[Shri Subodh Hansda]

- Review by the Government on the working of the Bharat Aluminium Company Limited, New Delhi, for the year 1972-73.
- (ii) Annual Report of the Bharat Aluminium Company Limited, New Delhi, for the year 1972-73 along with the Audited Accounts and the comments of the Comptroller and Auditor General thereon.

[Placed in Library. See No. LT-6076/73.]

ANNUAL REPORT OF DEVELOPMENT COUNCIL OF AUTOMOBILES, AUTO-MOBILE ANCILLARY INDUSTRIES, ETC. FOR 1971-72

THE DEPUTY MINISTER IN THE MINISTRY OF HEAVY INDUSTRY (SHRI DALBIR SINGH): I beg to lay on the Table a copy of the Annual Report (Hindi and English versions) of the Development Council for Automobiles, Automobile Ancillary Industries, Transport Vehicle Industries, Tractors, Earthmoving Equipment and Internal Combustion Engines for the year 1971-72, under sub-section (4) of section 7 of the Industries (Development and Regulation) Act, 1951. [Placed in Library. See No. LT-6077/73.]

EMPLOYEES' PROVIDENT FUNDS (FIFTH AMDT.) SCHEME, 1973

THE DEPUTY MINISTER IN THE MINISTRY OF LABOUR (SHRI BALGOVIND VERMA): I beg to lay on the Table:

- (1) A copy of the Employees' Provident Funds (Fifth Amendment) Scheme, 1973 (Hindi and English versions) published in Notification No. G. S. R. 1249 in Gazette of India dated the 17th November, 1973 under sub-section (2) of section 7 of the Employees' Provident Funds and Family Pension Fund Act, 1952.
- (2) A statement (Hindi and English versions) showing reasons for delay in laying the above Notification.
 [Placed in Library. See No. LT-6078/73.]

COMMITTEE ON ABSENCE OF MEMBERS FROM THE SITTINGS OF THE HOUSE

MINUTES

SHRI S. C. SAMANTA (Tamluk): I lay on the Table Minutes of the Twelfth sitting of the Committee on Absence of Members from the Sittings of the House held during the current session.

12.16 hrs.

STATEMENT RE: FUEL AND LOSSES IN REFINERIES

THE MINISTER OF PETROLEUM AND CHEMICALS (SHRI D. K. BOROOAH): Since this is a 4-page statement, with your permission may I lay it on the Table?

श्री मधु लिमये (बांका): अध्यक्ष महोदय स वक्तव्य को पढा जाये। इस में पांच मिनट से ज्यादा समय नहीं लगेगा।

MR. SPEAKER: It is too long a statement. He may lay it on the Table.

SHRI D. K. BOROOAH: I lay the statement on the Table.

Statement .

I am grateful to the Hon'ble Member Shri Madhu Limaye for drawing my attention to the extent of refining losses in the process of refining of crude oil. This matter has been under constant review in my Ministry and I have had it looked into further with a view to ensuring maximum possible scrutiny of crude oil consumption/losses on this account.

2. Broadly speaking in the refining process some of the products derived from crude oil are utilised for generating heat for steam raising so that the various units such as the distillation column, vacuum units and other facilities can be operated. In many of the refineries particularly in the public sector refineries at Gauhati, Barauni, Koyali and Madras, some of the products derived from crude oil are also utilised for generating power and for this purpose captive power generation units have been set up.

Fuel and Losses

in Refineries (St.)

- 3. Broadly speaking the head "Refinery Fuel and losses" includes utilisation of hydrocarbons for generating heat for the refinery units and for generating captive power and also on account of a very small notional loss which is otherwise unaccounted for.
- 4. Quantities of refinery fuel used vary on account of variations such as type of crude oil processed, complexity of the refinery in regard to the number of primary and secondary processing units available at a refinery, the quality of the products made, storage and handling systems employed etc. Therefore large variations can be expected in the fuel consumed in various refineries.
- 5. Actual losses in the refinery are on account of again a wide variety of factors which include the inevitable filling and evaporation losses inherent in such volatile products, from storage tanks, loading losses, flare loss, losses from slop handling and recovery system, hydrocarbon lost in processing etc.
- 6. Almost all the world-over, refinery fuel and losses are clubbed together for accounting purposes, taken together as so much of the products not available for sale. For this reason, little information is available on losses actually incurred in refineries. One reference found in literature (Oil & Gas Journal of July 13, 1946, page 148) is that the refinery loss as distinct from refinery fuel, ranges from 0.55 to 1%. No data is available on whether this statement is specifically for a single refinery or a number of refineries.
- 7. In a paper presented to the United Nations Inter Regional Seminar on Petroleum and Refining in developing countries held in New Delhi during the period January 22 to February 3, 1973, Dr. Nelson, the well known international authority on oil refinery and table which has indicated the refinery fuel and losses in a number of countries. This table has been picked up from the International Petroleum Annual 1970 published by the US Bureau of Mines. The refinery fuel and loss percentage reported for various countries are as follows:

Argentina	_	5.4%
Bolivia	_	2.8%
Brazil	_	5.7%

Chile	— 5.5%
Peru	— 12.6%
Kuwait	— 6.3%
Turkey	— 5.0%
Libya	— 6.0%
Moroco	- 5.5%
India	- 5.0%
Indonesia	— 3.4%
Pakistan	- 5.8%
Phillipines	— 5.8%
Thailand	— 17.7%

- 8. There are reasons to believe that the very low percentage reported for Indonesia can be because of the use of Natural Gas also as part of the refinery fuel.
- 9. The figures of actual refinery fuel and less in Italy available from a publication of AGIP is 6.2% in 1971 and 6.4% in 1972. Since Italy has approximately a refining capacity of 150 million tonnes per year, these averages for fuel and loss are significant.
- 10. Individual refinery-wise fuel and loss for the year 1972 are given below:

Burmah-Shell	_	6.2%
Esso	_	4.5%
Caltex	_	7.4%
Gauhati	_	10.8%
Barauni	_	9.5%
Gujarat	_	7.0%
CRL	_	6.5%
MRL	_	10.9%

Gauhati, Barauni, Gujarat and Madras refineries have captive power stations.

- 11. The figure quoted by the Hon' ble Member of 7% obviously includes refinery fuel in addition to refinery losses.
- 12. In any case in view of very high prices of imported crude oil which account for more than two-thirds of our refining, we have to be extremely careful about any savings in fuel and losses that we can make. I had discussed this matter with the Soviet experts who designed and helped to build the two public sector refineries i.e. at Barauni and in Gujarat and they have argeed to sent a team of refinery experts to look into this problem at an early date.