million ignoring expenditure of US$ 47.53 million already incurred till the date of approval and also released ₹ 48.71 crore over and above ₹ 300 crore without obtaining prior approval of CCEA.
  - In Block 279 Nigeria, the financial commitment to the tune of US$ 96.90 million, was approved by the Board of Directors on anticipated transfer of part stake to TOTAL (French Oil Company) and Shell.

The Management stated (January 2010) that the total investment by OVL exceeded the Board's delegated power on account of deterioration in security situation in Block 5B, Sudan. After the irregularity came to the notice the same was got ratified by the Board, ECS and CCEA by disclosing all the relevant facts.

The Ministry endorsed (October 2010) the Management's reply.

We do not agree with the Ministry's reply as the system of subsequent ratification not only deprived ECS and CCEA from deliberation on the issue but also bound them to approve the same. Moreover, above instances are indicative of a weak internal control system.

Our technical consultant while agreeing with the audit opined that there should be a strong monitoring system with multi level control at operational centre in order to avoid such recurrences.

5.5 Absence of Disaster Recovery Plan and/or Business Continuity Plan

The Company does not have a documented Disaster Recovery Plan (DRP) and/or Business Continuity Plan (BCP) to enable it to respond to a disaster situation. In the event of a natural disaster or other business interruption, a comprehensive Business Continuity Plan/Disaster Recovery Plan will help the Company to continue/resume its operations in a planned manner and ensure timely recovery of the IT systems within a reasonable period of time. Absence of a Business Continuity Plan/Disaster Recovery Plan could delay any damage control exercise and may lead to significant disruption of operations causing loss of business and revenue to client operations.

The Ministry stated (October 2010) that the Company runs its business transactions on SAP which is hosted in ONGC Data Center, Delhi with Disaster Recovery center at Baroda.

The fact remains that the Company is not having its own documented Disaster Recovery/ Business Continuity Plan.

To conclude, the Company despite being in high and capital intensive business did not formulate a risk mitigation plan and also failed to conduct partner's audit in time, which resulted in irregularities remaining unnoticed/unattended by the Management. These inadequacies could be attributed to lack of documented risk management plan and absence of robust internal control system including internal audit.

Recommendation # 3

In view of its presence in 16 countries and significant investment as non-operator, the Company should strengthen its internal audit and control system and put in place timely audit arrangements for audit of the Joint Ventures.


두 성

Chapter

6

Conclusion and Recommendations

Chapter 6 Conclusion and Recommendations

6.1 Conclusion

Out of 36 assets acquired at a cost of ₹ 6,206.83 crore at exploration stage, the company achieved success in five projects of which four were under development stage and only one project was producing, eight projects with a cost of ₹ 1,066.17 crore had to be abandoned and remaining 23 projects were still in the process of exploration. Producing and developed assets of the Company had proven hydrocarbon reserves of 185.995 Million Metric Tonne Oil Equivalent.

The Company had been consistently making profit during the last six years, mainly due to rise in prices of the crude oil. Production of crude oil and gas increased in 2004-05 to 2007-08 and remained almost constant thereafter. The profit of the Company was mainly from seven out of nine producing assets, of which eight assets (having an investment of ₹ 46,086.19 crore) were acquired at producing/ discovered stage. The Company has not been successful in discovering hydrocarbons in any of the blocks (excluding service contracts) as sole operator. The Company did not have documented policy for evaluation of investment opportunities and guidelines for formation of joint ventures. As a result, the Company was unable to reap the benefits of risk mitigation and incurred an unfruitful expenditure of ₹ 2367.77 crore.

In essence, in the absence of structured documented policy for exercise of due diligence process for evaluation of investment opportunities as also for formation of joint ventures , the Company was not able to mitigate the risk and leverage the benefits from the combined financial strength and expertise of the JV partners. Further, although joint operating agreements did contain provisions for audit arrangements, the Company could not adequately secure its financial interests due to delayed exercise of their audit rights. The fact that the Company operates in a varied political and operational environment, it is essential for the company to have a robust internal control system including effective internal audit mechanism to provide assurance to the stakeholders. Though the Company is performing profitably, inadequacies noticed in audit indicate that there is a scope of improvement and the Company needs to have more professional approach in conducting its operations.

Recommendation # 4

Based on the significant audit findings, the following recommendations are proposed:

- **The Company should formulate a policy and prepare standard guidelines in line with practices of Petroleum Resource Management System for evaluation of investment opportunities for acquisition of producing, discovered and exploration assets so as to mitigate the risks.**
- **The Company should prepare guidelines for formation of Joint Ventures so as to mitigate the risk, leverage the combined financial strength and share experience of the Joint Venture partner.**
- **In view of its presence in 16 countries and significant investment as non-operator, the Company should strengthen its internal audit and control system and put in place timely audit arrangements for audit of the Joint Ventures.**

(SUNIL VERMA)
Deputy Comptroller and Auditor General
and Chairman, Audit Board

New Delhi
Dated :

Countersigned

(VINOD RAI)
Comptroller and Auditor General of India

New Delhi
Dated :

Annexure

(Referred to in Chapter 1)

Investment of the Company in E&P assets as on 31 March, 2010

S. No.	Name of the E&P Assets	Investment ₹ in crore	Status	Operated /Non-Operated	Whether selected
1	Sakhalin-1	17,472.96	Producing	Non-Operator	Yes
2	Block 06.1, Vietnam	1,163.44	Producing	Non-Operator	No
3	Block 5A Sudan	1,830.80	Producing	Non-Operator	Yes
4	Block A 1, Myanmar	376.82	Development	Non-Operator	No
5	Block A 3, Myanmar	277.00	Development	Non-Operator	No
6	Block 6, Egypt (North Ramadan)	198.88	Discovered	Non-Operator	No
7	NEMED, Egypt	962.32	Discovered	Non-Operator	No
8	Block 24, Syria	131.14	Discovered	Non-Operator	Yes
9	Block NC 189, Libya	119.10	Exploration	Non-Operator	Yes
10	Block 25-29, 35 (part) & 36, Cuba	99.77	Exploration	Non-Operator	Yes
11	Block-1A, 1B, 2, 2B & 4, GNPOC Sudan	7,899.31	Producing	Joint-Operator	Yes
12	AFPC Project, Syria	1,189.11	Producing	Joint-Operator	No
13	RC-8, Colombia	6.67	Exploration	Operator	No
14	RC-9, Colombia	17.21	Exploration	Non-Operator	No
15	RC-10, Colombia	10.95	Exploration	Operator	No
16	Mansarovar Project, Columbia	3,154.46	Producing	Joint-Operator	Yes
17	Block BC-10, Brazil	2,456.06	Producing	Non-Operator	Yes
18	Block 2, JDZ Nigeria	100.35	Exploration	Non-Operator	No
19	Block 279 Nigeria	284.02	Exploration	Operator	Yes
20	Block 285 Nigeria	284.02	Exploration	Operator	Yes
21	San Cristobal	832.16	Producing	Joint Operator	No
22	BM-BAR-1	242.87	Exploration	Non-Operator	No
23	BM-SEAL-4	2.09	Exploration	Non-Operator	No
24	SSJN-7, Colombia	2.68	Exploration	Non-Operator	No
25	BMS-73, Brazil	25.33	Exploration	Owned	No
26	BM-ES-42, Brazil	66.10	Exploration	Owned	No
27	Block 8 Iraq	4.87	Exploration	Owned	No
28	Vietnam 127	226.47	Exploration	Owned	No
29	Vietnam 128	202.65	Exploration	Owned	Yes
30	Block 34 & 35 Cuba	178.72	Exploration	Owned	No

S. No.	Name of the E&P Assets	Investment ₹ in crore	Status	Operated /Non-Operated	Whether selected
31	Libya 81-1	92.10	Exploration	Owned	Yes
32	Block 43 Libya	161.15	Exploration	Owned	Yes
33	Myanmar AD-2	57.76	Exploration	Owned	No
34	Myanmar AD-3	21.83	Exploration	Owned	No
35	Myanmar AD-9	17.70	Exploration	Owned	No
36	Imperial	11,251.33	Producing	Owned	Yes
37	CPO-5, Colombia	5.53	Exploration	Owned	No
38	Block NC 188, Libya	68.51	Abandoned	Non-Operator	Yes
39	Block 5B, Sudan	417.55	Abandoned	Non-Operator	Yes
40	Block-11, 12 Turkmenistan	51.92	Abandoned	Non-Operator	Yes
41	Australia	34.69	Abandoned	Owned	No
42	Ivory Coast	52.60	Abandoned	Owned	No
43	Myanmar AD-7	55.67	Abandoned	Non-Operator	Yes
44	Najwat Najem Block, Qatar	317.45	Abandoned	Owned	Yes
45	MTPN, Congo	67.78	Abandoned	Non-Operator	Yes
	Total	**52,491.90**			

Glossary of Technical Terms

1 ”**Carry finance**” Carried interest is an agreement under which one party (carrying party) agrees to pay for a portion or for all of exploration and development of another party (carried party) on a property in which both own a portion of the working interest. The carrying party is able to recover a specified amount of costs from the carried party's share of the revenue from the production of petroleum, if any, from the property. In case carry finance is given by two or more parties, their respective shares in carry financing are termed as “Carry finance share”.

2 “**Un-risked**” refers to resource figures in which possibility of success is not risked.

3 “**Speculative resources**” refers to undiscovered resources that may occur either in known types of deposits in favorable geologic settings where mineral discoveries have not been made, or in types of deposits as yet unrecognized for their economic potential. If exploration confirms their existence and reveals enough information about their quantity, grade and quality, they will be classified as identified resources (reference: definition in USGS website)

4 “**Past cost**” refers to the cost which has already been incurred by the existing owner(s) and is intended to be passed on to the subsequent buyer.

5 “**Petroleum Resource Management System**” refers to the classification system for petroleum resources and related definitions developed by Society of Petroleum Evaluation Engineers, American Association of Petroleum Geologists and World Petroleum Council. This is used internally within the Petroleum industry and provided a consistent approach to estimating petroleum quantities, evaluating development projects, and presenting results within a comprehensive classification framework.

6 “**Farm-out**” refers to an arrangement in which the owner or lessee of mineral rights (the first party) assigns its interest to another party (the second party) for a consideration. The arrangement from the viewpoint of the second party is termed a "**farm-in** arrangement."