सत्यमेव जयते

REPORT OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA

UNION GOVERNMENT
NO. 24 (COMMERCIAL) OF 1995

INDIAN OIL CORPORATION LIMITED
(MARKETING DIVISION AND INTERNATIONAL TRADE)

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PREFACE

Audit Boards are set up under the supervision and control of the Comptroller and Auditor General of India to undertake comprehensive appraisals of the performance of the Companies and Corporations subject to audit by Comptroller and Auditor General of India.

2. The report on the Indian Oil Corporation Limited (Marketing Division and International Trade Division) was finalised by an Audit Board consisting of the following:

1. Shri C.K. Joseph	Deputy Comptroller and Auditor General -cum- Chairman, Audit Board from December 13, 1993 to March 20, 1995.
2. Shri Ramesh Chandra	Deputy Comptroller and Auditor General -cum- Chairman, Audit Board from April 6, 1995
3. Shri R.S. Prasad	Principal Director of Commercial Audit and Ex-Officio Member, Audit Board - II, Bombay.
4. Shri Shailendra Pandey	Principal Director of Commercial Audit and Ex-Officio Member, Audit Board - II, New Delhi.
5. Shri A.P. Bhalla	Part-time Member. Former Chairman, IBP Co. Ltd.

6. Shri V. Deenadayalu	Part-time Member. Former Chairman and Managing Director, Madras Refineries Limited
7. Shri Jagbans Singh	Asstt. Comptroller and Auditor General (Commercial) and Secretary, Audit Board from 6th July, 1995

The part time members are appointed by the Government of India (in the respective Ministry or Department controlling the Company or Corporation) with the concurrence of Comptroller and Auditor General of India.

3. The report was finalised by the Audit Board after taking into consideration the discussions held with the Ministry of Petroleum and Natural Gas on November 27, 1995.

4. The Comptroller and Auditor General of India wishes to place on record his appreciation of the work done by the Audit Board.

OVERVIEW

I. Introduction

On 30 June, 1959; Indian Oil Company Limited, a wholly owned Government enterprise, was incorporated to undertake marketing functions of petroleum products. For better co-ordination, the Indian Refineries Limited, which was started in August, 1958, was merged with the Indian Oil Company Limited to form Indian Oil Corporation Limited (IOCL) with effect from 1st September, 1964.

[Para 1.1.0]

The activities of the Company mainly cover refining of crude oil, import/export of crude oil/petroleum products as canalising agent, marketing of petroleum products, and research and development in petroleum related fields. Recently, the activities of the Company were suo moto examined by COPU in their 42nd Report (1994-95) placed before Tenth Lok Sabha on 28 April, 1995. The present appraisal covers mainly the marketing functions and International Trade Department of the Company including a review of the overall financial performance.

[Paras 1.1.3 & 1.2]

The Company has been signing an MOU with the Government every year since 1989-90. From 1992-93 onwards, MOU placed more emphasis on financial profits. This factor alone commanded 50 percent weightage in evaluation. The targets fixed for financial profits and return on capital employed during successive years were substantially lower than the previous years' actuals. Market share in the sale of petroleum products, which was an MOU target till 1991-92 and in which the Company could not achieve the 'high case' target, was dropped from MOU from 1992-93. It was, however, included again from 1995-96.

[Paras 1.5.0 to 1.5.2]

The 1994-95 target for net profit as a percentage of capital employed was 9.14 percent. Under the administered pricing, the Company is assured of a 12 percent post tax return on capital employed to the extent it is funded by net worth. The actual capital employed was considerably lower than the net worth for the year 1994-95. As such, the rationale of fixing target for return on capital employed at levels substantially lower than 12 percent was not clear.

[Para 1.5.3]

There were sharp fluctuations in the working capital and therefore in the capital employed from year to year. Hence, return on capital employed was not a reliable indicator of performance for this Company.

[Para 1.5.4

II. Marketing Operations

In order to provide for a regulated growth, Govt. of India introduced (August, 1976) the concept of Sales Plan Entitlement (SPE). Accordingly, the share of each marketing company in the overall sale is fixed by Government. The share of IOC(MD), which was 61 percent in 1976-77, was brought down to 56 percent by 1988-89 by the then SPE formula and the share since 1989-90 onwards had been fluctuating between 56.6 to 56.7 percent. The Company also could not achieve SPE targets during the last four years from 1991-92 to 1994-95.

[Para 2.3.0 to 2.3.5]

The SPE, in its present form stifles marketing initiative and serves as an in-built disincentive to any marketing effort beyond the entitled limits. It rewards shortfall in achievement of entitled share by providing that the Company which has exceeded its SPE would share a portion of the marketing margin with the deficient Company.

[Para 2.3.6]

A comparison of the IOC(MD)'s sales vis-a-vis industry sales indicated that its market share had declined from 56.2 percent in 1988-89 to 53.96 percent in 1994-95.

[Para 2.4.1]

Even though IOC(MD)'s direct sales were higher than its SPE for direct sales, the retail trade registered a fall vis-a-vis the SPE resulting in the overall sales being lower than the total SPE.

[Para 2.4.3]

Bitumen is marketed in packed drums as well as in bulk. During the period 1985-86 to 1993-94, the Company had supplied packed bitumen in excess of its targets and in bulk supplies it had not achieved its targets in the case of some States.

[Para 2.5.4]

There is an element of inbuilt subsidy in the price of packed bitumen vis-a-vis bulk bitumen. There was little justification for this subsidy in the price of packed bitumen. There has been no revision in the cost of drums in the price build up of packed bitumen since 1986 despite the fact the cost of steel used for drums had been going up over the years.

[Paras 2.5.6]

Due to down gradation of ATF to SKO during 1984-85 to 1988-89, the Company suffered a loss of Rs. 3.79 crores. Besides, this also involved an additional outgo of Rs. 3.06 crores as Government subsidy on sale of SKO.

[Para 2.6]

With the liberalisation of economic policy, the Government in 1993 allowed parallel marketing of kerosene. Due to lack of infrastructure with private parties, such imports which constituted only a small percentage (12.7% during 1994-95) of the total imports of kerosene, were also handled by the public sector oil companies. There were reports that blue dye added to PDS kerosene for easy identification and preventing its misuse is easily removed by some vested interests for the purpose of mixing PDS kerosene with free trade kerosene.

[Para 2.7]

A total amount of Rs. 41.43 crores was outstanding as on 31.3.1995 towards claims pending settlement with the Railways. The progress of settlement of these claims was poor.

[Para 2.8.1]

III. International Trade

International Trade Department of the Company has been functioning as a canalising agency for the import of crude oil and deficit petroleum products and export of surplus petroleum products like Naphtha, NGL, FO, etc., on behalf of the entire oil industry in the country.

[Para 3.1]

Based on the Oil Economy Budget (OEB) compiled by Oil Co-ordination Committee (OCC), a strategy paper is prepared by International Trade Department which chalks out the strategy for import and export of crude oil and petroleum products. The quantities to be purchased on 'term' contracts and from 'spot' market are also delineated.

[Para 3.2.1]

During the last 7 years ending 1994-95, the import of petroleum products has increased substantially from 6.385 MMT in 1988-89 to 13.373 MMT in 1994-95 mainly due to shortage of refining capacity. The import of crude also increased from 17.332 MMT in 1988-89 to a high of 30.820 MMT in 1993-94 and was slightly reduced to 27.348 MMT in 1994-95.

[Paras 3.3.0 & 3.3.1]

Crude oil and petroleum products are purchased on 'term' contracts as well as in 'spot' markets. 'Spot' prices are normally higher than the 'term' prices. An analysis of crude oil and petroleum products imported on 'term' and 'spot' basis indicated that the 'spot' purchase of petroleum products during the period from 1990-91 to 1994-95 (excepting 1993-94) and of crude oil during 1991-92 and 1992-93 was higher than purchases made under 'term' contracts. The actual imports of crude oil under 'term' contracts was always lower than the quantities envisaged for import under 'term' arrangements despite the fact that total quantities imported were higher than the quantities shown either in the strategy paper or initially approved by the Govt. The Company has since taken initiative to finalise 'term' contracts for crude oil through tender.

[Paras 3.3.2 to 3.3.10]

During the year 1988, the Company imported 4.025 MMT of crude oil from SNE of erstwhile USSR at the official selling price of Basrah Light at $ 17.30/barrel. The market related prices extended by SOMO of Iraq for the same crude was lower than their official selling price, which was linked to this contract. The contract provided for review of the contracted price in case of abnormal change in the international oil prices.

The difference between the official selling price under SNE contract and market related price of Basrah Light worked out to $ 120 million in 1988. The Company could not take advantage of it as it could not provide any evidence as per contract with SNE that it actually obtained Basrah Light crude oil from SOMO at any other price than official selling price.

[Para 3.4]

As a canalising agent for imports and exports, the Company paid heavy demurrages on imports and exports during the period from 1984-85 to 1994-95. This was mainly due to longer detention time of vessels arising from inadequate port facilities. The major port constraints were insufficient number of jetties, draft restriction, lack of night navigation facilities, old and shorter diameter discharge pipelines etc. The demurrages are recovered from pool account based on authorisations from OCC.

[Paras 3.6.1 to 3.6.3]

IV. Marketing of Liquified Petroleum Gas

The Company introduced LPG under the brand name "Indane" in 1965 as a substitute for kerosene (SKO) for domestic use.

[Para 4.1.0]

While the Company's market share for the sale of LPG was 50%, it owned only 44% of the total bottling capacity in the Company.

[Para 4.3.1]

The Company's total storage capacity for bulk LPG at the end of September, 1995 provided only 18 days cover of the Company's bottling capacity as against requirement of 30 days.

[Para 4.3.5]

The number of domestic consumers waiting for LPG connection has been increasing every year.

[Para 4.4.2]

Government of India permitted parallel marketing of LPG in August, 1993. The private parties were allowed to import and market LPG in bulk or packed in cylinders at market determined prices. However, private parties were not able to bring much LPG as they had not developed any import facility of their own for LPG. By utilising the existing facilities of public sector oil companies, the parallel marketeers imported

41000 MTs of LPG in 1994-95.

[Paras 4.4.4 & 4.4.5]

The delay in the procurement of railway tank wagons has increased road transportation of bulk LPG at a very high cost. The existing railway tank wagon capacity for movement of bulk LPG is grossly inadequate. Three fourths of the total bulk LPG movement currently takes place by road.

[Para 4.5.5]

Despite having a major share of about 50% in the LPG market, the Company does not have any facility of its own for import of LPG.

[Para 4.6.2]

The Company's plans of 1987 for creation of import facilities at Hazira and Haldia had not materialised till November, 1995.

[Para 4.6.3]

There was a delay in clearance of the Company's project for import facility at Kandla. This resulted in non-fructification of inter-fuel substitution and additional expenditure of Rs. 160 crores in the import of kerosene

[Paras 4.6.4 to 4.6.9]

Operating cost of bottling plants was more than the operating cost allowed under the administered pricing mechanism. This resulted in under-recovery of operating cost ranging from Rs. 129.26 lakhs in 1991-92 to Rs. 945.48 lakhs in 1994-95.

[Para 4.8.5]

As against the norm of 0.25 percent fixed by OCRC for stock loss at LPG bottling plants, the percentages of actual loss were 0.78, 0.35 and 0.58 for the years 1985-86, 1986-87 and 1987-88 respectively. The norm fixed by the Management was

0.5 percent which was subsequently revised to 0.4 percent in 1988-89, 0.3 percent in 1990-91 and 0.25 percent in 1993-94 and 1994-95.

[Para 4.8.7]

Under the existing administered pricing mechanism, the oil companies are fully reimbursed the cost of LPG cylinders procured by them. While the oil companies collect deposits from LPG customers, inn effect, they do not invest any monies on LPG cylinders. The availability of interest free deposits from customers, therefore gives an extra benefit to the oil companies to the extent of interest on these funds.

[Para 4.10.2]

V. Product Losses

There were always stock gains in installations while there were losses in depots. The losses in depots were, however, offset by the gains registered in installations and the net stock losses were within the targets.

[Para 5.1.6]

An analysis of the value of the stock losses sustained by the Company and the amount recovered against these losses through the pricing mechanism during the period 1984-95 to 1994-95 indicated that the Company gained an amount of Rs. 59.57 crores on account of reduction in stock losses . The Company also gained an amount of Rs. 13.04 crores during the period from 1988-89 to 1994-95 on account of reduction in ocean losses.

[Para 5.1.7]

VI. Facilities Planning

IOC operates 39 (including 3 of AOD) out of about 80 terminals/installations at 29 locations in the country. The other marketing companies viz. HPC, BPC and IBP have 19, 18 and 4 terminals respectively. Out of 250 company operated depots in the country, IOC operates 124 and the HPC and BPC operates 64 and 59 respectively. Out of seven product pipelines, IOC owns six.

[Para 6.1]

The Eighth Plan outlay for IOC (Marketing Division) has been pegged down to Rs. 341.41 crores against its projection of Rs. 2449.97 crores for plan expenditure. The approved outlay is, thus, hardly sufficient even for one year's expenditure. Although the Company had been allowed to exceed the approved outlay based on its annual plans, the actual expenditure during the first three years of the plan was only Rs. 489.52 crores. Keeping in view the profitability of the Company, its low debt-equity ration as well as a very small equity base, the reasons for not allowing the Company to raise its own resources for meeting its plan expenditure were not clear.

[Para 6.2]

The Oil Industry proposed (April 1979) to build up additional storage facilities to safeguard against disruptions in supply. The additional product tankage (APT) project was implemented in phases. Under APT Phase-I, the Company envisaged (June 1981) creation of 5.09 lakhs KLs of additional tankage at a cost of Rs. 26.77 crores which was approved by PIB. The project was finally completed at a cost of Rs. 31.50 crores for tankage of 4.79 lakhs KLs by March, 1988. Similarly under Phase II-A of the project, as against tankage for 1.82 lakhs KLs at 30 locations approved by Government in June, 1987 at a total cost of Rs. 16.23 crores, the Company completed the project for 1.80 lakhs KLs at 27 locations.

[Paras 6.3, 6.4 & 6.5.1]

While the tankage capacity increased by 70 percent from 1983-84 to 1994-95, during the same period the throughput increased by as much as 147 percent. While the APT programme aimed at providing 45 days cover, the existing tankage of the Company could provide for a cover of 22 days of throughput only.

[Para 6.6.1]

The Company could not create sufficient number of SKO/LDO dealerships as targeted during 1985-86 to 1988-89 due to non-availability of suitable land for storage and again during 1991-92 to 1992-93 due to non-functioning of Oil Selection Board.

[Para 6.8.1]

VII. Financial Performance

There has been steady growth in the reserves and surplus during the years under review. As on 31.3.1995, free reserves and surplus were 16 times the paid up capital after issue of bonus shares in 1994-95.

[Para 7.1.2]

The Company had been financing its capital expenditure to the extent of 81 to 83 percent through internally generated resources and the balance from borrowings. There was no budgetary support from Government.

[Para 7.1.4]

The Company had a substantially large pool of investible resources, partly generated from its own operations and partly from foreign currency loans obtained for financing imports. The investments of the Company mainly comprise bonds issued by Public Sector Undertakings, units of U.T.I. and shares of other mutual funds. Average yield on investments during the years under review was more than the cost of borrowing.

[Para 7.1.5]

With the mounting dues recoverable from OCC and a shift in the source of financing of imports from short term foreign loans to suppliers' credit, the company's working capital requirements increased from Rs. 634.35 crores in 1988-89 to Rs. 4411.84 crores in 1993-94 and came down to Rs. 2608.46 crores by end of 1994-95 due to reduction in dues from OCC.

[Paras 7.1.0 & 7.1.8]

While the increase in the value of sales in 1994-95 was 88 percent over that of 1988-89, the quantity of the petroleum products sold increased only by 25 percent. The increase in value of sales was predominantly due to upward revision in price of petroleum products and increase in international price of crude oil sold to other oil companies as a canalising agent.

[Para 7.2.1]

The return on net worth had been showing a continuous decline from 1989-90 to 1993-94.

[Para 7.3.2]

The marketing division was one of the main contributors towards overall profits of the Company. While profits of marketing division showed an increase of 16.77 percent in 1994-95 over 1993-94, there were marked declines in the profit of refineries division during 1992-93 and in the profit of pipeline division since 1992-93.

[Para 7.6.1]

The under recovery due to non-revision of delivery charges within and beyond free delivery zone went up from Rs. 4.36 crores in 1989-90 to Rs. 60.28 crores in 1994-95.

[Paras 7.8.6 & 7.8.7]

VIII. Materials Management

Idling and wastage of new LPG cylinders since 1986 at the LPG Bottling Plant at Kalyani (Calcutta) resulted in blocking of working capital of Rs. 2.47 crores with resultant interest loss of Rs. 0.43 crore per annum.

[Para 8.4]

IX. Manpower Analysis

The manpower deployed for marketing activities grew at a higher rate than the rate of growth of manpower for other activities. The ratio of the officers to staff was also always higher in the marketing division than for the organisation as a whole.

[Para 9.1.1]

1. INTRODUCTION

1.1 Formation

1.1.0 Indian Oil Company Limited, a wholly owned Government company was incorporated on 30 June, 1959 to undertake marketing functions of petroleum products. Later, Indian Oil Corporation Limited (IOC) was set up on 1st September, 1964 by amalgamating the Indian Refineries Limited (started in August, 1958) with the Indian Oil Company Ltd., for better coordination between refineries and marketing. Indian Oil Corporation has four divisions:

1. Marketing Division with Headquarters at Bombay;
2. Refineries and Pipelines Division with Headquarters at New Delhi;
3. Assam Oil Division with Headquarters at Digboi; and
4. Research and Development Centre at Faridabad.

1.1.1 The Assam Oil Division was established on 14th October, 1981 on taking over the refining and marketing operations of Assam Oil Company Limited.

1.1.2 The Company wholly owns a subsidiary Company viz. Indian Oil Blending Limited, which is engaged in the manufacture of lubricants and greases. The products of the subsidiary Company are also marketed by the Company.

1.1.3 The working of the erstwhile Indian Oil Company Limited, which was engaged only in marketing functions as stated above, was first reviewed and included in the Audit Report for Government Companies for 1965. The Committee on Public Undertakings (COPU) *suo moto* reviewed the working of the Indian Oil Company in their 35th Report to Third Lok Sabha in March, 1967 and in 39th Action Taken Report thereon placed before Fourth Lok Sabha in April, 1969. The marketing activities of the Company were last reviewed in the Report of the Comptroller and Auditor General of India for the Union Government (Commercial) Part VII for the year 1970-71. The Company then had only two main Divisions known as the Refineries and Pipelines Divisions and the Marketing Division. The COPU considered this in their 49th Report (1973-74) and 73rd Action Taken Report (1975-76). The activities of the Company were recently *suo moto* examined by COPU in their 42nd Report (Tenth Lok Sabha), which was presented to Parliament on 28 April, 1995.

1.1.4 Subsequent to 1970-71, the Company has recorded enormous growth and increased its activities manifold.

1.2 Scope of Audit

1.2.0 The working of Marketing Division, including International Trade Department, of the Company for a period of five years from 1988-89 to 1992-93 was generally reviewed in audit. However, in certain sections statistical data for the earlier years have also been analysed for appreciation of long term trends. Significant issues arising therefrom and relating to performance of the Company in the marketing of petroleum products vis-a-vis targets fixed for them, the Company's market share in the oil industry, marketing and distribution of speciality product like LPG, Bitumen, etc., canalised import of crude oil and petroleum products and export of surplus products, planning and execution of marketing infrastructure, product losses and the financial performance and profitability of the Company in the overall context of administered pricing of petroleum products have been discussed in the succeeding chapters.

1.2.1 A separate appraisal on the working of Refineries and Pipelines Divisions of the Company has also been prepared for presenting to Parliament.

1.3 Objectives

1.3.0 The objectives of the Company as approved (June, 1984) by Government are as follows:

- To serve the national interests in the oil and related sectors in accordance and consistent with Government policies.

- To ensure and maintain continuous and smooth supplies of petroleum products by way of crude refining, transportation and marketing activities and to provide appropriate assistance to the consumer to conserve and use petroleum products most efficiently.

- To earn a reasonable rate of return on investment.

- To work towards the achievement of self-sufficiency in the field of oil refining, by setting up adequate domestic capacity and to build up expertise for pipe laying for crude/petroleum products.

- To create a strong research and development base in the field of oil refining and stimulate the development of new petroleum products formulations with a view to minimise/ eliminate their imports, if any and

- To maximise utilisation of the existing facilities in order to improve efficiency and increase productivity.

1.4 Decanalisation of imports and exports

1.4.0 Earlier, import of crude oil and import as well as export of almost all petroleum products were canalised through the Company. In the wake of economic liberalisation, the Government has decanalised a number of petroleum products starting from July, 1991. The Govt. of India amended (July, 1994) Export and Import Policy 1992 - 1997, thereby enabling the users to import ATF (Aviation Turbine Fuel) against special import licence. The Company assisted (October, 1994) the airlines in importing the ATF. But with imposition (March, 1995) of a cost and freight surcharge by Government with retrospective effect, the Company stopped such imports as these were no longer beneficial. By September, 1995 as many as 9 products, including LPG and Kerosene, which are being marketed in parallel by joint as well as private sector, have been decanalised and custom duties on them have also been successively reduced. A chronology of major events in the liberalisation of marketing of petroleum products is given at Annexure-I.

1.4.1 However, the Company continues to import LPG and Kerosene for meeting the country's demand and for sale through public distribution system at administered and subsidised prices.

1.5 Memorandum of Understanding

1.5.0 The Company has been signing a Memorandum of Understanding with the Government since 1989-90. The MOU targets of selected physical and financial areas and the weightage assigned to them for judging the overall performance of the Company over the years are given in Annexure II.

1.5.1 The Company had achieved the 'high' targets except in the case of sale of petroleum products (market share) and was rated `Excellent' successively for all the six years upto 1994-95. In the case of sale of petroleum products (market share), the Company could not achieve the `high' target during 1989-90 to 1991-92 and from 1992-93 onwards this was not considered as an MOU parameter. It was, however, indicated by the Ministry during the Audit Board meeting (November, 1995) that from 1995-96 `market share' had again been included in the MOU.

1.5.2 It was noted that the MOU placed increasingly more emphasis on financial profits and from the year 1992-93 onwards, this factor alone commanded 50 percent weightage in evaluation of the performance of the Company. Further, the targets fixed for financial profits as well as return on capital employed during successive years were substantially lower than the actuals for the previous year.

1.5.3 The target (high case) for net profit after tax as a percentage of capital employed was 9.14 for 1994-95. Under the administered pricing mechanism, the Company is assured of a return of 12 percent post tax on capital employed to the extent capital employed is funded by net worth. The figures of capital employed (actual) and the net worth as at the end of 1994-95 were as follows:

	Rs. in crores
Capital employed	5488.10
Net worth	6491.96

As mentioned above, by virtue of administered pricing, the Company has already earned 12 percent post tax on the net worth. In such a situation, the rationale of fixing target for return on capital employed at levels lower than 12 percent (post tax) was not clear. Viewed in this context, the much higher actual as compared to the targets did not really reflect any extra efficiency or achievement.

1.5.4 Further, as observed in rows (i) and (f) of Para 7.1.0 and also discussed in Para 7.1.8, the working capital and hence the capital employed of the Company have been sharply fluctuating from year to year. Hence fixation of return on capital employed as an MOU target was not a reliable indicator of performance for this Company. In the Audit Board meeting (November, 1995) with the Ministry, Secretary (Petroleum) promised to look into fixing of financial targets in the MOU.

1.6 Organisational set-up and network of Marketing division

1.6.0 The Marketing Division, with its headquarters at Bombay and headed by Director (Marketing), has four regional offices located at Bombay, Delhi, Calcutta and Madras. All regional offices are headed by either Executive Directors or General Managers. There are 44 Divisional Offices, including two of the Assam Oil Division. As on 31 March, 1995, the Company had 39 bulk storage installations (including 3 of AOD) and 117 storage depots, which fed 5995 retail outlets. In addition, there were 2898 kerosene/light diesel oil dealers who also move these products from the depots to 4379 consumer outlets for sale. The Company had a total product tankage of 3.93 million kilo liters at its installations and depots.

1.6.1 Being the major producer and distributor of LPG to various types of consumers in India, the Company has 32 area offices to deal with LPG marketing. As on 31 March, 1995, the Company had 33 LPG bottling plants with a total bottling capacity of 11.92 lakh tonnes per annum. Indane cooking gas (LPG) is distributed to 12 million households.

1.6.2 Indian Oil markets nearly 66.8 percent of the country's aviation fuel (68.2% in 1992-93), meeting the needs of 59 international airlines besides the domestic carriers and the defence services. Of the 117 aviation fuel stations in the country, Indian Oil operates 93.

2. MARKETING OPERATIONS

2.1 Main Marketing functions

2.1.0 The marketing operations include the following main functions.

1. Import of crude oil/petroleum products to meet the gap between the demand and the availability of petroleum products in the country.

2. Export of surplus petroleum products.

   (The above two functions are carried out in co-ordination with International Trade Department at Corporate Office, New Delhi.)

3. Distribution of petroleum products, i.e., to make available various petroleum products at locations throughout the country as per demands of consumers.

2.2 Classification of Petroleum Products

2.2.0 Petroleum products are divided into three categories viz., Formula Products, Non-formula Products and Free Trade Products (FTP). Formula products are those products whose ceiling selling prices are determined on cost plus return basis by the Government. Non-formula products are special products whose ceiling selling prices are also determined by the Government but their prices were fixed on a basis different from that applicable to formula products. The oil companies are free to fix their own selling prices for free trade products. However, Government regulates the 'transfer price' of a free trade product from refinery to the marketing company. As of September 1995, the products under these categories were as under:

Formula Products: Aviation Gasoline,
Aviation Turbine Fuel (ATF),
Motor spirit (MS),
High Speed Diesel (HSD),
Superior Kerosene Oil (SKO),

Light Diesel Oil (LDO),
Furnace Oil (FO),
Low Sulphur Heavy Stock(LSHS)/
High Petroleum Stock (HPS),
Paraffin Wax,
Naphtha,
Liquified Petroleum Gas (LPG)
Bitumen,
NGL

Free Trade Products:

Benzene,
Toluene,
Aromex,
Linear Alkyl Benzene Feed Stock (LABFS),
Slack Wax,
Hexane,
IOC Solvent-90,
Jute Batching Oil (JBO),
Mineral Turpentine Oil (MTO),
Raw Petroleum Coke (RPC),
Calcium Petroleum Coke (CPC)
HTO, Heptane,
C-5 + Reformate.
Lubricants/Greases
CBFS/P.EXT
RT FUEL

2.2.1 The Oil Prices Review Committee (June 1991), after considering the views of the oil companies, came to the conclusion that there was no need to have a separate classification `non-formula products' as it did not serve any useful purpose. But this classification continued upto July, 1994.

2.2.2 A gist of methodology adopted by Government for fixing the prices of various petroleum products under the `administered pricing mechanism' is given in Annexure-III.

2.3 Sales Plan Entitlement

2.3.0 The marketing companies are permitted to sell petroleum products as retricted by a `Sales Plan Entitlement (SPE)'. As per the recommendations of Oil Prices Committee (August 1976) a `Sales Plan' was initially introduced by the Ministry of Petroleum in August 1976, when both Burmah Shell and Esso had been nationalised. The idea was to provide for a regulated growth of various oil companies in the country. It aimed at providing adequate scope for healthy competition and discouraging cut-throat competition amongst the oil companies.

2.3.1 The Company's (including AOD's) market share in the sale of petroleum products was 66 percent in 1975-76. The SPE as devised in 1976 pegged the SPE of IOC (excluding AOD) for 1976-77 at 61 percent and envisaged that 50 percent of the industry's yearly incremental growth would accrue to the Company and the balance 50 percent would be shared between other marketing companies including Assam Oil Division (AOD) in the ratio of their previous year's SPE. This formula gave accelerated growth to other marketing companies at the expense of IOC and reduced IOC's (excluding AOD) share to 56 percent by 1988-89, even though there was no reduction in SPE in quantity terms.

2.3.2 Consequent to Company's representation, followed by a series of counter-representations and discussions, it was agreed that Company-wise SPE would be based on the principle of uniform growth. Based on this, OCC finally devised company-wise, product-wise SPE for 1989-90 under a new principle, which came into effect from 1.10.1989.

2.3.3 The highlights of the new SPE which is currently in vogue, are as under:

(a) SPE would only confine to Non Free Trade Products. (Non FTP)

(b) Company-wise SPE from 1989-90 would be developed by applying uniform growth rate on the Company's SPE of 1987-88 (except in case of LPG).

(c) The market share of IOC (excluding AOD) for non-FTP as per SPE 1987-88 worked out to 56.6%. Based on the principle of uniform growth, the market share of IOC in future would remain at the same level.

(d) There would be a separate SPE for retail and direct sales of MS and HSD.

(e) Only `Price Controlled Grade (PCG) Lubes' would be included in SPE.

(f) Naphtha and FO/LSHS customers would be shared so that the potential of the customers for each Company would be in line with its SPE.

(g) Regarding Bitumen, though there would be no separate SPE for bulk and packed, oil companies would have to abide by bulk and packed allocations.

(h) If any Company's sales of a particular product exceeds its SPE, the Company would surrender 100 percent of return on capital and 50 percent of common (operation) costs (60 percent of the return on capital and 50 percent of the common costs in the case of MS/ HSD retail sales) to the oil pool in respect of sales over and above SPE and correspondingly claim from the pool for the shortfall.

2.3.4 The table below indicates the SPE of IOC (excluding AOD) vis-a-vis total industry SPE.

Year	Industry Demand (SPE) MMT	IOC's (excl. AOD) SPE MMT	IOC's Actual Sales MMT	Percentage of 3 to 2	Percentage of 4 to 3
1	2	3	4	5	6
1983-84	36.8	21.4	21.06	58.15	98.41
1984-85	37.9	22.0	22.37	58.05	101.68
1985-86	41.6	23.8	23.15	57.21	97.27
1986-87	43.7	24.8	25.09	56.75	101.17
1987-88	46.4	26.2	26.28	56.47	100.31
1988-89	49.8	27.9	28.14	56.02	100.86
1989-90*	51.9	29.4	29.38	56.65	99.93
1990-91*	50.9	28.9	29.74	56.78	102.91
1991-92*	54.8	31.1	30.65	56.75	98.55
1992-93*	58.2	33.0	31.29	56.70	94.82
1993-94*	61.0	34.5	31.85	56.56	92.32
1994-95*	62.2	35.2	34.46	56.59	97.90

* excluding Price Controlled lubes.

2.3.5 It may be observed from the above that IOC's (excluding AOD) share in SPE, which was as high as 61 percent in 1976-77, was brought down to 56 percent in 1988-89 and since then it had remained more or less stagnant at around 56.6 to 56.8 percent in view of the revised SPE formula. Further, the Company could not achieve its SPE targets during any of the last four years from 1991-92 to 1994-95.

2.3.6 The Sales Plan Entitlement serves as an inbuilt disincentive to any marketing effort beyond the entitled limits. In fact, it rewards shortfall in achievement of entitled share of the market by providing that the company which has exceeded its SPE would share a portion of the marketing margin with the deficient company. Thus, except in free trade products, which are a very limited portion of the total spectrum of petroleum products, there is virtually no competition among the various oil companies in the public sector.

2.4 Overall Sales Performance

2.4.0 Despite pegging down of SPE to a stagnant level in percentage terms, the Company (excluding AOD) enjoys the lion's share in marketing petroleum products at 56 percent as against average combined share of BPC, HPC, IBP and AOD at 44 percent. The table given below indicates IOC's (excl. AOD) actual sales (of all products including non-SPE products) vis-a-vis the total industry sales:-

Year	Industry Sales MMT	IOC's Sales MMT	IOC's market share (% age of 3 to 2)
1983-84	35.84	21.06	58.76
1984-85	38.79	22.37	57.67
1985-86	40.87	23.15	56.64
1986-87	43.66	25.09	57.47
1987-88	46.40	26.28	56.64
1988-89	50.06	28.14	56.21
1989-90	54.05	30.13	55.74
1990-91	55.00	30.59	55.62
1991-92	56.99	31.50	55.27
1992-93	58.92	32.11	54.50
1993-94	60.76	32.65	53.74
1994-95	65.57	35.38	53.96

2.4.1 It would be observed from the above that the Company's actual market share showed a downward trend during the years 1988-89 (56.21%) to 1994-95 (53.96%). The Ministry stated (November, 1995) that this was mainly due to drop in sales of Naphtha, HSD and FO/ LSHS. While the drop in Naphtha and FO/LSHS sales was attributed to allocation of Naphtha/FO/LSHS customers of IOC to other oil companies in the 1980s to improve their market participation, in the case of HSD there was lesser growth in the Government sector like Defence and Railways, where IOC has over 98% and 92% business participation respectively, than in the non-Government sector.

2.4.2 The total sales of the Company consist of direct sales in bulk to big organisations and industrial units and sales through retail outlets. The actual performance of the Company (excl. AOD) with reference to its prorata Sales Plan Entitlement (prorata based on the actual industry sales) under direct and retail trade for the period 1990-91 to 1994-95 is discussed in the following paragraph :

(In MMTs)

Year	SPE (Prorata)			Actual		
	Direct	Retail	Total	Direct	Retail	Total
1990-91	16.51	13.72	30.23	16.57	13.17	29.74
1991-92	16.81	14.44	31.25	16.86	13.79	30.65
1992-93	16.45	15.77	32.22	16.78	14.51	31.29
1993-94	16.43	17.00	33.42	16.66	15.19	31.85
1994-95	17.76	18.46	36.22	18.01	16.45	34.46

Note: All LPG and SKO sales have been treated as retail sales

2.4.3 It may be observed from the above that even though the actual direct sale was higher than the SPE, there was a sharp fall in the actual retail sales vis-a-vis SPE contributing to the overall drop in sales vis-a-vis SPE.

2.4.4 According to Management, retail network of the Company for marketing of 'motor spirit' and 'high speed diesel oil' was highly inadequate in relation to its Sales Plan Entitlement for retail sales for these products. Allocation of new retail outlets to IOC was pegged at 40% till 1993 as against its SPE of 56.8% for retail sales. As a result, there was a shortfall in retail sales year after year affecting achievement of sales targets.

2.5 Sale of Bitumen

2.5.0 Bitumen is a residue from the fractional distillation of crude oil. In view of its excellent binding and water proofing qualities, it finds ready use in road construction.

2.5.1 Bitumen is marketed in packed drums as well as in bulk. The trend of bulk and packed Bitumen sales vis-a-vis targets for the Company and the industry for the period 1985-86 to 1994-95 is tabulated below:-

(Qty.in 000' MTs.)

		BULK			PACKED		
		Target	Actual Sales	Perfor-mance (%)	Target	Actual Sales	Perfor--mance (%)
1985-86-Ind		390.0	391.0	100.3	710.0	726.4	102.3
	IOC	169.1	188.8	111.6	301.9	315.6	104.5
1986-87-Ind		470.0	524.6	111.6	780.0	764.7	98.0
	IOC	208.0	261.6	125.8	338.0	326.6	96.6
1987-88-Ind		639.0	641.9	100.5	781.0	738.0	94.5
	IOC	287.0	325.2	113.3	344.0	329.7	95.8
1988-89-Ind		830.0	732.0	88.2	750.0	753.7	100.5
	IOC	378.0	356.8	94.4	333.0	340.1	102.1
1989-90-Ind		862.0	968.1	112.3	778.0	729.7	93.8
	IOC	393.0	456.8	116.2	357.0	344.7	96.6
1990-91-Ind		1108.0	946.3	85.4	738.0	636.8	86.3
	IOC	528.2	501.8	95.0	345.8	306.8	88.7
1991-92-Ind		1112.0	1118.8	100.6	625.0	600.9	96.1
	IOC	524.0	550.4	105.0	288.0	280.3	97.3
1992-93-Ind		1248.0	1243.4	99.6	587.0	584.0	99.5
	IOC	597.0	587.1	98.3	271.0	274.8	101.4
1993-94-Ind		1410.0	1262.9	89.6	551.0	575.7	104.5
	IOC	682.0	613.9	90.0	256.0	278.3	108.7
1994-95-Ind		1432.0	1373.9	95.9	548.0	519.0	94.7
	IOC	695.0	722.0	103.9	255.0	271.4	106.4

2.5.2 The sale of bulk bitumen during 1988-89 was less than the targets. A similar situation arose again in 1990-91, 1992-93 and 1993-94. On the other hand, targets for the sale of packed bitumen were kept more or less at the same level till 1990-91 and reduced thereafter. This was in pursuance of a Government policy for promoting sale of bitumen in bulk for meeting the following objectives:-

a) to avoid the wastage of valuable steel sheet used for packing Bitumen which is partly being imported.

b) to reduce the outgo of foreign exchange spent on import of steel sheets.

c) to make bitumen available at a cheaper rate to the consumer by avoiding cost of packaging.

2.5.3 In order to encourage the bulk sale of bitumen, Ministry of Petroleum introduced (3.6.1985) a system of not supplying packed bitumen within a radius of 350 Kms of a refinery. Due to some difficulties arising out of this new system, the Ministry withheld its implementation from 19th December, 1986. Later, in April, 1987 the Ministry advised the oil companies to do away with this new system subject to the condition that the States/Union Territories may be required to buy the packed and bulk bitumen in the ratio prescribed by the oil industry.

2.5.4 It was seen from the sales appreciation prepared and submitted by the oil industry to OCC (in April every year) for the periods 1985-86 to 1993-94 that the Company had supplied packed bitumen in excess of its targets; but in bulk supplies it had not achieved its targets in the case of some States. The year-wise details of excess packed bitumen supplies made by the Company are given below:

Packed supplies **(in MTs)**

Year	No.of States	Targets		Actual		Short-fall in bulk	Excess in packed
		Bulk	Packed	Bulk	Packed		
1985-86	6	89700	96000	59600	126900	30100	30900
1986-87	1	3300	28000	2200	29000	1100	1000
1987-88	2	33000	19500	27500	22200	5500	2700
1988-89	6	155400	127200	124600	137200	30800	10000
1989-90	3	89000	71300	78300	72900	10700	1600
1990-91	2	59900	29700	54900	29900	5000	200
1992-93	4	267400	66300	241100	67800	26300	1500
1993-94	5	218900	79300	194800	80000	24100	700
							48600

During the years 1991-92 and 1994-95 there was no shortfall in sale of bulk bitumen.

2.5.5 Though the bulk to packed ratio was maintained on an overall basis, there were cases of excess supplies of packed bitumen in some States. The Management stated (June 1989) that shortfall in bulk consumption was mainly due to shortage of storage facilities with the consumers.

2.5.6 There is an element of extra cost in the form of drum cost and filling charges in selling bitumen in packed condition. It was observed in Audit that even though the final selling price of packed bitumen was more than the bulk bitumen, the price difference was not commensurate with the additional cost involved in packing bitumen. For instance, the cost of drum (incl. ED) and filling charges assumed in the price build up of packed bitumen as on 1.10.1986 was Rs. 945.00 per MT. Against this, the inbuilt subsidy in the price build up (excluding excise duty and marketing margin) of packed bitumen over bulk bitumen as on that date was Rs. 417.24 per MT of packed bitumen. Considering subsequent escalations in the cost of drum and filling charges paid to oil companies, the subsidy in 1994-95 amounted to approx. Rs.1000 per MT. There was no revision in the cost of drums in the price build up of packed bitumen during the period 1986 to 1995. This subsidy on packed bitumen acts as an incentive to go for packed product.

2.5.7 A scheme of financial assistance to the State Governments by the OIDB through Oil Industry for construction of bulk bitumen storage facility was authorised by the Ministry of Petroleum in June, 1985. Out of the 8 States allocated to the Company, only two State Governments viz., Karnataka and Madhya Pradesh had availed the financial assistance for this purpose.

2.5.8 The rationale behind allowing subsidy on packed bitumen is not clear and continuance of subsidy did not seem justified especially when Government wanted to encourage the sale of bitumen in bulk and had even introduced schemes of financial assistance for construction of bulk bitumen storage. The subsidy was also contrary to Government policy of promoting sale of bitumen in bulk.

2.6 Down gradation of Aviation Turbo Fuel (ATF) in imports/coastal movement: Loss involved

2.6.0 During import as well as during coastal movement of Aviation Turbo Fuel (ATF), the product sometimes gets downgraded to Superior Kerosene Oil (SKO) in part or in full quantity. In such circumstances, the difference between the cost of quantity of ATF downgraded and the ex-refinery price of SKO is reimbursed to the Company by OCC. If the downgradation of ATF to SKO is due to the mistake of the Company, such claims on 'OCC' are not tenable. Further, the SKO (downgraded ATF) when sold in market through public distribution system (PDS) attracts subsidy from Government which is also borne by the Government.

2.6.1 With a view to assessing the avoidable loss or unnecessary burden on the OCC/Government due to downgradation of ATF into SKO in imports/coastal movement of ATF, details alongwith reasons were called for and reviewed. During the period from 1985-86 to 1994-95, in 45 import shipments of ATF, 79,651 MTs of ATF was received as SKO. The difference in cost of ATF and SKO for this downgraded quantity worked out to Rs. 288.64 lakhs. Similarly, during the same period, in 101 coastal movements of ATF, 47,737 MTs of ATF was downgraded and the difference in cost for this quantity worked out to Rs.190.93 lakhs. While furnishing details, the Company stated that due to operational/quality control reasons some quantity of ATF would always have to be taken in the SKO tanks at discharge ports. Further, it stated that ATF was a very sensitive quality control product and hence no norm can be fixed for the quantum of downgradation at various ports where operational situations differ due to line contents, length of pipeline, other operational exigency factors and quality control requirements.

2.6.2 The very fact that the downgradation is unavoidable due to operational reasons makes it necessary on the part of the Company to evolve norms for such downgradations based on the past experience and facilities available at each port. The quantity of ATF downgraded out of total annual imports ranged from 5.39 percent to 28.40 percent during the four years from 1985-86 to 1988-89. During that period, the annual downgradation in coastal movements ranged from 11.83 percent to 15.89

percent. This indicated that there were very wide variations in quantities that were downgraded.

2.6.3 In 1984-85 two tankers "Nandhari" (August 1984) and "Nand Kishore" (October 1984) were loaded with ATF at Sarroch (an Italian port) and Madras for discharge at Bombay. On receipt at discharge port, the entire quantity of 23,352 MTs loaded in these two tankers was downgraded based on jet fuel oxidation tests conducted at disport. The Committee constituted(November 1984) to investigate this downgradation observed that there were lapses in adhering to certain procedures like cleaning of tankers with 500 MT of ATF, carrying of Naphtha, HSD/LSHS etc. during the previous voyages of tankers and other operational procedures at load ports. The total claim of Rs. 106.25 lakhs made by the Company in December 1984 and October 1985 was, however, settled by the tank owners only for Rs.15.45 lakhs in June 1991.

2.6.4 Further, this downgradation of ATF as SKO also resulted in an outgo of Rs. 305.72 lakhs as subsidy on sale of SKO.

2.7 Parallel Marketing of Superior Kerosene Oil

2.7.0. The Government in December, 1993 allowed parallel marketing of kerosene. The private parties were allowed to import and sell kerosene anywhere in the county at market determined prices. However, the Public Sector Oil Companies had to meet the needs of Public Distribution system for kerosene at the administered price which was highly subsidised.

2.7.1. During the two years 1993-94 (4 months) and 1994-95, private parallel marketeers imported 1,03,300 MTs and 5,37,000 MTs of kerosene respectively. These imports were handled by public sector oil companies as the private parties had no infrastructure to import. Out of the total 6,40,300 MTs imported by parallel marketeers, IOC handled 4,11,500 MT while the balance was handled by BPC and HPC. But on an overall basis, such imports were only a small percentage (12.7% during 1994-95) of the total imports of kerosene.

2.7.2 Under PDS, the public sector oil companies are required to supply kerosene coloured with a blue dye for easy identification and to prevent its misuse. There were, however, reports that this colour is easily removed by vested interests for the purpose of mixing PDS kerosene with free trade kerosene. In discussions with the Audit Board, it was mentioned by the Secretary (P) that the main reason for the misuse of PDS kerosene was the wide price differential between the subsidised and open-market kerosene.

2.8 Railway Claims pending settlement

2.8.0 The Railway claims arise -

1. when the wagons despatched with petroleum products do not reach their destination and no acknowledge-ment is obtained from the receiver.

2. when the wagons despatched reach their destination with a lesser quantity of product as compared to the booked quantity due to leakage in the wagons and pilferage.

3. where Railways charge a different higher freight rate as against that chargeable for the specified product booked by the company as per the freight chart.

2.8.1 The outstanding claims made by the Company on the Railways increased from Rs. 1547 lakhs at the end of March, 1990 to Rs. 4143 lakhs at the end of March, 1995. The agewise break-up of Rs. 4143 lakhs outstanding as on 31 March, 1995 is given below:-

(Rs.in lakhs)

Year	NR	ER	WR	SR	Total
upto 1988	140.43	370.30	40.16	16.06	566.95
1988-89	4.98	43.49	5.45	0.27	54.19
1989-90	15.35	57.97	50.91	18.35	142.76
1990-91	46.96	74.70	174.00	12.58	308.24
1991-92	46.84	201.64	200.18	24.84	473.50
1992-93	95.69	141.79	89.60	37.64	364.72
1993-94	232.22	196.51	66.30	80.90	575.93
1994-95	922.37	340.47	340.69	53.65	1657.18
	1504.84	**1426.87**	**967.29**	**244.47**	**4143.47**

2.8.3 An analysis of these claims revealed the following:-

(i) The outstanding claims upto 1988 included claims outstanding for the period prior to 1982.

(ii) Out of total outstanding claims of Rs.4143 lakhs as on 31 March, 1995,Rs.3172 lakhs pertain to non-delivery and Rs. 582 lakhs for leakages/shortages and balance Rs. 389 lakhs for freight refunds.

(iii) The amount of outstanding claims has been increasing every year.

2.8.4 A study made by the `Task Force Committee' set up to review the outstanding Railway claims and consisting of representatives of the Company revealed non-observance of a uniform system and procedure by all regions in clearing the outstanding railway claims with reference to-

a) Determination of quantity/value/amount of claim to be lodged in respect of shortage, missing wagons and refund of freight.

b) Reporting and exchange of data regarding claims lodged, withdrawn and outstanding on a particular date by the departments dealing with the respective subject. No fool proof system in regions to ensure putting up of claims on railways wherever they have to be made and to facilitate effective settlement of claims.

2.8.5 Based on the above observations, the Task Force Committee suggested in April, 1987:

1) to evolve a rationalised uniform system to be implemented by all regions in respect of lodgement of claims and reporting thereon etc., and

2) to fix up a time bound programme to be followed by each region for different categories of outstandings and specific cells/outside agencies for taking effective action for speedy settlement of railway claims.

2.8.6 On the basis of the above recommendations, a rationalised uniform system regarding lodging, reporting and follow-up of claims was implemented by all regions effective from 1st October, 1990 and a time bound programme for liquidation of railway claims was adivised to all regions. The progress of liquidation was to be reviewed during periodic Regional Review meetings.

2.8.7 In spite of this, the outstanding claims of the Company increased from Rs.1,547 lakhs on 31 March, 1990 to Rs.4,143 lakhs on 31 March, 1995.

2.8.8 The Company attributed the delay in liquidation of claims to;

(i) Law and order situation in the North-East resulting in negligible settlement of claims with the N.E. Railway which alone accounted for Rs.300 lakhs worth of claims.

(ii) The value of claims for every wagon/bogie intercepted by the Railways becoming substantially higher due to the introduction of BPTN (Bogie Type Tank Wagons) in the North-West sector.

2.8.9 The Company also stated that as against the outstanding claims of Rs. 4143 lakhs on 31st March, 1995, the Company had decanted unconnected tank wagons valued at Rs. 5426 lakhs which had not been adjusted against unrecovered claims.

3. INTERNATIONAL TRADE

3.1 Introduction

3.1.0 International Trade Department of Indian Oil Corporation Limited has been functioning as a canalising agency for the import of crude oil and deficit petroleum products and export of surplus petroleum products like Naphtha, NGL, etc. After getting the proposals approved by the Empowered Standing Committee (ESC), a body set up by the Government for expeditious decisions in such matters, the department takes further necessary action in finalisation of contracts.

3.2 Overall planning & general procedure
Oil Economy Budget/strategy

3.2.0 An `Oil Economy Budget' (OEB) for the year is compiled by the Oil Co-ordination Committee (OCC) of the Ministry of Petroleum and Natural Gas and approved by Government of India. OEB chalks out quantities of crude oil and deficit products for import and surplus products available for export based on annual demand of petroleum products, indigenous crude availability and domestic refining capacity.

3.2.1 Based on OEB, a strategy paper is compiled by International Trade Department which chalks out the strategies for import of crude oil after taking into account all the available and probable sources of supply suited for India's refining capacity and other commercial and international considerations. The quantities to be purchased on `term' contracts and from `spot' market are also delineated. The Government of India approves the import of crude oil on 'term' basis direct from oil producers.

3.2.2 All 'term' contracts for import of crude oil are finalised on official selling prices, wherever applicable, and for petroleum products on the basis of negotiations with national oil companies of oil producing countries without recourse to tenders.

3.2.3 As per guideline of ESC, all imports or exports are dealt with on principal to principal basis and the Company does not deal with any Indian or foreign agent.

3.2.4 The products that are exported are FO, Naphtha and NGL. During 1993-94, 787 TMT of high aromatic Naphtha, 782 TMT of NGL, 838 TMT of low aromatic

Naphtha and 1264 TMT of fuel oil were exported. While in 1994-95 the exports of Naphtha and NGL accounted for 2249 TMT and 585 TMT only, FO was found deficit in the country in the same year.

3.3 Import of crude and petroleum products

3.3.0 The table given below indicates the quantity of crude/petroleum products planned to be imported as per Oil Economy Budget (OEB) and actual import there against for the last seven years ending March, 1995. The figures for indigenous production of crude, total crude throughput of Indian refineries and total consumption of petroleum products for each of these years are also given for the purpose of an overall perspective.

(Quantity/MMT)

Year	Quantity as per O E B	Quantity imported	Indigenous production of crude	Total Crude Through-put of Indian refineries	Total con-sumption of petroleum products
1988-89					
Crude	17.560	17.332	32.04	48.80	
Products	6.388	6.385			50.09
1989-90					
Crude	19.359	19.857	34.09	51.94	
Products	7.14	6.494			54.10
1990-91					
Crude	20.783	20.697	33.02	51.77	
Products	8.722	8.515			55.04
1991-92					
Crude	23.791	24.028	30.35	51.42	
Products	9.100	9.201			56.97
1992-93					
Crude	26.660	29.243	26.95	53.48	
Products	11.564	10.701			58.90
1993-94					
Crude	28.900	30.820	27.03	54.30	
Products	15.137	11.820			60.81
1994-95					
Crude	24.230	27.348	32.23	56.45	
Products	14.773	13.373			65.62

3.3.1 From the above, it would be seen that the import of petroleum products has increased from 6.385 MMT in 1988-89 to 13.373 MMT in 1994-95 (an increase of 109.44 percent). Import of crude oil increased from 17.332 MMT in 1988-89 to a high of 30.820 MMT in 1993-94 and was slightly reduced to 27.348 MMT in 1994-95. The crude throughput of all refineries in the country increased from 48.80 MMT in 1988-89 to 56.45 MMT in 1994-95. Import of crude oil was limited by the total refining capacity available in the country leading to substantial import of products during the recent years.

3.3.2 The break up of actual quantities of crude oil and petroleum products imported and their value - separately for `term' and `spot' purchases - for the last seven years ending March, 1995 is as under:

Quantity/MMT
Value/Rs. in Crores

Year	Term			Spot			Total		Percentage of spot purchase to total purchase
	Qty	Value	Average Cost per MMT	Qty	Value	Average Cost per MMT	Qty	Value	
1988-89									
Crude	10.636	1621	152.4	6.696	1030	153.8	17.332	2651	38.63
Products	3.659	863		2.726	694		6.385	1557	42.69
1989-90									
Crude	12.076	2447	202.6	7.781	1587	203.9	19.857	4034	39.19
Products	4.794	1559		1.700	643		6.494	2202	26.18
1990-91									
Crude	12.634	3416	270.4	8.063	2484	308.1	20.697	5900	38.96
Products	3.374	1480		5.141	3075		8.515	4555	60.38
1991-92									
Crude	10.605	3331	314.1	13.423	4280	318.9	24.028	7611	55.86
Products	3.001	1545		6.200	3516		9.201	5061	67.38
1992-93									
Crude	14.301	4885	341.6	14.942	5628	376.7	29.243	10513	51.10
Products	5.127	2865		5.574	3295		10.701	6160	52.09
1993-94									
Crude	16.653	5328	319.94	14.167	5095	359.64	30.820	10423	45.97
Products	6.471	3759		5.349	3077		11.820	6836	45.25
1994-95									
Crude	16.806	6079	361.72	10.542	3980	377.54	27.348	10059	38.55
Products	5.899	3065		7.474	4096		13.373	7161	55.89

3.3.3 The table above indicates that the `spot' purchase of crude increased from 38.63 percent during 1988-89 to 55.86 percent during 1991-92 and thereafter progressively came down during the next 3 years to reach 38.55 percent in 1994-95. As regards products, `spot' purchases increased from a low of 26.18 percent in 1989-90 to a high of 67.38 percent in 1991-92 and thereafter fluctuated between 45 percent to 56 percent during the next 3 years. In absolute quantities, `spot' purchase of petroleum products during the period from 1990-91 to 1994-95 (excepting 1993-94) and of crude oil during 1991-92 and 1992-93 was higher than purchases made under `term' contracts.

3.3.4 As is clear from above, 'spot' prices for crude are normally higher than the 'term' prices. Thus, purchase of larger quantities in 'spot' market involved higher cost and drain on foreign exchange.

3.3.5 The Management stated (November, 1995) that during 1991-92 and 1992-93, the `spot' imports of crude oil included additional quantities of 4.155 MMT and 3.985 MMT respectively purchased from the term suppliers under the same terms and conditions as applicable for their `term' contracts.

3.3.6 Even excluding the above from the `spot' quantities, the remaining spot imports of 1991-92 and 1992-93 worked out to 38.57% and 37.47% of the total imports respectively in 1991-92 and 1992-93. The fact, however, remained that `spot' prices were normally higher than `term' prices.

3.3.7 As regards prices, the Management stated (May, 1994) that it was not appropriate to compare the average spot price to average term contract price due to the following reasons:

- **(i)** Purchases under term contracts were mostly for sour crudes and the purchases under spot tenders were for both sweet and sour crudes;
- **(ii)** crudes purchased under term contracts were mostly governed by the official selling prices and were not normally traded in the spot market; and

(iii) some of the important factors influencing the prices of the crudes are the characteristics of the crude, yield pattern, suitability for producing certain special end products.

3.3.8 The above notwithstanding, it was observed (August, 1994) that the Company had made a proposal to the Government in April, 1992 for allowing the Empowered Standing Committee to finalise crude oil purchases on a `term' basis by inviting tenders from the suppliers who were registered with the Company for making purchases on `spot' basis. Subsequently, from March 1994, a similar system for purchasing petroleum products on a term basis, ranging from 3 months to one year, by inviting competitive tenders from registered dealers has also been approved. The main advantages of this changeover according to the Company were:-

(i) Term tender for 12 months would eliminate the impact of seasonal variations.

(ii) The best price obtained against term tender for 12 months would provide useful information about long term market perception and provide an important information on price for negotiations with national oil companies.

(iii) Term tender for product would also provide opportunity to other traders/suppliers as well as national oil companies, who are not able to supply from their own country source on account of logistics, to offer competitive bids on long term basis.

3.3.9 A further analysis of the `term' and `spot' purchases of crude oil made with reference to the strategy paper, government approval, and the quantity actually imported revealed the following:

(Quantity/MMT)

Year 1.		Term 2.	Spot 3.	Total 4.	Percentage of (3) to (4) 5.
1989-90 -	SP	13.5	4.7	18.2	25.8
	GA	13.5	4.3	17.8	24.2
	AI	12.1	7.8	19.9	39.2
1990-91 -	SP	14.0	3.7	17.7	21.0
	GA	15.8	2.8	18.6	15.1
	AI	12.6	8.1	20.7	39.1
1991-92 -	SP	14.5	4.1	18.6	22.0
	GA	14.5	4.1	18.6	22.0
	AI	10.6	13.4	24.0	55.8
1992-93 -	SP	20.8	7.0	27.8	25.2
	GA	20.5	7.0	27.0	25.9
	AI	14.3	15.0	29.3	51.2
1993-94 -	SP	16.5	10.3	26.8	38.4
	GA	22.0	6.9	28.9	23.9
	AI	16.7	14.2	30.8	46.0
1994-95 -	SP	23.0	1.4	24.4	5.7
	GA	17.0	11.9	28.9	41.2
	AI	16.8	10.5	27.3	38.6

SP = As per strategy paper
GA = As per initial Govt. Approval
AI = Actual Import

3.3.10 The actual imports of crude oil under `term' contracts were always lower than the quantities envisaged for import under `term' arrangements despite the fact that the total quantities imported were higher than the quantities shown either in the strategy paper or approved by Govt. except during 1994-95. Thus, there was more and more reliance placed on `spot' purchases during first five years of the study.

3.3.11 The Management stated (May 1994) that this was due to non-finalisation of some `term' contracts envisaged in the strategy paper and lower availability than the quantities agreed in a number of `term' contracts.

3.4 Loss of 120 million Dollars on the import of Basrah Light Crude from SNE (U.S.S.R.) during 1988

3.4.0 A contract was signed on 29th January, 1988 between the All Union, Foreign Trade Association "Soujuznefteexport" (SNE), Moscow and Indian Oil Corporation

Ltd. for supply of a total quantity of four million tonnes of Basrah Light crude from Yanbu and/or other crudes as may be agreed upon by the parties from time to time.

3.4.1 The pricing clause in the contract stated that the prices applicable for crude oil/oils from sources other than USSR were to be the official selling prices (OSP) set by the Governments of the respective countries of supply in application of Organisation of Petroleum Exporting Countries (OPEC) resolutions and decisions. The service charge of US Dollar 0.05 per barrel was to be paid by buyers to sellers for the supply of crude oil other than the Soviet Export Blend.

3.4.2 The parties agreed that in case of any abnormal changes in the international oil prices, the pricing basis for Basrah crude would be reviewed and revised pricing basis would be agreed upon. It was further stated in the pricing clause that should there be no agreement on the revised pricing basis within 15 days from the date of notice of request for change in price, the contract would be suspended. However, sellers would be obligated to deliver and buyers to lift crude oil at the prices as stated above till the fulfilment of the current delivery programme agreed upon by the parties before the date of notice.

3.4.3 During the year 1988, the Company imported 4.025 MMT of crude oil from SNE at the official selling price of Basrah Light at $17.30/barrel. The market related prices extended by M/s State Oil Marketing Organisation (SOMO) of IRAQ for the same crude were the monthly average of Oman and Dubai discounted by 22 cent/bbl for January to September 1988, 42 cent/bbl for October to November 1988 and 52 cent/bbl for December 1988.

3.4.4 The difference between the official selling price and market related price of Basrah Light under SNE contract worked out to $ 120 million in 1988.

3.4.5 Despite repeated efforts, the Company could not take advantage of the market related prices, which would have resulted in a saving of US$ 120 million (Rs. 176.4 crores @ Rs. 14.70 per US$), as it could not provide any evidence that it actually obtained Basrah Light Crude oil from SOMO of Iraq at any other price than official selling price.

3.4.6 The Management stated (May 1994) as follows:-

"From time to time, the matter was taken up with SNE for review of price as market related prices were lower as per market price publications. SNE pointed out that they (SNE) approached SOMO on the basis of IOC's request to revise the price which as per the contract was fixed on OSP for Iraqi crude oil and SOMO officially replied to SNE that they were effecting prices of their crude on term basis only at OSP and did not see ground for price revision.

In view of long association with SNE and also considering that import from them was under 'trade protocol' involving payment in Indian Rupees, it was considered prudent to follow up the matter through discussions only rather than exercising the phase out clause. Any disruption in supplies would have affected our import plans and also resulted in short-falls against trade plan with USSR, beside adversely affecting our relationship with SNE, Moscow which was a major supplier of crude/products."

3.4.7 The Management's reply does not alter the facts of the case but only explains why they could not get the lower market related price accepted by the supplier.

3.5 Transportation

3.5.0 Crude oil is contracted usually on FOB basis. The arrangements for transportation of crude oil imported on FOB basis is made through a Contract of Affreightment (COA), which the OCC enters into on an annual basis with Shipping Corporation of India(SCI). Whenever SCI's ships are not available, SCI charters the ships from elsewhere. Unlike in other cases of FOB imports where vessels are arranged by `Transchart', a wing of the Ministry of Shipping and Transport, in the case of import of crude oil a general dispensation has been given to SCI to contract vessels if its own vessels are not available.

3.5.1 In the case of products, the imports are both on FOB as well as on C&F basis. In case of FOB upliftments, the Company first makes efforts to find out whether any of its time chartered vessel is available. The Company has a few vessels of SCI and private shipping companies on time charter, which are mainly used for coastal movements. Otherwise, a request is made to `Transchart' for nominating a suitable vessel on `Voyage Charter' basis.

3.5.2 The loading of crude/products at load port is done by an inspector mutually agreed upon between the supplier and the Company or independently by the Company. The unloading of the imports is the responsibility of the Company.

3.6 Demurrage incurred on Import/Export:

3.6.0 In the course of import/export of petroleum products, the oil industry incurs a substantial expenditure on port demurrage. IOC as the canalising agency for import/export of crude/petroleum products on behalf of the industry initially incurs the demurrage and obtains reimbursement from the oil pool account based on authorisations from the OCC. Almost the entire demurrage is reimbursed by the pool as the oil companies do not have a control over demurrage, at least in the short run.

3.6.1 The demurrage incurred during the period from 1984-85 to 1994-95 was as follows:-

(Rs. in lakhs)

Name	1984-85	85-86	86-87	87-88	88-89	89-90	90-91	91-92	92-93	1993-94	1994-95
Imports											
Crude	1245.3	1313.4	208.3	301.2	440.0	691.0	327.3	682.6	263.37	2310.92	1646.01
Products	1715.0	800.1	775.0	1280.8	1030.0	2153.6	2068.1	5744.5	6469.08	6189.13	18180.58
Lube	180.8	197.0	153.0	200.0	445.0	418.9	647.2	541.0	327.36	172.78	183.15
Exports	3148.3	106.1	214.4	286.9	179.5	249.4	302.8	598.3	1149.48	1180.50	984.80
TOTAL	6289.4	2416.6	1350.7	2068.9	2094.5	3512.9	3345.4	7566.4	8209.29	9853.33	20994.54

3.6.2 It may be observed that the total demurrage has been going up year after year. If one were to consider the detention charges paid on time chartered vessels, which in fact is in the nature of demurrage and in respect of which details are not readily available, the demurrage figures would be still more. The demurrage paid (Rs. 181.80 crores) on import of products in 1994-95 was three times the demurrage incurred in 1993-94.

The main reasons for the heavy demurrage on import of petroleum products in general and in 1994-95 in particular was the longer detention time of vessels arising from inadequate port facilities. The total tanker detention time went up from 1560 days in 1993-94 to 4513 days in 1994-95. A review by Audit of 177 cases of import shipments during 1994-95 showed that in 107 cases the detention time was more than 10 days and in 13 cases it was more than 30 days.

3.6.3 The major port constraints are insufficient number of jetties, draft restrictions, lack of night navigation facilities, old and shorter diameter discharge pipelines etc. Although the import (gross) of crude oil and petroleum products has gone up over the years from 26.054 MMT in 1989-90 to 42.898 MMT in 1993-94, the port facilities have not improved correspondingly. While the ideal jetty occupancy was stated to be 60 per cent, the actual jetty occupancy at all the major ports were in the range of 80 to 97 percent.

3.6.4 There is no dearth of funds with the oil industry to finance some aspects of the port handling facilities. In response to an observation by Audit that in view of the overall national interest as also their own interest, the oil Industry could finance some facilities like night navigation, pilot ships, etc., the Ministry agreed (November, 1995) that the oil Industry would examine and explore such a possibility. It was also mentioned by the IOC Management that private funds through joint sector projects could also be mobilised if exclusive oil jetties are approved.

3.6.5 Another method of reducing port congestion is the establishment of single point moorings and virtual jetties off the sea coast. Viable schemes in this regard need to be cleared and implemented on priority. A recent proposal of IOC for the installation of a virtual jetty off Kandla port showed that a one time investment of Rs. 6.34 crores with an annual operating cost of about Rs. 14 lakhs would result in a saving of Rs. 9.07 crores per annum in demurrages.

4. MARKETING OF LIQUIFIED PETROLEUM GAS

4.1.0 Liquified Petroleum Gas (LPG), which is a mixture of butane and propane, was introduced by the Company in the year 1965 in Calcutta under the brand name `INDANE' with a view to substituting kerosene oil as domestic fuel.

4.1.1 The Government/Company envisaged a gradual replacement of kerosene oil (imported as well) by LPG as domestic fuel in the country with a view to reducing imports of kerosene oil. The `Committee On Public Undertakings' (COPU) in its 35th Report on the Company (March, 1967) had also recommended the popularisation of LPG as it was cheaper, cleaner and would avoid wastage of gas which at that time was being flared. The saving in foreign exchange to the extent LPG could replace kerosene oil as a domestic fuel was envisaged by the Committee to be a significant amount. The Committee also urged the Company to ascertain and exploit the industrial demand for LPG.

4.2. Marketing of LPG

4.2.0 About 90 percent of LPG is sold by Company to domestic consumers in cylinders and balance is sold to commercial/industrial users. The bottling plants of the Company fill LPG in cylinders and market them through their network.

4.2.1 All three Government owned oil companies i.e. Indian Oil Corporation Ltd., Hindustan Petroleum Corporation Ltd. and Bharat Petroleum Corporation Ltd., are marketing LPG in all the regions, except Maharashtra State where historically market is shared between Hindustan Petroleum Corporation and Bharat Petroleum Corporation only.

4.3 LPG Sales Performance

4.3.0 The table given below indicates the position of availability of LPG (indigenous production and import), the Company's sales and its share in the industry during the period from 1988-89 to 1994-95:-

(In TMTs).

Year	LPG Availability Indigenous Production	Import	Total	Industry's Sales	IOC's Sales	Percentage of IOC's Sales to Industry's Sales
1988-89						
Planned	1830	262	2092	2027	970	47.85
Actual	1755	240	1995	1994	972	48.75
1989-90						
Planned	1806	205	2221	2160	1066	49.35
Actual	1941	293	2234	2260	1145	50.66
1990-91						
Planned	2161	401	2501	2326	1165	50.09
Actual	2120	325	2454	2415	1233	51.06
1991-92						
Planned	2485	356	2741	2483	1264	50.91
Actual	2573	332	2905	2873	1471	51.20
1992-93						
Planned	2649	370	2017	2743	1416	51.62
Actual	2573	332	2905	2873	1471	51.20
1993-94						
Planned	2766	394	3169	3010	1490	49.50
Actual	2647	307	3934	3113	1506	48.38
1994-95						
Planned	2874	655	3529	3303	1673	50.70
Actual	2848	574	3441	3435	1736	50.54

4.3.1 Ever since 1989-90, the Company's actual sales of LPG was more than the planned sales and it catered to more than 50 percent of the total market except during the year 1993-94. While the Company's market share was more than 50 percent, it owned only 44 percent of the total bottling capacity available in the industry. The Company controls only 45 percent of the total product availability.

4.3.2 The monthly average and peak demands vis-a-vis the installed bottling capacity and the actual bottling of LPG done during seven years upto 1994-95 were as follows:

Year	Average Monthly demand (TMT)	Peak Monthly demand (TMT)	Installed capacity per month (TMT)	Actual bottling per month (TMT)
1988-89	78.92	84	72.20	77.64
1989-90	91.08	95	89.40	91.39
1990-91	96.33	100	90.38	96.19
1991-92	108.92	115	94.10	107.07
1992-93	118.00	125	95.92	115.83
1993-94	128.00	149	95.92	114.75
1994-95	141.00	162	99.33	122.75

Note: Installed capacity and actual bottling per month include the data pertaining to all the bottling plants of the Company, including those under the Refineries Division.

4.3.3 While the average demand during the seven year period under study increased by 78.7 percent, the growth in the installed capacity during the same period was only 37.6 percent.

4.3.4 The balance of the demand, especially during the years 1991-92 to 1994-95, was met by obtaining hospitality from the bottling plants of other marketing companies like HPC and BPC.

4.3.5 The Company's total storage capacity for bulk LPG as at the end of September, 1995 provided for only 18 days cover of the Company's bottling capacity as against the requirement of 30 days. The Ministry stated (November, 1995) that efforts were being made to achieve 30 days cover by the turn of the century.

4.4 Customer enrolment

4.4.0 New customer enrolment is decided on Industry basis in consultation with OCC/Ministry depending on additional product availability anticipated during a particular year. Fifty percent of the total enrolment finalised for the Industry is carried out by the Company and is the target for the Company for new enrolment. Since Double Bottle Connection (DBC) releases add to customer satisfaction and also increase storage of LPG at the customer's premises, it is considered desirable to release DBC's freely. However, since at the time of release on a one time basis, release of DBC adds to the demand of product in a particular year, releases of DBCs are planned keeping in mind the overall product availability. Hence, the following factors have to be considered while setting target for new customer enrolment:

a) Incremental product availability left surplus after fully catering to the requirement of existing customers.

b) Adequate bottling capacity to fill the additional availability into cylinders.

c) Adequate transport and storage arrangements for movement and storage of product in line with availability.

d) Equipment availability.

4.4.1 The actual customer enrolment compared to target vis a vis number of consumers on the waiting list at the end of each year was as follows:

(Figures in lakhs)

Year	Number of consumers on waiting list	Customer enrolment Target	Customer enrolment Actual	Achievement percentage
1989-90	30.04	5.70	5.76	101.05
1990-91	36.61	3.08	3.50	113.60
1991-92	45.19	4.72	5.00	105.90
1992-93	52.00	3.55	4.06	114.36
1993-94	59.44	5.60	6.29	112.32
1994-95	61.10	9.60	11.51	119.90

4.4.2 The number of domestic consumers waiting for LPG connection has been increasing every year. While the customer enrolment from year to year was higher than the targets, the target itself was fixed at a low level during the years 1990-91 to 1993-94.

4.4.3 Management stated (May 1994) that Govt. has allowed parallel marketing of LPG so as to reduce the backlog in the country.

4.4.4 The Govt. of India, Ministry of Petroleum and Natural Gas vide its notification dated 3 August, 1993 allowed parallel marketing of LPG under which a private entrepreneur is allowed to import and market LPG in bulk or packed in cylinders at market determined prices.

4.4.5 The Management stated (June 1994) that only a few private marketeers imported LPG during 1993-94. They sold in bulk to the existing customers at prices lower than bulk rates of public sector oil companies. The cost of LPG sold in cylinders by parallel marketeers was higher than the subsidised rate charged by public sector companies. The Company further stated (November, 1995) that the private parties were not able to bring much LPG as they had not yet developed any new import facilities for LPG. However, private parties had utilised the existing import facilities available with public sector oil companies and had imported 41,000 MTs of LPG in 1994-95.

4.5 Procurement of LPG tank wagons

4.5.0 For rail transportation of LPG from refineries/ports to bottling plants, LPG tank wagons are used which are fabricated to the specifications of the Railways.

4.5.1 Oil industry placed an order on Railways for procurement of 230 Bogie Type Petroleum Gas Tank Wagons and advanced Rs. 31.24 crores to Railways during 1986-87. The tank wagons were to be distributed between the Company, BPC and HPC. The delivery of tank wagons by Railways/ fabricators was to commence in 1987 and be completed by March, 1988. The Railways placed an order for 174 tank wagons only on the ground that the advance deposited with them was sufficient only for 174 tank wagons as against the oil industry's requirement of 230. The actual delivery commenced only in April, 1989 and till September, 1994 only 167 wagons were delivered.

4.5.2 As per the Marketing Plan finalised for LPG (Phase IV-A) and based on domestic customer enrolment plan by Oil Industry, the industry assessed a requirement of 262 (including 56 tank wagons for Phase-III) BTPGL wagons for procurement through the Railways. Based on fabrication cost of Rs. 22 lakhs for each wagon, Oil Industry was required to deposit Rs. 57.64 crores for 262 wagons in a phased manner. Accordingly, the Oil Industry had deposited an amount of Rs. 24.95 crores with the Railways till July, 1992 towards first, second and third instalments. The fourth instalment of Rs.14 crores was not paid in view of reported delay in finalisation of tenders by Railways. The Railways have demanded (September, 1995) a further sum of Rs. 25 crores as the cost of 262 wagons has gone up to Rs. 80 crores at the revised rate of Rs. 26 - Rs. 27 lakhs per wagon.

4.5.3 According to the delivery schedule for the 262 tank wagons, the first lot of 15 tank wagons was to be delivered by August, 1993 and thereafter 30 wagons were to be delivered every month. Thus, all the tank wagons should have been supplied by May, 1994. As against this, only 68 tank wagons had been supplied till September, 1995.

4.5.4 There was no separate agreement with the Railways on supply, procurement and maintenance of these tank wagons except the copies of the minutes of various meetings held with the Railways on various issues connected with the subject.

4.5.5 The delay in the procurement of tank wagons has increased road transportation of bulk LPG at a very high cost. The existing railway tank wagon capacity for LPG is grossly inadequate. Three fourths of total bulk LPG movement currently takes place by road. At the same time, railway sidings provided for unloading of bulk LPG tank wagons at bottling plants had remained under-utilised.

4.6 Inadequate facilities for LPG imports

4.6.0 LPG is a deficit product with reference to its demand and the shortfall is imported. At present, there are only limited facilities at Bombay (owned by BPCL and commissioned in 1979) and at Vizag (owned by HPCL and commissioned in 1987) for import of about 600 TMTs of LPG per annum. The table below shows the actual consumption of LPG in the country and the share of indigenous production and imports for the last three years and projections for the terminal years of the VIII, IX, and X plans.

(in TMTs)

Year	Consumption	Indigenous production	Imports
1992-93	2866	2538	328
1993-94	3113	2703	410
1994-95	3443	2849	594
1996-97	3989	2808	1181
2001-02	8049	4748	3301
2006-07	10213	4748	5465

4.6.1 Because of shortage of import facilities for LPG, the entire demand is not being met and the quantum of actual import is restricted by the facilities available. Further, due to inherent port constraints, the actual imports are still lower than the installed capacity available as may be seen from the fact that the actual import in 1993-94 was only 410 TMT. As is evident from long waiting list (114.17 lakhs as on 31 March, 1994) for domestic LPG connections, there is a large unmet demand for LPG in the country.

4.6.2 Despite having a major share of about 50% in the LPG market, the Company does not have any facility of its own for import of LPG.

4.6.3 A working group constituted by OCC to draw up the marketing and distribution plan for LPG phase IV recommended (January, 1987) setting up of LPG import facilities at Hazira and Haldia. While IOC was independently required to develop the import facilities at Haldia, its requirement for LPG import facility at Hazira got clubbed with that of the Oil and Natural Gas Corporation Ltd., which was in the process of installing a Single Buoy Mooring (SBM) facility off Hazira coast for export of Natural Gas Liquid (NGL). Due to a variety of reasons, ONGC's SBM at Hazira has not come up so far (November, 1995). As regards Haldia, the Company's efforts ever since 1987 to obtain suitable land for putting up the import facilities fructified only in December, 1994 and the project is now under execution (November, 1995).

4.6.4 The Ministry of Petroleum & Natural Gas gave a directive in 1986 that Oil Industry should co-ordinate detailed studies and come out with suggestions for suitable locations for setting up new facilities for import of LPG. The Company, however, submitted a proposal only in 1989 for creation of import facilities for import of about 600 TMT of LPG per annum at Kandla at a capital cost of Rs. 106 crores (January, 1989 prices) for the first stage clearance of Government. The clearance was conveyed by the Ministry in September, 1989.

4.6.5 The detailed Feasibility Report(FR) was submitted by the Company in March, 1990. The pre-PIB, which discussed the FR in August. 1990, desired that the Company should do a techno-economic study for LPG import facilities with refrigerated system (as against pressurised system proposed by the Company) but this was communicated to the Company only in March, 1991.

4.6.6 The proposal as desired by the Ministry was submitted by the Company in September, 1991 for stage II clearance. The estimated cost (which was less as compared to pressurised system) was Rs. 139 crores (August, 1991 prices). This was cleared by pre-PIB in November, 1991. The note for PIB was, however, submitted only in July, 1992 and by this time, the project cost had escalated to Rs. 149.86 crores (March, 1992 prices). The final approval of PIB/CCEA was received only in April, 1993.

4.6.7 LPG is a cleaner, non-polluting domestic fuel with better thermal efficiency in usage as compared to other conventional fuels like kerosene and firewood. With the indigenous capacity for LPG being limited, creation of adequate import facilities was a must for increasing the availability of LPG in the country. Further, kerosene is also a deficit product and 3.946 million tonnes of kerosene (about 45 percent of total consumption) was imported during 1993-94. Considering the higher calorific value of LPG vis-a-vis kerosene, it was estimated by the Ministry in its note submitted to PIB that 1 tonne of LPG would replace 1.5 tonne of kerosene and thus 0.9 million tonnes of kerosene imports would be replaced by import of 0.6 million tonnes of LPG. The Ministry estimated that taking the CIF price of LPG and kerosene as of March, 1992, there would be an annual saving of Rs. 80 crores by the creation of LPG import facilities by the Company at Kandla.

4.6.8 Although the Ministry had identified the need for setting up import facilities for import of LPG in 1986 and a project was conceived by the Company in 1989, the same could not be cleared till 1993. With the projected time schedule of 42 months from PIB clearance, the project is expected to be completed only by October, 1996. Had the revised proposal with refrigerated system as desired by Pre-PIB in August 1990 been speeded up and cleared by the Government by end of that year, the LPG import facilities would have come up atleast by middle of 1994.

4.6.9 Apart from the cost escalation and non-fructification of inter-fuel substitution, resulting in the additional expenditure in foreign exchange amounting to Rs. 160 crores in the import of kerosene at least for two years, the oil industry has also been incurring substantial demurrage on import of LPG due to inadequate infrastructure facilities. The amounts of demurrages incurred by the three public sector oil companies on the import of LPG during the three years 1992-93, 1993-94 and 1994-95 and reimbursed from the oil pool account were Rs. 7.27 crores, Rs. 6.08 crores and Rs. 27.49 crores respectively.

4.6.10 Further, with effect from April 1993, the Government has allowed private sector to import LPG and supply the same to consumers under parallel marketing. But even private sector is not able to meet the demand in the absence of adequate import facilities. Had the Company's facilities been ready, it would have enabled the Company to hire out its facilities profitably.

4.7 Hospitality arrangements

4.7.1 In the Industry Co-ordination meeting held on 23.12.1985 in New Delhi, it was agreed to implement measures to avoid criss-cross movement of LPG packed items involving huge transportation costs. It was also agreed to treat the LPG bottling plants as industry bottling plants and to link markets direct to the bottling plants. By doing so, it was expected that 'cross haulage' and 'under recoveries' would be avoided and better utilisation of facilities in LPG marketing would be achieved.

4.7.2 However, speedy implementation of these suggestions was not carried out and the subject regarding avoiding of criss-cross movements of LPG bulk across the country was considered by the LPG planning and monitoring group which met in New Delhi on 13.5.1988 after a lapse of more than 2 years and five months. It was then decided to introduce 'Inter Company Exchange arrangements' of bottling capacity in all bottling plants and to start 'hospitality arrangements' of LPG capacities with effect from 1.10.1988.

4.7.3 This matter was considered by the Ministry in the industry meeting held on 16.7.1991. It was decided that the net hospitality given and taken by each oil Company should be zero. This principle was adopted while deciding the hospitality plans of LPG during subsequent supply plan meetings (SPMs). The Ministry had, however, observed that the actual hospitality levels were much below the planned targets. In this connection, during an Industry meeting convened by OCC on 24.11.1992, a decision was taken by Executive Director, OCC that the existing norm that the net hospitality imbalance for each company should be zero would not be accepted. This decision was taken in order to minimise the under-recoveries in transportation and criss cross movements of LPG as there was no choice but to go for the least cost options by augmenting hospitality levels without any constraints on the net imbalances amongst oil Companies. Oil Industry was also advised (July, 1993) by the Ministry to adhere to the revised principle and achieve hospitality at planned levels without any further delay.

4.7.4 Because the Company's share (44%) of bottling capacity was lower than its market share (50%), it had taken more hospitality from the bottling plants of other oil companies than it had given to them.

4.7.5 The Management stated (June, 1990) that there was no financial loss on account of freight under-recovery under Sales Plan Entitlement Scheme and all the savings arising out of reduction in avoidable movement accrue to Freight Surcharge Pool and not to any oil company in particular. The above situation makes it all the more important to avoid unnecessary movements of products so that pool account is not overburdened.

4.7.6 While formulating plan for LPG marketing, investment on duplication of facilities like LPG bottling plant, Railway siding and other associated facilities such as setting up of area offices, sale offices, etc. could have been avoided had an integrated approach been taken on oil industry basis in the initial stage itself.

4.7.7 The Management further stated (July 1994) that after the introduction of the industry bottling concept, the industry has ensured that there is no duplication of bottling facilities at any location in the country except the metropolitan cities. However, for the purpose of customer satisfaction, individual area offices are required for each oil Company to ensure that rapid expansion of LPG marketing is smoothly handled without losing the Company's market participation and for ensuring quality customer service. In a competitive set up that is now emerging due to liberalisation of LPG marketing by Govt. of India, such all India infrastructure will go a long way in protecting/ expanding the Company's LPG marketing.

4.8 Operating performance of LPG bottling plants:

Bottling capacity

4.8.0 OCC conducts the exercise of making available adequate bottling capacity with reference to demand for packed LPG for a period of 5 years. While working out the capacity, the main assumptions taken into account are :-

- to match bottling capacity to demand for last year under consideration,
- existing capacity should be first utilised to the maximum possible,
- consideration of marginal cost implication for augmenting bottling capacity of existing plants.

4.8.1 After exhausting all the above options, additional bottling capacity is considered through new bottling plants taking into account shortfall in capacity and likely estimated growth for 5 years with some cushion. Even after taking into account the above factors, IOC's existing bottling capacity was less than the requirement due to faster growth of demand.

4.8.2 The summarised operating performance of LPG plants under the Marketing Division for the years 1985-86 to 1994-95 is detailed below:-

	YEAR									
	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
(A) CAPACITY UTILISATION										
(a) CAPACITY IN TMTPA	226.9	264.9	443.0	554.5	803.5	815.0	860.0	877.0	1002	1021
(b) ACTUALS IN TMT	240.0	301.2	492.8	684.1	869.9	916.0	1081.7	1174.3	1272.97	1391.03
(c) CAPACITY UTILISATION (%)	105.8	113.7	111.2	123.4	108.3	112.4	125.8	133.9	127.04	136.24
(B) OPERATING COST										
(a) OPERATING COST(Rs./MT)	406.77	505.78	562.20	512.07	505.68	543.90	507.45	520.00	514.58	563.47
(b) OCRC NORM (Rs./MT)	310.00	310.00	454.00	454.00	454.00	495.50	495.50	495.50	495.50	495.50
(c) VARIATION (a-b)	96.77	195.78	108.20	58.07	51.68	48.40	11.95	24.50	19.08	67.97
(d) % OF VARIATION TO (b)	31.22	63.15	23.83	12.79	11.38	9.77	2.41	4.94	3.85	13.72
(e) UNDER RECOVERY (Rs. in lakhs) Item (b) of (A) x (c) of (B) above	232.25	589.69	533.21	397.26	449.56	443.34	129.26	287.70	242.88	945.48
(C) LPG STOCK LOSSES *										
(a) VOLUME (in MTs.)	284962	365418	418666	588206	750018	795752	929527	1097885	1100024	1224190.60
(b) LOSS (IN MTs)	2224	1261	2447	2174	1910	483	(1352)	(3589)	(2239)	(3049)
(c) PERCENTAGE OF LOSS	0.78	0.35	0.58	0.37	0.25	0.06	(0.15)	(0.35)	(0.20)	(0.25)
(d) OCRC NORM	0.25	0.25	0.25	**	**	**	**	**	**	**
(e) VARIATION	0.53	0.10	0.33							
(f) % OF VARIATION TO OCRC NORM	212	40	132							
(g) MANAGEMENT TARGET	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.25	0.25
(h) VARIATION (c - g)	0.28	(0.15)	0.18	(0.03)	(0.15)	(0.24)	(0.45)	(0.65)	(0.45)	(0.50)
(i) UNDER RECOVERY/(OVER RECOVERY) (Rs. in lakhs)	N.A.	N.A.	76.92	43.26	14.89	(45.06)	(162.61)	(170.55)	(77.27)	(106.78)

* Details excluding plants fed by pipeline Mathura & Hazira

Note: i) Figures in brackets indicate gain.

** ii) The OCRC norms for LPG stock losses for the years 1988-89 to 1994-95 was Rs. 7.88/MT.

Capacity Utilisation:

4.8.3 There is no uniformity in the capacity figures adopted in Design capacity, Feasibility report, Detailed Project report, OCC report, productivity linked bonus scheme (PLBS), Inter-Divisional Committee Report (IDC), Installed, Achievable capacity by the Management and thus it is not possible to comment on the capacity utilisation on any standard basis.

4.8.4 Further, the lower percentage utilisation in 1989-90 as compared to other years was attributed mainly to stabilisation of Phase II plants commissioned during 1988-89.

Operating Cost:

4.8.5 It was observed that the operating cost per MT for bottling plants was always appreciably higher than the operating cost allowed to the Company under the administered pricing mechanism from time to time. The increase varied from 2.41 percent to 63.15 percent. This resulted in under-recovery on account of operating costs ranging from Rs.129.26 lakhs in 1991-92 to Rs. 945.48 lakhs in 1994-95.

4.8.6 The Management stated (June 1994) that with the passage of time the construction costs have gone up. The element of non-controllable cost viz. salary, bonus etc. go up every year. Margins for operating cost are fixed by OCRC on overall basis for all the plants put together and not for individual bottling plants. The margin given by OCRC were not in line with the inflationary trends. The Management also stated that regular monitoring of the expenses is done.

Stock Losses:

4.8.7 The Management fixed a target of 0.5 percent for the stock loss at LPG filling plants as against OCRC norm of 0.25 percent during 1985-86 to 1987-88. The actual losses recorded were much in excess of norm of 0.25 percent fixed by OCRC. The percentage of variation i.e. excess losses over OCRC norms worked out to 212 and 132 during 1985-86 and 1987-88 respectively. The actual losses were 0.78, 0.35 and 0.58 percent for the years 1985-86, 1986-87 and 1987-88 as against Management's norm of 0.5 percent. The Management however revised its norms to 0.4% in 1988-89, 0.3% in 1990-91 and to 0.25% from 1993-94 onwards.

4.8.8 From a statement showing LPG stock loss/gain position for the years 1985-86, 1986-87 & 1987-88 at the various LPG bottling plants of the Company (Marketing Division), it was observed that the loss/gain varied quite widely from plant to plant and in each plant from year to year. At Kalyani bottling plant of Eastern Region (E.R.), the percentage of loss was 0.828, 1.488 & 1.585 in 1985-86, 1986-87 and 1987-88 respectively. It showed that there was lack of control over stock losses during these years.

4.8.9 The Management stated (June 1994) that during earlier years the employees were new to LPG bottling. Further, only in case of rail fed bottling plants losses were experienced and continuous monitoring and analysis is being done to reduce the losses/identify the causes of losses.

4.8.10 According to Management, certain measures were taken to reduce the stock loss over the years such as provision of vapour compressors with preset pressure switches, change of weigh bridges from 30 MT to 50 MT and to electronic weigh bridges, fixation of servo gauges in Horton Spheres, etc.

4.9 Claims from LPG Distributors

4.9.0 The amount recoverable from LPG distributors towards shortage of LPG equipment/accessories as on 31.3.1995 amounted to Rs. 6.61 crores as against Rs. 4.91 crores as on 31.3.1992.

4.9.1 The position of good and doubtful claims as on 31.3.1995 is given below:

	As on 1.4.94	Liquidated	Balance	Generated during the year	Liquidated	Balance	Total as on 31.3.95
Good	432.15	193.22	238.93	465.85	381.02	84.83	323.76
Doubt-ful	262.19	23.47	238.72	98.73	-	98.73	337.45
Total	694.34	160.04	477.65	564.58	381.02	183.56	661.21

4.9.2 The above claims do not include Rs. 1.48 crores on account of loss of LPG equipment in eastern region covering the period between August, 1987 and March, 1992. This relates to non-recovery of penal rate resulting in short recovery to the extent of Rs.950 per cylinder and Rs. 175 per regulator. This is in violation of the Management directive laid down in the policy circular dated 20.10.1987 and amounted to unjustified and unauthorised waiver.

4.10 LPG cylinder deposits received from customers

4.10.0 Each LPG consumer is required to keep a deposit towards the cost of the LPG cylinder issued to him by the Company. This deposit is almost permanently retained by the Company.

4.10.1 The amount of such deposits held by the Company at the end of each year during 1985-86 to 1994-95 and the amount of interest @ 12 percent thereon is given in the following table :

Year	Amount of Deposit (Rs. in crores)	Amount of interest (Rs. in crores)
1985-86	255.86	30.70
1986-87	316.74	38.00
1987-88	358.91	43.07
1988-89	425.42	51.05
1989-90	491.42	58.97
1990-91	532.06	63.85
1991-92	604.40	72.53
1992-93	662.02	79.44
1993-94	747.00	89.64
1994-95	853.05	102.37
		629.62

4.10.2 Under the existing administered pricing mechanism, the oil companies are fully reimbursed the cost of LPG cylinders procured by them. While the oil companies collect deposits from LPG customers, in effect, they do not invest any monies on LPG cylinders. The availability of interest free deposits from customers, therefore gives an extra benefit to the oil companies to the extent of interest on these funds.

4.10.3 The Management stated (February, 1992) that for each customer, oil company had to make investment on 1.5 cylinder and one pressure regulator, the total cost of which amounts to more than the security deposit collected for one cylinder and regulator. Oil companies do not recover any rentals from customer for cylinder and regulator and that replacement cost thereof is not recovered from customer.

4.10.4 The Management's reply is not relevant as the cost of the cylinder is recovered from the OCC pool account and the deposits received from the customers are retained by the oil companies.

5. PRODUCT LOSSES

5.1.0 The product loss is the loss which occurs in the course of transportation, handling, storage and distribution of petroleum products.

5.1.1 The product losses are broadly categorised into the following categories for the purpose of monitoring and control:-

(i) Ocean losses; which can be further categorised into a) Imports b) Coastal movements;

(ii) Pipeline losses; and

(iii) Operation losses i.e. losses at installations and depots.

5.1.2 Norms for ocean losses and stock losses were fixed by the Oil Pricing Committee - 1976 for the purpose of compensation to the oil companies under the administered pricing mechanism. These norms have not been revised thereafter. Any variation in actual losses over the norms is borne by the individual oil company. If the actuals are more, the Company loses and if less, the gains are retained.

5.1.3 Apart from the norms fixed under pricing mechanism, the Company has also fixed its own targets for product losses for the purpose of control and monitoring. For this purpose, products are usually classified into three categories viz dangerous products (DP), non-dangerous products (NDP) and heavy products (HP). The targets for stock losses at depots and installations from time to time were as under:

Category	Particulars	All India targets as a percentage			
		83-84 to 88-89	89-90	90-91 to 93-94	1994-95
1. D.P.	Dangerous Petroleum (includes Naphtha, AV gas, 93 Octane but excludes NGL for which separate norms are fixed	0.35	0.11	0.10	0.08
2. N.D.P	Non-Dangerous Petroleum (includes ATF, SKO, HSD and MTO).	0.15	0.00	0.00	0.00
3. H.P.	Heavy Petroleum (includes LDO, FO and RFO).	0.10	0.00	0.00	0.00

5.1.4 The Company, as a measure of Long Range Plan (LRP) revised the target for dangerous products (D.P) from 0.35 percent for 1988-89 to 0.11 percent for 1989-90 and 0.10 percent for the years 1990-91 to 1993-94, and 0.08 percent for 1994-95 and for NDP the target was revised from 0.15 percent upto 1988-89 to Nil (0.00) for the period from 1989-90 to 1994-95.

5.1.5 Though the net stock losses in respect of depots and installations during the years 1990-91 to 1994-95 were within the all India targets fixed by the management for depots and installations taken together, the stock losses at the depots in all the regions in all the years for DP, NDP and HP were heavy as shown below:

Year	Products	Northern Region			Eastern Region			Western Region			Southern Region			All India	
	Depot	Instn.	Regn.	Depot	Instn.	Regn.	Depot	Instn.	Regn.	Depot	Instn.	Regn.	Depot	Instn.	Regns
1990-91	DP	0.35	(0.23)	(0.10)	0.43	0.02	0.11	0.50	0.01	0.13	0.31	(0.04)	0.02	0.40	(0.08)
	NDP	0.03	(0.28)	(0.16)	0.11	(0.07)	(0.04)	0.22	(0.14)	(0.04)	0.19	(0.08)	0.00	0.13	(0.14)
	HP	0.15	(0.13)	(0.12)	(0.20)	(0.54)	(0.52)	0.04	0.06	0.06	(0.13)	(0.12)	(0.12)	(0.09)	(0.12)
	All Products	0.06	(0.26)	(0.15)	0.13	(0.10)	(0.06)	0.25	(0.09)	(0.01)	0.19	(0.08)	(0.01)	0.15	(0.13)
1991-92	DP	0.47	(0.16)	(0.02)	0.29	0.06	0.10	0.55	0.09	0.19	0.28	(0.10)	(0.03)	0.42	(0.05)
	NDP	0.11	(0.28)	(0.13)	0.08	(0.06)	(0.04)	0.16	(0.14)	(0.06)	0.26	(0.12)	0.00	0.16	(0.15)
	HP	0.57	0.39	0.40	(0.07)	(0.48)	(0.44)	0.29	0.25	0.25	0.04	(0.11)	(0.10)	0.11	0.00
	All Products	0.14	(0.23)	(0.10)	0.09	(0.08)	(0.05)	0.20	(0.07)	(0.01)	0.25	(0.11)	(0.02)	0.18	(0.12)
1992-93	DP	0.44	(0.21)	(0.06)	0.28	0.07	0.12	0.72	0.06	0.20	0.34	(0.10)	(0.02)	0.46	(0.07)
	NDP	0.04	(0.22)	(0.12)	0.11	(0.07)	(0.04)	0.23	(0.10)	(0.02)	0.31	(0.10)	0.02	0.17	(0.12)
	HP	0.05	0.44	0.42	0.10	(0.50)	(0.45)	0.91	0.06	0.08	0.22	(0.08)	(0.06)	0.26	(0.07)
	All Products	0.07	(0.20)	(0.10)	0.12	(0.09)	(0.05)	0.28	(0.07)	0.01	0.31	(0.10)	0.01	0.19	(0.11)
1993-94	DP	0.52	(0.20)	(0.02)	0.33	0.00	0.13	0.70	0.03	0.16	0.34	(0.08)	0.00	0.48	(0.08)
	NDP	0.05	(0.28)	(0.14)	0.09	(0.15)	(0.13)	0.25	(0.14)	(0.05)	0.21	(0.13)	(0.03)	0.17	(0.15)
	HP	0.78	(0.00)	0.05	0.28	(0.48)	(0.41)	0.62	(0.27)	(0.22)	0.31	(0.10)	(0.07)	0.40	(0.19)
	All Products	0.09	(0.25)	(0.12)	0.23	(0.21)	(0.05)	0.52	(0.12)	(0.05)	0.22	(0.12)	(0.03)	0.20	(0.15)
1994-95	DP	0.45	(0.14)	0.00	0.40	0.14	0.00	0.67	(0.03)	0.13	0.49	0.04	0.13	0.50	(0.06)
	NDP	0.07	(0.26)	(0.13)	0.08	(0.09)	(0.06)	0.16	(0.12)	(0.06)	0 22	(0.18)	(0.06)	0.13	(0.15)
	HP	0.55	(0.07)	(0.04)	0.19	(0.39)	(0.36)	0.64	(0.21)	(0.17)	0.26	(0.11)	(0.08)	0.36	(0.19)
	All Products	0.10	(0.23)	(0.11)	0.11	(0.11)	(0.07)	0.22	(0.12)	(0.15)	0.25	(0.14)	(0.04)	0.17	(0.15)

Note: The figures within brackets indicate gain.

5.1.6 The table indicates that in all the years from 1990-91 to 1994-95 the stock losses in the depots of all the regions ranged between 0.28 percent and 0.72 percent for DP, 0.03 percent and 0.31 percent for NDP and 0.04 percent and 0.91 percent for HP. The losses in DP and HP in the depots of Western Region were all the time higher than those in other regions and loss on NDP in the depots of Southern Region were higher than other regions. It was interesting to note that in installations there were always stock gains and no stock losses. The heavy stock losses in depots were, however, offset by the gains registered in installations and the net stock losses were within the all India target.

5.1.7 An analysis of the value of the stock losses sustained by the Company and the amount recovered against these losses through the pricing mechanism during the period 1984-85 to 1994-95 indicated that the Company gained an amount of Rs. 59.57 crores on account of reduction in stock losses. The Company also gained an amount of Rs. 13.04 crores during the period from 1988-89 to 1994-95 account of reduction in ocean losses.

6. FACILITIES PLANNING

6.1 Marketing and distribution infrastructure of the oil industry

6.1.0 India has about 80 terminals/installations at 29 locations throughout the country. The Company operates 39 terminals including 3 of AOD. There are only four locations where oil marketing companies other than IOC have terminals and at 17 of the locations IOC is the sole operator. HPC and BPC operate 19 and 18 terminals respectively and IBP the remaining four.

6.1.1 IOC operates 124 of the 250 company operated depots. IBP has four depots. The remaining depots are split between HPC (64) and BPC (59). IOC has a monopoly of 19 depots in the Northeast.

6.1.2 IOC owns six of the seven product pipelines and all of the crude oil lines in the country. The remaining one product pipeline is owned by HPC.

6.1.3 As on 31 March, 1995 there were about 18,000 road tankers operating in the country for the purpose of transporting petroleum products. Only about 5 percent of these are owned by the oil companies, the balance being owned by customers or road transporters. IOC again has the dominant share of road transport, operating 14450 tankers and owning 418.

6.1.4 IOC has 38 percent of the approximately 16,000 Retail Products Outlets (RPOs), followed by HPC and BPC at 25 percent each and IBP at 9 percent.

6.1.5 The following table shows the total number of installations/terminals, depots, etc. as on 31 March 1988 and as on 31 March, 1995 for the Company and also the increase in the facilities over the last 7 years.

(Tankage capacity: in lakh KL)

Sl. No. 1.	Category 2.	As on 31.3.88 No. 3.	Tankage 4.	As on 31.3.95 No. 5.	Tankage 6.	Net increase No. 7.	Tankage 8.
1.	Port-Installations	18	12.02	18	16.10	-	4.08
2.	Pipeline Installations	12	10.14	11	10.54	(-)1	-
3.	Inland Installations	5	1.19	7	2.30	2	1.11
4.	Bulk Depots	105	7.46	117	12.21	12	4.75
5.	Consumer Depots	161	0.56	199	0.81	38	0.25
6.	TKDs (Taluka Kerosene Depots)	29	-	30	-	1	-
7.	Retail Outlets	5250	-	5995	-	745	-
8.	SKO/LDO Dealers	2580	-	2898	-	318	-
9.	Multi Purpose Distribution Centres(MPDCs)	231	-	231	-	-	-
10.	Consumer Pumps	3393	-	4379	-	986	-
11.	Tank Trucks	419	-	418	-	(-)1	-

6.2 Gap between requirement and plan outlay for marketing and distribution infrastructure

6.2.0 In the Eighth Plan (1992-97) the demand of petroleum products was expected to grow at a rate of 6.9% p.a. reaching a level of 79.37 million tonnes by 1996-97. The Sub-Group set up by the Planning Commission for refining and marketing operations had initially proposed an outlay of Rs. 13,806.25 crores (net of LPG deposits) for investment in marketing and distribution facilities for the industry as a whole. However, in view of resource crunch, the industry carried out an exercise on prioritisation of projects to arrive at the bare minimum requirements which were projected at Rs. 3300 crores with the share of IOC (MD) at Rs. 1832 crores. During company-wise discussions with Planning Commission, these outlays were further pruned by making only token provisions for a number of major projects. The approved Eighth Plan outlay for IOC (Marketing) has been pegged down to Rs. 341.41 crores against the company's projection of Rs. 2449.97 crores for plan expenditure during the period. Thus, the approved outlay was not sufficient even for meeting one year's expenditure. This is despite the fact that the company had been continuously generating sufficient internal resources as shown below:-

(Rupees in crores)

	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
Retained profits	489	650	703	746	628	723	914
Depreciation	202	228	206	74	232	296	396
Total internal resources	**691**	**878**	**909**	**820**	**860**	**1019**	**1310**

6.2.1 Keeping in view the profitability of the company, its low debt-equity ratio as well as a very small equity base, the reasons for not allowing the company to raise its own resources for meeting its capital requirements either by public issue or through additional borrowings were not clear.

6.2.2 The Management stated (November, 1995) that the Company had been allowed to spend more than the original approved eighth plan outlay based on the annual plan outlays from year to year. As against the total approved outlay of Rs.341.41 crores for the entire eighth plan period (1992-97), the Company has already spent a sum of Rs. 489.52 crores during the first three years of the plan. This, however, puts a question mark on the sanctity of the plan outlays fixed by the Government. Further, this expenditure is no where near the IOC's projected minimum requirements.

6.3 Additional Product Tankage (APT)

6.3.0 The Oil Industry proposed (April, 1979) to build additional storage facilities to safeguard against disruptions in supply. It was decided that storage capacities in the country should be augmented to hold stocks equivalent to 45 days requirement of finished products. A feasibility report was prepared (June, 1981) on Additional Product Tankage (APT) requirements, proposing to set up additional product tankage with a capacity of

28.39 lakh KLs, at a total cost of Rs. 147.49 crores. The Public Investment Board (PIB) discussed the report and suggested (December, 1981) that the project be split up in phases due to resource constraint.

6.3.1 Accordingly, the Industry submitted (August, 1982) a revised proposal for Phase-I of the project to the Public Investment Board seeking approval for 10 lakh KLs tankage at a total estimated cost of Rs. 59 crores. PIB cleared the proposal on the condition that the cost estimate be updated within a period of six months. The revised proposal for Phase-I was submitted to the PIB for 9.61 lakh KLs at an estimated total cost of Rs. 69 crores. The Government approved this proposal in November, 1983. The detailed project report (DPR) for APT - Phase-I was presented to Government in December 1984 proposing revised tankage of 9.7 lakh KLs at an estimated cost of Rs. 81.56 crores to meet the demand of 45 days requirement of 1985-86.

6.3.2 The Phase-II proposals were split into two sub-phases i.e. Phase II-A and Phase II-B, to avoid delay in respect of issues relating to railway siding. Phase II-A proposal was to include only those locations which were cleared by the Railways. Accordingly, a proposal for addition of about 3.6 lakh KLs of tankage at an estimated cost of Rs. 30.58 crores was approved by the Government in March, 1985. The detailed project report was submitted in December, 1986 with a revised tankage of 3.46 lakh KLs. Most of the items of the project were estimated to be completed by 1986-87.

6.4 Implementation by the Company of its APT Phase-I Project

6.4.0 The project which originally envisaged (June 1981) creation of 5.09 lakh KLs of tankage capacity on the part of the Company before 1984-85 at a cost of Rs. 26.77 crores was approved only in May 1983 by the Public Investment Board with further revisions in cost estimates and envisaged capacity. The project was completed in March 1988 at a cost of Rs. 31.50 crores for a tankage capacity of 4.79 lakh KLs. spread over 49 locations.

6.4.1 Feasibility Report (FR) target for completion of APT phase I tankage was March, 1985. The tankage of 2.26 lakh KL at 23 locations was completed by March, 1985 as per FR target. The balance tankage of 2.53 lakh KL at 26 locations was re-scheduled for completion by March, 1987 as per the DPR target. It was seen that even this revised date was not adhered to in three locations viz., Jalgaon, Rajkot and Raxaul due to delay in providing railway siding and culvert facilities by Railways.

6.5 Implementation of APT - Phase II-A Project

6.5.0 The Oil Industry submitted (December 1986) the Detailed Project Report (DPR) revising the tankage capacity to 3.46 lakh KLs. at a revised cost of Rs. 32.67 crores to OCC. The Company's portion of tankage was also revised to 1.82 lakhs KLs. at a cost of Rs. 16.23 crores based on September 1986 prices, which was approved by Government of India (June 1987) with scheduled completion by 1986-87.

6.5.1 Out of Company's portion of the envisaged 1.82 lakhs KLs tankage at thirty locations, two locations (Marodabad & Itarsi) were entirely dropped, and in other five locations, part tankage was proposed. However, during execution, one location i.e. Bilaspur, where part tankage, was proposed was also dropped due to delay in allotment of land by Railways. Hence, in effect a total of 1.80 lakh KLs. tankage was provided at 27 locations as against 1.82 lakh KLs approved in DPR at 30 locations. The overall completion at all locations was achieved in May 1987 at a total cost of Rs. 15.56 crores.

6.6 Tankage capacity vis-a-vis actual throughput

6.6.0 The following table shows the tankage capacity available and the actual throughput turnover for the last twelve years ending 31st March, 1995.

(Lakhs KL)

Year	Tankage capacity	Throughput	Turnover (No. of times)
1983-84	24.25	274	11
1984-85	26.51	315	12
1985-86	28.80	336	12
1986-87	30.77	350	11
1987-88	30.81	380	12
1988-89	32.10	426	13
1989-90	32.67	463	14
1990-91	34.29	507	15
1991-92	34.88	559	16
1992-93	37.68	593	16
1993-94	40.17	635	16
1994-95	41.15	675.7	16

6.6.1 While the throughput increased by 146.61 percent from 1983-84 to 1994-95, the tankage capacity of the Company went up by 69.69 percent only. While the APT Phase I and Phase II-A programmes were aimed at providing 45 days cover, the Company's tankage in 1994-95 was enough to provide a cover of 22 days of throughput only.

6.6.2 The Management stated (June 1994) that the initial target for days coverage was 45 days which was subsequently revised (1990) in keeping with increasing throughput and operational needs. The norms are now different for port locations, refinery locations, tap-off points (TOPs) and depot etc. The Company further stated (November, 1995) that the Government has again decided to set up strategic stocks to the extent of 45 days cover and that a working group has been set up to work out the necessary modalities.

6.6.3 The Company had been exploring the possibility of creating storage facilities jointly with other oil companies or with third parties. The Company has signed (November, 1994) an MOU with the following companies for setting up a Joint Venture Company for tankage infrastructure.

a) M/s. IBP Company Ltd., a PSU Oil Company.

b) M/s. Oil Tanking, GMBH, Hamburg, Germany

6.7 Retail Outlets (R/O)

6.7.0 As on 31 March, 1995, the Company had 5995 retail outlets for sale of MS and HSD. The retail outlets increased from 5165 in 1985-86 to 5995 in 1994-95.

Performance of Retail Outlets in Western Region:

6.7.1 The table given below shows the performance of ROs in achieving the annual targets during the last ten years ending March 1995 in Western Region of the Company.

(Figures in '000 tonnes)
(Average Sales per RO)

Year	No. of outlets	Target		Actuals		Percentage of achievement	
		MS	HSD	MS	HSD	MS	HSD
1985-86	1017	0.18	0.76	0.22	0.75	122	99
1986-87	1059	0.19	0.81	0.25	0.82	131	101
1987-88	1063	0.22	0.79	0.20	0.88	91	111
1988-89	1173	0.25	0.95	0.20	0.89	80	94
1989-90	1203	0.22	1.03	0.23	0.99	105	96
1990-91	1238	0.25	1.01	0.22	1.00	88	99
1991-92	1238	0.26	1.03	0.23	1.09	88	106
1992-93	1238	0.29	1.46	0.28	1.43	97	98
1993-94	1255	0.31	1.59	0.30	1.54	97	97
1994-95	1312	0.33	1.72	0.32	1.70	98	99

6.7.2 The Management stated (June, 1994) that the achievement in sale of MS was not satisfactory as the Company did not have adequate number of retail outlets in Bombay city where MS potential was concentrated in Western Region and where the Company's representation was only 17 percent.

6.8 Appointment of SKO/LDO Dealers:

6.8.0 The following table depicts the targets, actuals and the shortfall regarding appointment of fresh dealers for the last ten years ending March, 1995.

(Figures in Nos.)

Year	Target	Actual	Shortfall(Excess)
1985-86	94	87	7
1986-87	138	108	30
1987-88	107	75	32
1988-89	80	60	20
1989-90	65	78	(13)
1990-91	78	83	(5)
1991-92	26	10	16
1992-93	11	8	3
1993-94	1	13	(12)
1994-95	34	24	10

6.8.1 The Company could not create sufficient number of SKO/LDO dealerships as targeted in the years 1985-86 to 1988-89 and 1991-92 to 1992-93. The reason for non-commissioning as per targets was attributed to non-availability of suitable land for storage. For the shortfall in 1991-92 and 1992-93 it was stated that the Oil Selection Boards (OSB) were non-functional from November, 1990 to December, 1992 which had affected the commissioning programme. Subsequently, in January 1993, the OSB was constituted for each State/Union Territory for a period of two years.

7. FINANCIAL PERFORMANCE

7.1 Financial Position

7.1.0 The financial position of the Company as a whole for the seven years ending March, 1995 is summarised below :

(Rs. in crores)

		1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
Liabilities								
a)	i) Paid Up Capital	123.27	123.27	123.27	123.27	123.27	123.27	369.80
	ii) Share Application Money	-	-	-	-	-	-	19.54
b)	Reserves & Surplus							
	i) Free Reserves & Surplus	1868.24	2517.82	3220.44	3966.25	4593.63	5316.02	6122.16
	ii) Committed Reserves & Surplus	232.35	232.67	232.97	233.27	233.57	233.87	95.37
		2100.59	2750.49	3453.41	4199.52	4827.20	5549.89	6217.53
c)	Borrowings from -							
	i) Govt. of India	6.83	-	-	-	-	-	-
	ii) Others							
	Long Term Loans	16.75	349.42	458.51	1064.78	1271.31	799.53	1236.43
	Short Term Loans	2008.72	5085.93	6662.70	2555.81	4864.25	5449.45	3554.54
	Public Deposits	54.58	5.78	6.48	6.22	81.05	250.92	575.74
		2086.88	5441.13	7127.69	3626.81	6216.61	6499.90	5366.71
d)	Current Liabilities and Provisions	2322.63	2925.75	3535.54	6006.84	4898.59	5070.93	6049.36
	Total	6633.37	11240.64	14239.91	13956.44	16065.67	17243.99	18022.94
Assets								
e)	Net Block	852.61	966.97	1091.23	1348.93	1914.82	2577.52	2879.64
f)	Capital Work-in-Progress	307.66	438.19	706.42	1134.79	1147.79	1326.07	2628.59
g)	Investments	2516.13	5310.48	6465.96	4153.34	3721.79	3857.63	3856.89
h)	Current Assets, Loans & Advances	2956.97	4525.00	5976.30	7319.38	9281.27	9482.77	8657.82
	Total	6633.37	11240.64	14239.91	13956.44	16065.67	17243.99	18022.94
I)	Working Capital h-d)	634.35	1599.25	2440.76	1312.54	4382.68	4411.84	2608.46
j)	apital employed e+h-d)	1486.95	2566.22	3531.99	2661.47	6297.50	6989.36	5488.10
k)	et Worth a+b(i)]	1991.51	2641.09	3343.71	4089.52	4716.90	5439.29	6491.96
l)	et Worth per upee of Equity apital(Rs.)	16.16	21.43	27.13	33.18	38.26	44.13	17.56*

* After issue of Bonus shares in the ratio of 2:1.

Paid up Capital

7.1.1 The authorised capital of the Company was Rs. 150.00 crores since 1976-77, which was increased to Rs. 2500 crores in 1994-95. There was no change in the paid up capital during the years under review except in 1994-95 when it increased three-fold due to issue of bonus shares in the ratio of 2 bonus shares for every share held. During the year 1994-95 the company divided its shares of Rs. 1000 each into 100 shares of Rs. 10 each.

During the year 1994-95 the Government of India disinvested 1,43,63,150 equity shares of Rs. 10 each. The average price at which the shares were disinvested was Rs. 712. Taking into consideration the bonus shares issued to the President of India, the disinvestment works out to 3.88%. During the year 1994-95, the Company also offered 600 shares (ex-bonus) to each of its employees at Rs. 100 per share (including a premium of Rs. 90). The allotment was made on 6.4.1995.

Reserves and Surplus

7.1.2 There had been a steady growth in the 'reserves and surplus' over the years and as on 31 March, 1995 the 'free reserves and surplus' were 16 times the paid-up capital (including share application money) after issue of bonus shares in the ratio 2:1 by the Company during 1994-95.

7.1.3 Committed reserves include mainly special reserves such as `investment allowance reserve' and `export profit reserve' which were created for specific purposes. After a point was raised by Audit, the Company has reviewed these reserves during 1994-95 and transferred an amount of Rs. 138.80 crores from Investment Allowance Reserve to General Reserve.

Financing of Capital Expenditure (Net Block and Capital Work-in-Progress)

7.1.4 The Company had been financing its capital expenditure to the extent of about 81 to 83 percent through internally generated resources. The balance was met from loans obtained from International Bank for Reconstruction & Development and other agencies. There was no budgetary support from Government.

Investments

7.1.5 The Company had a substantially large pool of investible resources. This was partly due to the surplus generated by the Company from its own operations and partly due to suppliers' credit and foreign currency loans obtained by it for financing the import of crude and other canalised products on behalf of the entire oil industry. The investments mainly comprise bonds issued by Public Sector Undertakings, units of UTI and shares of other mutual funds. The following table indicates the average return on investments and average rate of borrowing during the last five years ended 31 March, 1995.

	1990-91	1991-92	1992-93	1993-94	1994-95
Average return on investment	9.52%	9.66%	9.56%	9.55%	9.98%
Average cost of borrowings	9.39%	9.70%	7.38%	5.97%	7.34%

The Company surrenders to the OCC the difference between interest income earned on investments out of funds availed under foreign currency loans including suppliers' credit etc. and the actual interest cost incurred on such loans/credits plus a service charge at 0.2 percent on the interest cost. The Company surrendered an amount of Rs. 182.46 crores, Rs. 212.88 crores and Rs. 171.55 crores to the OCC on this account during 1992-93, 1993-94 and 1994-95 respectively.

7.1.6 During the year 1991-92, the Company sold investments of Rs. 2312.61 crores and also reduced the borrowings from banks and others by Rs. 3500.88 crores.

7.1.7 Short term investments made by the Company till 1991-92 in 'ready forward deals' and 'portfolio management schemes' etc. were reviewed in audit and commented upon in the Report of CAG of India - Union Government (Comml) for 1994 (No.3).

Working Capital

7.1.8 The working capital of the Company is financed mainly from short-term loans. Another source of working capital is deposits for LPG cylinders received from the customers which is shown in the accounts as a current liability but which is normally not required to be returned. If the LPG deposits also taken out of the current liabilities the working capital of the Company would be much more than what is reflected in para 7.1.0. There was a steep increase in working capital requirements during 1989-90 and 1990-91 over the previous years mainly due to accumulation of dues recoverable from OCC, which had shot up from Rs. 151.37 crores on 31 March, 1989 to Rs. 2073.60 crores at the end of 1990-91. The increased requirement of working capital during these years was met mainly by raising short term loans. There was, however, a substantial decrease in the working capital as at the end of 1991-92 to Rs.1312.54 crores, mainly due to a shift in the method of financing of imports of crude and petroleum products from short term loans to suppliers' credit. While short term loans are accounted for under borrowings, suppliers' credit forms part of the current liability. As mentioned earlier under 'investments', the Company had also disinvested Rs. 2312.61 crores during the same year to liquidate borrowings from banks and others by Rs. 3500.88 crores. This had also put a pressure on the Company's cash resources. But with mounting dues recoverable from OCC and a shift again during 1992-93 in the source of financing of imports from suppliers' credit to short term foreign loans, the Company's working capital as at the end of 1993-94 stood at a whopping Rs. 4411.84 crores. The working capital, however, fell to Rs. 2608.46 crores at the end of March 1995 due to reduction in dues from OCC which was utilised in the repayment of loans. It would be clear from the above that the delay by OCC in the release of amounts due to the Company has a significant impact on the cash flow position of the Company.

Net Worth

7.1.9 The steady growth in net worth from Rs. 1991.51 crores in 1988-89 to Rs.6491.96 crores at the end of 1994-95 was mainly due to generation of profits year after year. As on 31 March 1995, the net worth was 17.56 times the paid-up capital. The net worth as on 31 March, 1995 was more than the capital employed, which indicated that the Company's own funds were not fully utilised in its business.

Dividend

7.1.10 The Company paid dividend at the following rates during 1988-89 to 1994-95:-

	1988-89	89-90	90-91	91-92	92-93	93-94	94-95
Dividend Percentage	20	20	22	33	40	40	40
Total amount of Dividend paid (Rupees in crores)	24.65	24.65	27.12	40.68	49.31	49.31	104.69
Dividend pay-out ratio (i.e. % of dividend to net profit after tax)	4.79	3.65	3.71	5.17	7.28	6.39	10.28

7.2 Working Results

7.2.0 The working results of the entire company for the seven years ending 1994-95 are tabulated below :

(Rs.in crores)

		1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
A.	INCOME :							
i)	Sale of Products & Crude oil	15172.80	17499.58	19578.80	20745.06	24319.88	23731.91	28489.78
ii)	Other Income	230.81	(138.40)	454.64	(53.28)	366.32	401.08	80.50
	Total	15403.61	17361.18	20033.44	20691.78	24686.20	24132.99	28570.28
B.	EXPENDITURE :							
i)	Purchase of products & crude	7051.86	8192.40	9797.92	10195.35	13632.91	12408.66	14257.12
ii)	Manufacturing Expenses	5447.19	5900.41	6631.33	6964.28	7213.26	7441.85	8352.87
iii)	Payments to employees	185.84	214.09	244.62	272.93	317.85	341.71	424.84
iv)	Office Admn., Selling and other expenses	149.80	181.89	194.41	247.15	290.12	345.67	428.91
v)	Duties	1846.68	1925.60	2211.08	2101.30	2201.40	2281.20	3570.70
vi)	Depreciation & Amortisation	209.24	228.20	234.92	177.16	240.14	322.78	417.47
vii)	Less:Transfer to Capital Account	13.33	19.58	12.07	22.51	23.11	58.96	115.39
	Total	14877.28	16623.01	19302.21	19936.16	23872.56	23082.91	27336.52

C.	Operating Profit							
	(Before Dividend, Interest, Extraordinary and prior period adjustments & Tax)	526.33	738.17	731.23	755.62	813.64	1050.08	1233.76
	Interest paid	142.92	372.23	665.57	605.21	377.51	418.92	475.24
D.	Gross Profit (Operating Profit minus interest paid)	383.41	365.94	65.66	150.41	436.13	631.16	758.52
	Interest Income	140.14	289.33	599.66	613.49	386.17	351.69	346.43
	Dividend Income	49.54	123.93	214.82	164.47	36.53	37.30	55.95
E.	Profit before ext-aordinary/prior period adjustments	573.09	779.20	880.14	928.37	858.83	1020.15	1160.90
	Extraordinary/prior period adjustments	103.32	60.62	26.90	156.42	76.16	(56.04)	208.94
F.	Profit Before Tax	676.41	839.82	907.04	1084.79	934.99	964.11	1369.84
	Tax (net)	162.08	165.28	177.00	298.00	258.00	192.11	350.98
G.	Profit after tax(Net profit)	514.33	674.54	730.04	786.79	676.99	772.00	1018.86
H.	Earning per share (Rs.) (of Rs.1000)	4172.53	5472.24	5922.49	6382.87	5492.20	6262.89	27.55*
I.	Return on Networth (Net Profit : Networth * 100)	25.83	25.54	21.83	19.24	14.35	14.19	15.69

* Denotes post bonus EPS on shares of face value of Rs.10 each as against shares of Rs.1000 each earlier.

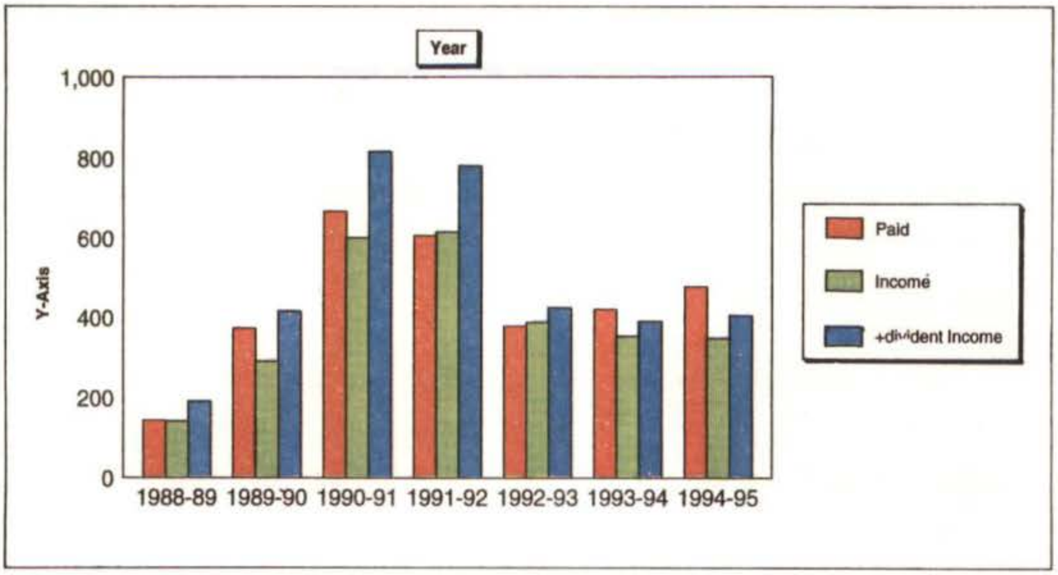
In the above table, 'other income' has been taken net of interest and dividend incomes and these items have been shown below separately. Negative figures of 'other income' during 1989-90 and 1991-92 indicate that there was a decrease in the closing stocks during those years and the value of reduction in closing stock was more than other incomes.

Sale of Products

7.2.1 While sale progressively increased by 87.77 percent from 1988-89 to 1994-95, the quantity of petroleum products sold increased only by 24.51 percent over the same period. The increase in the value of sales was thus predominantly due to upward revisions in the price of petroleum products announced by the Government from time to time and increase in the international price of crude oil sold to other oil companies as canalising agent.

Interest paid vs interest earned

7.2.2 There was almost a direct correlation between the interest paid and interest earned (as also dividend income) upto 1992-93 as shown in the graph below:



7.2.3 A further break up of the interest paid as well as interest earned during the last five years was as follows:

(Rupees in crores)

	1990-91	1991-92	1992-93	1993-94	1994-95
A. Income					
i) Interest earned on Investments (net)	500.48	416.98	164.10	311.24	315.87
ii) Interest recoverable from OCC	62.38	189.92	221.50	*	*
iii) Interest recoverable from Others	36.80	6.59	0.57	40.45	30.56
	599.66	**613.49**	**386.17**	**351.69**	**346.43**
B. Expenditure					
i) Interest payable to OCC	18.00	25.44	30.49	*10.08	*101.77
ii) Interest payable to OIDB	8.13	41.87	41.01	0.06	0.04
iii) Interest on foreign currency loans/ suppliers' credit etc.	639.44	537.90	306.01	408.78	373.43
	665.57	**605.21**	**377.51**	**418.92**	**475.24**

* Interest payable to OCC for 1993-94 and 1994-95 is after taking into account the interest recoverable from OCC.

7.2.4 Out of the interest income, the Company had to surrender, as per the directives of the OCC, the difference between interest income earned on investments out of funds availed under foreign currency loans etc., and the actual interest cost incurred on such loans/ credits plus a service charge of 0.2 per cent on the interest cost. The amount surrendered worked out to Rs. 566.89 crores (1992-93 - Rs. 182.46 crores, 1993-94 - Rs. 212.88 crores, and 1994-95 - Rs. 171.55 crores).

7.2.5 As is evident from above, bulk of the interest payment related to foreign currency loans and short term credits/suppliers' credit taken for import of crude and petroleum products. Significant increase in the amount of interest paid during 1990-91 and 1991-92 was mainly due to the fact that the Company on its own strength had to raise foreign exchange resources for importing crude and petroleum products. But as the imports were done on behalf of the oil industry, the Company was adequately compensated for it. It invested the surplus rupee funds and earned higher rates of interest than what it paid on foreign currency loans/suppliers' credit. In fact, as already mentioned in Para No.7.2.4, the Company surrendered Rs. 566.89 crores to the OCC pool accounts during 1992-93 to 1994-95 being the difference between interest income earned on investments out of funds availed under foreign currency loans and suppliers' credit and the actual interest cost incurred on such loans/credits.

7.2.6 The trend in interest income earned is also supported by the figures of investments shown in Para 7.1.5. The substantial increase in investments during 1989-90 and 1990-91 had resulted in corresponding increase in interest income during the following years, namely 1990-91 and 1991-92. Similarly, large scale disinvestments in 1991-92 as discussed in Para 7.1.6 above, culminated in reducing interest income during 1992-93.

7.3 Profitability Analysis

7.3.0 The operating profit of the Company, after showing a jump of 40.25 percent in 1989-90 over 1988-89, remained almost stagnant during 1990-91 and, increased marginally during 1991-92 by 3.3 percent and by 7.7 percent during 1992-93. It again increased substantially by 29.06% in 1993-94 and by 17.49% in 1994-95.

7.3.1 Both 'profit before extra ordinary/prior period adjustments' and net profit declined during the year 1992-93 after having continuously increased over the four year period from 1988-89 to 1991-92. These increased again during the subsequent two years 1993-94 and 1994-95.

7.3.2 The return on networth had been showing a continuous decline after the year 1988-89 (except a slight improvement in 1994-95). This was because the profit earned on the incremental networth was reducing year after year indicating lower growth.

7.3.3 The Company maintained (July 1994) that a number of distortions in the working results and profitability were caused by the administered pricing mechanism owing to the following:-

a) retention margins were fixed for a pricing cycle of three years and there was delay and adhocism in revision of retention margins which affected the working results from year to year;

b) incentive claims for improvement in production were admitted by OCC retrospectively and accounted for only in the year of approval as per the accounting policy; and

c) there were revisions in pricing parameters from retrospective dates which necessitated substantial adjustments.

7.3.4 The Company also stated (November, 1995) that another factor responsible for decline in the return on networth was dues from OCC which went up substantially during the years 1990-91 to 1992-93. While OCC paid interest at 10.5%, IOC had to borrow funds at higher rates.

7.3.5 The drop in the 'net profit' as well as 'profit before extra ordinary/prior period adjustments' during 1992-93 was mainly due to a substantial reduction (Rs. 127.94 crores) in dividend income from units of the Unit Trust of India following large scale disinvestments during 1991-92.

7.4 Analysis of main items of extra-ordinary income and expenditure

An analysis of the main items of extra-ordinary income and expenditure is given in Annexure -IV.

7.5 Ratio Analysis

7.5.0 The table below indicates the trend of certain key financial ratios and performance indicators of the Company during the last seven years ending 1994-95.

RATIOS	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
Debt Equity Ratio (Long term debts/ shareholders fund)	0.03:1	0.12:1	0.14:1	0.26:1	0.29:1	0.19:1	0.27:1
Current Ratio (Current assets to current liabilities)	1.27:1	1.55:1	1.69:1	1.22:1	1.89:1	1.87:1	1.43:1
Liquidity Ratio (Quick assets to current liabilities)	0.46:1	0.94:1	1.04:1	0.80:1	1.43:1	1.10:1	0.74:1
Dividend pay-out ratio	0.05:1	0.04:1	0.04:1	0.05:1	0.07:1	0.06:1	0.10:1
PERCENTAGES							
Operating Profit to Sales	3.47	4.22	3.73	3.64	3.35	4.42	4.33
Gross Profit to Sales	2.53	2.09	0.34	0.73	1.79	2.66	2.66
Profit After Tax to Net Worth	25.83	25.54	21.83	19.24	14.35	14.19	15.69
Sundry Debtors to Sales	2.35	2.87	2.69	4.46	4.46	5.05	4.48

The debt equity ratio was low indicating the company's capacity to borrow more funds, if required, for their projects.

7.6 Division-wise profit

7.6.0 The table below gives the Division wise profits before dividend income, interest (net), extra ordinary/prior period items and tax:-

Rs. in Crores

	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
Refinery	190.30	334.73	350.91	345.03	296.08	450.32	554.70
Marketing	271.77	314.60	306.57	335.37	460.55	568.37	667.24
Pipelines	55.16	71.14	65.46	65.89	38.07	20.89	21.35
R&D Centre	1.58	0.86	(2.62)	(0.08)	(0.44)	(0.66)	1.24
Assam Oil Dn.	9.51	16.09	10.84	7.04	6.42	7.38	(3.67)
Registered Office (*)	(2.00)	0.75	(0.79)	1.92	7.33	(8.80)	(7.10)
Corporate	526.32	738.17	730.37	754.97	808.01	1037.50	1233.76
Share of Marketing Division in the overall profit (%)	51.63	42.62	42.00	44.42	57.00	54.78	54.08

(*) This represents the adjustments made in the registered office in respect of such items which are not allocable to other divisions.

7.6.1 The Marketing Division was one of the main contributors towards the overall profits of the Company. While the profits of the Marketing Division showed an increase of 37.3 percent in 1992-93 over 1991-92, 24.11% in 1993-94 over 1992-93 and 16.77% in 1994-95 over 1993-94, there were marked declines in the profit of refineries division during 1992-93 and in the profit of pipeline division since 1992-93. This was mainly due to:-

1) Revision in standard product pattern;

2) Revision in margin on account of surrender of networth variation and reduction in escalation claim;

3) Increase in the operating expenses;

4) Increase in extra ordinary/prior year expenditure and variation in interest during the year.

7.6.2 A detailed analysis of the financial position and working results of Marketing Division is brought out in succeeding paragraphs 7.7 and 7.8 respectively.

7.7 **Financial position of Marketing Division.**

7.7.0 The data relating to financial position of Marketing Division of the company for the last seven years ending 1994-95 is summarised below:

(Rs. in crores)

SOURCES OF FUNDS:	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
1. Allocated Share Capital	17.46	17.46	17.46	17.46	17.46	17.46	- *
2. Reserves & Surplus	962.98	1178.18	1494.28	1879.19	2274.01	3076.50	3626.16
3. Total shareholders fund	980.44	1195.64	1511.74	1896.65	2291.47	3093.96	3626.16
4. Borrowings(including Inter-Region Balances)	2034.02	5385.95	6808.69	3382.54	5922.47	0.43	1.76
Total	3014.46	6581.59	8320.43	5279.19	8213.94	3094.39	3627.92
APPLICATION OF FUNDS:							
1.a. Gross Block	1113.67	1391.43	1651.47	1855.78	2197.76	2578.54	3086.16
b. Less: Depreciation	732.49	884.21	1041.97	1117.32	1277.84	1479.73	1770.32
Net Block (A)	381.18	507.22	609.50	738.46	919.92	1098.81	1315.84
c. Work-in-progress & Capital goods in stock	189.88	185.07	207.12	288.68	275.19	342.64	440.61
2. Investments	2516.63	5310.46	6465.81	4153.20	3721.78	-	-
Sub Total (B)	3087.69	6002.75	7282.43	5180.34	4916.89	1441.45	1756.45
3. a. Current Assets	1463.92	1558.02	2097.99	2325.69	2730.00	3187.06	3248.23
b. Loans & Advances	321.21	1112.44	2384.09	3207.84	4394.69	3284.24	2038.73
Total :	1785.13	2670.46	4482.08	5533.53	7124.69	6471.30	5286.96
Less: Current Liabilities & Provisions	1858.35	2091.61	3444.08	5434.67	3827.64	4818.36	3415.49
Working Capital(C)	(73.22)	578.85	1038.00	98.86	3297.05	1652.94	1871.47
Total (B+C) :	3014.47	6581.60	8320.43	5279.20	8213.94	3094.39	3627.92

* Since transferred to Registered Office.

7.7.1 The allocation of share capital between the Marketing and Refineries & Pipeline Divisions was on the basis of the existing share capital of the then Indian Refineries Limited and Indian Oil Company Limited at the time of their merger in September, 1964. The reserves and surplus of the respective Divisions are made up of the profits recorded by them. The profits of the respective divisions are, however, adjusted for dividend paid and income tax booked by the Company on the basis of their pre-tax profits for the year. The investment portfolio of the Company was handled by and accounted for in the books of the Marketing division. Reasons for fluctuation in the working capital have already been discussed earlier in para 7.1.8.

7.8 Working Results of Marketing Division

7.8.0 The working results of the marketing division for the last seven years ending 1994-95 are shown below:

(Rs. in Crores)

	1988-89	1989-90	1990-91	1991-92	1992-93	*1993-94	*1994-95
A. INCOME :							
i) Sale of Products	14662.61	16835.02	18367.83	19447.88	23037.36	22311.96	26248.67
ii) Other Income (Adjusted)	423.34	173.32	666.37	248.19	674.93	826.13	416.76
Total Income : (A)	15085.95	17008.34	19034.20	19696.07	23712.29	23136.09	26665.43
B. EXPENDITURE :							
i) Purchase of products & crude	11983.51	13567.61	15224.12	15827.19	19332.36	18270.85	20736.35
ii) Manufacturing expenses	1133.43	1272.74	1383.21	1555.86	1741.10	1953.88	1727.25
iii) Payment to employees	84.37	106.81	123.27	138.14	158.38	173.64	216.54
iv) Office Admn., Selling & Other expenses	88.97	106.35	117.46	151.68	184.35	197.19	222.23
v) Duties	1407.91	1482.96	1706.03	1567.13	1671.48	1748.74	2795.90
vi) Depreciation	119.35	159.79	176.32	123.58	167.31	227.24	307.56
Less: Transfer to Capital Account	3.36	2.52	2.79	2.88	3.24	5.02	7.64
Total:	14814.18	16693.74	18727.62	19360.70	23251.74	22566.52	25998.19

C. Operating Profit (A-B) (i.e. before Dividend, Interest, Extra-ordinary & Prior period adjustment & Tax)	271.77	314.60	306.58	335.37	460.55	571.57	667.24
Interest Paid	132.12	334.12	660.47	597.51	369.03	0.36	0.61
D. Gross Profit (Operating profit minus Interest paid)	139.65	(19.52)	(353.89)	(262.14)	91.52	571.21	666.63
Interest Income	117.54	231.34	542.32	555.81	400.76	31.42	20.15
Dividend Income	49.54	123.92	214.82	164.47	36.53	-	-
E. Profit before extra-ordinary/prior period adjustments	306.73	335.74	403.25	458.14	528.81	602.63	686.78
Extra-ordinary/ Prior period	61.62	40.66	24.27	118.57	127.24	69.91	172.84
F. Profit before Tax	368.35	376.40	427.52	576.71	656.05	672.54	859.62

* Above figures are based on the trasnactions pertaining to Marketing Division only and excludes impact of transactions/items handled for Corporate by Marketing Division.

There was a steady growth in the profit of the Marketing division over the years.

Marketing Cost

7.8.1 The table below shows the trend of increase in marketing costs for the five years ending 1994-95.

(Rs. in crores)

	1990-91	1991-92	1992-93	1993-94	1994-95
Marketing Cost					
Establishment Cost (Rs. in crores)	123.21	144.60	165.41	173.64	216.54
Office Admn., Selling & Distribution and others * (Rs. in crores)	158.00	197.06	235.98	275.83	320.85
Total Cost	287.21	341.66	401.39	449.47	537.39
Percentage increase over previous year	-	18.96	17.48	11.87	19.56

Sales (000 MT)	33244	34451	33829	36676	38629
Percentage increase over previous year (%)	-	3.63	4.00	-	5.33
Sales Value (Rs. in crores)	18367.83	19447.88	23037.36	22311.96	26248.67
Percentage increase over previous year (%)	-	5.88	18.46	-	17.64
Sales value per tonne (Rs.)	5525.15	5645.08	6429.81	6083.53	6795.07
Marketing cost per tonne (Rs./MT)	86.39	99.17	112.03	122.55	139.12

*** Excluding Commitment charges & Brokerage paid on PDs**

Note: The marketing cost comprises of establishment cost, consumable stores, repairs and maintenance, water, electricity & fuel and other office administration, selling expenses. These are covered by payment to employees, manufacturing expenses and office administration, selling and other expenses mentioned in the Para 7.8.0.

7.8.2 It would be seen from the above table that while the increase in sales in 1991-92 vis-a-vis 1990-91 was marginal, the increase in marketing cost was very high (18.89 percent during 1991-92 over 1990-91). During the period 1990-91 to 1994-95 the increase in the volume (Quantity) of sales was 16.20% whereas the cost has increased to 86.93%

7.8.3 The increase in the marketing cost was stated to be due to increase in establishment cost, rent etc.

7.8.4 Besides various items on which expenditure is incurred in the normal course of business and which showed a sharp increase over the last few years, the profitability of the Company was also affected by certain types of inadmissible/avoidable expenditure. Such expenditures are termed as under-recoveries and constitute an implicit loss for the Company.

7.8.5 The year-wise details of under-recoveries for the seven years ending 1994-95 are shown below:

(Rs. in crores)

1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
32.21	77.37	98.29	61.98	49.94	64.55	93.21

7.8.6 The details of major under-recoveries for the last seven years ending 1994-95 are given below:

(Rs. in crores)

	1988-89	89-90	90-91	91-92	92-93	93-94	94-95
1. Loss on delivery charges	(1.31)	4.36	11.98	17.64	32.57	46.70	60.28
2. Supply of LSHS to Gujarat Electricity Board (GEB)	20.41	21.52	21.74	20.59	(6.24)*	-	-
3. Supply of FO/LSHS to Assam State Elec. Board (ASEB)	3.51	5.52	5.43	4.28	4.39	3.73	5.68
4. LPG cylinder-Local movement	0.93	1.42	2.84	4.09	5.48	6.18	6.91
5. Road bridging cost	(3.00)	-	(2.40)	1.70	6.38	3.12	7.94
6. Demurrage	3.31	2.40	0.79	4.51	3.31	-	-
7. Coastal Freight	-	-	-	-	-	2.19	7.56

* As per the decision taken in the meeting by MOP&NG on 14.9.1992, GEB is being billed at the revised coal parity price w.e.f. 1.1.1991. The revised coal parity price is more than ex-refinery price plus marketing margin allowed by Rs. 90.26 per MT. Therefore, over-recovery of Rs. 6.24 crores has been accounted for the year ended March, 1993.

7.8.7 It could be seen from the above that the major under- recovery was on account of loss on delivery charges. Pricing norms allow recovery of Rs. 7 per KL on supplies within 'Free Delivery Zone' (FDZ) and 25 paise per KL/KM for supplies beyond FDZ. However, the actual cost of road transportation is much higher and the delivery charges reimbursed to the oil companies, have not been revised since 1984.

7.8.8 To maintain the supply line and to ensure that the consumers get the product, the Management stated (June 1994) that they had no option but to continue supplies by incurring additional cost and absorbing the differential under recovery, till the Govt. either agrees to reimburse such under recoveries from the Pool Account or increases the rate adequately to cover the current transportation cost.

7.8.9 The under-recovery under road bridging charges was due to bridging movement not authorised by OCC and high transportation cost.

7.8.10 The under-recovery in respect of sale of LSHS to the Gujarat Electricity Board arose mainly because of dispute in price, which had been continuing for quite some time. The prices had been revised w.e.f. 1.1.1991 and 1.1.1994 after the Company had taken up the matter with the Ministry. These enhanced revisions were to eliminate under recoveries.

7.8.11 In the case of sale of Fuel Oil/LSHS to ASEB, the Government fixed a provisional rate of Rs. 634.7 per MT upto 29.2.1986 and Rs. 872 per MT w.e.f. 1.3.1986. The Company suffered under-recoveries because the ex-refinery price fixed for those products was higher than the price fixed in this case by Government. The price has since been revised and the ASEB is paying Rs. 2130.78 per MT from 1 January, 1994 eliminating the under-recovery.

8. MATERIAL MANAGEMENT AND INVENTORY CONTROL

8.1 Material Management

8.1.0 Marketing Division of the Company undertakes construction of certain storage facilities for storing and marketing of petroleum products. Planning the work of construction, procurement of capital items, placing the work orders for executing the capital jobs, etc. are being done by Materials Department/Engineering Department of the Head Office at Bombay.

8.1.1 As per the Manual prepared in September, 1991, open tenders for all purchases/contracts exceeding Rs. 10 lakhs are invited except in the following cases :-

- **a)** Proprietary items/Monopoly items
- **b)** Items for which prices are statutorily controlled (like Cement, Steel etc.)
- **c)** Items covered under DGS & D rate contracts.
- **d)** Items for which decision has been taken to invite limited quotations from duly approved lists of suppliers.

8.1.2 The tenders are opened and accepted by duly authorised officers. Monetary limits have been prescribed by Delegation of Authority (D.O.A.) for acceptance of tenders by various functional managers/DGMs/GMs/EDs/Directors and Board of Directors. Since April, 1984 the contracts/orders for which approval of the Board is required are submitted to the Contracts Sub-Committee of the Board of Directors for approving the placement of orders and the same are put up to the full Board of Directors in subsequent meeting for information.

8.2 Procedure

8.2.0 The material management department of Head Office procures capital items for projects against specific indents from the functional departments. Since March, 1986 the procurement of material for LPG Schemes has been entrusted to LPG Department itself. The material department of regional offices also procure capital items and revenue items.

8.2.1 During 1987, a professional firm of Chartered Accountants was appointed to undertake a study on "Working Capital Management" of the Company, which included material management and inventory control of all units of the Company. The report submitted to the Board did not dwell much on material management nor give any recommendations for improvement of Inventory Control of Marketing Division.

8.2.2 There are four Central Inventory Points (CIPs) in each of four regions exercising inventory control.

8.3 Surplus Material

8.3.0 The periodical reports received from CIPs are analysed at regional level so as to identify the surplus/unserviceable/slow moving/non-moving items, etc. The Board, in 1984, approved "quantitative norms" for inventory of stores & spare parts, raw-materials, and finished products. There is, thus, a system of determining surplus stores at regular intervals and disposal of such stores is done after reviewing the requirement of other Regions. For this purpose, a software is being developed for monitoring the inventories of various capital items held at different locations.

8.3.1 The table below indicates the comparative position of itemwise inventory holding of Marketing Divn. for eight years ending 31st March, 1995 and percentage of total inventory to total sales of marketing division.

(Rs. in lakhs)

	As on 31st March									
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
1. Raw Materials	7388	6983	7539	7274	7419	9906	12147	13913	21335	19522
2. Stores & Spare parts	2078	1270	2001	1293	1776	1615	1514	2210	1969	2229
3. Stores-in-Transit	164	47	75	160	52	64	202	36	5	8
4. Stock of empty barrels & Tins	287	225	217	479	548	443	438	536	534	495
5. Stock-in-trade (Oil Stock)	72357	79775	81153	93878	82157	118020	104297	122344	150738	147497
6. Total Inventory	82274	88300	90985	103084	91952	130048	118598	139039	174581	169751
7. Total Sales	1059488	1202204	1384084	1466261	1683502	1836783	1944788	2303736	2231196	2624867
8. Percentage of 6. to 7. above	7.77	7.34	6.57	7.03	5.46	7.08	6.10	6.04	7.82	6.47

8.3.2 Although the inventory holding of the Marketing Division has come down from 7.77 percent of sales in 1985-86 to 5.46 percent in 1989-90, it increased again to 7.82 percent in 1993-94 and came down to 6.47 percent in 1994-95.

8.4 Idling and wastage of new LPG Cylinders - amount blocked Rs.247.01 lakhs and consequent loss of interest of Rs. 43.23 lakhs.

8.4.0 LPG Bottling plant at Kalyani (Calcutta) had a stock of 72,650 new empty LPG Cylinders as on 25.11.1987. This included 63,653 new cylinders lying in stock since 18.12.1986. The cylinders had been lying in the open for nearly one year. As a result, the cylinders of the bottom tiers of the stacks had dug into the soil and were rusted. Stacks being double tiered, 50 percent of the cylinders were apprehended to have rusted at the bottom.

8.4.1 Due to non-utilisation of these new cylinders for one year, the working capital blocked worked out to Rs. 247.01 lakhs @ Rs. 340 per cylinder and the interest loss on this capital worked out to Rs. 43.23 lakhs per annum @ 17.50 percent.

8.4.2 Since the daily rate of production of the plant was less than the serviceable empties received back from the distributors and the cylinders in circulation remaining more or less unchanged, the Management could have taken an early decision to transfer the new cylinders to the needy places. Had this been done, the Company could have saved Rs. 43.23 lakhs per annum.

8.4.3 The Management stated (June, 1994) the following reasons for increase in the inventory of new cylinders :-

1) For release of new connections/DBCs and for replenishment of cylinders for replacement.

2) The DBC releases were less during 1986-87, which contributed to inventory build up.

3) Improvement in the position of inventory of cylinders out of circulations from 4.44 percent to 3.23 percent which generated cylinders from within the already commissioned cylinders, reducing induction of new cylinders.

4) Additional cylinder receipt on account of eastern region plants.

5) Major plants at Durgapur and other plants at Jamshedpur and Balasore were under construction as such the cylinder requirements for release of new connections and DBCs to the concerned States were stored at Kalyani itself.

6) In the absence of adequate security arrangements at other plants these cylinders could not be stored elsewhere.

8.4.4 From the above it could be observed that the acquisition of cylinders and the schedule of construction of plants for which the cylinders were acquired were not planned and synchronised properly. As a result, cylinders were acquired much in advance of completion of bottling plants. Further, the Management in its reply also admitted that the cylinders were not stored properly.

9. MANPOWER ANALYSIS

9.1 Man Power:

9.1.0 The total man-power (officers and staff) employed by the company as a whole and comparative strength deployed in Marketing Division (excluding AOD) are given below for the last eight years as at 1st January each year upto 1995.

1st January	Officers	Staff	Total
1985			
Corporate	6465	24329	30794
Marketing	3064	11126	14190
	(47.39)	(45.73)	(46.08)
1986			
Corporate	6690	24494	31184
Marketing	3255	11655	14910
	(48.65)	(47.58)	(47.81)
1987			
Corporate	7004	24804	31808
Marketing	3426	11998	15424
	(48.91)	(48.37)	(48.49)
1988			
Corporate	7426	25158	32584
Marketing	3700	12399	16099
	(49.82)	(49.04)	(49.41)
1989			
Corporate	7858	25281	33139
Marketing	3991	12666	16657
	(50.79)	(50.10)	(50.26)
1990			
Corporate	8139	25185	33324
Marketing	4263	12734	16997
	(52.38)	(50.56)	(51.00)
1991			
Corporate	8282	25120	33402
Marketing	4312	12838	17150
	(52.06)	(51.11)	(51.34)
1992			
Corporate	8313	25218	33531
Marketing	4315	12961	17276
	(51.91)	(51.40)	(51.52)
1993			
Corporate	8330	25367	33697
Marketing	4306	13156	17462
	(51.69)	(51.86)	(51.82)

1994			
Corporate	8508	25439	33947
Marketing	4457	13085	17542
	(52.39)	(51.44)	(51.67)
1995			
Corporate	8679	25041	33720
Marketing	4468	13040	17508
	(51.48)	(52.07)	(51.92)

(Figures in brackets represent percentage of marketing staff to total staff).

9.1.1 The manpower deployed for marketing activities grew at a higher rate than the rate of growth of manpower for other activities. It also emerges from the above table that the officer to staff ratio was always higher in Marketing division than for the Company as a whole. The norms for manpower exist in the marketing division for the bottling plant and depots only, and no norms have been fixed for other activities.

9.1.2 An analysis of the actual manpower employed in the marketing Division vis-a-vis the sales revealed as under:

Year	Manpower employed as on 31st March	Sales* in MMT	Percentage increase in sale over previous year	Sales per employee (MT / E)	Percentage increase in sales per employee as compared to previous year
1986-87	15573	27.57		1770.37	
1987-88	16395	29.70	7.73	1811.53	2.32
1988-89	16763	30.45	2.53	1816.50	0.27
1989-90	17059	32.74	7.52	1919.22	5.65
1990-91	17101	33.24	1.53	1943.75	1.28
1991-92	17321	34.45	3.64	1988.92	2.32
1992-93	17507	35.83	4.00	2046.61	2.90
1993-94	17477	36.68	2.37	2098.53	2.54
1994-95	17506	38.63	5.33	2206.61	5.15

* <u>Note</u>: Sales excludes sales to IBP

9.1.3 An analysis of the total marketing cost of the Marketing division, manpower cost and marketing margin for the last seven years from 1988-89 to 1994-95 is shown in the table given below:

Year	Total marketing cost	Manpower cost	Marketing margin (gross)	No. of emplo-yees	Marketing Margin per employee (4/5) (Rs. in lakhs)	Average cost per employee (3/5) (Rs. in thousands)	Percentage of Manpower cost to total Mktg. cost (3/2x100)
	-----(Rupees in crores)---						
1.	2.	3.	4.	5.	6.	7.	8.
1988-89	327.80	84.37	595.51	16763	3.55	50.33	25.74
1989-90	400.66	106.81	747.71	17059	4.38	62.61	26.66
1990-91	446.87	123.27	808.80	17101	4.73	72.08	27.59
1991-92	447.07	138.14	801.64	17321	4.63	79.75	30.90
1992-93	548.96	158.38	998.03	17507	5.70	90.47	28.85
1993-94	449.47	173.64	1221.73	17477	6.99	99.35	38.63
1994-95	537.39	216.54	1490.61	17506	8.51	123.69	40.29

9.1.4 From the above it would be seen that the percentage of manpower cost to total marketing cost has increased from 25.74 percent in 1988-89 to 40.29 percent in 1994-95. The average cost per employee has also increased from Rs.50.33 thousands in 1988-89 to Rs.123.69 thousands in 1994-95.

9.2 Value added per employee

9.2.0 The following table indicates details of value added per employee and cost per employee of the Company as a whole during five years upto 1994-95.

		1990-91	1991-92	1992-93	1993-94	1994-95
a)	Value Added (Rs./lakhs)	2291	2413	2221	2487	3333
b)	No. of employees at the end of the year	33303	33434	33829	34035	33589
c)	Value added per employee (Rs./lakhs)	6.88	7.22	6.57	7.31	9.91
d)	Establishment cost per employee (Rs./lakhs)	0.74	0.82	0.94	1.00	1.27

9.2.1 There was a sharp fall in value addition per employee during 1992-93 mainly due to reduction in interest income arising out of disinvestment of funds. The value addition per employee, however, showed a marked increase in 1994-95 because of improvements in production and operation and receipt of a substantial amount as retention margin during the year.

According to Management, the establishment cost per employee has gone up primarily due to impact of Mini Long Term Settlement (LTS) with staff and inflationary trend.

BPMathur

(B.P. MATHUR)
Deputy Comptroller and Auditor General
- cum - Chairman, Audit Board

New Delhi
The

Countersigned

(C.G. SOMIAH)
Comptroller and Auditor General of India

New Delhi
The

Annexure-I

(Referred to in Para 1.4.0)

CHRONOLOGY OF EVENTS IN LIBERALISATION OF PETROLEUM SECTOR

JULY, 1991	DECANALISATION OF BASE OIL, BENZENE, TOLUENE AND OTHER PETROCHEMICALS.
	DEVALUATION OF INDIAN RUPEE. EXCHANGE RATE OF 1 USD INCREASING FROM APPROX. RS.19 TO RS.26.
FEBRUARY, 1992 (Budget 1992)	INCREASE IN SPECIAL EXCISE DUTY FROM 10% TO 15% ON PETROCHEMICALS.
	INCREASE IN BASIC EXCISE DUTY ON BASE OILS FROM RS.3675 PMT TO RS.4000 PMT.
	WITHDRAWAL OF EXCISE DUTY TOTALLY ON LUBRICANTS HAVING MORE THAN 75% MINERAL OIL CONTENT.
	INTRODUCTION OF PARTIAL CONVERTIBILITY WITH TWO FOREX RATES - OFFICIAL AND MARKET DETERMINED.
	WHEREAS CRUDE WAS MADE AVAILABLE AT OFFICIAL RATES, LPG & BASE OIL WAS MADE AVAILABLE AT MARKET-DETERMINED RATES. PERMISSION TO JVCs FOR EXPLORATION AND DEVELOPMENT OF OIL FIELDS, AND PRODUCTION, REFINING AND MARKETING OF OIL AND GAS.

REDUCTION IN IMPORT TARIFF AS UNDER:

CAPITAL GOODS USED IN REFINING	FROM 80.00% TO 30.00%
BENZENE	FROM 40.00% TO 25.00%

15 SEPTEMBER, 1992	INCREASE IN SELLING PRICES OF FORMULA PRODUCTS/TRANSFER PRICES OF FREE TRADE PRODUCTS BY IMPOSITION OF A LEVY TO BRING THEM AT PAR WITH LANDED COST OF IMPORTS.
31 DECEMBER 1992	DECANALISATION OF NAPHTHA.
FEBRUARY 1993 (BUDGET 1993)	FULL CONVERTIBILITY OF RUPEE
	OIL COMPANIES TO PURCHASE FOREX FROM MARKET FOR PURCHASE OF CRUDE AND OTHER PETROLEUM PRODUCTS. INCREASE IN EXCISE DUTY ON BASE OIL FROM RS.4400 PMT TO RS.5000 PMT. RUPEE SETTLES AT APPROX. RS.31.50 PER USD. ABOLITION OF SPECIAL EXCISE DUTY AND RATIONALISATION OF DUTY STRUCTURE.

REDUCTION IN IMPORT TARIFF AS UNDER:

	FROM	TO
BASE OIL	90.00%	85.00%
LPG	105.00%	85.00%
LSHS	105.00%	85.00%
BENZENE	25.00%	15.00%
TOLUENE	85.00%	40.00%
PROPYLENE	80.00%	15.00%
CAPITAL GOODS USED IN REFINING	30.00%	25.00%

28 APRIL, 1993	DECANALISATION OF SKO, LPG, LSHS & LUBES
1 NOVEMBER, 1993	PRICE DECONTROL OF ALL GRADES OF LUBRICANTS SUPPLY OF BASE OIL TO OIL COMPANIES ON IMPORT PARITY BASIS.
3 NOVEMBER, 1993	ABOLITION OF ALL SURCHARGES ON FREE TRADE PRODUCTS REVISION IN TRANSFER PRICES OF STREAM/FEED/FUEL FROM WHICH SUCH FREE TRADE PRODUCTS ARE PRODUCED.
12 JAN. 1994	REDUCTION OF CUSTOMS DUTY FOR LPG FROM 85% TO 25%.
	INCREASE IN LPG (DOMESTIC) PRICE BY RS.1056.34 PMT (RS.15/- PER CYLINDER).
14 JAN. 1994	REDUCTION IN LPG (DOMESTIC) PRICE BY RS.352.11 PMT (RS.5/- PER CYLINDER).
2 FEB. 1994	INCREASE IN EX-STORAGE POINT PRICE OF MS/HSD/LDO AS FOLLOWS:

MS	RS/KL	1000
HSD	RS/KL	750
LDO	RS/KL	750

BUDGET 1994	REDUCTION IN CUSTOM DUTY FOR LPG FROM 25% TO 15%
	CUSTOM DUTY ON OTHER PETROLEUM PRODUCTS INTRODUCED/PEGGED AT 30% EXCEPT NAPHTHA AND SKO (NIL DUTY)

	EXCISE DUTY ON PETROLEUM PRODUCTS MADE AD VALOREM AS FOLLOWS:	
	MS/SBP/HEXANE	20%
	OTHER PRODUCTS	10%
	MODVAT BENEFIT EXTENDED TO PETROLEUM PRODUCTS AND CAPITAL GOODS.	
JULY 1994	DECANALISATION OF ATF, BITUMEN AND FURNACE OIL (IMPORT IS PERMISSIBLE ONLY BY HOLDERS OF SPECIAL IMPORT LICENCE)	
24 NOV 1994	REVISION OF REFINING COST AND MARKETING MARGINS OF GUJARAT REFINERY CONSEQUENT UPON COMMISSIONING OF HYDRO CRACKER PROJECT :-	
	1-1-1994 TO 31-12-1994	RS.369.20/MT.
	FROM 1-1-1995.	RS.366.30/MT.
MARCH 1995	BUDGETARY CHANGES REDUCTION IN CUSTOM DUTY BENZENE FROM 15% TO 10% TOLUNE FROM 30% TO 20% RPC FROM 30% TO 20% CPC WILL ATTRACT 30% **AD VALOREM** MODVAT RELIEF IS PROVIDED FOR CAPTIVE CONSUMPTION OF PETROLEUM PRODUCTS. THIS CHANGE IS APPLICABLE TO ALL REFINERY UNITS. PETROLEUM PRODUCTS EXCLUDING SBP SPIRIT IS-2710.11, 2710.12 AND 2710.13 AND M.S. (EXCEPT NGL) 2710.19 AND HSD 27.10 MANUFACTURED AND USED WITHIN THE FACTORY OF PRODUCTION OR FINAL	

PRODUCTS FALLING UNDER CHAPTER 27 OR 29 OR 34 OR 38 ARE EXEMPTED FROM THE EXCISE DUTY.

MARCH 1995 — OIL COMPANIES PROVIDING FACILITIES TO AIRLINES FOR IMPORT OF ATF UNDER SIL WOULD CONTRIBUTE AN AMOUNT OF RS.3292 KL TOWARDS C&F SURCHARGE TO THE POOL ACCOUNT FOR HANDING SUCH IMPORTED ATF. THIS SURCHARGE WOULD BE APPLICABLE RETROSPECTIVELY FOR IMPORTS WHICH HAD ALREADY MATERIALISED.

APRIL 1995 — INCREASE IN RAILWAY FREIGHT FROM 1/4/1995 ON PETROLEUM PRODUCTS SHOULD BE PASSED ON TO CONSUMER FROM 8/4/1995. THIS WOULD NOT BE DEBITED TO POOL ACCOUNT.

25 MAY 1995 — CONSEQUENT UPON RATIONALISATION OF LPG CATEGORIES AGAINST SIX EXISTING CATEGORIES LPG WILL BE SOLD IN 3 CATEGORIES VIZ.

1) LPG (PACKED) DOMESTIC.
2) LPG (PACKED) NON DOMESTIC.
3) LPG (BULK)

EXISTING TWO CATEGORIES OF NON DOMESTIC (PACKED), ESSENTIAL AND NON-ESSENTIAL WERE MERGED. LPG (BULK) ESSENTIAL AND NON-ESSENTIAL WERE MERGED.

ANNEXURE - II (Refer to in Paragraph 1.5.0)

Operations			1989-90			1990-91			1991-92			1992-93			1993-94			1994-95		
Physical		Unit	Wt.	High	Low	Wt.	High	Low	Wt.	High	Low	Wt.	High	Low	Wt.	High	Low	Wt.	High	Low
Refinery Crude Throughput	Target	Million Tonnes	0.20	22.750	21.840	0.15	23.645	22.819	0.15	23.800	23.033	0.08	24.100	23.256	0.08	24.50	23.28	0.08	24.6	23.68
	Actual			23.530			23.742			24.294			24.313			24.744			25.163	
Market Share	Target	%age		58.2	55.9		58.26	55.93		57.00	54.77		*	*		*	*		*	*
		Mil.Ton	0.15	30.617	29.392	0.09	33.508	32.168	0.07	31.2	*		*	*		*	*		*	*
	Actual	%age		57.5			57.4			56.7										
LPG Bottling exc.hospitality	Target	'000 ton	0.10	859.4	825.0	0.10	969.0	930.2	0.03	993	953	0.03	1127	1087	0.02	1275	1220	0.01	1364	1264
	Actual			962.7			1021.0			1159.58			1258.20			1376.12			1474.59	
Pipeline Throughput	Target	Mil. ton.	0.10	19.802	19.010	0.10	19.601	18.896	0.10	20.118	19.313	0.05	20.119	19.314	0.03	23.000	21.900	0.03	23.3	22.2
	Actual			20.89			21.36			22.50			23.618			24.121			24.465	
Financial																				
Profit before interest (net), deprn. & tax	Target	Rs. in crores	0.20	730.92	672.45	0.15	794.20	730.67	0.25	730	690	0.50	865	825	0.20	1010	970	0.20	1313	1270
	Actual			1171.29*			945.07*			998.87*			1141.83*			1420.22*			1950.1*	
Net Profit/ Capital Employed	Target	%age	•												0.30	9.09	8.54	0.30	9.14	8.70
	Actual												10.8			11.00			18.6	

* Excludes dividend income for respective years as given under D in para 7.2.0

Annexure-III

(Referred to in Para 2.2.2)

ADMINISTERED PRICING POLICY FOR PETROLEUM PRODUCTS

1. INTRODUCTION

The pricing of petroleum products in India is governed by the administered pricing system based on the accepted recommendations of the Oil Pricing Committee appointed from time to time. Generally, the Pricing Committees comprise of eminent persons belonging to various sectors and officials from various Govt. Departments such as Department of Economic Affairs, Ministry of Finance, Planning Commission, Cost Accounts Branch of Ministry of Finance, Administrative Ministry, OCC and RBI etc.

2. PRINCIPLES

* Fixation of selling prices of petroleum products is done under the "Administered Pricing Scheme" of the Govt. of India. The criteria followed for fixing administered prices are:

  - Products which are essential for common man should be brought under an administered pricing system.

  - High volume products should be administered under the pricing system in the overall public interest.

* Petroleum products are divided into the following categories for the purpose of administration of pricing:

  - Formula products (viz. MS, HSD, SKO, ATF, FO, etc.) whose ceiling selling prices are fixed.

- Other products (such as Benzene, Tolune, MTO, Lubes etc.) whose prices are determined by and large by market forces or through negotiations between oil companies and bulk industry consumers (coverage about 3%).

* Each Refinery/Pipeline/Marketing function is considered separate pricing centre.

* The administered pricing is based on the retention concept which ensures a return on capital employed. Capital employed, comprising of net fixed assets and normative working capital, is bifurcated between net worth and borrowings. Return is allowed at 12% net of tax on net worth and at actual interest rates on borrowings. Working Capital is allowed on a normative basis.

* Operating cost is allowed on a normative basis. Variations for major factors like Long Term Settlement with employees (LTS), Govt. levies etc. are compensated separately.

* Returns at the prescribed levels are available to the Oil Companies if they achieve the prescribed parameters, viz:

  Crude Throughput/Pipeline Throughput
  Production Pattern
  Sales
  Fuel & Loss
  Normative Working Capital
  Operating Cost.

* The crude oil cost which forms the bulk of total cost is insulated from the fluctuation of international prices by means of a pool accounts mechanism so that the net cost to the refinery is independent of whether it is processing imported or indigenous crudes. Variations in the prices of imported and indigenous crudes are adjusted in the Government-controlled pool account up to the base level built into the selling price of products.

* Refineries transfer the refined products to Marketing based on the ex-refinery price fixed for each product which is common for all refiners of a particular product.

* The ex-refinery price is based on the weighted average of the retention price of the product of all the refineries.

* The build up of ex-refinery prices is presented in the attached Appendix-I for better understanding.

3. CEILING SELLING PRICE TO CONSUMERS

Ex-storage ceiling selling prices of products to the consumers are evolved from ex-refinery onwards. The following elements are added into the ex-refinery prices in order to calculate the ex-storge ceiling selling prices (Appendix-II).

i) Custom/Excise Duty
ii) Marketing Margin
iii) Surcharge
iv) Product Price Adjustment (PPA Element)

After adding excise duty, marketing margin and surcharges to the ex-refinery prices of the products, a set of product prices are arrived at, which are readjusted for the purpose of charging the consumer. This readjustment, which is based on distribution equity and which reflects Government's policies to supply certain products like SKO, LPG etc. at subsidised rates to the consumer, is carried through product price adjustment (PPA). The amount of subsidy to be provided on a product is deducted from the price of that product and the deduction is shown as minus PPA against the price of that product. The burden of this subsidy is passed on to other product(s) by increasing its price through PPA i.e. against the price of that product, the cross subsidy element is shown as plus PPA and added to the price. To put it briefly, PPA is a medium through which subsidisation/cross subsidisation of product prices takes place. PPA is also used for selective increases in the prices of some products viz. MS to curtail demand or generate resources.

Thus, the ex-storage point price of each product is the sum total of all the elements mentioned above, including plus or minus PPA. Consumer pays this price plus freight and local levies. In addition to the elements mentioned above, in the case of Bitumen, LPG and Wax, filling and packing charges are also included.

4. PRIMARY & SECONDARY PRICING POINTS.

Primary

For the purpose of uniformity in consumer pricing (excluding freight and local levies), pricing points have been fixed for petroleum products. Each pricing point has an assigned pricing zone. The producer's location is fixed as a primary pricing point, while the port installations at Goa, Okha, Kandla and Calcutta as well as pipeline terminal at Sabarmati are secondary pricing points. The price of petroleum products at all primary points will be uniform. The price at locations within the pricing zone assigned to a pricing point will be the ex-storage point price plus cost of transportation to that location.

Currently, all the refineries are primary pricing points for controlled products.

Secondary Pricing Points

The port installations at GOa, Okha, Kandla, and Calcutta as well as pipeline terminal at Sabarmati, are secondary pricing points. Each of these secondary pricing points has also been assigned distinct pricing zones. The pricing zones attached to Goa, Okha and Kandla are restricted to their local limits.

While ex-storage price will be the price at a primary pricing point, the price at secondary pricing point will be arrived at by adding the element of transportation cost thereto on a predetermined basis.

5. MARKETING MARGIN INCLUDING RPO & AIR-FIELD CHARGES

Marketing companies operate on retention concept basis. The actual cost data for past 3 years and projection for future pricing period submitted by marketing companies are moderated after detailed examination by Pricing Committee/OCC and product-wise marketing margin is fixed for each marketing company. The weighted average of the retention margins for all the oil companies for each product is adopted for price build up of ex-storage point price. The difference between the retention margin of each company and the weighted average marketing margin included in the price build up is adjusted in the pool account.

On the basis of detailed review of cost data of marketing companies and other related relevant factors, the unit cost of marketing for different functions is fixed by OCC. The individual marketing company is allowed to retain the marketing margin as per retention concept and the weighted average of the retention margin is recovered from the price build up. The different functions under which such margins are allowed are as under:

A. Installation, Distribution and Administration

a. Common Cost

Under this head the operating expenses and depreciation is taken into consideration. The operating cost under each head of Installation/Distribution and Admn. is as per data submitted by Oil Companies and Final rate is based on recommendations of pricing committees.

b. Specific Cost

The unit rate of product loss for installation and distribution on an industry basis is compensated under this head. The rate is per selling unit of each product.

c. Return on capital employed

The reward for use of capital @ 12% post tax on actual net worth and weighted average rate on actual interest on borrowings has been provided under this head. The capital employed consists of net fixed assets (Gross Block minus Depreciation) and normative working capital.

B. Retail Pump Outlets (RPO)

The operating expenses towards sale of MS, HSD through RPOs and return towards facilities provided at RPO are compensated to individual companies on retention concept.

C. Air Fuel Station (AFS)

The sale of ATF/AV Gas to aircraft is on delivered basis at the AFS. This element is towards compensation for such function.

D. LPG Filling

Uniform LPG filling charges are recovered from the price build up and for each marketing company filling cost (operating expenses plus return) has been fixed for bottling of LPG at its own plant. Individual oil companies to retain the cost as per retention concept in respect of return, the operating cost being uniform in the industry.

6. INCENTIVES

Pricing Mechanism provide incentive for efficiency and disincentives for inefficient operations. The following are the factors on which incentives are provided for efficient operations:

a) Improvement in actual throughput as compared to the standard crude throughput fixed by OCC/Govt.

b) Improvement in the yield pattern as compared to the standard product pattern. For the purpose of calculation, the following adjustments are carried out.

- Variation in crude mix as compared to the standard crude mix.
- Incremental/decremental crude throughput based on the formulae for incremental/ decremental yields.
- Govt. directives etc.

c) Reduction in Fuel & Loss.

d) Reduction in Ocean Loss.

e) Increase in Sales.

f) Increase in pipelines throughput as compared to the standard level.

g) Increase in the level of LPG/Bitumen filling as compared to the standard norms.

h) Improvement in the steel consumption for bitumen production (standard provides for 66 kgs. of steel per tonne of bitumen production).

i) Efficiency in the working capital management (any reduction in the actual working capital as compared to the standard norms would improve the profitability of the company)

j) Operating cost - any reduction in the operating cost as compared to the standard operating cost would improve the profitability.

7. INDUSTRY POOL ACCOUNTS

Industry Pool Accounts are managed by the Oil Coordination Committee/Government of India in such a manner that collections from surcharges on finished products generate resources adequate for the Pool Accounts to cover variations in the prices of indigenous/imported crude oil & products, exchange fluctuations, operating cost reimbursement claims, incentive claims, freight variations etc.

Appendix-I

BUILD-UP OF EX-REFINERY PRICES

IMPORTED CRUDE OIL | POOLED FOB | INDIGENOUS CRUDE OIL

+

FREIGHT

+

OCEAN LOSS

+

INSURANCE

+

WHARFAGE

+

AUXILIARY DUTY

=

DELIVERED COST OF CRUDE

REFINING COST

CHEMICALS & CATALYSTS UTILITIES,
CONSUMABLES SALARIES & WAGES,
REPAIRS & MAINTENANCE/OVERHEADS
DEPRECIATION, ETC.

+

RETURN ON CAPITAL EMPLOYED

=

RETENTION PRICE PER MT OF CRUDE THRUPUT

X

STANDARD THRUPUT

/

STANDARD PRODN. X INDICES OF EACH PRODUCT
X INDEX OF EACH PRODUCT

=

RETENTION PRICE PER MT OF PRODUCT

WT. AVERAGE RETENTION PRICE FOR EACH
PRODUCT ON INDUSTRY BASIS

+ RS.25.00

= EX-REFINERY PRICE

Appendix-II

EX-REFINERY PRICE

+

CUSTOM/EXCISE DUTY

+

MARKETING MARGIN

+

SURCHARGES

+

PRODUCT PRICE ADJUSTMENT

=

EX-STORAGE POINT PRICE

+

RPO CHARGES/SURCHARGES FOR MS/HSD

=

EX-RETAIL OUTLET PRICE
WITHIN FDZ

(excluding freight & local levies)

Annexure - IV
(Refered to in Para 7.4)

Analysis of main items of extra-ordinary income and expenditure

Year of Accounting	Period to which claim pertains	Brief description	Amount (Rs.in crores)
1989-90	1.4.1987 to 31.3.1989	Additional margin arising out of updation by OCC	80.90
	upto 31.3.1989	Interest payable to OCC on non-surrender of surcharge on supplies to GEB/ASEB.	(-)19.21
	*	Profit on sale/provision for loss on investment	2.53
	@	Establishment (Arrears of pay revision/Adhoc relief, LTS etc.)	(-) 2.90
		Others (OCC escalation claims for LTS etc.)	(-) 0.70
		Net income	60.62

1990-91		Interest		8.56
	*	Profit on sale/provision for loss on investment		18.38
	@	Establishment (Pay revision/adhoc relief etc.)		(-)42.1[illegible]
	7.4.1987 to 31.3.1990	Depreciation (The effect of change in charging depreciation for new additions from annual basis to prorata quarterly basis)		19.81
		Others (OCC escalation claims for LTS etc.)		22.10
			Net income	26.90
1991-92		Interest		(-)12.37
	*	Profit on sale/provision for loss on investment		9.03
	1.4.1989 to 31.3.1991	Irrecoverable sales tax (levied by State Govts. reimbursed by OCC from Pool A/c.		90.62
	@	Establishment	(-)25.19	

	2.4.1987 to 31.3.91	Depreciation (Effect of changing depreciation rates to fall in line with rates prescribed as per schedule XIV of Companies Act.	92.16	
		Other	2.17	
		Net income	156.42	
1992-93	1.4.1989 to 31.3.1991	Additional Margins arising out of updation by OCC		127.74
		Interest		3.55
	*	Profit on sale/provision for loss on investment		(-)16.29
	1.1.1991 to 31.3.92	GEB rate revision		36.16
	1.4.90 to 31.3.92	Guj. Revision of standard Ref. throughput in Gujrat & Mathura Refineries		(-) 72.67
	1.4.89 to 31.3.92	Math. Ref.		
	@	Establishment		(-) 21.65
		Depreciation		(-) 3.85
		Others		22.17
			Net income	76.16

1993-94	1.4.90 to 31.3.93	70% Adhoc margin	67.58
		Interest - OCC	(-)149.59
		Write-back of provision for loss in the cost of Investments	12.50
		Others	13.47
		Net Expenditure	56.04
1994-95	1992-93 to 1993-94	Balance 30% retention margin under administered pricing	307.60
		Return on additional working capital	49.62
		Interest differential surrenderable to Pool due to change in interest rates for the period upto 31.3.1994	(-)121.62
		Provision for loss in the cost of Investements.	(-) 8.33
		Profit on sale of Investments	12.61
		Others	30.94
		Net income	208.94

Note: @ This mostly represents arrears of Pay revision/ adhoc relief, LTS with staff etc. released during years relating to previous years.

* profit/provision for loss on investment has always been accounted as "extra ordinary" and therefore it does not pertain to any particular period.

GLOSSARY OF ABBREVIATIONS

AFS	Aviation Fuel Station
AOD	Assam Oil Division
APT	Additional Product Tankage
ASRTC	Andhra State Road Transport Corporation
ATF	Aviation Turbine Fuel
BL	Bill of Lading
BPC	Bharat Petroleum Corporation Limited
CBFS	Carbon Block Feed Stock
CE	Capital Employed
CIP	Central Inventory Point
DGS&D	Director General of Supplies and Disposal
DOA	Delegation of Authority
DP	Dangerous Petroleum
DPR	Detailed Project Report
DTC	Delhi Transport Corporation
ER	Eastern Region
ESC	Empowered Standing Committee
FO	Furnace Oil
FR	Feasibility Report
FTP	Free Trade Product
Govt.	Government
HPC	Hindustan Petroleum Corporation Limited
HSD	High Speed Diesel
IBP	Indo-Burma Petroleum
IOC(M)	Indian Oil Corporation (Marketing Division)
IOC	Indian Oil Corporation Limited
KL	Kilo Litres
LDO	Light Diesel Oil
LPG	Liquefied Petroleum Gas
LRP	Long Range Plan
LSHS	Low Sulphur Heavy Stock
MI	Main Installation
MMT	Million Metric Tonne
MOP&NG	Ministry of Petroleum & Natural Gas
MPDC	Multi Purpose Distribution Centre
MS	Motor Spirit
MT	Metric Tonne
MTO	Mineral Turbine Oil
NDP	Non-Dangerous Petroleum
NGL	Natural Gas Liquid
NRF	Notional Railway Freight
NR	Northern Region
NW	Net Worth
OCRC	Oil Cost Review Committee
OCC	Oil Coordination Committee
OEB	Oil Economy Budget
OIDB	Oil Industry Development Board
PADIT	Profit After Depreciation, Interest & Tax
PBDIT	Profit Before Depreciation, Interest & Tax

PDS	Public Distribution System
PDs	Public Deposits
PE	Phenol Extract
PIB	Public Investment Board
PPA	Product Price Adjustment
PWD	Public Works Department
R&D	Research and Development
RO	Retail Outlet
RTD	Round Trip Distance
SKO	Superior Kerosene Oil
SPE	Sales Plan Entitlement
SR	Sourthern Region
STU	State Transport Undertakings
TKDs	Taluka Kerosene Depots
TMT	Thousand Metric Tonne
TMTPA	Thousand Metric Tonne Per Annum
TNEB	Tamil Nadu Eletricity Board
TWs	Tank Wagons
UPSRTC	Uttar Pradesh State Road Transport Corporation
w.e.f.	with effect from
WR	Western Region

ERRATA

Page No.	Para No.	Line No.	For	Read
VIII	4.3.1	11	Company.	industry.
X	5.1.7	17	1984-95	1984-85
XI	6.2	9	ration	ratio
8	2.3.0	7	retricted	restricted
16	2.6.1	4	79651 MTs	79661 MTs
32	4.3.0	Table 88-89 Col.3	262	272
32	4.3.0	Table 88-89 Col.4	2092	2102
32	4.3.0	Table 88-89 Col.5	1994	1974
32	4.3.0	Table 88-89 Col.7	48.75	49.24
32	4.3.0	Table 89-90 Col.2	1806	1886
32	4.3.0	Table 89-90 Col.3	205	385
32	4.3.0	Table 89-90 Col.4	2221	2271
32	4.3.0	Table 89-90 Col.5	2260	2268
32	4.3.0	Table 89-90 Col.7	50.66	50.48
32	4.3.0	Table 90-91 Col.2	2120	2128
32	4.3.0	Table 90-91 Col.4	2501	2562
32	4.3.0	Table 90-91 Col.4	2454	2453
32	4.3.0	Table 91-92 Col.2	2573	2437
32	4.3.0	Table 91-92 Col.3	356	256
32	4.3.0	Table 91-92 Col.3	332	217
32	4.3.0	Table 91-92 Col.4	2905	2654
32	4.3.0	Table 91-92 Col. 5	2873	2650
32	4.3.0	Table 91-92 Col. 6	1471	1347
32	4.3.0	Table 91-92 Col.7	51.20	50.83

32	4.3.0	Table 92-93 Col. 4	2017	3019
32	4.3.0	Table 93-94 Col. 3	307	387
32	4.3.0	Table 93-94 Col.4	3169	3160
32	4.3.0	Table 93-94 Col. 4	3934	3034
32	4.3.0	Table 93-94 Col.4	1506	1586
32	4.3.0	Table 93-94 Col.7	49.50	49.53
32	4.3.0	Table 93-94 Col. 7	48.38	50.95
32	4.3.0	Table 94-95 Col.2	2848	2847
32	4.3.0	Table 94-95 Col. 3	574	594
32	4.3.0	Table 94-95 Col. 7	50.70	50.65
32	4.3.1	2nd & 3rd Line	except during the year 1993-94	--
34	4.4.1	Table 92-93 Col.2	52.00	52.80
34	4.4.1	Table 92-93, Col.2	61.10	61.18
44	4.9.1	Table	--	Rs.in lakhs on top of the table
49	5.1.5	Table 90-91 Col. Last	--	0.02 (0.06) (0.12 (0.06)
49	5.1.5	Table 91-92 Col. Last	--	0.05 (0.06) 0.00 (0.04)
49	5.1.5	Table 92-93 Col. Last	--	0.04 (0.04) (0.05) (0.03)
49	5.1.5	Table 93-94 Col. Last	--	0.05 (0.07) (0.17) (0.06)
49	5.1.5	Table 94-95 Col.Last	--	0.07 (0.08) (0.15) (0.07)