CHAPTER 7

MONITORING OF EXPLORATION ACTIVITIES

In the previous chapters various performance indicators of OIL in respect of its efficiency in reserve accretion, survey process, drilling operation and management of exploration blocks have been discussed. It is seen that under-achievement in various parameters can be linked to OIL's own estimation of budget, management of human resources, robustness of internal control and oversight by higher management. It also involves updation of manuals.

Audit reviewed the effectiveness of OIL towards utilisation of financial, technological and human resources to achieve its hydrocarbon goal, utilization of budgetary outlay and resource allocation for research and development. Audit also reviewed OIL's contract manual. Results of audit examination are detailed below:

7.1 Utilization of Budgetary Outlay

7.1.1. Under Utilization of Plan Outlay

The Annual Budget is drawn up with a view to plan future operations and to make ex-post-facto checks on the results obtained. Timely preparation of budget and analysis of the variations noticed in the actual execution serve the purpose of Internal Control.

OIL prepared its annual budget for each financial year for its operational activities based on which it carried out its planned activities. Audit noticed variations between the Budget Estimates (BE), Revised Estimates (RE) and actuals in respect of major operational activities during the period from 2009-10 to 2013-14.

The annual plan outlay vis-à-vis actual and physical performance of OIL for the period from 2009-10 to 2013-14 are given in Annexure I and VIII.

Audit observed that:

- OIL was not able to utilize the entire BE in all the years from 2009-10 to 2012-13. In 2013-14 expenditure under survey and exploratory drilling remained less than BE though overall expenditure exceeded BE due to increased investment in joint venture.

For all the five years, the actual expenditure against survey and exploratory drilling fell short of BE by 13 to 40 per cent.

- Similarly, the actual expenditure relating to survey and exploratory drilling against RE fell short in all the years from 2009-10 to 2013-14 which ranged between 2 and 33 per cent.
- The shortfall in achievement of physical target was not commensurate with the shortfall in achievement of financial target. In case of survey, the shortfall in physical target was upto 55 per cent and the same for exploratory drilling was upto 47 per cent.
- In OIL's MOU, MOPNG had not put any weightage for expenditure under plan outlay for the period from 2009-10 to 2011-12. However, the expenditure under Plan Outlay was considered as a parameter for fixation of MOU target with 1 per cent weightage in 2012-13 which was increased to 2 per cent weightage in 2013-14.

OIL's persistent shortfall in financial achievement/utilization of budgetary outlay indicates that it lacked in monitoring of its expenditure and grossly over-estimated its expenditure.

OIL replied (April 2015) that Plan outlay and actual expenditure in Assam and Arunachal Pradesh during the referred period was primarily affected by less achievement in physical activities than planned due to availability of less number of chartered hire rigs, litigation in procurement of rigs, land acquisition problems, frequent bandh and blockades in Assam disrupted field operations including drilling and field preparatory work.

Survey and drilling suffered due to continued rain for prolonged period and heavy floods in Assam resulting in limited working window in the North East, delay in getting statutory clearances / permissions, insurgency prone forest and river confluence areas (Sadiya, Karbi Anglong) and public obstruction in developmental works.

OIL added that it had a definite control mechanism of physical performance through its monthly action plan which ultimately reflects the year end actual financial expenditure. OIL has implemented Business Planning and Consolidation (BPC) for preparation of Budget and for real time controlling, Fund Management (FM) module has been activated in SAP. The system provides warning popup messages when the expenditure exceeds the budgeted amount and thus control exercised. Plan outlay is introduced as a dynamic efficiency parameter in MOU system in the recent years and is monitored internally and in QPR meetings with MOPNG.

OIL further stated that selection of new parameters (viz., plan outlay since 2012-13, flare reduction for 2015-16 etc.) or deletion of any parameter (viz., acquisition of producing asset overseas, RP ratio, etc,) in MOU is absolute prerogative of the Task Force based on priority and to avoid duplication etc.

All the above replies put forward by OIL need to be viewed in the light of the fact that budgeting is an exercise aimed at anticipating future course of income and expenditure. Persistent variations in budget and actual indicated a lack of internal control.

The Standing Committee on Petroleum and Natural Gas (2011-12, Fifteenth Lok Sabha) in its Tenth report felt that most of reasons given for shortfall viz. land acquisition problem, delay in obtaining various clearances from concerned departments, non-availability of drilling rigs etc. were avoidable and could have been timely addressed with proper planning by the company. The committee therefore desired OIL to make all out efforts for 100 per cent utilization of funds in the current financial year and also would like DGH to effectively monitor to ensure that there is no underutilization of funds by oil companies.

Further, the Standing Committee on Petroleum and Natural Gas (2014-15, Sixteenth Lok Sabha) in its First report noted that there was skewed utilization of budget outlays by various oil PSUs compared to the previous financial years. In some of the PSUs, there was huge variation between budget estimates and revised estimates and further, there is under-utilization of even the revised budget estimates. The committee further expected the oil PSUs, some of them Navratnas, to be more serious in their budgetary exercises and revamp their budgetary planning mechanism so that such flawed estimates are avoided. The committee also recommended that a stringent monitoring system should be put in place to ensure that budget projections are achieved in the stipulated timeframe for effective planned activity.

7.1.2 Budgetary Allocation for Research and Development

OIL is an upstream exploration and production Public Sector Organization engaged in various activities in petroleum sector in India and overseas. OIL's vision includes "a learning organization, nurturing initiative, innovations and aspirations with best practices". Technology induction is, thus, a strategic goal and an essential requirement in the field of exploration.

The actual expenditure vis-à-vis Budget Estimates (BE) and Revised Estimates (RE) on Research and Development (R&D) activities for the last five years ended 2013-14 are given in table 7.1:

Table 7.1 – Budget Estimates, Revised Estimates vis-à-vis Actual Expenditure on R&D activities

(₹ in crore)

YEAR	B.E	R.E	Actual Expenditure	Excess/(Shortfall) (BE - Actual)
2009-10	29.23	30.00	22.49	(6.74)
2010-11	33.28	25.55	19.79	(13.49)
2011-12	30.74	26.44	26.99	(3.75)
2012-13	63.52	30.11	37.39	(26.13)
2013-14	43.53	38.97	38.74	(4.79)
Total	**200.30**	**151.07**	**145.40**	**(54.90)**

Audit observed that:

- Actual expenditure on R & D activities was less than the BE in all the years during the period from 2009-10 to 2013-14, the reasons for such wide variations were not on record.
- Actual expenditure in 2011-12 and 2012-13 was more than the RE by 2 and 24 per cent respectively. However, the excess of actual expenditure of 2012-13 over RE of the same year was attributable to manifold reduction (53 per cent) in the BE.

OIL replied (April 2015) that it had been making all efforts to develop and acquire new technology through R&D. R&D activities planned in different years under review have been completed with less expenditure / cost against budgeted amount. High BE for the year 2012-13 was mainly due to planned construction activity of proposed building for Centre of Excellence for Energy Studies (COEES) at Guwahati in line with 12^{th} five year plan projection for 2012-13 (₹ 39.85 crore). However, no expenditure was incurred on construction of COEES during the year as it was operating from a rented building. Therefore, RE was reduced significantly after reviewing the planned activity.

OIL's reply focuses on non-utilization of fund for setting up of COEES. The fact remains that OIL could not incur the planned expenditure on R&D and acquire new technology for exploration of hydrocarbon, as brought out in Para 3.4 that even though OIL discovered (July

2012) highly viscous Heavy Oil in the well Punam-1 in Rajasthan, it failed to produce from the well due to absence of required technology with them.

The Hydrocarbon Vision 2025 *inter alia* included 100 per cent exploration coverage of the Indian sedimentary basins by 2025, to keep pace with technological advancement and application and be at the technological forefront in the global exploration and production industry.

7.2 Utilization of Human Resources (HR) in Exploration

Exploration efforts in OIL are carried out by a dedicated exploration group consisting of executive and non-executive staff of Geo-physics, Geological & Reservoir and the Drilling Services. As on 31 March 2014, out of total manpower of 7746, the manpower for exploration group was 1368, representing 17.66 per cent of total manpower.

The exploration group consists of Geophysics, Geological & Reservoir and Drilling Department which plays a key role in exploration activities of OIL. There was shortage of manpower in these departments despite its importance in exploration activities.

Audit observed that:

- During 2009-10 to 2013-14, in Geophysics department, the actual workmen were higher than the sanctioned posts ranging from 97 to 124 per cent due to regularization of contract labour over the period from 1992 to 1996;
- The shortfall of executive in Geological & Reservoir (G&R) department ranged between 28 and 37 per cent during the same period;
- Executive shortfall went up from year to year in Drilling department. The same was 16 to 25 per cent during the period from 2009-10 to 2013-14.
- As on 31 March 2014, there were only 100 and 70 employees in the cadre of Rigman and Topman against the sanctioned strength of 233 and 108 respectively;
- During the period from 2009-10 to 2013-14, OIL planned to recruit 391 persons in executive cadre and 1081 persons in non-executive cadre against which only 340 persons were recruited under executive cadre and 597 persons in non-executive cadre. The shortfall of manpower was still persisting (December 2014). It is pertinent to mention that to address the shortage of technical manpower, OIL was regularly entering into Man Management Contract in order to operate its own rigs.
- During the period from 2009-10 to 2013-14, major attrition took place in G&R and Geophysics department as out of total attrition of 36 cases, 10 executives (28 per cent)

were from G&R department and 7 executives (19 per cent) from Geophysics department. The maximum number of attrition was found in B and C cadre.

While accepting the audit observations, OIL replied (April 2015) that sanctioned strength was dated and was already under review as work persons requirement in different departments was changing over the years. Once this sanction was reviewed, then the manpower allocation issue could be addressed by re-allocation of reviewed sanctioned post. Although OIL had been carrying out external recruitment and was taking all efforts to expedite the recruitment process so as to meet manpower shortage, it was also experienced that recruitment process took considerable time due to problems and demands raised by various local organizations for recruitment of locals. Efforts were on to reduce the time required to complete recruitment processes.

OIL further stated that it carried out its exploration activities including production and other associated services through various technical groups where manpower was deployed as per its operational requirement. Depending on exploration requirement, non-executive manpower was determined and the requirement was met through its existing employees and also through external recruitment.

OIL's reply shows acceptance of audit comments. Audit has not come across any human resource policy consciously adopted by OIL.

In the Exit Conference MOPNG/OIL stated (July 2015) that they have commenced reviewing and redeploying the manpower to strengthen certain functional groups and also initiated efforts in supplementing the manpower through recruitment.

7.3 Oversight of Internal Control

OIL is having an Internal Audit Department headed by a General Manager who in turn reports to Director (Finance). During the period from 2009-10 to 2013-14, the post of GM (IA) remained vacant and the IA department directly reported to Director (Finance). The IA department operates from Corporate Office, Noida and Registered Office, Duliajan. The IA carried out audit of all the Departments at Corporate Office (Noida), Registered Office (Duliajan), Project Offices (North East Frontier, Rajasthan and Kakinada) and Joint Venture blocks (Domestic and Abroad) either on its own or outsourced to different Chartered Accountant (CA) firms.

Audit observed that:

- Ideally the functioning of IA department should be independent and should report directly to CMD; however, contrary to this, the IA Department of OIL was reporting to Director (Finance). As per IA Manual, IA Department should be headed by an Executive Director (ED) who is to be assisted by two GMs. However, during the entire period from 2009-10 to 2013-14, the posts of ED and GMs remained vacant. The GM (IA) took over charge only from July 2014. During the period from 2009-10 to 2013-14, only three to five executives were posted in the IA Department. As a result the IA function was outsourced to different CA firms. IA Department included only people from Finance without any representative from technical wings.
- In case of outsourcing of IA functions, OIL has not incorporated any condition in the Letter of Award to include technical people having knowledge in upstream oil companies in their audit team to review the technical issues in its operational areas. Further, there was no system in place to verify the composition of Audit team engaged by the CA firms for conducting the IA functions.
- Internal Audit reports were not placed before the Board of Directors during the period from 2009-10 to 2013-14 for appraisal. OIL did not have an Internal Audit Manual till April 2012. As per the IA Manual, the IA department should meet the CAG Auditors and Statutory Auditors at least once in six months to discuss their plans for the next six months to ensure that there is no duplication of efforts. The same was, however, yet to be arranged. Compliance to Internal Audit reports were not furnished by concerned departments in a time bound manner.

Thus, Internal Audit which is an important part of Internal Control System remained inadequate and needs to be strengthened. The Statutory Auditors also in their report (May 2014) to the Members stated that the coverage of the area and monitoring of internal audit system needs to be strengthened.

OIL replied (April 2015) that Internal Audit and Technical Audit Department were existing in the company since long back and the audits were being carried out as per the annual audit program approved by the audit committee. The functioning of the department was guided by Audit Committee periodically. It was felt prudent to have Internal Audit Manual to guide the audit department and its functions. Accordingly the Audit Manual was prepared which came into force in the month of April 2012. The Audit Committee in its meeting held in August 2014 resolved that Internal Audit Department was to report to CMD as a part of good

Corporate Governance. Accordingly, the Internal Audit Department henceforth was reporting to CMD.

OIL has accepted the audit contention.

In the Exit Conference MOPNG/OIL stated (July 2015) that corrective action had already been taken based on the deficiencies pointed out in Audit and the IA was now directly reporting to CMD.

7.4 Involvement of Board in decision making

The Board of Directors (BOD) is responsible for overall supervision of the performance of the Company and plays a key role in advising the company about its activities. The following deficiencies in involvement of BOD in decision making were observed in audit:

- OIL submitted (September 2011) a Capital Outlay Plan for the period 2012-17 to MOPNG amounting to ₹ 19,003.02 crore. The Plan was not placed before BOD for their consideration and approval.
- As per the requirement of MOPNG, OIL prepared its Quarterly Performance Report (QPR) for onward transmission to MOPNG. The same was, however, not placed before BOD for their approval on regular basis as out of 20 QPRs prepared during the last five years ended 2013-14, only 10 QPRs were placed before BOD. During the last two years (i.e. 2012-13 and 2013-14) only 1 QPR in each year was placed before BOD.
- As per the Central Vigilance Commission (CVC) guidelines (Circular No.15/5/06 dated 9 May 2006), the contract awarded on nomination basis needs to be brought to the notice of BOD for their scrutiny and vetting post-facto. The Audit Committee is also required to check at least 10 per cent of such nomination contract.

Scrutiny of Board minutes revealed that during the period from 2009-10 to 2013-14, as a matter of routine only a list of contracts awarded under nomination basis was placed before BOD for their appraisal on quarterly basis which was noted by BOD. However, no post-facto scrutiny and vetting was done by BOD on the contracts awarded on nomination basis. Further, nothing was placed on record in favour of the fact that Audit committee checked at least 10 per cent of contract awarded on nomination basis as per the guidelines of CVC.

In addition, scrutiny of minutes of Local Management Committee (LMC) meeting revealed that in one occasion while finalizing the contract[47] for hiring of rigs, although the minutes of LMC had not been drawn, its decision was implemented.

[47] No. Cont./GL/DRLG/259/10

OIL replied (April 2015) that Strategic Meet was held on 10 March, 2012 at Ahmedabad which was attended by Directors of OIL under the Chairmanship of CMD, wherein the Strategic Plan was discussed in detail. It was a fact that this was not placed in BOD. However, implementation was done on the basis of recorded minutes of the said meeting and the same were circulated to all concerned.

Capital Outlay plan of OIL is discussed in detail with Functional Directors before submission to the MOPNG and it is kept in mind while preparing Annual Plan and Non-Plan Budget. Annual Plan and Non Plan Budget are placed before the Board for its approval.

Quarterly Performance Report is discussed at Functional Directors level before submission to MOPNG. However, Board is informed about the production of crude oil, gas, LPG and other products in every Board meeting. Further, CMD in his communication to the Board informs about the key performance, highlights covering areas like drilling, production, capital expenditure (India and Overseas) and CSR initiatives. BOD also reviewed on quarterly basis, the performance of the company while approving the quarterly results. Hence, BOD of OIL was well informed about the performance of the company.

As per CVC guidelines and Board decisions, information about the contracts awarded on nomination basis are regularly being placed in the Board Meetings. Queries/ clarifications in this regard by the Board, if any, are being suitably addressed/replied accordingly by the concerned departments as and when required. Further, Internal Audit department checks all kinds of contracts including the contracts awarded on nomination basis. Based on the samples decided on regular basis, significant audit observations arising out of the same are placed to the Audit Committee.

The reply is not convincing as OIL reports only the statistical information to the BOD and no discussion or analysis were traceable from the Board Minutes during the period from 2009-10 to 2013-14.

7.5 Deficiencies in Contract Manual

Contract life cycle management is the process of systematically and efficiently managing the contract creation, execution and analysis for maximizing operational and financial performance and minimizing risk of the organization. The contract manual of OIL incorporated the importance of timely award of contract, saying that indenting department shall indicate, the time by which the award shall be placed, the contract and the indenting departments shall discuss and agree upon a schedule of programme for awarding contract, starting from the purchase requisition date to date of award of contract.

Audit reviewed the contract manual of OIL and management of contracts of acquisition and chartered hire of rigs and observed that:

- The contract manual did not specify the time line for different stages of contract processes in order to obtain the goods and services in time;
- It also did not include comprehensive guidelines regarding fixation of responsibility in case of damage or loss of drilling units/ sub-surface tools/ equipments of contract while carrying out the jobs. As a result in two contracts[48] OIL paid ₹ 3.18 crore as compensation to the contractor, though the committee formed for fixing of responsibility failed to fix the responsibility either on the part of the contractor or on OIL.
- There was no schedule of programme for awarding of contract prepared by the concerned department;
- OIL has not fixed any norm for finalization of tender and award of the contract. As a result, no control mechanism was in place to ensure timely award of contract.
- The contract manual was not updated since October 2009.

In view of the above, the Internal Control System prevalent in OIL remained deficient.

OIL replied (April 2015) that as per the advice of MOPNG, it consulted ONGC's manual and updated its manual with the help of international consultant. Necessary amendments suggested for incorporation in OIL's manual were approved. The contract manual is currently under advanced stage of finalisation after incorporation of amendments as necessary. OIL has already put in place a new, "Banning Policy" , which inter alia contains the provision of putting a supplier/contractor on holiday for failure of timeline deviation, non-performance and failure to supply goods/services as per contractual terms and conditions.

While accepting the audit observation, OIL stated (April 2015) that no schedule of program for awarding of contract was in place earlier which was now being incorporated. Further, OIL has prepared a time frame for tender finalization.

In the Exit Conference MOPNG/OIL stated (July 2015) that the contract manual was under revision and expected to be finalized by September 2015, which would eventually bring down the tender processing period.

[48] No.OIL/CCO/DRLG/GLOBAL/187/2007 and No.Cont./GL /DRLG/ 287/ 12