Ref. No.: PF/9
August 13, 2014

Shri M. M. Chitale
Chairman
NACAS
Accounting Standards Board
Institute of Chartered Accountants of India
ICAI Bhavan, Indraprastha Marg, New Delhi-110 002

Sub.: Valuation of inventories - a submission

Dear Sir,

1. Preamble:

i. As you are aware, globally, efforts are directed at ensuring that the Profit & Loss Account presented by Corporates to their stake holders present a true and fair view of the profit or loss of the enterprise. Valuation of inventory plays a major role in the presentation of the true and fair view of profits of a going concern.

ii. It has been universally accepted that inventories of the enterprises should be valued at the lower cost and net realisable value. The revised International Accounting Standard - 2 (IAS-2) issued in 2003 by International Accounting Standards Board (IASB) discontinued last-in, first-out (LIFO) as a method of costing inventory for the purpose of valuation. This has initiated a lot of debate on the desirability of LIFO method of costing of inventories for valuation of inventories.

iii. What is under discussion, particularly in United States is, how the cost of inventories is to be arrived at - whether it should be first-in, first-out (FIFO), LIFO or weighted average method- so that the universally accepted formula of the valuation of inventory at lower of the cost and net realisable value could fairly represent the profit of a going concern.

Petroleum Federation of India
PHD House, 3rd Floor, 4/2, Siri Institutional Area, August Kranti Marg, New Delhi 110 016 Tel.: +91-11-26537483, 26537052, 26537069, 26535284, 26535216, 65654037
Fax : +91-11-26960240 E-mail : petrofed@petrofed.org Website : www.petrofed.org

2. Scenario in India

i. Valuation of inventories in India is governed by the accounting Standards issued by the Institute of Chartered Accountants of India. Thus, Accounting Standard - 2 (AS-2) issued by the ICAI deals with inventories. Earlier, under the Indian GAAP, LIFO Method of costing inventory was permitted and same was in line with the IAS - 2 pre-revision. The Standards in India, permitted a choice of Cost formulae for valuing inventories Viz first-in, first-out (FIFO), last-in, first-out (LIFO) and weighted average

ii. With a view to converge the financial reporting of Indian companies with the International Accounting Standards (IAS) issued by the International Accounting Standards Board, Indian accounting Standards (Ind AS) have been issued and hosted on the website of the Ministry of Corporate Affairs. The date from which these standards would come into force is yet to be notified. Each country mandates a standard that best suits its business interests. For example, in the United States of America (USA), the Generally Accepted Accounting Principles of USA (US-GAAP) permit the valuation of inventories on LIFO method of costing.

iii. However, as per Indian Accounting Standard, Ind AS - 2, in terms of paragraph 25, the cost of inventories shall be arrived at by using either the FIFO or weighted average cost formula to value the inventories at the lower of cost and net realisable value (paragraph 9 of the said Ind AS - 2).

iv. Thus, both AS - 2 and Ind AS - 2 and the IAS - 2, have shut the door on LIFO method of costing the inventories.

3. **Purpose of this submission**

This submission seeks to suggest that the options to 'cost the inventory' at LIFO or FIFO or weighted average method should be made available under law of the land, to businesses, so that businesses could choose the method that best suits their nature of business.

4. **FIFO Vs LIFO**

FIFO

i. The FIFO formula assumes that the items of inventory that were purchased or produced first are sold first, and consequently the items remaining in inventory at the end of the period are those most recently purchased or produced. (Refer para 27 of the Ind AS-2)

ii. Therefore, FIFO method of inventory valuation actually results in matching current revenues with historical costs, since the cost of goods sold is said to come out of opening stock and subsequent purchases in chronological order.

iii. 'Cost of goods sold' (value of opening stock plus purchases minus closing stock) computed when stocks are valued on FIFO basis thus tend to be historical costs- which is out of tune with the reality.

LIFO

iv. In order to arrive at realistic margins earned by trading, the cost of goods sold should be arrived at by computing current costs. Cost of goods sold would be at current costs if

inventories are valued by using the LIFO formula. This is because:

v. The LIFO method operates under the assumption that the last item of inventory purchased is the first one sold. In other words, LIFO method of inventory valuation results in matching current revenues with current costs and not historical costs;

vi. Inventories are current assets or circulating capital;

vii. Inventories are neither fixed assets nor investments;

viii. FIFO is typical of Capital Gains accounting; (please refer Section 45(2A) of the Income tax Act 1961, where, for arriving at Capital gains from sale of shares in Dmat form, FIFO shall necessarily be followed.) The method of "Matching historical costs with current revenue" which is the essence of FIFO basis of accounting, and, which is specific to accounting of Capital Gains on Fixed Assets or Investments CANNOT BE A BASIS FOR MATCHING COSTS AND REVENUE of Current assets;

ix. A trading account is based on the premise of 'Going Concern Concept' and hence the inventories of a trader that are sold by him are intended to be replenished, for, he wants to stay in the business of trading - He purchases to sell and sells so that he can purchase anew.

x. So, what a trader does is to effectively sell goods at market determined prices and buy goods to replenish those that have been sold, but the delivery for sale is out of stock in trade so

that the goods stored in the Godown are refreshed every day and they are always new.

xi. Thus, there are two cycles simultaneously, one of purchase and sale of goods which is at current prices & costs and another of receipt and delivery of goods which is a process of renewal of the 'expiry date' of the stock.

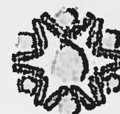
xii. The margin made on current assets has to be arrived at by comparing current revenues, which is a reality, with current costs and not unrealistic historical costs.

xiii. Since LIFO provides a matching of current sale prices with current costs, it ensures realistic margins, which is the prime objective of a trading account.

5. **LIFO and Petroleum refining and marketing sector:**

i. Presently the accounting standards allow two methodologies of inventory viz. weighted average and FIFO. Considering of the price volatility in petroleum industry, use of both the methods (FIFO and Weighted Average method) leave a considerable impact on the period earnings of the companies in case of a sudden increase or decrease in the international prices of feedstock or petroleum product prices.

ii. Let's illustrate this with an example. Assuming that a Refinery purchases crude oil at $100/bbl. & after refining it sells product at $ 110/bbl. (net of operating cost). In case at the beginning of the month the company has 1 mbbl inventory of



crude oil at $ 100/bbl. Assuming that the procurement during the month of 1 mbbl came at a cost of $ 95/bbl. and assuming a margin of 10$ was sold at $105/bbl though at current cost basis it has earned a margin of $10 mn, since the consumption happens on FIFO basis, the inventory will get valued only at $95/bbl. and hence the book profit will be reflected at only $5/bbl.

iii. As it normally happens in oil industry, this trend of falling or increasing prices is cyclical in nature and tends to continue over several business periods (months/quarters). During this period, the companies tend to show an extraordinary loss or profit to the extent that the value of their inventory is continuously getting reduced or increased depending on the direction in which the market is moving.

iv. In this situation, the only alternative available to the oil companies to manage the volatility in earnings is to protect the reduction in the value of inventory and consequent erosion in earnings is to resort to hedging. Since the protection is required for every period and in a falling market the hedging could become a continuous process.

v. In this sort of an environment, LIFO acts as a natural hedge against the volatility in the market as this enables the input material to be consumed at the current cost and hence the valuation difference between the opening inventory and the current market does not impact the earnings of the current period. Annexed hereto and marked as Exhibit-A is an illustration of the impact of FIFO and LIFO on the financial

results of a corporate. As can be seen from the illustration, in the rising trend, FIFO gives higher profitability whereas for the same set of facts, LIFO gives lower profitability, in tune with the current costs of raw materials which get reflected in higher product prices.

6. Submission

i. Thus, the adverse impact of FIFO in reflecting the current earnings of Refining and marketing sectors could be moderated to a large extent by resorting to hedging transactions; but hedging transactions cost time and money. In view of the fact that a natural hedge is available to Refining and Marketing sector if LIFO is adopted for valuation of inventory, it is submitted that an option should be available to this sector to adopt this method of valuation in arriving at their earnings.

ii. The same may kindly be considered favourably while notifying Ind AS-2.

Thanking you,

Yours faithfully,

A. K. Arora
Director General

Encl.: as above

Exhibit - A (ILLUSTRATION)

Inventory valuation under FIFO, LIFO and Weighted Average method

Date	Transactions	Units Purchased	Units Sold	Unit Cost / Sales price	Amount
01 Mar 2014	Opening balance	400		120	48,000
05 Mar 2014	Purchase	300		110	33,000
08 Mar 2014	Sales (A)		500	[illegible]	[illegible]
15 Mar 2014	Purchase	800		98	[illegible]
20 Mar 2014	Sales (B)		300	[illegible]	[illegible]
31 Mar 2014	Closing balance	[illegible]			

1) Inventory valuation - FIFO

Date	Transactions	Units Purchased	Unit Cost	Cost of Goods sold
1) Cost of Goods sold for 500 units				
01 Mar 2014	Opening balance	400	120	48,000
05 Mar 2014	Purchase	100	110	11,000
			(A)	[illegible]
2) Cost of Goods sold for 300 units				
05 Mar 2014	Purchase	200	110	22,000
15 Mar 2014	Purchase	100	98	9,800
			(B)	[illegible]
Closing balance				
15 Mar 2014	Purchase	500	98	[illegible]
Closing inventory		500		[illegible]

Income Statement Extract

Particulars	Amount	Comments
Revenue	[illegible]	
Closing Stock	[illegible]	
Cost of Goods Sold	[illegible]	
Profit	[illegible]	In the rising price trend FIFO gives higher profitability
BS Extract		
Inventory (BS)	[illegible]	

2) Inventory valuation - LIFO

Date	Transactions	Units Purchased	Unit Cost	Cost of Goods sold
1) Cost of Goods sold for 500 units				
05 Mar 2014	Purchase	300	110	[illegible]
01 Mar 2014	Opening balance	200	120	[illegible]
			(A)	[illegible]
2) Cost of Goods sold for 300 units				
15 Mar 2014	Purchase	300	98	[illegible]
			(B)	[illegible]
Closing balance				
01 Mar 2014	Opening balance	200	120	[illegible]
15 Mar 2014	Purchase	500	98	[illegible]
Closing inventory		[illegible]		[illegible]

Income Statement Extract

Particulars	Amount	Comments
Revenue	[illegible]	
Closing Stock	[illegible]	
Cost of Goods Sold	[illegible]	
Profit	[illegible]	In the rising price trend LIFO gives lower profitability
BS Extract		
Inventory (BS)	[illegible]	

3) Inventory valuation - Weighted Average Method

Date	Transactions	Units Purchased	Unit Cost	Cost of Goods sold
1) Cost of Goods sold for 500 units				
01 Mar 2014	Opening balance	400	120	48,000
05 Mar 2014	Purchase	300	110	33,000
		700	116	81,000
	Cost of goods Sold	500	116	[illegible]
	Closing inventory	200	116	[illegible]
2) Cost of Goods sold for 300 units				
08 Mar 2014	Balance b/f	200	116	[illegible]
15 Mar 2014	Purchase	800	98	[illegible]
		1000	102	[illegible]
	Cost of goods Sold	300	102	[illegible]
Closing inventory		[illegible]	102	31,214

Income Statement Extract

Particulars	Amount
Revenue	[illegible]
Closing Stock	31,214
Cost of Goods Sold	[illegible]
Profit	[illegible]
BS Extract	
Inventory (BS)	31,214