

**COMMITTEE ON PUBLIC  
UNDERTAKINGS  
(1975-76)**

(FIFTH LOK SABHA)

**EIGHTY-FOURTH REPORT**

**Action taken by Government on the recommendations  
contained in the Sixty-Fourth Report of the Com-  
mittee on Public Undertakings (Fifth Lok Sabha)**

on

**INDIAN PETROCHEMICALS CORPORATION LTD.  
MINISTRY OF PETROLEUM**



**LOK SABHA SECRETARIAT  
NEW DELHI**

*April, 1976/Chaitra, 1898 (Saka)*

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C O R R I G E N D A

EIGHTY FOURTH REPORT OF THE COMMITTEE ON PUBLIC UNDERTAKINGS (1975-76) ON ACTION TAKEN BY GOVT. ON THE RECOMMENDATIONS CONTAINED IN THE 64TH REPORT OF THE COMMITTEE ON PUBLIC UNDERTAKINGS ON INDIAN PETROCHEMICALS CORPORATION LTD.

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7	5	except	expect
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17	6	scheduled	schedule
18	2	shippage	slippage
18	2	executive	execution
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18-20		<u>Transfer</u> entire matter beginning with the Heading "Further inform- ation called for by the Committee" appearing at page 18 to "comments of the Committee". appearing at page 19 and <u>insert</u> it after "Reply of Government" at page 20.	
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**(1975-76)**

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18. Shri Jagdish Prasad Mathur\*
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21. Shri Sultan Singh
22. Pandit Bhawani Prasad Tiwary\*

**SECRETARIAT**

**Shri M. A. Soundararajan—Chief Financial Committee Officer**

**Shri K. S. Bhalla—Senior Financial Committee Officer**

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\*Ceased to be a Member of the Committee consequent on his retirement from Rajya Sabha on 2-4-1976.

**ACTION TAKEN SUB-COMMITTEE OF THE COMMITTEE ON  
PUBLIC UNDERTAKINGS**

(1975-76)

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  4. Shri Amarnath Vidyalankar
  5. Shri C. K. Jaffer Sharief
  6. Shri Damodar Pandey
  7. Shri Atal Bihari Vajpayee
-

## INTRODUCTION

I, the Chairman, Committee on Public Undertakings having been authorised by the Committee to submit the Report on their behalf, present this Eighty Fourth Report on Action Taken by Government on the recommendations contained in the Sixty Fourth Report of the Committee on Public Undertakings (Fifth Lok Sabha) on Indian Petrochemicals Corporation Ltd.

2. The Sixty-Fourth Report of the Committee on Public Undertakings (1974-75) was presented to Lok Sabha on the 25th April, 1975. Out of 31 recommendations contained in the Report, replies of Government to 26 recommendations were received in two batches and the last batch was received on 13-2-1976. Replies of Government to the remaining 5 recommendations are still outstanding.

3. The Report has been divided into the following five Chapters:

- (i) Report.
- (ii) Recommendations that have been accepted by Government.
- (iii) Recommendations which the Committee do not desire to pursue in view of Government's replies.
- (iv) Recommendations in respect of which replies of Government have not been accepted by the Committee.
- (v) Recommendations in respect of which replies of Government are awaited.

4. An analysis of the Action Taken by Government on the recommendations contained in the Report of the Committee is given in Appendix. It would be observed therefrom that out of the total number of recommendations made in the Report 61.3 per cent have been accepted by the Government. The Committee do not desire to pursue 19.4 per cent of the recommendations in view of the Government's replies. Replies of Government in respect of 32 per cent of their recommendations have not been accepted by the Committee. Replies of Government in respect of 16.1 per cent of their recommendations are still outstanding.

NEW DELHI;  
April 7, 1976  
Chaitra 18, 1898 (S)

NAWAL KISHORE SHARMA,  
Chairman,  
Committee on Public Undertakings.

## CHAPTER I

### REPORT

This Report of the Committee deals with the action taken by Government on the recommendations contained in the Sixty-Fourth Report (Fifth Lok Sabha) on Indian Petrochemicals Corporation Ltd., which was presented to the Lok Sabha on the 25th April, 1975.

1.2. Action Taken Notes have been received from Government in respect of 26 out of 31 recommendations contained in the said Report.

1.3. The Action Taken Notes on the recommendations of the Committee have been categorised as follows:—

(i) Recommendations|Observations that have been accepted by Government:

Serial Nos. 1, 2, 3, 8, 11, 14; 15, 16; 17, 19, 20, 23, 25, 26, 27, 28, 29, 30 and 31.

(ii) Recommendations|Observations which the Committee do not desire to pursue in view of the Government's replies:

Serial Nos. 4, 7, 12, 13, 18 and 24.

(iii) Recommendations in respect of which replies of Government have not been accepted by the Committee:

Serial No. 21.

(iv) Recommendations in respect of which replies of Government are awaited:

Serial Nos. 5, 6, 9, 10 and 22.

1.4. The Committee deprecate the delay on the part of the Government in furnishing replies to recommendations at Serial Nos. 5, 6, 9, 10 and 22. They would like the Ministry to take action on these recommendations expeditiously and bring it to the notice of Parliament.

1.5. The Committee will now deal with the action taken by Government on some of their recommendations.



## STATEMENT OF OBJECTIVES AND OBLIGATIONS

**Recommendation (Serial No. 3)**

1.6. The Committee noted that even though the Bureau of Public Enterprises had asked all the Public Undertakings as far back as November, 1970 to formulate a statement of their objectives|obligations clearly and communicate the same to the Government and even though the need for formulating such a statement was reiterated in the 40th Report (5th Lok Sabha) of the Committee on Public Undertakings on Role and Achievements of Public Undertakings, the Indian Petro-chemicals Corporation Ltd. had not so far formulated its statement of objectives|obligations in spite of the fact that IPCL was asked by the Ministry in 1971 to look into the matter. The Ministry admitted during evidence that in the ultimate analysis it was the fault of the Ministry and they should have pursued it more vigorously. The Committee were unhappy at this long delay and recommended that the Corporation/Ministry should finalise the statement of objectives|obligations of IPCL without any further delay and place it before Parliament.

1.7. In their reply, Government have stated that "instructions have already been issued to concerned authorities and further action is being taken for finalising the statement of objectives and obligations for placing before Parliament expeditiously."

1.8. The Committee are constrained to note that Government have taken too long a period to finalise the statement of objectives and obligations of IPCL. They reiterate that the Corporation/Ministry should finalise the statement of objectives|obligations of IPCL without any further loss of time \*and place it before Parliament at the earliest possible opportunity.

## SCHEDULED DATES OF COMPLETION OF PROJECTS

**Recommendation (Serial No. 15)**

1.9. The Committee stressed that delays as have occurred in the execution of Gujarat Olefins Project and its downstream units not only put up the cost and affected the profitability of the project but also contributed to delays in other developmental activities. The Committee recommended that Corporation should work out a realistic cost estimate and revised profitability of the Project and other down-stream units after taking into account all the factors and bring it to the notice of Parliament without any delay.

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\*After finalisation of the report but before its printing the Ministry informed that "the statement of objectives and obligations of IPCL is expected to be finalised by 30th April, 1976."

1.10. The Government in their reply stated that "the Corporation has worked out revised cost estimates and revised profitability studies for these projects, taking all the factors into consideration. These are under examination in the Government."

1.11. The Committee reiterate that the Government should examine the cost estimates and revised profitability in respect of each of these projects (Gujarat Olefins and its down-stream units) expeditiously and bring it to the notice of Parliament at an early date.

#### POLYESTER FILAMENT YARN PROJECT

##### Recommendation (Serial No. 16)

1.12. The Committee found that the selection of Karl Fisher and J.K. Technology for Polyester Filament Yarn Project had been made mainly on account of the advantage in foreign exchange and J.K.'s technical experts and facilities for training could be used.

1.13. The Committee recommended that the Corporation should take advantage of the collaboration in developing their own planning and designing with a view to attaining self-reliance in this field.

1.14. The Committee were informed that none of the equipments ordered for the project had yet become due for delivery and, therefore, the question of delay could not be assessed. The Committee stressed that a continuous watch should be kept on the progress being made by the fabricators of equipment so that necessary steps could be taken well in time to obviate any possibility of delays. They also desired that Corporation should draw lessons from their experience with the Gujarat Aromatics Project and ensure timely supply of equipment of good quality and the commissioning of the project on schedule after proper inspection and guaranteed performance.

1.15. In their further reply the Ministry have stated—

"PCL's objectives are to get the filament yarn project designed, installed and commissioned through a system of contracting with appropriate consultancy organisations and contractors and thereafter to operate the plant & sell the product to member cooperatives. PCL does not seek to build up expertise from within its own organisation for design of production plants. Planning of execution of the project is being done by PCL personnel in association with its prime engineering consultancy contractor viz.

EIL. Emphasis is placed on establishing suitable facilities and suitable expertise for rendering technical services to customers in handling and processing of filament yarn.

Apart from contractual provisions that equipment supplied are of suitable specifications and quality, inspection of equipment and materials during and after fabrication is being carried out by PCL's consultants *viz* EIL. PCL are using PERT techniques for control and monitoring of the time schedule for project implementation and commissioning."

1.16. The Committee note that planning of execution of the Polyester Filament Yarn Project is being done by the IPCL personnel in association with its prime engineering/consultancy contractor, viz., EIL. The Corporation had, however, not stated as to what steps it proposes to take to develop its own planning and designing with a view to attaining self-reliance in this field. The Committee would like to reiterate that the Corporation should take advantage of the collaboration in developing their own planning and designing with a view to attaining self-reliance in this field.

1.17. The Committee note that IPCL is using PERT techniques for controlling monitoring the time schedule for project implementation and commissioning. The Committee expect that while keeping a continuous watch on the progress being made by the fabricators of equipment necessary steps would be taken by the Corporation well in time to obviate possibility of delays. They would also reiterate that Corporation should draw lessons from their experience with the Gujarat Aromatics Project and ensure not only timely supply of equipment of good quality but also commissioning of the project on schedule after proper inspection and guaranteed performance.

#### PRICING POLICY

#### Recommendation (Serial No. 21)

1.18. The Committee recommended that the Corporation should take steps to reduce the cost of production by achievement of full rated capacity, stabilising production and keeping the overheads to the minimum. The Committee also recommended that Government/Corporation should consider fixing the prices on a fairly long term basis taking into account all the relevant factors and the Board should review the prices periodically to ensure that the prices were competitive and the price increase did not contribute to the inflationary trend. The Committee stressed that since petro-chemical

intermediates were the raw materials for a number of industries. Government should take effective measures to see that the prices of the petro-chemicals which were used as raw materials were reasonable and internationally competitive and the benefit of any reduction in the prices was always available to the common man.

1.19. The Committee found that the price of orthoxylene and mixed-xylene were higher than the landed price. The Committee would like that this aspect should be gone into the Government so that the prices of xylene were in accordance with the guidelines issued by Government in this regard. The Committee also expected that the Corporation should fix the price of its products within the framework of the recommendations of BPE and wherever there had been deviations, the Corporation obtain the prior approval of Government.

1.20. The Committee found that while the cost of DMT, the base product for polyester fibre cloth was not high, the cloth produced by using DMT was sold at a price which is higher. The Committee felt that with the stabilisation of production of DMT, the prices of and other products manufactured with DMT as base should be so fixed that the benefit of reduction in price of DMT could ultimately be passed on to the public.

1.21. The Committee had come across cases where the Private Sector had been making use of the products manufactured by the Public Sector and making huge profits at the expense of the Public Sector, as in the case of basic drugs of IDPL and steel. The Committee felt that there should be a correlation between the price of the raw material and the cost of the end product. The Committee, therefore, recommended that Government/IPCL should take steps to evolve a procedure by which any reduction in the cost of raw material ultimately did go to the benefit of the consumer.

1.22. While noting the recommendation, the Ministry in their reply stated that all possible measures were being undertaken by IPCL to remove operational bottlenecks to ensure that the plants achieve their respective rated capacities.

1.23. Prices fixed by IPCL for its products were meant to be operative for fairly long periods. However, prices were adjusted from time to time to take into account changes in cost of production and the local market situation.

1.24. Considering the scales of IPCL's operations and the cost of inputs, the objective of being internationally competitive in the

products was difficult to achieve. IPCL's product prices might be construed as a reasonable balance between the interests of IPCL and the local market situation.

1.25. Of the products made and sold by IPCL.

- (a) DMT is converted to fibre/filament, spun, processed, dyed, woven and sold as cloth or garments to the ultimate consumer.
- (b) Oxylene is primarily used for manufacture of phthalic anhydride which is subsequently converted as plasticisers, dyestuffs, resins etc.
- (c) Mixed xylenes are used primarily as solvents in pesticidal formulations, paints/varnishes etc.

1.26. The structure of utilisation industries covers the gamut of organised, medium scale and small scale levels with wholesale and retail trading also involved before the final product reaches the ultimate consumer. Ensuring that reduction in IPCL's product prices reaches the ultimate consumer would require price control at each and every stage of conversion which was not considered feasible. For the time being, the market forces would determine to what extent lower prices get passed on down the line.

1.27. In reply to further information called for by the Committee, the Ministry have stated that—

“At present the sale prices of the products of IPCL are higher than the landed cost of the items in question. This is primarily because there has been, for some time back, a slump in the International prices of these items. IPCL have been advised to submit detailed justifications for fixing the prices of their products above the landed cost for consideration of the Government.”

1.28. The Committee are not convinced by the reasons advanced by the Ministry that it is not feasible to exercise price control at each and every stage of conversion of IPCL products which is considered necessary to ensure that reduction in prices of IPCL's products reaches the ultimate consumer. The Committee feel that there should be a correlation between the price of raw material and cost of end product. They reiterate that Government/IPCL should take steps to evolve a procedure by which any reduction in the cost of raw material ultimately goes to the benefit of the consumers.

1.29. The Committee are informed that the sale prices of some of the products of IPCL are higher than the landed cost because of slump in international prices and the IPCL has been advised to submit detailed justification for the same for the consideration of the Government. The Committee except the Government will soon take a decision in the matter after thorough examination of the data supplied by the Corporation.

## RESEARCH AND DEVELOPMENT

### Recommendation (Serial No. 26)

1.30. The Committee recommended that Government should undertake an objective appraisal by an Independent Expert Body of the work done by the Research and Development Centre from year to year in order to see how far the centre had succeeded in achieving the objectives for which it had been set up. Among other things, they desired the Centre to pay attention to the problems which might arise in the day-to-day working of the various plants of IPCL and not only suggest measures to solve these problems but also to devise techniques to bring about efficiency and economy in the general working of the various plants.

1.31. The Government in their reply stated that one of the main functions of the R & D Centre of IPCL was to study plant technology and operations areas to assist in devising measures for improving efficiency in the working of the plants. This was being already done in the case of the operating Aromatics Complex.

1.32. The Government added that the R & D Centre's programme were still in their infancy. The recommendation of CPU had been noted and at an appropriate time suitable mechanism for reviewing the performance of the R & D centre would be devised.

1.33. The Committee reiterate that Government should undertake an objective appraisal by an independent expert Body of the work done by the Research and Development Centre from year to year in order to see how far the Centre has succeeded in achieving the objectives for which it has been set up.

## **CHAPTER II**

### **RECOMMENDATIONS THAT HAVE BEEN ACCEPTED BY GOVERNMENT**

#### **Recommendation (Serial No. 1 Paragraph 1.18)**

The Committee note that IPCL was formed in March, 1969 as a separate Company to implement the public sector Petro-chemical Projects formulate earlier by the Petro-chemicals Division of the ONGC, with the main objects of carrying on the business in the field of Petro-chemicals polymers and industries based on Petro-chemical including outlining of technology and fabrication of equipment.

The Committee are informed that the aims and objectives of the Corporation apart from production of several petro-chemicals intermediates and raw materials would be achieved when the project goes into production on a regular commercial basis. The obligations of the Corporation will not be confined merely to production of the petro-chemicals but will comprise the various objectives with regard to profitability, resource generation, development of marketing facilities, technical services, introduction of new conversion products, research and development to the extent practicable, reaching a position of near independence in know-how technology. From the subsequent chapters, it will be seen that, from the date of inception of the Corporation till now, only the Aromatics Project has been completed and is in operation at present and the other projects are at different stages of their completion. In view of the need for the petrochemicals and its end-products in the country and the importance of Petro-chemical Industry for the development of the country, the Committee stress that every effort should be made both by the Corporation and the Government to complete and commission all the projects under Indian Petro-chemicals Corporation Ltd. in accordance with their scheduled dates of completion so as to achieve the aims and objectives of the Corporation at the earliest.

#### **Reply of Government**

Noted.

[Ministry of Petroleum and Chemicals O.M. No. 40012/2/75-PC.  
II dated the 10th Dec., 1975]

**Recommendation (Serial No. 2. Paragraphs 1.10 to 1.22)**

The Committee find that while the World had made tremendous progress in Sixties in the field of Petro-chemical industry our country lagged way behind. It is only during the last Five Year Plan that some effort has been made to set up a Petro-chemical industry at Baroda. But this effort suffered initially, for the plan covered only the installation of two mother plants without the down-stream units. The Committee note that in the beginning the idea was that the projects for the utilisation of the products from the two mother units of IPCL were to be licensed in the private sector. It took Government almost three years to take a decision to place the responsibility for the down-stream units also on the Public Sector. The net result of all this was heavy delay in the setting up of the down-stream units and in the achievements of objective of integrated development of Petro-chemical Industry.

The Committee stress that Government should learn a lesson from this experience and see that in future Petro-chemical industry plants are planned in an integrated manner.

Having regard to the tremendous potentialities of the Petro-chemical industry in the matter of accelerating the pace of development and creating employment opportunities, the Committee feel that like the Electronic industry this is another field which should receive prior and intensive attention of the Government.

The Committee stress that having regard to the experience already gained in setting up the Petro-Chemical Unit in Baroda, Government should prepare in depth a shelf of schemes so that these could be taken up for implementation on a priority basis having regard to the availability of resources, raw-materials, demand pattern etc.

The Committee need hardly stress that in deciding the product mix, Government should keep in view the primary need for utilising petro-chemical industry for manufacture of products which would best serve the interest of the common man and development, rather than cater to the fanciful requirements of more affluent section of society.

The Committee stress that there should be coordination at the highest level in research and technological fields to see that know-how in the crucial areas of petro-chemical industry is developed in the country in the shortest time and where it is not available, latest know-how best suited for our requirements is obtained without delay so as not to hold up development.



Another aspect to which the Committee would like to draw attention is the need for ensuring that petro-chemical industrial units do not pollute the environment, thus alienating the sympathies and jeopardising the health of the people in the vicinity of the plants.

### **Reply of Government**

Noted.

2. Even though there was a time lag between the decision to set up the Olefins Projects and the decision to set up its downstream units also in the Public Sector, this has not led to any delay in the setting up of these units, and even now the commissioning of the Olefins Projects and the downstream units will more or less synchronise. The delay in completion and commissioning of these projects has been due to other constraints.

3. Having regard to the availability of resources, raw-material demand patterns etc., the public sector petro-chemical units have prepared and are preparing feasibility reports in respect of certain schemes for consideration of Government.

Instructions have been issued to IPCL to orient their product development and technical services departments keeping in view the primary need for utilising the petro-chemicals industry for manufacture of products which would best serve the interest of the common man, and for economic development, rather than cater to the luxury or non-essential requirements of more affluent sections of society. The approach of Government also will be similar.

[Ministry of Petroleum and Chemicals O.M. No. 4001272/75-PC. II dated the 10th December, 1975]

### **Further information called for by the Committee**

(a) Whether Government have prepared a shelf of schemes as recommended by the Committee;

(b) What arrangements have been made to maintain coordination at the highest level in research and technical fields to attain the objective underlined in the recommendation; and

(c) What measures have been taken to prevent pollution of the environment?

(Lok Sabha Secretariat O.M. No. 13-PU/75 dated 18-2-1976)

### **Further Reply of Government**

(a) Feasibility Reports have been prepared for setting up some new units e.g., for the manufacture of Acrylates, PVC, HDPE. Their

implementation will depend upon availability of resources, relative priorities under the Plan etc.

(b) The identification and priorities of knowhow/technology development in the field of petro-chemicals have been done and incorporated in the NCST Plan. Within the ambit of this national Plan, R & D activities are being carried out as in-house R & D in manufacturing units, in national and other R & D laboratories or through the medium of sponsored research. Regarding petro-chemicals, IPCL have created in-house R & D facilities for applied research on polymers, have sponsored research with some national laboratories for technology development for acrylates & propylene oxide. Similarly EIL have launched a chemical engineering oriented research *suo-motu* as well as on cooperative basis with IPCL & national laboratories. When reduced to such specific R & D programmes, within the national plan, subsequent coordination and monitoring is done by the Boards of the respective organisations and at periodic reviews at Ministry level.

(c) In the IPCL complex adequate precautions have been taken to preserve the quality of environment. The measures taken, in brief, are as follows.

*Preservation of water quality:*

When all the plants in IPCL complex go into production, it is estimated that a total of 11, mgd of effluents would be required to be disposed off. The Government of Gujarat, in association with the Gujarat Water (Prevention & Control of Pollution) Board, has planned a channel, over a distance of 60 Km, which would be covered upto a distance of 12 Km, through which all the effluents from the IPCL complex and the other nearby industries, would be carried and ultimately discharged in the Mahisagar river estuary in the Gulf of Cambay. All the effluents discharged into this channel will be treated to the specifications laid down in Indian Standards 2490. The quality of effluents discharged into the channel will be monitored by an authority to be established by the Government of Gujarat, which will also ensure that the effluents ultimately discharged into the Mahisagar estuary do not pose any hazard to marine life. The channel is likely to be operational sometime in 1977-78. If, for any reason, the completion of the channel is delayed, the effluents from IPCL complex will be discharged after proper treatment to meet the standards of IS : 2490 into the rivulet Meni, which is a tributary of the Mahisagar river.

Within the IPCL complex, some of the plants will have their own treatment units within their battery limits. All the effluents

partially treated or otherwise from the plants will be collected at a central waste water treatment plant which is being established at an approximate cost of Rs. 1.2 crores. In this plant, the entire effluents will be treated, chemically and biologically in accordance with the latest available technology, and then discharged into the rivulet Meni till the effluent channel is commissioned.

*Preservation of air quality:*

The process gases other than those captively utilised—e.g. hydrocarbons, sulphur and nitrogen compounds would require disposal. All hydrocarbons will be flared in flare stacks of more than 100 meter height. Flaring at this height will considerably reduce the risk of air and thermal pollution. Fuel oils (to be used in boilers and heaters) containing very small quantities of sulphur will not cause any air pollution. To guard against air pollution from higher sulphur-content fuel oils, the height of the chimneys is being raised to about 100 meters for proper dispersion in the atmosphere. Additional measures, if found necessary, such as desulphurisation of fuel, will be adopted.

*Solid wastes:*

All kinds of solid and semi-solid waste matters will be handled in a planned manner. Toxic wastes will be incinerated in a multi-purpose incinerator. Other wastes will be transported to a low lying area for the purpose of land filling.

*Environmental quality monitoring:*

A modern laboratory is planned for water, air and solids. The latest monitoring techniques are planned to be deployed.

[Ministry of Petroleum O.M. No. 40012/2/75--PC. II dated the 29th March, 1976]

**Recommendation (Serial No. 3, Paragraph 1.35)**

The Committee regret to note that even though the Bureau of Public Enterprises had asked all the Public Undertakings as far back as November, 1970 to formulate a statement of their objectives/obligations clearly and communicate the same to the Government and even though the need for formulating such a statement was reiterated in the 40th Report (5th Lok Sabha) of the Committee on Public Undertakings on Role and Achievements of Public Undertakings, the Indian Petro-chemicals Corporation Ltd. has not so far formulated its statement of objectives/obligations in spite of the fact that IPCL was asked by the Ministry in 1971 to look into the

matter. The Ministry admitted during evidence that in the ultimate analysis it is the fault of the Ministry and they should have pursued it more vigorously. The Committee are unhappy at this long delay and recommend that the Corporation/Ministry should finalise the statement of objectives/obligations of IPCL without any further delay and place it before Parliament.

### **Reply of Government**

The recommendation has been noted. Instructions have already been issued to concerned authorities and further action is being taken for finalising the statement of objectives and obligations for placing before Parliament expeditiously.

[Ministry of Petroleum and Chemicals O.M. No. 40012/2/75-PC.  
II dated the 10th Dec., 1975]

### **Further information called for by the Committee**

Whether statement of objectives and obligations of IPCL has since been finalised. If not, date by which it is likely to be done.

[Lok Sabha Secretariat O.M. No. 13-PU/75 dated 18-2-1976]

### **Further Reply of Government**

The statement of objectives and obligations of IPCL is expected to be finalised by 30th April, 1976.

[Ministry of Petroleum O.M. No. 40012/2/75 dated the 29th March,  
1976]

### **Comments of the Committee**

Please see Paragraphs 1.6 to 1.8 of Chapter I of Report.

### **Recommendation (Serial No. 8, Paragraph 3.17 & 3.18)**

The Committee regret to note that though according to the DPR the time for completion of the project was 38 months from February, 67 and that production was to commence from April, 70, the Corporation has taken 57 months for completion of the project with the result that the Corporation suffered a loss in production of about Rupees Nine crores due to the delay in the commissioning of the plant and the consequent loss in production. The Committee note that even initially there had been a delay of 9 months for the conclusion of the engineering contract and the supplementary contract took another two months to be concluded. The Engineers India Ltd. started their work as consultants of their project in August

1968. Even according to these revised dates, the scheduled date of completion of the project was April, '71. The Committee however note that as against this revised schedule the actual dates of mechanical completion of the DMT was 20th March, 1973 and Xylxnes plant was June, 1973 and these plants were commissioned between 20th March, 1973 and 12th November, 1973 respectively. The result was that there had been a loss of production to the extent of 37,600 MT of DMT and 29,400 MT of Orthoxylenes.

The Committee are informed that the main causes which contributed to the delay in the completion of the project were the longer time required for detailed engineering and the consequent placement of orders in India rather than abroad, delay in delivery of equipment by indigenous fabricators consequent to the decision to obtain significantly higher proportion of plant and equipment indigenously and the delay in the delivery of equipment by over a period of 12--18 months by the indigenous suppliers due to shortage of nickel, steel, plates, labour unrest, power cuts etc. The Committee regret to observe that no effective action was taken except recovery of penalty from the suppliers of indigenous machinery. In the opinion of the Committee it should not have been difficult for the Corporation to have avoided these delays, had the Corporation planned its requirements in advance and taken coordinated and concerted measures for the placement of orders and procurement of machinery. The Committee feel that the Corporation should have also monitored the programme of suppliers and kept a watch on the progress so that timely assistance could have been rendered to remove the constraints and minimise the delays in supplies in the interest of adherence to time schedule.

#### **Reply of Government**

Noted.

[Ministry of Petroleum and Chemicals O.M. No. 40012/2/75-PC.  
II, dated the 10th Dec., 1975]

#### **Recommendation (Serial No. 11, Paragraph 3.52)**

The Committee are informed that though it is not normal to have standby compressors for Paraxylene plants because of the difficulties encountered during the commissioning of the original compressor, in this instance, it has been considered prudent to instal a stand-by compressor of a different design. The Committee note that the Corporation had decided to purchase a stand-by compressor of a five-stage slower speed machine of 13,420 RPM compared to the existing high speed three stage compressor of 23,300 RPM from M/s

Mid Continent of USA and its installation would involve an expenditure of Rs. 56.17 lakhs. The new compressor is expected to be delivered by 3rd quarter of 1975.

The Committee are also informed that the selection of the vendor was made on the basis of the lowest capital investment, shortest delivery, proven performance, etc. The Committee would only caution that IPCL should on the basis of the past experience with the present compressor take all precautionary measures to ensure that the shortcomings in the existing compressor are not repeated in the new compressor. The Committee would also like that IPCL should in particular ensure about the performance of the stand-by compressor in the whole system as the specific action of the proposed stand-by compressor is different from the existing 24,000 RPM one. The Committee would also like to be assured that the stand-by compressor would suit the Indian conditions and adequately serve the purpose and that no further expenditure would be incurred on such costly stand-bys.

### **Reply of Government**

Noted.

2. IPCL to whom the observations of the Committee were communicated have confirmed the following:—

- (i) Additional precautionary measures are being taken to ensure that the testing procedures approximate to actual operating conditions to the extent possible. This would include the closed loop performance test with a refrigerant. The data collected in these tests will be given for torsional analysis by an independent agency like M.T.I.
- (ii) The stand-by compressor will properly fit in the overall system.
- (iii) It will be ensured as before that the stand-by compressor will suit Indian conditions.
- (iv) No further expenditure would be incurred on this stand-by compressor.

[Ministry of Petroleum O.M. No. 40012/2/75-PC. II dated the 10th Dec., 1975]

### **Recommendation (Serial No. 14, Paragraph 4.24)**

The Committee note that the original cost estimates of Rs. 157.50 crores in respect of the Olefins Project and the down stream units were revised upwards to Rs. 331.93 crores in September, 1974. The variations between the original estimates and the revised estimates

have been attributed to variations in exchange rates (9.71 crores) increase in customs duty (16.32 crores), price escalation (41.09 crores), increase in pre-production interest (8.63 crores), increase in management expenses (4.88 crores), additional items of equipment (42.90 crores), additional provision for contingencies (37.13 crores) and quantitative changes. It has been stated that the Revised estimates of the Olefins Project were received by Government in December, 1973 and in respect of other down stream units in October, 1974. These estimates are still under consideration. The Committee are not happy over the delay of 1 year in the sanction of the revised estimates by Government. According to the management of IPCL, due to abnormal inflationary conditions prevailing in India and in many countries abroad from where foreign equipment is being obtained, some further escalation cannot be ruled out altogether if the schedules are not maintained due to delay in delivery of indigenous or imported equipment or difficulties in supply of construction material such as cement, steel argon gas etc., or in provision of utilities such as power and water. The Committee feel that while some of these factors necessitating escalation in cost estimates may not be entirely under the control of IPCL or Government, factors like timely supplies of materials, supply of power, water etc. are not entirely outside the control of the undertaking or the Government. They would, therefore, like the IPCL and the Government to go into the factors which have resulted or are likely to result in further revision of cost estimates and take effective measures to control at least those factors which can be controlled by the undertaking itself or through the intervention of the Government of India. The Committee also recommend that Government should critically examine each one of the reasons for the revision of the estimates of the Olefins Project and the down stream units to see how far such excesses which are over 100 per cent are justified. The Committee are informed that while according to the revised estimates the profit before tax was of the order of 15.5 per cent, in the Revised Estimates, it is stated to be 15 per cent. The Committee need hardly stress that revision of cost estimates affects the profitability of the Project ultimately and the cost of production. The Committee, therefore, recommend that Corporation|Government should take timely concerted measures to keep the cost well within the estimates sanctioned by the Government.

#### **Reply of Government**

Noted.

2. Effective timely measures are being taken to control, as far as possible, the factors responsible for increase in the cost estimates

of the projects by the Corporation itself or through the intervention of the Government.

[Ministry of Petroleum O.M. No. 40012|2|75-PC, II dated the 22nd January, 1976]

**Recommendation (Serial No. 15 Paragraphs 4.25 & 4.26)**

The Committee further note that there has already been slippage in the scheduled of mechanical completion of the projects under Gujarat Olefins Project and its down-stream units the delay ranging from 12 to 36 months. In the case of Naphtha Cracker Project the delay in execution is expected to be of more than 3 years. The Committee are informed that the original schedule was based on certain assessment of availability of foreign exchange and the tying up of foreign exchange for the projects within the time schedules has not been possible. There were also various other difficulties such as delay in the supply of indigenous equipment because of inadequate previous experience of vendors and various other difficulties such as power cuts, shortage of trained personnel, difficulties in obtaining timely delivery of sub-contracted components such as forgings etc. The Committee are also informed that certain steps have been taken by IPCL like assured supply of steel plates, pipes and other raw materials to fabricators, posting of inspectors from Engineers India Limited in the fabricated shops to expedite progress, periodical review of progress at meetings with the major fabricators etc. etc. The Committee feel that in this case also some of the difficulties which have contributed to delays could have been solved by an imaginative approach by IPCL itself if necessary with the assistance of Government by taking advance action to tie up with foreign exchange, placement of orders in time for indigenous equipment, procurement of scarce raw material etc. The Committee are informed that as on 30th November, 1974, 45 per cent of indigenous equipment and 65 per cent of imported equipment had been ordered and foreign exchange for the project had been tied up and the revised estimates are being worked out. The Committee need hardly stress that such delays not only put up the cost and affect the profitability of the project but also contribute to delays in other developmental activities. The Committee recommend that Corporation should work out a realistic cost estimate and revised profitability of the Project and other downstream units after taking into account all the factors and bring it to the notice of Parliament without any delay.

The Committee also recommend that IPCL/Government should take up concerted and concrete measures, in the light experience



gained by them in setting up of the Gujarat Aromatic Project, to see that there is no slippage in the programme of executive of the project and to ensure that sufficient safeguards exist for inspection and testing of equipments and for guaranteed performance.

### **Reply of Government**

All possible measures to ensure that there is no further slippage in the project schedules are being taken. Sufficient safeguards exist for inspection and testing of equipments and for guaranteed performance.

2. The Corporation have worked out revised cost estimates and revised profitability studies for these projects, taking all the factors into consideration. These are under examination in the Government.

[Ministry of Petroleum O.M. No. 40012/2/75-PC. II dated the 22nd January, 1976]

### **Comments of the Committee**

(Please see Paragraphs 1.9 to 1.11 of Chapter I of Report.

#### **Further information called for by the Committee**

- (a) Please indicate whether Government have ensured that the technology selected is proven and up to date and operating costs are economical;
- (b) Whether steps have been taken by IPCL to develop its own planning and designing taking advantage of the experience; and
- (c) What steps have been taken to ensure that supply of equipments of good quality and in accordance with time-schedule and the project would be commissioned according to schedule?

[Lok Sabha Secretariat O.M. No. 13-PU/75 dated 18-2-1976]

#### **Further Reply of Government**

- (a) While selecting the technology for the project from among a number of technologies evaluated, due care has been taken to ensure that the technology is commercially proven as well as that the capital investment and operating costs are minimal.
- (b) PCL's objectives are to get the filament yarn project designed, installed and commissioned through a system of

contracting with appropriate consultancy organisations and contractors and thereafter to operate the plant & sell the product to member cooperatives. PCL does not seek to build up expertise from within its own organisation for design of production plants. Planning of execution of the project is being done by PCL personnel in association with its prime engineering/consultancy contractor viz EIL. Emphasis is placed on establishing suitable facilities and suitable expertise for rendering technical services to customers in handling and processing of filament yarn.

- (c) Apart from contractual provisions that equipment supplied are of suitable specifications and quality, inspection of equipment and materials during and after fabrication is being carried out by PCL's consultants viz EIL. PCL are using PERT techniques for control and monitoring of the time schedule for project implementation and commissioning.

[Ministry of Petroleum O.M. No. 40012/2/75 dated 29th March, 1976]

#### Comments of the Committee

[Please see Paragraphs 1.12 to 1.17 of Chapter I of the Report]

#### Recommendation (Serial No. 16 Paragraphs 4.44 & 45)

The Committee note that Polyester Filament Yarn Project has been finalised at an estimated cost of Rs. 24.67 crores including a foreign exchange component of Rs. 6.44 crores in technical collaboration with Karl Fisher (West Germany), J. K. Synthetics (India) and Industries Petroquimicas Mexicanas (IMSA), Mexico. Karl Fisher has to provide the necessary technical know-how, basic engineering and technical services for the manufacture of polyester chips from DMT and Karl Fisher jointly with JK Synthetics shall provide technical know-how and basic engineering for the manufacture of polyester filament yarn from polyester chips. JK synthetics are also to supply all onsite (battery limit) plant equipment. It has been stated that the selection of Karl Fisher with JKs of India was made after inviting quotations from various parties and a critical evaluation of the offers from both technical and commercial points of view, and testing and critical analysis of the yarn of the collaborators.

According to Government, the country had not yet reached the stage where JK alone give indigenous technology for the polyester filament yarn project. The advantages of obtaining JK's participation in the agreement are that a part of the know-how and the basic engineering fees for the spinning and draw twisting plant will be

paid in rupees and JK's technical experts and facilities for training of personnel can be used. The plant performance guarantee is jointly by Karl Fisher and JK for the spinning and draw twisting plant. The Committee find that the selection of Karl Fisher and J.K. Technology has been made mainly on account of the advantage in foreign exchange and J.K.'s technical experts and facilities for training could be used. The Committee would like Corporation/Government to ensure that the technology selected is proven and upto date, operating costs are economical, and the quality of products is the best.

The Committee recommend that the Corporation should take advantage of the collaboration in developing their own planning and designing with a view to attaining self reliance in this field.

The Committee are informed that none of the equipments ordered for the project has yet become due for delivery and, therefore, the question of delay cannot be assessed. The Committee would stress that a continuous watch should be kept on the progress being made by the fabricators of equipment so that necessary steps could be taken well in time to obviate any possibility of delays. They would also like that Corporation should draw lessons from their experience with the Gujarat Aromatics Project and ensure timely supply of equipment of good quality and the commissioning of the project on schedule after proper inspection and guaranteed performance.

### **Reply of Government**

Noted.

[Ministry of Petroleum and Chemicals O.M. No. 40012/2/75-PC. II dated the 10th December, 1975]

### **Recommendation (Serial No. 17, Paragraph 4.46)**

The Committee further note that the Government have set up a cooperative society under the name of Petrofils Cooperative Limited in September, 1974 for the running of the Polyester Filament Yarn Project with a direct equity participation between the Government of India and the Cooperative Sector on a 60:40 basis. The Committee are informed that this decision to set up a cooperative was taken to create interest in the cooperatives owning their own raw material plant and no corporate relationship between IPCL and this coopera-

tive society is however contemplated at present. It has also been stated that since the plant is fairly complex and expensive, Government have decided to retain a substantial equity interest for a considerable period of time though there is a provision for gradual retrenchment of the Government interest by the cooperatives themselves. The Committee, however, see no special advantage in not taking this plant as part of IPCL because of the complexity of the plant and funds for running the cooperative had come from Government. Now that a cooperative has been set up the committee would like Government to take all possible steps to make the cooperative a success by ensuring that the plant which is both expensive as well as complicated gets the services of competent technical personnel for maintenance and is operated profitably under the supervision of enlightened and efficient management. They feel that it would be advisable to create a corporate relationship between IPCL and the Petrofils Cooperative Limited because of their dependence on each other for the sale and purchase of DMT. Such a relationship will also enable the cooperative to have the benefit of Research and Development wing of the IPCL and make for its more efficient and economical operation.

#### **Reply of Government**

The recommendation of CPU for creating a corporate relationship between IPCL and PCL has been noted. The corporate relationship may take the form of:—

- (a) a Director nominated by Government in the Board of PCL from IPCL; or
- (b) a representative from IPCL in PCL's Board's Sub-Committees for Production, R & D and Marketing.

Action will be taken at the appropriate time for creating such inter-corporate link between PCL and IPCL.

[Ministry of Petroleum O.M. No. 40012/2/75-PC.  
II, dated the 10th Dec., 1975]

#### **Recommendation (Serial No. 19, Paragraphs 5.35 to 5.45)**

The Committee note that to take care of the marketing activities of the existing Gujarat Aromatics Project and the future Gujarat Olefins Project/Downstream Units. IPCL purposes to follow the Product Manager's concept within the Marketing Department and is planning to have the following major product groups, viz., Polymers, Fibres and Chemicals. In addition, it has also planned for an

expert technical group to take care of product and applications development and field technical service. Field sales and other associated activities will be handled from Regional Sales Offices which are proposed to be opened in Delhi, Bombay, Calcutta and Madras. In order to see that the products purchased by manufacturing units, a large majority of which will be in small scale sector, are efficiently used, IPCL proposes to have well qualified marketing and engineering personnel in each region to handle all marketing operations and after-sales-service. Three of the four plastics products, viz., Polypropylene (PP), Polybutadiene Rubber (PBR) and Acrylic Fibre (AF) are reported to be totally new to the Indian market as these will be produced for the first time in the country. Even in the case of fourth product viz., Low Density Polyethylene (LDPE), the existing production is restricted to very few grades. While in the case of Polypropylene, Polybutadiene rubber and Acrylic Fibre, IPCL has to develop the market from scratch in the case of LDPE, several new grades tailored to specific use would be made available for the first time. None of the prospective customers of these products know how to process these into useful articles. IPCL proposes to make a modest beginning this year in support of the market development programme based on imported material.

The Committee understand that like electronics, plastic industries also do not require large infrastructure facilities. The Committee, therefore, recommend that developmental efforts should be made in consultation with the State Governments and Small Industries Institutes so that the possibilities of setting up units especially in backward areas for the absorption of this Orthoxylene may be considered.

The Committee are informed that as most of the products will be produced for the first time in the country the IPCL will have to do markets survey for the ultimate projects, stimulate interest in its products through publicity, evaluate project profitability, select equipment and location for the consuming units, arrange financial assistance and employee training, help the units in developing optimum processing conditions for maximum profitability, organising publicity campaigns for new end products and resolving other difficulties which may arise from time to time. In order to find export outlets for plastics and other end products, the company will also have to advise the small scale units about the foreign markets prices, products quality requirements, desired sales appeal and product pattern suited for export. These are new and challenging tasks. The Committee find that IPCL will have a pioneering role to play in stimulating and creating demand for its solid products through new

investments by existing entrepreneurs, or through developing a new class of entrepreneurs in this small and medium scale sector.

In the opinion of the Committee the Corporation should not take upon itself the responsibility of running the individual units nor for their financial results, but merely confine itself to providing the necessary technical know-how, material assistance and training facilities in close coordination with small scale industries and service institutes.

The Committee, also feel that any organisation of marketing of the products of IPCL should be market-oriented rather than customer-oriented. The Committee are informed that the Marketing Organisation has been established as a specialised Division headed by a Marketing Manager and it will eventually consist of four Product Managers, a Sales Manager and a Manager to take care of Application Development and Field Customers service.

The Committee would like to watch the performance of this organisation with reference to development, particularly in backward areas.

The Committee note that the expenditure on sales and distribution has been of the order of Rs. 4.67 lakhs in 1972-73 and Rs. 3.79 lakhs in 1973-74 as against the sales of Rs. 512 lakhs only in 1973-74.

The Committee recommend that Government/Corporation should set suitable norms for such sale and distribution expenses and ensure that such norms are adhered to, so that the overhead expenses of sales and distribution are not excessive.

The Committee note that the Corporation propose to handle the field sales and other associated activities through its Regional Offices in the Metropolitan cities. The Committee would like that economics of the opening of such offices should be critically examined with reference to the market for the products in the region before such offices are set up.

As regards the Regional Offices, the Committee recommend that these offices should be compact so that the small scale sector which are using the products are not unnecessarily loaded with excessive overheads. The Committee recommend that IPCL should finalise the staffing pattern with great care and see that the personnel selected for the regional offices and field services are development minded with technical background capable of handling the jobs efficiently.

The Committee also note that when the demand for DMT was more than the availability, the available quantity of DMT was allocated to different users in the ratio of their respective requirements

on the basis of their licensed capacities. But lately, due to financial constraints and other factors, some of the customers have not been able to lift the entire quantity allocated and consequently some other parties have been allowed to lift quantities in excess of their respective monthly allocations. The Committee recommend that the Corporation in consultation with the Government, should critically go into the reasons for the non-lifting of the allocated quantity of DMT by the parties and take suitable remedial measures to avoid recurrence of similar situations in future. They would like the IPCL/ Government to keep a constant eye on the market situation and review its allocation policy from time to time to cope with the situation and to see that the turn-over of the company does not suffer in any way.

The Committee also note that the current production of Orthoxylene is substantially in excess of the demand. They would like the IPCL to analyse the reasons as to why the units which were expected to consume Orthoxylene products by IPCL have not come up and to see what can be done to help such units be established as early as possible.

The Committee learn that stocks of the two by-products from DMT plant, namely, Methyl Benzoate and crude Bi-Methyl Isophthalate, have accumulated in the plant and IPCL is making efforts to find out outlets for these products.

The Committee would like to be informed of the specific action taken for the disposal of these products. The Committee stress that there should be greater co-ordination between the Marketing & Production functionaries in order that the products of the Corporation are not accumulated.

#### **Reply of Government**

1. Noted.

2. Two Units for the manufacture of Phthalic Anhydride, which will utilise orthoxylene as feed stock, both to be set up in backward areas (one at Panipet in Tamil Nadu and the other near Raichur in Karnataka) have already been licensed.

3. The marketing organisation of IPCL shall be market oriented in as much as the marketing operations shall be sensitive to the conditions of supply and demand, pricing of raw materials and end-products, tax structure etc., rather than to the need of specific consumers. The Corporation however, also intends to set up field technical services to provide help and guidance to conversion units, particularly in the small sector.

4. Norms for sale and distribution expenses are being worked out. A critical examination of the economics of opening regional offices is also under way. Due care will be taken in deciding staffing pattern as also selection of personnel for these centres.

5. The reasons for non-lifting of DMT by certain units in the past was primarily the general recessionary trend in the polyester industry and partly the high price of DMT due to heavy excise duty. The market for DMT has now revived and its off-take has improved. Even so, a constant watch on market situation is being kept and the allocation policy shall be decided from time to time on pragmatic considerations.

6. The main reason for inadequate off-take of IPCL's orthoxylene has been the delay in the completion and commissioning of two downstream phthalic anhydride units in the private sector. Three phthalic anhydride units with an installed capacity of 15,300 tonnes|annum (out of which 12,000 tonnes|annum is based on orthoxylene feed stock have already come up. Another two units with an installed capacity of 12,000 tonnes|annum are expected to go on stream in 1976. With the commissioning of these two units it is expected that there would be adequate off-take for IPCL's orthoxylene.

The IPCL is exploring new lines of application for orthoxylene.

The possibility of export of surplus orthoxylene is being constantly kept in view and decisions will be taken on pragmatic considerations, depending upon the ruling international price of orthoxylene.

7. All the accumulated stocks of Methyl Benzoate and Crude Dimethyl Isophthalate have since been disposed of. Proper co-ordination between production and Marketing Departments is being maintained. In addition to normal channels, such coordination is achieved in weekly production planning meetings.

(Ministry of Petroleum O.M. No. 40012/275-PC. II dated 22nd January, 1976).

#### **Recommendation (Serial No. 20, Paragraphs 5.59 and 5.60)**

The Committee note that though the Corporation has adopted a costing system, it has not so far worked out standard cost for its products since the production in the Aromatics plant which started in 1973-74 had not stabilised. The actual consumption of inputs is however compared with the consumption data provided by the foreign licensors for purposes of assessment of performance. The



Committee note that the consumption of Naphtha, fuel and power during 1973-74 is higher than the fixed by the process licensors though it has decreased during 1974-75. The Committee also note that the average actual cost of production has been much higher than the cost envisaged in DPR.

The Committee were informed that the large variation is stated to be due to low capacity utilisation and increase in prices particularly of raw materials and fuel oil. The Committee recommend that Corporation should take suitable steps to ensure strict adherence to the norms for the consumption of the raw materials as fixed by the Process Licensees critically analyse any variations between the actual consumptions and the standards so that suitable remedial measures may be taken in time to effect economics in costs.

The Committee find that the consumption of materials has decreased during 1974-75 with the increase in production. The Committee recommend that the Corporation should take concerted measures to attain full capacity of the plant at the earliest, to obtain economic cost of production.

### Reply of Government

The standards of consumption of raw materials prescribed by the process licensors for the various plants of IPCL's Aromatics Project and actuals for 1973-74 and 1974-75 are set out in the table below:—

Input	Consumption as indicated by Process Licensors	Actual 1973-74	Actual 1974-75
1	2	3	4
1 Naphtha M/T per tonne of Xylene	1.313	1.867	1.616
2 Methanol per tonne of DMT	0.470	0.508	0.447
3 Power, HW—			
(a) per tonne of xylene	0.119	0.085	0.128
(b) per tonne of DMT	0.500	1.107	0.456
(c) per tonne of paraxylene	0.729	2.340	0.799
4 Fuel Oil (M/T) per tonne of DMT	0.160	0.343	0.154

It will be observed that while in some cases IPCL have improved upon the standards indicated by the process licensors, in case of

the rest, the rate of consumption of the raw materials is quite near the mark. The position is expected to improve further as the plants attain full-rated capacity.

IPCL is taking concerted measures to ensure that the various plants of Aromatics Project achieve full-rated capacity. Some of the measures taken in this regard are enumerated below:—

- (1) *Naphtha quality*:—A constant check is being maintained on the quality of naphtha supplied by the Gujarat Refinery. Long-term measures for sustained supply of the requisite quality of naphtha to IPCL are under discussion between IPCL and IOC.
- (2) *Steam generation*:—Bharat Heavy Electricals Limited, the suppliers of two steam boilers for the project have completed major modifications in the boilers recently. It is expected that these modifications would result in improved and sustained availability of steam.
- (3) *Power shortages*:—Steps are being taken to procure an inverter which will prevent frequent shutdowns in the plant due to power dips. This inverter is likely to be commissioned by the end of 1975.

IPCL is also carrying out negotiations with Gujarat Electricity Board and IOC to secure the excess electricity presently being generated by the Gujarat Refinery at its captive power plant for IPCL. The question of installation of a captive power plant for the IPCL Projects is also under investigation.

[Ministry of Petroleum and Chemicals O.M. No. 40012/2/75-PC. II, dated the 10th December, 1975].

*Further information called for by the Committee*

#### *Naphtha Quality*

Whether long-term measures for sustained supply of the requisite quality of Naphtha to IPCL have been finalised. If not, the reasons for delay and time by which these are likely to be finalised.

#### *Power shortages*

- (a) Whether the inverter was actually commissioned by the end of 1975? If not, what are the reasons for delay.

- (b) What is the outcome of negotiations with Gujarat Electricity Board and IOC for supply of excess electricity to IPCL; and
- (c) Has the question of installation of a Captive Power Plant for IPCL been finalised? If not, reasons therefor?

[Lok Sabha Sectt. O.M. No. 13-PU/75 dated 18-3-1976].

*Further Reply of Government*

**Naphtha Quality:**

The long-term measures envisages the installation of a pre-fractionation facility. Necessary data for carrying out the preliminary design have been furnished to Engineers India Limited and the design is expected to be ready before April, 1976. The pre-fractionation facility is expected to be in operation by early 1978.

**Power Shortages:**

- (a) Since the inverter has been developed recently there has been a delay in its delivery. It is expected to be delivered by the end of March, 1976 after which it will be installed and commissioned.
- (b) IOC have agreed in principle to spare 3 MW power for IPCL's emergency requirement. As regards tariff for the electricity supply the matter is under discussion between GEB and IOC and will be decided after the arbitration award on prices to be charged by IOC to GEB for RFO supplied to their thermal station at Dhuvaran.
- (c) IPCL are approaching CWPC for permission to set up a captive power plant as required under the rules. This power plant would cover only a part of IPCL's requirement (i.e. 25 MW out of 60 MW).

[Ministry of Petroleum O.M. No. 40012/2/76-PC. II dated the 29th March, 1976]

**Recommendation (Serial No. 23, Paragraph 6.7)**

The Committee note that in the various units of the Aromatics Projects, vigorous quality control is exercised over raw materials supply in various stages, intermediates and over final products. In addition to this a Central Laboratory which is well equipped with modern analytical instruments analyses and approves samples from each batch of production. The IPCL products, namely; Orthoxylene, DMT and Paraxylene are stated to have achieved and maintained in-

ternationally accepted quality standards. Though there have been no complaints either from India or foreign customers in respect of Orthoxylene or mixed xylenes. A few complaints have been received on the quality of paper bags used for packaging of DMT. Even though the complaints are stated to be of minor nature and did not affect either the sales or the customers production, the Committee feel that all possible steps should be taken by IPCL to see that its products which are claimed to be of internationally accepted quality continue to maintain such high standards and are free from complaints even of a minor nature and are to the satisfaction of the consumers. The Committee recommend that the Corporation should introduce strict standards for quality control and these should be meticulously enforced so that the products of the Public Sector Corporation, establish a name in the world market for their quality.

### **Reply of Government**

Noted.

2. The Corporation have made institutional arrangements to enforce rigorous quality control in respect of its products.

[Ministry of Petroleum and Chemicals O.M. No. 40012/2/75-PC. II, dated the 10th December, 1975].

### **Recommendation (Serial No. 25, Paragraph 7.13)**

The Committee regret to note that though the Company Auditors have been pointing out in their reports about the absence of Manuals for accounts, internal audit, inventory procedure and control right from 1970-71 to 1972-73, it is only now that the Corporation has prepared the inventory control manual, purchase manual and accounts manual. The Committee would like these manuals should be implemented without any delay so that the cash, stores accounts and other accounts records are maintained systematically. The Committee also recommend that a system of Management Accountancy should be developed so that the Management is kept fully informed in time of the different facts of the working of the Corporation, both in financial and physical terms, so that effective measure could be taken to arrest any adverse trends. The Committee also recommend that the procedure for internal audit should also be finalised keeping in view the recommendation of the Committee on Public Undertakings in their 15th Report (4th Lok Sabha—1967-68) in this regard that the functions of the internal audit should include a critical review of the systems, procedures and the operations of the Undertaking as a whole.

## Reply of Government

Noted.

2. A system of Management Accountancy is being developed by the Corporation in order to keep the Management informed in time of the various aspects of the working of the projects both in physical and financial terms. The Corporation have also set up an Internal Audit Unit with a Joint Financial Controller as its head. The Unit has *inter alia* been charged with the function of undertaking a critical review of the systems, procedures and operations of the Undertaking as a whole. The recommendations of the Committee on Public Undertakings contained in their 15th Report (4th Lok Sabha—1967-68) have been kept in view while finalising the duties and functions of the Unit.

[Ministry of Petroleum and Chemicals O.M. No. 40012/2/75-PC. II, dated the 10th December, 1975].

### Recommendation (Serial No. 26, Paragraphs 8.12 and 8.13)

The Committee note that a full fledged Research and Development Centre has been set up a part of the IPCL with a view to effecting improvements in the technology purchased for the projects from overseas, developing engineering know-how so that expenditure of foreign exchange is reduced if not eliminated and using the by-products and co-products available from the plants rationally and profitably. A sum of Rs. 80 lakhs was allocated for R & D in the 4th Five Year Plan and as against this a sum of Rs. 61 lakhs was spent during the period. The capital expenditure already approved for the period 1974-75 is Rs. 90 lakhs and the revenue expenditure for this period is estimated to be Rs. 9 lakhs. The centre is stated to have been working since 1970-71 and has done research on raw material specifications effect of different type of crude on the plants, optimisation of operational conditions etc. The Committee hope that the results of research would be advantageously utilised in the operation of plants. The Committee further note that important research projects which have to be investigated by R & D Centre have already been identified and a priority list has already been drawn up. The suggestions of NCST have also been taken into consideration. The work of R & D Centre is stated to be supplemented by sponsoring the work in National Laboratories and other research institutions. The Company has in fact sponsored work on certain processes in the National Chemical Laboratory, Poona, and in the University of Bombay. There is stated to be close coordination between the National Chemical Laboratories and IPCL in the field of applied research. The Committee are glad

to note that due importance has been given to the research and development work in the IPCL right from the beginning and adequate funds have been placed at its disposal for the purpose. Needless to say, the success of the centre will be indicated not by the amount of money spent by it on capital account or revenue account but by its achievements in the research projects which it has chosen to investigate. The Committee recommend the Government should undertake to an objective appraisal by an Independent Expert Body of the work done by the Research and Development Centre from year to year in order to see how far the centre has succeeded in achieving the objectives for which it has been set up. Among other things, they would like the Centre to pay attention to the problems which arise in the day-to-day working of the various plants of IPCL and not only suggest measures to solve those problems but also to devise techniques to bring about efficiency and economy in the general working of the various plants.

The Committee understand that Engineers India Ltd. is also interested in research on chemical engineering oriented subjects. Initially it was thought that the Division on Chemical Engineering would be organised and managed jointly by EIL and IPCL. On reconsideration, however the IPCL has decided to do it alone as the total quantum of research work on chemical engineering that would be required by IPCL would be substantial. In view of the fact that both EIL and IPCL are public sector organisations interested in more or less the same field, the Committee recommended that there should be close coordination between the two undertakings to obviate any duplication of activities and efforts should be intensified in more critical areas by pooling the talents and bringing about economies in overheads.

### **Reply of Government**

One of the main functions of the R & D Centre of IPCL is to study plant technology and operations areas to assist in devising measures for improving efficiency in the working of the plants. This is being already done in the case of the operating Aromatics Complex.

2. The R & D Centres programmes are still in their infancy. The recommendation of COPU has been noted and at an appropriate time suitable mechanism for reviewing the performance of the R & D centre will be devised.

3. IPCL are already in coordination with EIL in certain R & D programmes for achieving the objectives mentioned in COPU's recommendations.

[Ministry of Petroleum and Chemicals O.M. No. 40012/2/75-PC. II, dated the 10th December, 1975].

#### **Comments of the Committee**

Please see Paragraphs 1.30 to 1.33 of Chapter I of Report.

#### **Recommendation (Serial No. 27, Paragraph 9.9)**

As Petro-Chemicals is a sophisticated technology and engineering intensive industry, the Committee stress that there should be an increase in number of technical hands on the Board of Directors, especially when the Corporation is in the process of setting up down stream units so that they may be in a position to view the problems in their correct perspective and take decisions in the best interests of the Corporation.

#### **Reply of Government**

Noted.

[Ministry of Petroleum and Chemicals O.M. No. 40012/2/75-PC. II, dated the 10th December, 1975].

#### *Further information called for by the Committee*

What action has been initiated to increase the technical hands on the Board of Director?

(Lok Sabha Secretariat O.M. No. 13-PU/75 dated 18-2-1976)

#### *Further Reply of Government*

The Government is alive to the need of having as many technical experts as possible on the Board of Directors of IPCL and already there is a pre-ponderance of technical hands on the Board of the Corporation.

(Ministry of Petroleum O.M. No. 40012/2/75-PC. II dated the 29th March, 1976)

#### **Recommendation (Serial No. 28, Paragraphs 9.20 & 9.21)**

The Committee note that as against 79 supervisory and 141 non-supervisory posts indicated in the DPR of Gujarat Aromatics Project, the actual staff in position in the Project is 58 supervisory and 436 non-supervisory. The Committee are informed that because pro-

vision for staff in the DPR/Feasibility Report had not been realistically worked out, the Institute of Applied Man-power Research had been commissioned to assess the staff requirements of each plant when it was operational. According to their report the Committee find the Institute had suggested a strength of 389 against the present sanctioned strength of 498 for the project and existing strength of 420. After discussion it was agreed to have a strength of 436 after adjustment of the leave reserve. The Committee were also informed that in the light of the experience gained by IPCL the Institute has been entrusted with another study on the requirements of staff for the Olefins and Downstream Units. Although the Committee has been assured that there is no surplus staff with the Corporation at present the Committee recommend that the Corporation should keep the position under constant review and in the light of the experience of operations fix realistic staff standards and ensure that there is no overstaffing at any stage in any of the projects.

#### **Reply of Government**

Noted.

[Ministry of Petroleum and Chemicals O.M. No. 40012/2/75-PC. II, dated the 10th December, 1975].

#### **Recommendation (Serial No. 29, Paragraph 9.24)**

It is no doubt a challenge to recruit a large number of qualified and experience scientists and engineers from India and abroad and the Committee note that the IPCL is reported to have had a fair degree of success in this field. But in their opinion, there is bigger challenge ahead in creating a climate in which the highly qualified and experienced scientists and engineers recruited by IPCL can work with creative zeal in an atmosphere of co-operation with one another, have a feeling of job satisfaction and do not feel frustrated for lack of recognition of their talent and achievements. The Committee hope that the IPCL will continue to attract scientific and engineering talent from India and abroad and will soon work out a detailed career development plan which will provide openings for advancement for the competent technical and scientific personnel at all levels.

#### **Reply of Government**

Noted.

[Ministry of Petroleum and Chemicals, O.M. No. 40012/2/75-PC. II, dated the 10th December, 1975].



**Recommendation (Serial No. 30, Paragraphs 9.31 to 9.34)**

The Committee note that the IPCL has introduced a number of training schemes to prepare the technical and other personnel to handle the maintenance and production of the plants properly and efficiently and to keep them abreast of latest information and techniques related to their professional subjects.

They cannot over-emphasise the importance of training and refresher courses in petrochemicals field in which new and far-reaching technological developments are taking place very fast and IPCL cannot afford to ignore them.

The Committee note that the Task Force of Planning Commission has emphasised the need for closely linking the training with the experience to be obtained by the trainees in actual operation and maintenance of production facilities. The Committee recommend that these observations would be kept in view in organising the Training Schemes.

The Committee are glad to note that the IPCL has introduced a training scheme for the children of person whose land was acquired for establishing petrochemicals projects with a view to fulfil the social obligation of rehabilitating the land losers. Of the 47 trainees initially recruited under this scheme, 43 are currently under training and the question of recruiting a fresh batch of such apprentices is to be considered in due course if considered necessary.

The Committee also note that the expenditure on training has been of the order of Rs. 6.9 lakhs in 1971-72, Rs. 1.2 lakhs in 1972-73 and Rs. 5.7 lakhs in 1973-74. The Committee would like the Corporation to undertake evaluation of the training programme so as to assess the usefulness of the training in actual operation and maintenance of production facilities. The Committee need hardly stress that the Corporation should ensure that there are no drop-outs in the trainees and there is a systematic follow-up to see that the persons trained are usefully deployed in the appropriate fields.

**Reply of Government**

Noted.

2. The training courses have been designed keeping in view the specific needs of operation and maintenance of production facilities. In addition to imparting basic theoretical knowledge specific to operations, in-plant training in operation and maintenance plays an im-

portant part in that 75 per cent of the total period of training is devoted to such in-plant training.

3. Evaluation of the training programme is a continuous process. Modifications in curriculum and methods of instruction are carried out in the light of the response of the trainees and their performance on the process simulator and in practical exercises.

4. Except for four apprentices whose contracts of apprenticeship were terminated with the approval of the Apprenticeship Adviser, there have been no drop-outs among the trainees. All the persons trained so far have been usefully deployed in appropriate fields.

[Ministry of Petroleum and Chemicals O.M. No. 40012/2/75-PC. II, dated the 10th December, 1975].

#### **Recommendation (Serial No. 31, Paragraph 9.4i)**

The Committee are glad to note that the relations between the Management and the employees have been cordial and welfare amenities have been provided to the employees of the Corporation. The Committee recommend that the IPCL should keep in view their recommendation made by the Committee in their 17th Report (5th Lok Sabha) on Personnel Policies and Labour-Management Relations in Public Undertakings and shape their Labour Management relations in the light thereof.

#### **Reply of Government**

Noted.

[Ministry of Petroleum and Chemicals O.M. No. 40012/2/75-PC. II, dated the 10th December, 1975].

## CHAPTER III

### RECOMMENDATIONS WHICH THE COMMITTEE DO NOT DESIRE TO PURSUE IN VIEW OF GOVERNMENT'S REPLIES

#### Recommendation (Serial No. 4, Paragraph 2.12)

The Committee note that IPCL has entered into 23 foreign collaboration agreements in connection with the implementation of its schemes of Aromatics Project and Olefins Project and Down Stream units. The Committee were informed that every effort was made to secure as much conformity as possible of the foreign collaboration agreements with the guidelines issued from time to time by the Government in this regard but in certain cases there have been deviations from such guidelines. For example, in certain cases, provisions in the agreements relating to payments, sublicensing of technical know-how, exports operation of Indian laws *vis-a-vis* the agreements have not been on the lines prescribed in the Guidelines. These deviations are stated to have been dictated by the circumstances peculiar to each agreement and made with the knowledge of the Government and after each case of deviation was examined and approved by the Foreign Investment Board.

The Committee would like Government to undertake a critical review of the working of collaboration agreements with a view to finding out that these agreements are in the best interests of the country and also to what extent the deviations approved in the agreements of IPCL could have been avoided, so that lessons may be drawn for the future.

#### .. Reply of Government

The working of IPCL's foreign collaboration agreements in respect of the Aromatics Project which alone has so far gone into production has been reviewed. Nothing prejudicial to the interest of the country has come to notice in the actual working of these agreements. The deviations from the guidelines agreed to in these agreements were unavoidable as it had not been possible to persuade the collaborators concerned to accept the terms of the guidelines in their entirety in certain cases.

It is too early to review the working of foreign collaboration agreements in respect of the Olefins Project and its downstream units as these projects have yet to go into production.

[Ministry of Petroleum O.M. No. 40012|2|75-PC. II, dated the 22nd January, 1975].

### **Recommendation (Serial No. 7, Paragraphs 3.10 to 3.12)**

The Committee regret to note that the original estimates of Rs. 23 crores in respect of the Gujarat Aromatics Project of IPCL in 1968 which were approved by Government of India in 1970 had to be revised immediately thereafter to Rs. 25 crores and approved by Government in 1970. These revised estimates were further revised to Rs. 28 crores in January, 1973 and approved by Government in 1974. The Committee also note that the basic reasons for the revision of the project estimates were besides revaluation of D.M. and increase in the customs duty additional items of work not originally contemplated in the estimates additional charge of catalyst and additional items of plant and equipment, buildings etc. and consequential increase in IPCL's share of infra-structure facilities and management expenses etc. The Committee are informed that another basic reason for the revision of estimate was that the original estimate was not based on a very good data. It has been admitted during evidence that "the mistake is not in execution but the mistakes are in assumptions on which the original estimates were made." The Committee are informed that the actual expenditure on the project upto August 1974 is Rs. 27.1 crores and that the accounts relating to the project are likely to be closed during 1974-75. The final capital cost of the project is, however, not likely to exceed Rs. 28 crores. The Committee are informed that the Government have gone into the reasons for excess and are satisfied that these were unavoidable. The Committee desire that the Ministry should critically examine the revised estimates with a view to ensuring that economic viability of the project is not adversely affected. The Committee would like to be informed of the results.

The Committee would like to draw attention of Government to their recommendation in para 118 of their Fifteenth Report (5th Lok Sabha) on Financial Management in Public Undertakings and reiterate that the importance of estimates in the detailed project report being as realistic as possible needs hardly any emphasis as the project report forms the very basis on which Government approve the project and the capital outlay. It is, therefore, essential that the

estimates take into account all foreseeable items of expenditure and are based on correct data so as to obviate the necessity of revision of estimates frequently.

The Committee regret to note the long period of more than one and half year taken by the Government in giving formal approval to the revised estimates of Rs. 28 crores submitted to them on 3rd January, 1973 and the formal approval of which was received by IPCL in September, 1974. In the opinion of the Committee, it is irregular to delay sanction of revised estimates and allow the Corporation to continue to incur expenditure in excess of sanctioned estimates. The Committee recommend that if estimates should really serve the purpose of controlling costs, there should not be any avoidable delay in sanctioning the estimates.

### Reply of Government

Noted.

2. Government have considered the impact of revision of cost estimates of Aromatics Project on the economic viability of the project. It is found that the profitability of the project would not be adversely affected with the upward revision in the cost estimates because concurrently with the increase in the capital costs and costs of inputs, the sale prices of the products have also gone up *vis-a-vis* those assumed earlier.

[Ministry of Petroleum and Chemicals O.M. No. 40012/2/75-PC. II, dated the 10th December, 1975].

### Recommendation (Serial No. 12, Paragraphs 3.62 to 3.64)

The Committee note that as against the installed capacity of 24,000 and 21,000 MT of DMT and Oxylene, actual production of DMT and Oxylene was 5169 MT and 7927 MT in 1973-74 and 5851 MT and 5061 MT in April—August 1974, thus indicating that the capacity utilisation has been only of the order of 21.5 per cent and 65 per cent in 1973-74 and 58.5 per cent and 58 per cent in April—August, 1974, respectively. Though according to DPR, the Project is expected to reach the full rated capacity in 3rd year of operation, the Committee are informed that the Project is expected to reach 75 per cent capacity in 1975 and 90 per cent in the year 1976 which is the 3rd year of operation. The factors responsible for low capacity utilisation were stated to be, supply of inferior quality of naphtha inadequate quantity of process air, frequent power dips and failure of power supply, frequent failure of boilers, and failure of critical recirculat-

ing gas compressor and refrigeration propane compressor in the past. It has been stated that necessary steps to overcome these problems had been initiated and these are expected to bear fruit by the middle of 1975.

The Committee however, fail to understand as to why the correct specification about the quality of Naphtha could not have been given to the Gujarat Refinery even at the initial stages and firm commitment therefor entered into with the Refinery and avoid the complaint of inferior quality of Naphtha at this stage. The Committee are informed that the Gujarat Refinery have agreed to certain modifications but a long-term solution is possible only after a year, though some improvement can be expected in next two months. The Committee would like to be informed of the developments in this regard.

The Committee also find that amongst the reasons for low utilisation of capacity, were the frequent failures of boilers and recirculating gas compressor. The Committee are informed that the suppliers of the boilers are identifying the problems and taking remedial measures and the job is expected to be completed shortly and action has been also taken for procurement of a stand-by compressor. The Committee are not sure whether these boilers and compressor were pre-tested before taking delivery and whether any action has been taken to allocate the responsibility of the suppliers in the matter for such defective supplies. The Committee recommend that these matters should be investigated in detail so as to demarcate the responsibility of the Management and the suppliers in regard to each one of the reasons so that suitable remedial action may be taken.

### **Reply of Government**

M/s. IPCL have intimated that a constant check on the general quality of Naphtha supplied by Gujarat Refinery is being maintained by them. Efforts are being made to improve the quality of Naphtha. Discussions are being held with the representatives of the Indian Oil Corporation Limited with a view to carrying out modification of their systems to effect favourable changes in the operating conditions of the Refinery in order to enable improvement in the quality of naphtha supplied to IPCL. Improvement to some extent has already occurred and long term measures are under discussion with the IOC. Engineers India Limited are studying this problem with a view to suggesting measures for sustained supply of quality raw material.

The boilers in question which were supplied by BHEL were hydro-statically tested in the manufacturing shop. The recirculating gas compressor was imported through IPCL's foreign engineering contractors, M/s. Krupp. The compressor was tested according to normal standards prevailing and appropriate testing certificates were obtained. Problems, however, arose during the actual operation of these equipments. While the cause for the trouble in the recirculating gas compressor has been identified and remedied, the boilers are being repaired by BHEL.

[Ministry of Petroleum O.M. No. 40012|2|75-P.C. II,  
dated the 22nd January, 1976]

### Comments of the Committee . .

#### Recommendation (Serial No. 13, Paragraph 3.65)

The Committee note that as against the production targets of 15,000 MT of DMT and 10500 MT of Orthoxylene for 1974-75 the actual production during the first six months (April to September) of 1974-75 was 7,726 MT of DMT and 5,516 MT of Orthoxylene. The Committee are informed that if all the other current problems—Naphtha quality, steam generators and power shortages are resolved it should be possible to attain near full production in the 3rd year of operation of the plants'. The Committee would therefore, like that the Management should take effective steps and Government should render necessary timely assistance so that the problems can be resolved and constraints removed without any delay to enable achievement of the full rated capacity according to schedule fixed in the DPR.

#### Reply of Government

IPCL is taking concerted measures to ensure that the various plants of Aromatics Project achieve full-rated capacity. Some of the measures taken in this regard are enumerated below:—

- (1) *Naphtha quality*:—A constant check is being maintained on the quality of naphtha supplied by the Gujarat Refinery. Long-term measures for sustained supply of the requisite quality of naphtha to IPCL are under discussion between IPCL and IOC.
- (2) *Steam generation*:—Bharat Heavy Electricals Limited, the suppliers of two steam boilers for the project have completed major modifications in the boilers recently. It is expected that these modifications would result in improved and sustained availability of steam.

- (3) *Power shortages*:—Steps are being taken to procure an inverter which will prevent frequent shutdowns in the plant due to power dips. This inverter is likely to be commissioned by the end of 1975.

IPCL is also carrying out negotiations with Gujarat Electricity Board and IOC to secure the excess electricity presently being generated by the Gujarat Refinery at its captive power plant for IPCL. The question of installation of a captive power plant for the IPCL Projects is also under investigation.

The Government will render all possible assistance, where necessary, to help IPCL in achieving full rated capacity in the Plants.

[Ministry of Petroleum O.M. No. 40012|2|75-P.C. II,  
dated the 22nd January, 1976]

#### Recommendation (Serial No. 18, Paragraphs 5.7-5.8)

The Committee note that the demand projections of the various petro-chemicals made by the task force of the Planning Commission are different from those made by the National Committee on Science and Technology. They further note that the demand projections in respect of Orthoxylene, Mixed Xylenes and DMT—the three products at present being manufactured by the IPCL, at its Aromatics Project—indicate that the production of Mixed Xylenes and DMT at the IPCL will always be less than the demand according to the supply and demand balance—1978-79 and as such there will be no difficulty for the IPCL to sell its products. The demand for Orthoxylene, however, has been less than its production at IPCL even in the first year of the operation of the plant and the IPCL is left with unsold orthoxylene even after exporting one consignment last year. The Committee however find that the demand for orthoxylene referred to its use as raw material for manufacture of chemicals. Down-stream units which could use orthoxylene as raw material have reached the stage of construction and are expected to consume orthoxylene from 1976-77. The Committee are informed that the surplus availability is expected to continue in the next two years and by 1977-78 IPCL may be in position to sell off its entire production of Orthoxylene. The Committee would like the IPCL to examine as to why demand for Orthoxylene has not come up to the level of its production and to ensure that the projects which are to use Orthoxylene as raw material do come up and are commissioned in time so that the



Orthoxylene Plant is not kept partially idle for want of demand. The Committee also recommend that Government/Corporation should intensify their development efforts in consultation with the Small Scale Industries and Small Industries Institute so that the surplus Orthoxylene may be advantageously utilised. Government should also consider the possibilities of exporting this product with a view to disposing of the surplus stock.

The Committee note that the demand projections made by Task Force of the Planning Commission in respect of the products of the Gujarat Olefins Project and its downstream units also indicate that there will be no difficulty for the IPCL to market these products as the demand is likely to be always ahead of availability. They, however, note that there are sharp variations in the demand projections of the Task Force and the National Committee on Science and Technology in respect of Polypropylene and Detergent Alkylate. According to the Task Force, the demand for polypropylene in 1978-79 is likely to be of 36,000 tonnes whereas the NCST estimates it to be of the order of 15,000 tonnes. In the case of Detergent Alkylate also, the Task Force's estimate of demand is 83,000 tonnes and the NCST's estimate is 25,000 by 1978-79. If the Task Force's estimates are taken into account, the IPCL will have no difficulty in disposing of its entire production of Polypropylene (27,000 tonnes) and Detergent Alkylate (27,000 tonnes); but if the NCST's estimates are taken into account, IPCL will find itself in difficulty in finding market for its full production and may have to work its plants at low level thus suffering loss in the bargain. The Committee recommend that Government should go into the reasons for the difference between the demands assessed by the Task Force of Planning Commission and by the National Committee on Science and Technology and stress that a realistic demand for the products should be available before setting up the appropriate capacity and planning the production programme.

### **Reply of Government**

The main reason for inadequate off-take of IPCL's orthoxylene has been the delay in the completion and commissioning of two down-stream phthalic anhydride units in the private sector. Three phthalic anhydride units with an installed capacity of 15,300 tonnes/annum (out of which 12,000 tonnes/annum is based on orthoxylene feed stock) have already come up. Another two units with an installed capacity of 12,000 tonnes/annum are expected to go on stream in 1976. With the commissioning of these two units it is expected that there would be adequate off-take for IPCL's orthoxylene.

The IPCL is exploring new lines of application for orthoxylene.

The possibility of export of surplus orthoxylene is being constantly kept in view and decisions will be taken on pragmatic considerations, depending upon the ruling international price of orthoxylene.

The demand supply position in respect of Detergent Alkylate and Polypropylene has been reviewed.

So far as Detergent Alkylate is concerned, sufficient capacity in the consuming units has already been set up/licensed and no difficulty is anticipated in marketing the entire product of IPCL's plant.

As regards Polypropylene, the market is essentially a created one. IPCL is embarking on a programme of market development well in advance of the commissioning of their plant with a view to ensuring adequate off-take for their product. Creation of additional conversion capacity over and above the existing capacity is being reviewed by the Ministry.

[Ministry of Petroleum and Chemicals O.M. No. 40012/2/75-PC. II dated the 10th December, 1975]

#### **Recommendation (Serial No. 24, Paragraph 7.10)**

The Committee find from the schedule F of the Annual Accounts for 1973-74 that a sum of Rs. 8,05,484 representing the difference between the revaluation of physical inventory of stores and spares transferred from the capital stores and that shown in the financial records has been kept under Material Suspense. The Committee are informed that this discrepancy was due to the difference between the book value and the valuation at the time of return of the materials to store. As custody of stores during construction was with E.I.L., they have been requested to investigate and reconcile the difference. It has been stated that the discrepancy has been narrowed down. The Committee were also informed that physical verification of construction stores in the custody of E.I.L. was being carried out regularly at the close of each financial year. The Committee feel that if E.I.L. had been required to render proper accounts for the consumption of material such a situation at the completion of the work would not have arisen. The Committee recommend that steps should be taken to have the discrepancies settled and amount under material suspense cleared at an early date. The Committee would also like that suitable instructions about the maintenance of proper store accounts at construction sites should be issued to avoid similar situation in future.

**Reply of Government**

IPCL have informed that against the sum of Rs. 8.05,484 originally shown under material suspense, all except the following items have since been fully accounted for:—

- (i) Steel items (M.S. reinforcement, structural like angles, etc.) valued at Rs. 54,855/-.
- (ii) Gaskets, nuts, bolts, fittings, spares, valves, etc. valued at Rs. 41,540/-.

IPCL's investigations have revealed that the above discrepancies are attributable partly to different systems for recording receipts and issues, necessitated by practical conditions, and partly to *bona fide* errors in making suitable entries in books regarding the issue of stores in question. In relation to the total volume of stores handled during project implementation such discrepancies are negligible and it has been decided by the Corporation to write off the above amount.

The Corporation have issued suitable instructions regarding maintenance of proper stores accounts at the construction sites and regular arrangements for stock verification and internal audit have been introduced.

[Ministry of Petroleum and Chemicals O.M. No. 40012/2/75-  
PC. II dated the 10th December, 1975]

## CHAPTER IV

### RECOMMENDATIONS IN RESPECT OF WHICH REPLIES OF GOVERNMENT HAVE NOT BEEN ACCEPTED BY THE COMMITTEE

#### **Recommendation (Serial No. 21, Paragraphs 5.73 to 5.78)**

The Committee note that according to the guidelines issued by the Government, the pricing of products of enterprises operating under monopolistic and semi-monopolistic condition should be within the basis of the landed cost of comparable imported goods which would be the normal ceiling. The enterprises can fix prices within the ceiling of the landed post and the prices so fixed should be operative for a period of 2-3 years. If it is necessary to fix prices higher than this ceiling, the matter should be referred to the administrative Ministry concerned for examination in depth in consultation with the Ministry of Finance etc. The Committee were informed that the IPCL had not been able to arrive at firm cost figures in the initial period of operations due to a number of problems dealt with elsewhere in this report and the determination of landed costs itself presented some difficulties in early 1973.

The Committee note that the pricing of products of IPCL had been undergoing frequent revisions and every time the prices fixed were provisional. While the price of DMT varied from Rs. 6,000 per M.T. in April, 1973 to 7,000 in August, 1973, it was again increased to 12,000 in January 1974 and 16,000 in March, 1974. In the case of the Oxylene the prices has increased from 2,000 in August 1973 to 3,000 in January, 1974 and further increased to 6,000 in March, 1974. The Committee are informed that the Corporation had been following a pricing policy based on (a) cost of inputs, (b) realisation of reasonable return on capital invested, (c) level of production achieved over a period of 18 to 24 months and (d) keeping prices in line with landed cost of identical products to the extent possible. The Committee are also informed that while the initial prices fixed at first was based on estimated landed cost, since no fixed cost data was available. Subsequently the price of Rs. 7,000 in August, 1973 was based on estimated landed cost as also the estimated availability of imported paraxylene.

In January, 1974, the revision proposed was based on the resumption of production after repair of propane compressor and estimated average production of 60 per cent over a period of 18—24 months from April, 1973 and a reasonable return of 15 per cent on capital employed. The further revision in March, 1974 was however stated to be on account of high cost of inputs.

The Committee recommend that the Corporation should take steps to reduce the cost of production by achievement of full rated capacity, stabilising production and keeping the overheads to the minimum. The Committee also recommend that Government/Corporation should consider fixing the prices on a fairly long term basis taking into account all the relevant factors and the Board should review the prices periodically to ensure that the prices are competitive and the price increase does not contribute to the inflationary trend. The Committee need hardly stress that since petro-chemical intermediates are the raw materials for a number of industries, Government should take effective measures to see that the prices of the petro-chemicals which are used as raw materials are reasonable and internationally competitive and the benefit of any reduction in the prices is always available to the common man.

The Committee find that the price of orthoxylene and mixed-xylene are higher than the landed price. The Committee would like that this aspect should be gone into by Government so that the prices of xylene are in accordance with the guidelines issued by Government in this regard. The Committee also expect that the Corporation should fix the prices of its products within the framework of the recommendations of BPE and wherever there had been deviations, the Corporation obtain the prior approval of Government.

The Committee find that while the cost of DMT, the base product for polyester fibre cloth is not high, the cloth produced by using DMT is sold at a price which is higher. The Committee feel that with the stabilisation of production of DMT the prices of other products manufactured with DMT as base should be so fixed that the benefit of reduction in price of DMT could ultimately be passed on to the public.

The Committee have come across cases where the Private Sector has been making use of the products manufactured by the Public Sector and making huge profits at the expense of the Public Sector, as in the case of basic drugs of IDPL and steel. The Committee feel that there should be a correlation between the price of

the raw material and the cost of the end product. The Committee, therefore, recommend that Government/IPCL should take steps to evolve a procedure by which any reduction in the cost of the raw material ultimately goes to the benefit of the consumer.

### Reply of Government

Noted.

2. All possible measures are being undertaken by IPCL to remove operational bottlenecks to ensure that the plants achieve their respective rated capacities.

3. Prices fixed by IPCL for its products are meant to be operative for fairly long periods. However, prices are adjusted from time to time to take into account changes in cost of production and the prevailing market situation.

4. Considering the scale of IPCL's operations and the cost of inputs, the objective of being internationally competitive in the products is difficult to achieve. IPCL's product prices may be construed as a reasonable balance between the interests of IPCL and the local market situation.

5. Of the products made and sold by IPCL:

- (a) DMT is converted to fibre/filament, spun, processed, dyed, woven and sold as cloth or garments to the ultimate consumer.
- (b) O-xylene is primarily used for manufacture of phthalic anhydride which is subsequently converted as plasticisers, dyestuffs, resins etc.
- (c) Mixed xylenes are used primarily as solvents in pesticidal formulations, paints/varnishes etc.

The structure of utilisation industries covers the gamut of organised, medium scale and small scale levels with wholesale and retail trading also, involved before the final product reaches the ultimate consumer. Ensuring that reduction in IPCL's product prices reaches the ultimate consumer would require price control at each and every stage of conversion which is not considered feasible. For the time being, the market forces will determine to what extent lower prices get passed on down the line.

[ Ministry of Petroleum and Chemicals O.M. No. 40012/2/75-PC.  
II dated the 10th December, 1975]

**Further information called for by the Committee**

Please indicate whether prices of IPCL product are fixed within the framework of the recommendations of BPE and wherever there are variations, prior approval of Government is obtained?

(Lok Sabha Secretariat O.M. No. 13-PU/75 dated 18-2-1976)

**Further reply of Government**

At present the sale prices of the products of IPCL are higher than the landed cost of the items in question. This is primarily because there has been, for some time back, a slump in the International prices of these items. IPCL have been advised to submit detailed justifications for fixing the prices of their products above the landed cost for consideration of the Government.

[Ministry of Petroleum O.M. No. 40012/2/75-P.C. II,  
dated the 29th March, 1976]

**Comments of Committee**

(Please see Paragraphs 1.18 to 1.29 of Chapter I of Report)

## CHAPTER V

### RECOMMENDATIONS IN RESPECT OF WHICH FINAL REPLIES OF GOVERNMENT ARE STILL AWAITED

#### Recommendation (Serial No. 5, Paragraphs 2.13 to 2.14)

The Committee note that the project management assistance contract with M/s. Lummus & Co. for the Olefins project include a condition for payment to M/s. Lummus & Co. of a fee of  $\frac{1}{2}$  per cent of the lowest quotation received from an intended supplier abroad or of the price of the item purchased from a source inside India when they have been authorised to proceed with procurement action for plant and machinery and it is subsequently decided by IPCL to purchase them in India or outside India without the assistance of M/s. Lummus so as to cover the cost of infructuous work undertaken by them in connection with the procurement. The Committee also note that in the case of the agreement for Naptha Cracker a fee of 1 per cent is similarly payable to M/s. Lummus & Co. and in the case of the Acrylonitrile project a certain amount on the basis of a different formula is payable to Badger B.V., Netherlands in similar circumstances. The Committee feel that these are unusual provisions even though IPCL does not consider them extraordinary or unreasonable. The Committee would like Government to examine the foreign collaboration agreements entered by other public undertakings to ensure how far the inclusion of such terms of payments either directly or indirectly are justified and in the financial interests of the undertakings and lay down suitable guidelines in this regard for the benefit of all concerned.

The Committee further note that under the terms of agreement for the Naptha Cracker, M/s. Lummus have preferred a claim of £4190 for work done and considered by them as infructuous in connection with the procurement of hydronyl distillation trays out of which a sum of £527 has been accepted by IPCL and the balance is stated to be under examination. While noting that it was originally intended to be imported through M/s. Lummus was ultimately manufactured indigenously through the efforts of Engineers India Ltd., the Committee feel that the IPCL could have saved the infructuous expenditure on fees payable to M/s. Lummus if indigenously



sources of supply had been identified and action had been taken to consult such indigenous suppliers in advance before asking M/s. Lummus to initiate procurement action.

The Committee recommend that Ministry/Corporation should draw a lesson from this experience and issue suitable guidelines to all Undertakings in this regard.

**Recommendation (Serial No. 6, Paragraphs 2.15-2.16)**

The Committee note that according to the findings of the Task Force of Planning Commission, a number of design engineering firms in developed countries are in a position to offer their services for constructing petro-chemical production facilities in developing countries on attractive terms and it is possible that many of such firms would be able to arrange for the payments to be made in exported end-products so that the manufacturing facilities become self paying in terms of foreign exchange cost involved. The Task Force has recommended that this possibility should be explored as one of the methods of financing the development programmes for the Fifth and Sixth Five Year Plans.

The Committee are informed that all the foreign collaboration agreements signed by IPCL had been finalised well before the report of the Task Force was available. The Committee are of the view that the recommendation made by the Task Force in regard to the method of financing of development programmes should be borne in mind while negotiating all such foreign collaboration agreements in future not only by IPCL but also by other Government and public sector agencies with a view to eliminating or at least reducing foreign exchange remittances abroad. The Committee would like Government to consider issue of suitable instructions in this matter to all Public Sector Undertakings for compliance.

**Recommendation (Serial No. 9, Paragraphs 3.25 to 3.26)**

The Committee note that there are two units in the aromatics Project—one Xylenes Plant using naptha from Gujarat Refinery and the second DMT plant using paraxylene from the Xylenes Plant. Though the DMT plant was completed in March, 1973, the actual production could be started in April, 1973, only with imported para-xylene as the para-xylene plant which was to provide the feed stock for DMT plant was not ready at that time. The Committee also note that though the para-xylene plant was mechanically completed in June 1973 the smooth operation of the Plant could

not be achieved till the end of 1973 owing to repeated failure of an imported compressor which had to be repaired and modified ultimately. The compressor is reported to be working satisfactorily and continuously since March, 1974. The Committee have dealt with this aspect in a subsequent Chapter in the Report.

The Committee regret to note that lack of planning and synchronisation in having the para-xylene plant commissioned later than the DMT plant when the DMT plant was based on para-xylene as its feed stock. The result of this was that the DMT plant had to be run with imported para-xylene and foreign exchange to the extent of Rs. 44.80 lakhs had to be spent. The Committee are also informed that the plant had to be shut down and remain closed from September to December, 1973 for want of para-xylene. The loss during 1973-74 due to low production consequent on the closure of the DMT Plant and the late commissioning of Xylenes Plant was reported to be of the order of Rs. 2.62 crores. The Committee feel that with better planning and monitoring of the programmes at several stages including effective steps for production of indigenous machinery, it should not have been difficult for the Undertaking to have ensured synchronisation between the two plants and effected considerable saving in foreign exchange. The Committee would like the Government to analyse the reasons for this lack of synchronisation between the two plants and draw lessons for the future. The Committee would like to be informed of the result. The Committee recommend that the Management of I.P.C.L. should take advantage of modern management techniques like PERT etc. to guard against the usual inadequacies and pitfalls in the matter of ensuring sequence and adherence to delivery schedules. The Committee hope that at least in the future plants of the Corporation, namely Olefins project and the down stream units etc. such a situation will not arise.

**Recommendation (Serial No. 10, Paragraphs 3.44-3.45)**

The Committee regret to note that though paraxylene unit of Aromatics Project was mechanically completed in August 1973, the smooth operation of the plant could not be achieved till the end of 73 owing to the repeated failure of the imported compressor in the propane refrigeration system. The Committee were informed that this equipment was supplied by M/s. Linde fabricators who were selected by M/s Krupps according to the terms of the collaboration agreement. The Committee however find that the propane compressor was not of proven design and as admitted by the management "there was no compressor which was exactly identical to this compressor in all respects and was being used for the same purpose". While the compressors supplied by M/s Linde earlier were of 12000

RPM and 18000 RPM, the one supplied to IPCL was of 24000 RPM. The Committee were also informed that Linde was selected by the collaborators on the basis that its machines had been running successfully in the Krupps built-paraxylene plants in Bulgaria for the same refrigeration but using Freon as refrigerant. The Committee are surprised that such a compressor had been accepted for conditions which are entirely different from those countries.

The Committee also note that though Krupps were responsible for carrying out inspection and testing of the equipment before despatch and they provided certificates that test had been successfully carried out on the machines, the IPCL, did not exercise the option of deputing a representative to Linde's works and to inspect the compressor in spite of the fact that the contract No. 5 gave the right to IPCL representative to be present during the testing. It has been admitted by the Secretary of the Ministry during evidence that "I do not really excuse this aspect of it. Inspection should have been done... the test was in the workshop at the shop bench and not as part of the whole system." The Committee are convinced that if IPCL had exercised its right of inspection at Linde's works, the adequacy of test of the compressor could have been proved and scope for the failure which was attributed to the system could have been avoided. The Committee regret to observe that in spite of the repeated failure of the compressor, no investigation was made either by Undertaking or by the Government to identify the exact causes of the repeated failure except getting a report from the collaborators. According to the Management, the exact reasons for the failure have not been identified by the manufacturers of the compressor or by the collaborators although the probable causes have been indicated in the collaborators report as (a) dirt and dust in the gas system and lube oil system, (b) inadequate flow of lube oil to the bearings, (c) looseness of the polygon bush on the shaft and (d) effect of vibration due to the lifting of pressure relief valve on the lube oil system.

According to the Ministry, "This is considered a preliminary finding. I do not know if we will ever get to the bottom of whole this in a very high frequency compressor like this." The Committee also find that when this question was raised in the Parliament on 12th August, 1974, it was stated by the Minister of Petroleum and Chemicals "I have always thought this is a very serious matter".

The Committee are informed that because of the repeated failure of the compressor and delay in the commissioning of the plant, the

Corporation suffered a loss of production of Rs. 6 crores. The Committee are also informed that the compressor was recommissioned in March 1974 and the unit has been running satisfactorily since then. The Committee are not happy at the huge loss suffered by the IPCL on account of the delay in commissioning due to the repeated failure of the compressor. The Committee desire that the entire matter should be thoroughly investigated by an independent Committee of experts to be appointed immediately in order to identify the shortcomings at several stages including the points raised in Parliament on this issue from time to time and fix responsibility for the lapses. The Committee would like to be informed of the action taken within six months of this Report. The Committee also recommend that the Corporation should derive lessons from the experience of the working of this contract for future.

**Recommendation (Serial No. 22, Paragraphs 5.86 to 5.87)**

The Committee note that the question of fixing a uniform F.O.R. destination price for DMT and xylenes was considered by the Corporation on the basis of an estimated production and distribution during 1973-74 and it was found that Rs. 110 per metric tonne in the case of DMT and 115 per metric tonne in the case of ortho-xylene and mixed-xylene would have been added to the ex-works price to arrive at uniform F.O.R. destination price. The Committee were informed that the Corporation would not like to take all the responsibility for booking and despatch of DMT and bulk supplies of Ortho-xylene and it would be convenient for the bulk purchaser to take delivery ex-works. For this purpose, the Corporation would be giving a rebate on the uniform F.O.R. destination prices equal to railway freight to the particular destination at the rate used in the freight equalisation calculation. The Committee were also informed that the recoveries on account of freight would be reviewed periodically and adjustments made either by way of refunds to the parties over-charged or by fresh invoicing to the under-charged. In the case of ortho-xylenes and mixed-xylenes, supplies would be available at the regional offices at uniform prices.

The Committee, however, note from the minutes of the meeting of the board of Directors held on 26th February, 1973 that one of the directors had warned that 'unless a uniform F.O.R. price was introduced, the polyester fibre units situated at a distance from Baroda would be put to a disadvantage. This might also set in motion demands for establishing petrochemical projects in other areas; a large petrochemicals complex has been set up at Baroda on techno-economic considerations including the consideration to avail of

economics of large scale operation and this benefit should be available to the entire country, and the Board decided to refer the matter to the Government. The Secretary of the Ministry, however, stated during evidence that "broadly speaking, I would say the freight equalisation is an economic concept that can be operated in the economy as a whole. It should not be attempted for individual product and for such products like DMT." While the Committee agree with the views of the Secretary that freight equalisation is an economic concept, the Committee need hardly stress that petrochemicals industry being highly employment-oriented, the benefit of the price including freight should be available to the country as a whole irrespective of the distances. The Committee, therefore, recommend that the question should be examined carefully with reference to its effect on the profitability of the project and development of industries particularly in the backward areas. The Committee would like to be informed of the action taken in the matter.

NEW DELHI;  
April 7, 1976  

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Chaitra 18, 1898 (S)

NAWAL KISHORE SHARMA,  
Chairman,  
Committee on Public Undertakings.

## APPENDIX

(Vide para 4 of Introduction)

### *Analysis of the action taken by Government on the recommendations contained in the Sixty-Fourth Report of the Committee on Public Undertakings (Fifth Lok Sabha)*

1	Total Number of recommendations . . . . .	31
2	Recommendations that have been accepted by Government ( <i>Vide</i> recommendations at Serial Nos. 1, 2, 3, 8, 11, 14, 15, 16, 17, 19, 20, 23, 25, 26, 27, 28, 29, 30 and 31)	
	Number . . . . .	19
	Percentage of total . . . . .	61.3
3.	Recommendations which the Committee do not desire to pursue in view of Government's replies ( <i>Vide</i> recommendations at Serial Nos. 4, 7, 12, 13, 18 and 24)	
	Number . . . . .	6
	Percentage of total . . . . .	19.4
4.	Recommendations in respect of which replies of Government have not been accepted by the Committee ( <i>Vide</i> recommendations at Serial Nos. 2, 16 and 21)	
	Number . . . . .	1
	Percentage of total . . . . .	3.2
5.	Recommendations in respect of which final replies of Government are still awaited	
	Number . . . . .	5
	Percentage of total . . . . .	16.1