E. C. No. 815

ESTIMATES COMMITTEE (1974-75)

(FIFTH LOK SABHA)

SEVENTY-EIGHTH REPORT

MINISTRY OF STEEL AND MINES

(DEPARTMENT OF STEEL)—Planning, Development, production, distribution, etc. of Iron & Steel and Ferro-Alloys.

LOK SABHA SECRETARIAT
NEW DELHI

April, 1975/Vaisakha, 1897 (Saka)

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7. Shri M. G. Ulkey

INTRODUCTION

I, the Chairman, Estimates Committee having been authorised by the Committee to submit the Report on their behalf, present this Seventy-Eighth Report on the Ministry of Steel and Mines (Department of Steel)—Planning development, production, distribution, etc. of Iron and Steel and Ferro-Alloys.

2. The Committee took evidence of the representatives of the Ministry of Steel and Mines (Department of Steel) on the 8th November, 1974. The Committee wish to express their thanks to the Secretary, Ministry of Steel and Mines (Department of Steel) and other officers of the Ministry for placing before them material and information which they desired in connection with the examination of the subject and for giving evidence before the Committee.

3. The Report was considered and adopted by the Committee on the 25th April, 1975.

4. A summary of the Recommendations/Conclusions contained in the Report is appended (Appendix—I).

5. A statement showing the analysis of recommendations/conclusions contained in the Report is also appended to the Report (Appendix—II).

R. K. SINHA,
Chairman,
Estimates Committee.

NEW DELHI;
April 19, 1975.
Vaisakha 9, 1897 (*Saka*).

CHAPTER I

INTRODUCTORY

1.1. The Estimates Committee (1971-72), Fifth Lok Sabha, examined the various problems relating to planning, production and distribution, etc. on Iron and Steel and Ferro-Alloys in the country and presented their Twentieth Report on the Ministry of Steel and Mines (Department of Steel)—Planning, Development, Production and Distribution, etc. of Iron and Steel and Ferro-Alloys (hereinafter referred to as "Original Report") to Lok Sabha on the 26th April, 1972. This Report contained 47 recommendations in all.

1.2. Government's replies to these recommendations indicating action taken to implement the recommendations were examined and commented upon in the Thirty-second Report (1972-73), Fifth Lok Sabha, on Action Taken by Government on the recommendations contained in the Original Report (hereinafter referred to as 'Action Taken Report'). According to this Report, out of 47 recommendations contained in the original Report, 29 recommendations had been accepted by Government and the Committee did not desire to pursue 10 recommendations in view of Government's replies thereto. The final replies of Government in respect of the remaining eight recommendations had not been received by the Committee till the time of presentation of the Action Taken Report on the 3rd May, 1973.

1.3. The Action Taken sub-Committee of the Estimates Committee (1974-75) at their sitting held on the 25th July, 1974 decided to pursue with the Government *inter-alia* the action taken by Government to implement certain recommendations contained in the 20th and 32nd Reports of the Estimates Committee (Fifth Lok Sabha).

1.4. The Estimates Committee took evidence of the representatives of the Ministry of Steel and Mines (Department of Steel) on the 8th November, 1974.

1.5. The various matters taken up by the Committee and recommendations of the Committee in this regard are dealt with in the subsequent chapters.

CHAPTER II

PRODUCTION

A. Targets during Fourth Plan

2.1. In paras 1.33 and 1.34 of the Twentieth Report of the Estimates Committee (Fifth Lok Sabha) on the Ministry of Steel and Mines (Department of Steel)—Planning, Production, Distribution, etc, of Iron and Steel and Ferro-Alloys, the Committee had been constrained to observe that while nature had been abundantly generous in endowing India with all necessary inputs for a flourishing steel industry, like iron ore, coal, stone, manganese and other ingredients and above all plentiful labour, our steel production formed only a hundredth part of the world production. On the other hand, Japan, which suffers from disadvantage of having no basic raw material for its steel industry and has to depend upon iron ore imports from other countries had converted this disadvantage into a visible advantage and was producing nearly 93 million tonnes of steel against 1.7 million tonnes produced by it in 1948. Against this, India's manufacture of iron and steel had risen from 1.3 million tonnes in 1948 to 6.3 million tonnes only in 1970.

2.2. As the rapid growth of Iron and Steel industry was indispensable for the country's developmental, industrialisation and export programme, the Committee had urged that Government should take necessary measures to step up production of steel in order to achieve the targeted capacity of the steel plants envisaged in the Plan.

2.3. Indicating the position obtaining in this regard during the Fourth Plan, the Department of Steel have furnished the following two statements containing information about the installed capacity, production, targets and actual production in respect of major steel plants (Bhilai, Durgapur and Rourkela Steel Plants under Hindustan Steel Limited and TISCO and IISCO) in terms of ingot steel and saleable steel covering the Fourth Plan period.

STATEMENT I

Production of Ingot Steel at the integrated Steel Plants during the Fourth Five Year Plan

UNIT '000 Tonnes

Sl. No.	Plant	Rated Capacity	1969-70		1970-71		1971-72		1972-73		1973-74	
			Target	Acutal	Target	Actual	Target	Actual	Target	Actual	Target	Actual
1	2	3	4	5	6	7	8	9	10	11	12	13
1	B.S.P . .	2500	2180	1859	2230	1940	2200	1953	2250	2108	2250	1894
2	D.S.P. . .	1600	1100	818	1100	634	1150	700	1000	723	1000	776
3	R.S.P. . .	1800	1400	1104	1500	1038	1400	823	1250	1177	1300	1081
4	TISCO . .	2000	na	1708	na	1716	1778	1708	1900	1690	1900	1514
5	IISCO . .	1000	na	700	na	627	800	617	800	431	648	439
	TOTAL .	9900	..	6189	..	5955	7328	5801	7200	6129	7098	5704

STATEMENT II

Production of Saleable Steel at the Integrated Steel Plants during the Fourth Five Year Plan

UNIT '000 Tonnes

1	B.S.P. . .	1965	1710	1495	1707	1549	1720	1568	1790	1746	1790	1682
2	D.S.P. .	1239	667	494	695	413	877	432	729	477	773	377
3	R.S.P. . .	1225	966	796	1044	684	999	597	889	765	875	736
4	TISCO .	1500	na	1440	na	1375	1400	1387	1425	1458	1500	1200
5	IISCO . .	800	na	568	na	523	623	493	640	347	503	358
	TOTAL .	6729	..	4793	..	4544	5619	4477	5473	4793	5441	4353

na—Not available.

2.4. In para 2.7 of the original Report the Committee had been concerned to note the gap between the estimated requirements and the production of finished steel in the country which was 0.2 million tonnes in 1969-70 had risen to 1.5 million tonnes in 1971-72. The Committee felt that as steel was the basic raw material for a large number of industries, it was imperative that adequate supplies were made available for sustaining and accelerating industrial development. The Committee had, therefore, urged upon Government to take timely measures to arrange for imports of steel to meet the gap between the assessed requirements and estimated production.

2.5. The latest figures furnished by the Ministry in respect of the domestic demand and actual production of Iron and Steel (Saleable) during the Fourth Plan are as follows:—

(Figures in thousands tonnes)

Year	Domestic Demand	Excess Production shortfall	
1969-70	3,414	4,794	+1380
1970-71	3,867	4,544	+677
1971-72	5,201	4,478	—723
1972-73	5,344	4,793	—551
1973-74	4,658	4,353	—305

2.6. It will be noticed from statement Nos. I & II above that against the rated capacity of 9.9 million tonnes of ingot steel at the various steel plants, the production in the case of ingot steel has been 6.18 m.t. in 1969-70, 5.9 m.t. in 1970-71, 5.8 m.t. in 1971-72, 6.1 m.t. in 1972-73 and 5.7 m.t. in 1973-74. In the case of saleable steel, as against the rated capacity of 6.7 m.t., actual production amounted to 4.8 m.t. in 1969-70, 4.5 m.t. in 1970-71, 4.5 m.t. in 1971-72, 4.8 m.t. in 1972-73 and 4.35 m.t. in 1973-74.

2.7. In para 2.59 of the original Report the Committee had taken a serious note of the fact that the steel production had been around 65 to 70 per cent of the installed capacity and that in none of the periods, *i.e.* from 1955-56 onwards the production targets had been achieved. The Committee had, therefore, questioned the rationale of the production targets when there was a shortfall year after year.

2.8. As would be seen from the statements I & II above, even the targets of production in respect of ingot steel as well as saleable

steel have been fixed below the rated capacities. Asked what were the considerations for fixing targets below the rated capacity of each plant, it has been stated by the Department of Steel that while fixing the annual targets, apart from production possibilities taking in view the possible build-up in production with reference to past production, factors like infrastructural inputs, viz., power, rail transport etc. and the likely market demand is also taken into consideration. This has led to fixing of targets at plants below the rated capacity. On a sustained basis, however, 90 per cent of the rated capacity utilisation may be considered as satisfactory. The rated capacity for production of saleable steel at the five main integrated steel plants (Bokaro is yet to come into full operation and will be in gestation stage) is 6.7 m.t. per annum. The Department anticipate that by the end of the 5th Five Year Plan, a little over 90 per cent of this capacity will be achieved.

2.9. It would also be seen from the statements referred to earlier that actual production has ben falling short of the targets laid down from year to year, during the Fourth Plan period. Actual production of ingot steel during 1971-72 was 5.8 million tonnes against the target of 7.3 million tonnes. During 1972-73 and 1973-74 the production has been 6.1. m.t. and 5.7. m.t. against the target of 7.2 m.t. and 7.09 m.t. respectively. A similar picture emerges in case of saleable steel.

2.10. It will also be observed from the relevant figures given in para 2.5 that there is a considerable short fall in production of iron and steel as compared to the domestic demand during the years 1971-72, 1972-73 and 1973-74.

B. Constraints on Production

2.11. It has been stated by the Department of Steel that the lower utilisation of capacity/non-achievement of targeted capacity during the Fourth Plan has been due to a variety of reasons differing from plant to plant and year to year. The main impediments in reaching targetted production in each of the steel plants during the Fourth Plan period are indicated below.

Bhilai Steel Plant

2.12. 1969-70: Production was adversely affected in the first half of the year due to labour troubles which occurred in the Traffic Department, Steel Melting Shops and Blooming Mill. Critical shortages of refractories for the Steel Melting Shops and in-adequacy of loco power also affected the production adversely.

2.13. 1970-71: Major technical constraints affecting production arose mainly from the quality and quantity of refractories available, longer time taken in the completion of certain repairs and some unexpected difficulties in Blast Furnace No. 4 and in the Blooming Mill.

2.14. 1971-72: A major break-down occurred in the coke oven batteries in May, 1971, which affected the pushing rate of coke oven resulting in shortage of coke for the blast furnaces and gas for the steel melting shop and the rolling mills.

2.15. 1972-73: Production during this year represented about 93 per cent and 97 per cent of the targets in terms of steel ingots and saleable steel respectively. The production would have been higher but for the following difficulties:—

(a) Comparatively higher absenteeism in some of the important departments like coke ovens and steel melting shop in the first quarter of the year due to severe summer conditions.

(b) Non-availability of good quality stopper sleeves and shortage of mould trains for the first six months of the year.

(c) Inadequate furnace availability due to poor quality of refractories.

(d) Irregular supply of medium coking coal from September, 1972, onwards resulting in poor quality of coke, affecting the performance of blast furnaces adversely.

(e) Constraints arising from the conditions of coke oven batteries.

Durgapur Steel Plant

2.16. 1969-70: Substantial production was lost due to considerably disturbed industrial relations situation throughout the year; equally importantly a climate did not exist in which planned efforts at systematic production and maintenance could be mobilised. Open Hearth Furnace No. 9 in Steel Melting Shops could not be commissioned due to industrial disputes concerning manning. Programme for clearing backlog of capital repairs was impeded by delays in the arrival of imported spares from the United Kingdom and failure on the part of indigenous suppliers to maintain their deliveries to schedule.

2.17. 1970-71: There were considerable disturbances in production due to frequent strikes, series of stoppages in work in many

units and a lock-out in the Steel Melting Shop following assaults on officers and stoppage of work.

2.18. 1971-72:

(a) Disturbed industrial relations situation. It has been estimated that 8,86,626 man-hours were lost on account of labour troubles in this plant. The value of production lost is estimated at Rs. 8.06 crores.

(b) Unsatisfactory conditions of coke ovens and oven equipments restricting the pushing rate of coke ovens and thereby affecting production in the rolling mills on account of gas shortage.

(c) Equipment troubles.

(d) D.V.C. power restrictions, particularly from March, 1972.

2.19. 1972-73:

(a) Adverse industrial relations situation. It has been estimated that 2,61,487 man-hours were lost on account of labour troubles. The value of production lost is estimated at Rs. 4.95 crores.

(b) D.V.C. power restrictions and under-frequency practically throughout the year.

(c) Equipment troubles especially in the coke oven areas leading to short supply of gas affecting the steel melting shop and the rolling mills.

Rourkela Steel Plant

2.20. 1969-70: Performance of the plant was affected to varying degrees throughout the year due to a spate of labour troubles, which reached a peak during December, 1969 and January, 1970 and were of such magnitude as to necessitate the blanking of an entire C.O. Battery, banking of Blast Furnances and slowing down of operations in the other units in the chain of production.

2.20A. 1970-71: Disturbed industrial relations which continued during the first half of the year and the strike in the South Eastern Railway in July-August, 1970 affected the production. Serious problems developed in the Coke Ovens in February, 1971 which affected

production in all the units. There were also interruptions in production due to technical break-downs in blast furnace No. 4 soaker and stiffer cranes, plate mill and hot strip mill and also due to power cut from the Hirakud grid.

2.20B. 1971-72:

(a) Collapse of the roof of steel melting shop on 11th July, 1971, affecting the operation of the entire steel plant for several months.

(b) Unsatisfactory condition of coke oven batteries.

(c) Power supply restrictions from the Orissa State Electricity Board from March, 1972 affecting production particularly in the hot strip mill and the tandem mill.

2.21. 1972-73:

(a) Occasional power failure and frequent power restrictions from Orissa State Electricity Board.

(b) Heavy Capital repair work during the first quarter of the year in blast furnaces, slabbing mill, plate mill and hot strip mill.

(c) Equipment troubles in coke oven machinery, slabbing and hot strip mills in the first half of the year.

(d) Labour troubles in some of the mills and sections of the plant.

(e) Constraints arising out of the conditions of the coke ovens.

Indian Iron and Steel Company

2.22. The management of Indian Iron and Steel Company was taken over by Government through an Ordinance with effect from 14th July, 1972. Against the rated capacity of 1.0 million ingot tonnes, the production which was as high as 1.027 million tonnes in 1963-64 had fallen to 6,17,000 tonnes in 1971-72 and the production during the first few months of 1972-73 before the take over of the management, was substantially worse than that in 1971-72. This fall in production was chiefly due to a deterioration in the condition of plant and equipment which was the direct result of:

(a) ineffective management at the top;

(b) neglect of rehabilitation programme in the past; and

(c) inadequacy of replacement, repairs and maintenance programmes.

The production in the plant also suffered on account of disturbed industrial relations.

Tata Iron and Steel Company

2.23. The production during 1971-72 and 1972-73 was quite satisfactory. In 1971-72, the production of saleable steel was 99 per cent of the target. In 1972-73, the production was in excess of the target. The production of ingot steel was lower, particularly in 1972-73, mainly due to a deterioration in the condition of the coke oven batteries.

2.24. It has been stated that the year 1973-74 has proved to be an exceptionally adverse year for steel production. There was an appreciable improvement in steel production in 1972-73 over the preceding two years. Expecting that this upward trend in production would be maintained in 1973-74, a target of production of 7.098 million tonnes of ingots (against production of 6.129 million tonnes in 1972-73) and of 5.441 million tonnes of saleable steel (as against the production of 4.793 million tonnes in 1972-73) had been set. This represented overall capacity utilisation of 80 per cent in terms of ingot steel and of 81 per cent in terms of saleable steel. The targets of production for each of the steel plants had been accepted by the Joint Negotiating Committee for the Steel Industry and were also based on joint discussions between the managements and the workers at the plant level. There was, therefore, every expectation that these targets could be achieved. Unfortunately, however, certain external factors intervened and affected steel production adversely from all the steel plants. Mainly these were:—

(a) Severe power cuts and power interruptions, especially in the period from April to mid-November, 1973, directly affecting production in all the steel plants except Bhilai.

(b) Inadequate availability of coal again largely due to power cuts and power interruptions during this period which affected the entire Jharia Coal-fields leading to curtailment in the operation of coal washeries and of coal mines which, in turn, affected production in all the steel plants.

2.25. It has been estimated that a production of nearly 4,13,000 tonnes of saleable steel was lost due to power shortage and/or coal

shortage resulting from power shortage at the collieries and mines. The plant-wise loss on this account is estimated as under:—

Bhilai Steel Plant	32,500	tonnes
Durgapur Steel Plant	64,663	tonnes
Rourkela Steel Plant	57,198	tonnes
T.I.S.C.O.	2,35,517	tonnes
I. I. S. C. O.	23,674	tonnes
TOTAL	4,13,552	tonnes

(c) Intermittent slow down and industrial unrest in the Railways specially in the South Eastern and Eastern Railways, in August, 1973, and thereafter from late November, 1973, onwards affecting movement of coal and other raw materials and of finished products and necessitating the imposition of drastic cuts on production in keeping with the minimal flow of raw materials.

(d) The production was also affected at Durgapur Steel Plant and to some extent at Rourkela Steel Plant on account of disturbed industrial relations. It has been estimated that in 1973-74, 1,83,157 man-hours were lost in Durgapur Steel Plant and 52,720 man-hours in Rourkela Steel Plant on account of labour troubles. The value of production lost is estimated at Rs. 5.9 crores and Rs. 7.9 crores in the two Plants respectively.

2.26. Thus broadly speaking the main factors responsible for lower utilisation of capacity/non-achievement of targetted production during the Fourth Plan period have been as follows:—

(i) The unsatisfactory working of coke oven batteries.

(ii) Backlog of maintenance/inadequate maintenance leading to equipment troubles and breakdowns.

(iii) Collapse of the steel melting shop roof of Rourkela Steel Plant in July, 1971 affecting the operation of the entire steel plant for several months.

(iv) Inadequacy of replacement, repairs and maintenance programmes in IISCO.

(v) Disturbed industrial relations, particularly in the Durgapur Steel Plant and IISCO and to ome extent in the Rourkela Steel Plant.

(vi) Power restrictions/failures. Severe power cuts/interruptions, inadequate availability of coal and serious dislocation in rail movement on account of intermittent slow down and industrial unrest in the Railways in 1973-74.

Maintenance of Plants

2.27. Asked if such factors as the unsatisfactory working of coke oven batteries and backlong of maintenance/inadequate maintenance leading to equipment troubles and break-downs could not be foreseen and timely remedial action taken and also as to what measures had been adopted to avoid recurrence of these difficulties in future, the representative of the Department of Steel stated during evidence that efforts had been made to analyse these reasons and to draw conclusions therefrom. He was of the view that such a situation arose from inexperienced people operating the plants. The other reason was to ignore the health of the plant and its maintenance schedule with the urge to get a little higher production out of it.

The disturbed industrial relations, particularly at Durgapur and Rourkela during the Fourth Plan period especially during the later half, which were a part of general political disturbances, which were then prevailing, just before last general elections contributed also greatly towards this. Therefore, one had to ensure that the inputs were regularly flowing in and the industrial relations and the attitude of the workmen were such as would ensure uninterrupted and regular production. Non-adherence to these norms resulted in lowering production and getting equipment badly damaged with the result that there would be a great loss to the national Exchequer. The representative further stated that during the last two and a half years, fairly large-scale and well-planned programmes had been taken up for repair of the coke oven batteries. In certain areas coke oven batteries had been replaced by new ones. The Committee have also been informed subsequently that additional coke oven batteries were being installed to serve as replacement at the time of scheduled rebuilding of the existing coke oven batteries.

2.28. The representative assured the Committee that a great deal of stress was being laid on ensuring that the technical requirements for maintenance of production were fully adhered to. This was expected to result in avoiding some of the negative features witnessed during the Fourth Plan.

Power Supply

2.29. Explaining the difficulties experienced in regard to power supply, the representative of the Department stated during evidence that 1973-74 was one of the most difficult years as far as power sup-

ply was concerned. The difficulty was experienced in case of power supply from D.V.C., to some extent in case of supply from the Orissa State Electricity Board and also from the Bihar State Electricity Board. The estimate of loss of production in steel during the year 1973-74 was stated to be of the order of 4,00,000 tonnes. This was not merely a loss directly in the steel plants but also, owing to the effect of power loss, on the operation at the coal washeries and coal mines. During the early part of 1974-75 when the Railway Strike was on and there was a slow movement of wagons, the steel industry faced a serious problem with regard to power supply especially from D.V.C. The representative added that during the last four to five months there had been considerable improvement in power supply.

2.30. The representative assured the Committee during evidence that the Department had given great importance to the detailed study of Power requirements of the plants and a great deal of work had been done in this area. In fact one of the areas which had been most specifically spelt out for detailed study in the Steel Authority of India, as well as in the Steel Plants had been this area. This had a four-fold aspect. One was to maximise internal generation. In this regard there had been a noticeable improvement, particularly in Rourkela and to a certain extent in Durgapur where the problems were larger. Secondly the agencies which controlled the principal supplies of power from outside like the D.V.C., Bihar State Electricity Board, Orisa State Electricity Board were impressed upon so that the power requirements of the Steel plants received a much higher priority. Thirdly, a direct line from Bokaro to Dugda Washery had been completed recently. Fourthly, initiatives had been taken in regard to captive power plants. In Bokaro this work had been done and in other plants this work was being done.

Captive Power Plants

2.31. In regard to captive Power Plants the representative of the Department of Steel stated during evidence that the captive power plants could be interlinked with the grid so that in normal times the grid would be strong enough but in case of deficiency captive power plants would ensure minimum needs of the Steel Plants.

2.32. In the case of Bokaro, the captive power plant had been approved as far as the Steel Authority was concerned and would now go before the Government and other agencies for taking a decision on this because ultimately it was linked with the question of finding money for investment.

2.33. Expressing his views on the economy of captive power plants, the representative stated that there was a view point that

the unit cost for captive power plants was somewhat higher than a large plant set up with a common grid. Upto a point this was correct but the fact had to be noted that the captive plants, while they may not be able to meet and should not be able to meet all the requirements of the Steel Plants, they would be in a position to take care of them when power in the grid is not available. This view was being pressed and the Department was hopeful that this might be accepted.

Coal Supply

2.34. Irregular supply of coal is another important factor standing in the way of consistent steel production programme. Asked if the Department had been able to resolve the difficulties regarding the availability of coking coal required by the Steel Plants, the representative of the Department explained during evidence:

> "As far as the coking coal problem is concerned, I would not say that we have resolved all our problems. This continues to be one of the important inputs which cause us an anxiety. This receives the highest attention. Now the power situation has somewhat stabilized. I am glad to say that the Central Coal Washeries of the HSL in the last four months have substantially come up to a figure as high as ever attained. With regard to the medium coking coal, the matter has been taken up and we have been assured that they would show improvement as far as the supply is concerned. The tie-up of the supply of coking coal in the 5th Plan for steel requirements has been done. For blended and medium, the details are in the process of being worked out. We have been assured of their supply."

2.35. The Committee desired to know if any definite short-term and long-term arrangements had been arrived at for regular supply of the coal requirements to the steel plants.

2.36. The Department of Steel have in a note furnished to the Committee stated that based on the steel targets for 1974-75, fixed after detailed consultation between the Chief Executives of the Steel Plants, the coal producing organisations and the representa-

tives of the Railways, Planning Commission and C.W.&P.C., the requirements of coal for 1974-75 have been estimated as under:—

(figures in thousand tonnes)

Prime coking coal	7,578	tonnes
Medium coking coal	4,859	tonnes
Blendable Coal	1,303	tonnes
TOTAL	13,740	tonnes

2.37. Based on the corresponding requirements of coal during the period April-September, 1974, actual receipts at the steel plants were 92 per cent in respect of prime coking coal, 69 per cent for medium coking coal and 73 per cent for blendable coal. Frequent consultations are held at all levels, including at Minister's level, to discuss the problems relating to the supply of coal to the Steel Plants. The following short-term arrangements are stated to have been made for regular supply of coal to the Steel Plants:

(i) *Operating Supplies*:

Both Coal Mining Authority and Bharat Coking Coal Ltd. have planned procurement of necessary supplies e.g. explosives, drills, haulages, etc.

(ii) *Production at Washeries*:

The balancing facilities required at different washeries have been identified and steps have been taken for installation of the same. In this respect, special mention has been made of the installation of additional tippler at Dugda and additional filters at Dugda and Patherdih Washeries. The produtcion at C.C.W.O. washeries is stated to have improved significantly during the year 1974-75.

(iii) *Road and Ropeway Transport*:

Transportation of coal by road and ropeway has been increased from a level of about 2,000 tonnes per day to about 3,000 tonnes per day.

(iii) *Road and Ropeway Transport*:

Clean coal dumps have been formed at the washeries to serve as a buffer stock, in case of occasional non-supply of railway wagons.

(v) *New sources of coking coal:*

New sources of coking coal have been tried. Special mention may be made of (i) Damia-Kalichappar coal pench/Kolanhan coalfield to Bhilai; (ii) Lower seam Jharia prime coking coal as additional washery feed; and (iii) Medium coking coal from Ramgarh and West Bokaro coalfield at Gidi Washery. The supply from Gidi washery, which was originally not meant for steel plants, has been started and is of the order of 8,000 tonnes per month.

Long-term arrangements:

2.38. An assessment has been made of the yearwise requirements and the anticipated availability of coking coal during the 5th Five Year Plan period, as follows:—

(In 000 tonnes)

Year	Particulars	Prime	Medium	Blendable	Total
1974-75	Requirements	8034	5183	1543	14760
	Availability	8196	5394	1140	14640
	Surplus +				
	Shortfall —	+ 162	+121	—403	—120
1975-76	Requirement	9077	6134	1663	16904
	Availability	9488	6180	1440	17108
	Surplus +				
	Shortfall —	+ 411	+ 46	—253	+ 204
1976-77	Requirement	9606	7230	1782	18618
	Availability	9972	6830	1680	18182
	Surplus +				
	Shortfall—	+ 366	—400	—102	—136
1977-78	Requirement	10370	7982	1788	20140
	Availability	10992	7380	1680	20052
	Surplus +				
	Shortfall —	+ 622	—602	—108	—88
1978-79	Requirement	10827	8428	1796	21051
	Availability	11792	7884	1680	21356
	Surplus +	+ 965	—544	—116	+ 305
	Shortfall —				

NOTE : Requirement figures include requirements of Durgapur Coke Oven Project and Sindri.

2.39 The Committee have been informed that a new 250 tonnes per hour ropeway from Dugda to Bokaro Steel Plant has been planned at an estimated cost of Rs. 6.3 crores. This is expected to be completed in about 2 years time.

Steps for improvement of production:

2.40. To increase the production of coking coal at BCCL, sanction for capital expenditure has been given in respect of the following schemes:—

(i) *Intensive prospecting*: A total amonut of Rs. 6 crores has been sanctioned for intensive prospecting of coal reserves by Bharat Coking Coal Limited. For the years 1974-75 and 1975-76, an amount of Rs. 2 crores has been sanctioned.

(ii) *Diesel Generating Sets*: Diesel Generating Sets for an aggregate capacity of 200 MW to make available emergency power supply to Bharat Coking Coal Limited have been sanctioned at an estimated cost of Rs. 3.42 crores.

(iii) *Telecommunication facilities*: Installation of telecommunication system in the Jharia Coal-field has been sanctioned at a cost of Rs. 1.5 crores.

2.41. In addition to the above, the following schemes for increase in production of coal are under consideration:—

(a) *Advance action for machinery and materials*

Advance action has been taken for procurement of plant, machinery and materials for increasing production of coal by Bharat Coking Limited amounting to about Rs. 170 crores.

(b) *New Washeries*

Installation of new coal washeries at Sudamdih and Monidih, each of capacity of about 2 million tonnes per year of raw coal throughout and estimated to cost Rs. 14 crores each.

(c) *Reconstruction of existing mines and construction of new mines*

Bharat Coking Coal Limited has formulated a basic outline for the reconstruction projects of five mines. Apart from the above, detailed project reports are in the final stages of preparation for fair new mines projects. The total investment for reorganisation, reconstruction and new schemes for Bharat Coking Coal Limited including advance action for procurement of plant and machinery would be of the order of Rs. 240 crores.

2.42. The Committee have also been informed that Committee with Secretary, Department of Coal, as Chairman, and Secretary, Department of Steel, Member (Transportation) Railway Board and other concerned officials as members has been formed with a view to finding out measures for ensuring that coal requirements for steel plants are met during the 5th and subsequent plans.

Rail Movement

4.43. Steel Plants have been experiencing rail movement difficulties in the supply of raw materials particularly coking coal, as well as for the despatch of saleable products.

2.44. Having identified these two difficult areas, studies are stated to have been made of the various measures to overcome the problems. The main items on which action has been taken are listed below:

(i) *Linkages for supply of raw materials*:

Detailed linkages have been worked out between the sources of raw materials and the consuming points, in respect of all the steel plants.

(ii) *Rationalisation of railway sidings*:

Rationalisation of railway sidings at the coalfields, particularly at the Katrasgarh Depot and the Kasunda yard, have been done with a view to streamline loading and movement of coal in bulk.

Modifications have been undertaken at the railway siding of Kathara washery to increase the capacity.

(iii) *Iron Ore Movement to Bokaro*:

A by-pass is under construction at Rajkharswan to facilitate movement of iron ore from Badami, Gua and Nuamundi to Bokaro Steel Limited.

Modifications have been undertaken at Kiriburu mines to separate the loading systems of lump iron ore and iron ore fines in order to meet the increasing requirements of Bokaro Steel Limited.

(iv) *Limestone movement to Steel Plants*

Movement of limestone to the steel plants has been rationalised keeping in view the technological requirements of railway operations. Bhavnathpur has been developed as a new source for Durgapur Steel Plant.

(v) *Railway Movement systems at the Steel Plants*

A Committee headed by Shri G. D. Khandelwal, ex-Chairman of Railway Board has studied the railway movement system at the

steel plants, and submitted its recommendations in respect of Durgapur, Rourkela and TISCO. Some of the important recommendations of the Committee are listed below:

Long-term Measures such as:

1. Doubling of feeder tract between Adityapur and TISCO yard;
2. Unidirectional movement from highlines to Marshalling yard and back at Rourkela Steel Plants;
3. Additional-Box-tippler at Durgapur Steel Plant—orders already placed;
4. Purchase of 3x1200 HP locomotives for Durgapur—letter of intent issued.

Short term measures, such as:

1. Certification of back-loadability in the pre-tippler line; and
2. Fixed path running of iron ore trains between mines and plant at TISCO.

2.45. Most of the short-term recommendations of the Committee have been implemented.

2.46. The Khandelwal Committee is continuing its studies in respect of other steel plants.

Despatches of saleables:

2.47. Considerable burden was being placed on the railway system by allocation/despatches of steel in wagon loads to a number of individual buyers. The need and feasibility for transporting steel in rake-loads and half-rake loads has been accepted so that rail transport capacity is more rationally utilised. 62 base stations (focal points) have been identified for this purpose. Rakes now reach the destination in about 3 to 4 days as against the earlier arrival of wagon loads taking anywhere between 7 to 21 days, thereby greatly improving the turn-round time between successive loadings.

2.48. Facilities at the stockyards have been reorganised to take care of bulk arrivals.

2.49. Facilities at the steel plants are also being reorganised to take care of the rationalised pattern of loading.

Future expansion of steel plants and rail movement

2.50. With a view to facilitate rail movement, future expansion of Bhilai and construtcion of new steel plants envisage peripheral unloading of raw materials.

Alternate modes of transportation

2.51. The working of the ropeway from Chasnalla to IISCO has been improved and movement of coal by road has been planned for transporting part of Bokaro's coal requirement from Dugda.

Possibilities of making increased usage of road and water movement are also being looked into. Bokaro is already taking about 1000 tonnes of coal per day by road.

Liaison with Railways

2.52. It has been stated by the Department that continuous coordination with the Railways has been established. A coordination cell was set up in Calcutta in August, 1973. In the beginning for three or four months, the Secretary, Department of Steel and Chairman, Steel Authority of India Limited personally took meetings in Calcutta for coordinating supplies of coal by rail movement.

2.53. In addition, day-to-day liaison is being maintained at Delhi between Steel Authority of India Limited and the Railway Board.

Industrial Relations

2.54. The statement given below indicates the estimated loss of man-hours and value of production lost during the years 1971-72 to 1973-74 and during the period from April to July, 1974 on account of labour troubles in the steel plants under Hindustan Steel Limited:—

Name of the Plant	Man-hours lost	Value of production lost (in crores Rs.)
1	2	3
Bhilai Steel Plant		
1971-72	2,515	0·047
1972-73	5,131	0·006
1973-74	40,330	0·130
1974-75 (April-July'74)	660	0·028

1	2	3
Durgapur Steel Plant		
1971-72	886,626	8·06
1972-73	261,487	4·95
1973-74	183,157	5·910
1974-75 (April-July'74)	1,664	0·168
Rourkela Steel Plant		
1971-72	3,421	0·03
1972-73	20,064	3·92
1973-74	52,720	7·894
1974-75 (April-July '74)	4,488	0·359
Allowy Steel Plant		
1971-72	414,976	10·63
1972-73	240,991	13·41
1973-74	184,957	8.704
1974-75 (April-July'74)	257,467	2·727

2.55. In a written note furnished to the Committee regarding the prevailing industrial relations in the steel plants, the Department of Steel have stated that generally speaking, the industrial relations situation in the Bhilai Plant was and continues to be satisfactory. On the whole, the position in the Rourkela Steel Plant was not unsatisfactory, though there was considerable loss of production on account of labour troubles in 1972-73 and 1973-74. The labour situation in the Durgapur Steel Plant and the Alloy Steel Plant of Durgapur continued to be disturbed during the period 1971-72 to 1973-74, as in the preceding few years.

2.56. It has been stated that efforts continue to be made to ensure that industiral disputes are settled by negotiations and that cooperation and participation of workers in the production efforts are made more effective. In the Rourkela Plant, joint consultation has been revitalised by the formation of Joint Production Committee through a tripartite agreement with the recognised union, though these have not fully yielded the desired results. In a new initiative to restore normalcy and to ensure unimpeded production, a

three-tier joint consultative machinery was constituted in both the Plants at Durgapur with the active assistance of the State Government through an agreement dated 19th May, 1972 which, among other things, laid down a procedure for resolving industrial disputes speedily. The agreement which was for a period of one year was extended by another six months upto November, 1973. It has been stated that although there has been some improvement in the industrial realtions situation in comparative terms, this scheme has not produced the desired results. Of the three tiers envisaged, Floor levels Comimttee never got off to a start because of basic disagreement among the unions as to the method of constituting them. The apex body *viz.* State Level Consultative Council met only a few times. It was only the middle tier *viz.* The Plant Level Committees which functioned effectively. The machinery, however, broke up in December, 1973, because of the unwillingness of one of the Unions to continue its participation in this forum. Renewed efforts are, however, being made to restore this or similar machinery for the purpose in view.

2.57. The Joint Wage Negotiating Committee for the Steel Industry which was originally constituted for the settlement of the qustion of wage revision and allied matters had agreed to continue functioning as a Joint Negotiating Committee after the agreement had been signed, and, in that capacity, to discuss production problems at the steel plants and to make suggestions for improving production as well as for meeting the situation arising out of work stoppages etc. Its good offices continue to be availed of in dealing with industrial unrest. One of its Sub-Committees the Standardisation Committee, is engaged in carrying out job evaluation of technical jobs with a view to standardising the grades of pay and job nomenclatures and of certain amenities. The Department feels that since labour problems largely arise out of pressures for increasing manning and for upgradation, it is hoped that these pressures will be curbed to some extent with the completion of the task of job evaluation in the steel plants.

2.58. In IISCO, production was affected adversely on account of disturbed industrial relations in 1971-72. There was, however, a general improvement in labour management relations with the take-over of the management of the Company by Government in July, 1972. A Joint Production Committee and a Joint Industrial Relations Committee were set up during 1972-73. The former assists the management in setting production targets and reviewing actual performance while the latter is concerned with removing the constraints which develop in the fields of industiral relations. These Committees have been meeting and discussing matters regularly

during 1973-74 and there was no major trouble during this year.

2.59. The Industrial relations situation in TISCO has been satisfactory throughout.

2.60. In Bokaro Steel Limited during 1971-72, the relations between labour and the management remained, on the whole, cordial. The situation in the establishments of the contractors was, however, not satisfactory. A 56-day strike by muster-roll workers of Hindustan Steel Works Construction Limited during this year impeded the progress of construction of the plant. 1972-73 was a year of industrial peace with no serious labour problems. An agreement was signed by Bokaro Steel Limited Management with the recognised labour union on March 2, 1973 on various outstanding demands. Industrial relations remained cordial for the greater part of 1973-74. In October, 1973, mobile equipment and crane operators struck work for a few days. In November, operators and construction workers of the Company jointly went on a strike in support of their demands which were then under consideration of the management. At the intervention of the State Government, this strike was called off after ten days and an amicable settlement was reached.

2.61. The Department is of the view that with the progressive steps, implemented by the company management, labour-management relations will continue to improve.

2.62. Dilating on the state of industrial relations prevailing in the Steel Industry and their role in production of Iron & Steel, the representative of the Department of Steel during evidence stated:—

> "Apart from the Durgapur Steel Plant, we have not elsewhere been severely plagued by trouble in the field of industrial relations. We must, therefore, draw a positive conclusion from it. I think it should not be made out to be a reason for lack of production. We have recently begun working out methods whereby we can obtain the involvement of the people in the shop floor; i.e., not merely of junior and middle-level technicians but also of skilled and semi-skilled work-men."

2.63. Asked in what way the worker had been involved and how the whole tone of administration had improved, the representative stated:

> "While there is certainly some improvement, I would not say that we are completely at the top of our problems

A good deal of credit is due to the good sense which prevailed during the last year. But the steel plants are not new, but are 10 or 15 years old; some of the older ones are there for half-a-century or more, e.g., the TISCO. The recruitment policy there was on the basis of father-to-son of relative. A great deal of attachment has been built in. We have obtained a greater involvement of the men through the formation of production committees and consultation committees at the plants. If you ask me whether they are working satisfactorily, I would say that I am not fully satisfied. They need further improvement but they certainly play a positive role."

C. Performance in 1974-75

2.64. Statements III and IV below indicate the targets and production of ingot as well as saleable steel during 1974-75 in respect of the main integrated steel plants in the country. A comparison has also been drawn with the actual production in 1973-74.

Statement III

Production of Ingot as well as saleable steel during 1974-75 in respect of main integrated steel plants.

(In '000 Tonnes)

Sl. No	Plant	Production during 1974-75		1973-74 Actuals	1974-75 in terms of	
		Plan	Actuals		Plan	1973-74 Actuals
	1. *Ingot Steel*					%
1·1	Bhilai	2070	2001	1896	96·7	105·5
1·2	Durgapur	915	819	776	89·5	105·5
1·3	Rourkela	1165	1066	1081	91·5	98·6
1·4	Bokaro	120	124	18	103·3	
1·5	Sub-Total :—	4270	4010	3769	93·9	106·4
	Sail					
1·6	TISCO	1760	1722	1514	97·8	113·7
1·7	IISCO	545	532	439	97·6	121·2
	TOTAL —	6575	6264	5722	95·3	109·5
1·8	ASP	82·00	78·36	55·26	95.6	141·8
1·9	MISL	165.05	141.58	156·05	85 8	90.7

Statement-IV

S.No.	Plant	Production during 1974-75		1973-74 Actuals	1974-75 in terms of	
		Plan	Actuals		Plan	1973-74 Actuals
	2. *Saleable Steel*					%
2·1	Bhailai. .	1655	1693	1682	102·3	100·0
2·2	Durgapur .	672	520	377	77·4	137·9
2·3	Rourkela	835	812	736	96·0	109·0
2·4	*Sub-Total Sail*	3162	3025	2795	95·3	107·9
2·5	TISCO	1400	1461	1200	104·4	121·8
2·6	IISCO. . . .	482	414	358	85·9	115·6
	Total —	5044	4900	4353	96·9	112·3
2·7	ASP	45·48	36·68	35·08	80·7	104·6
2·8	MISL .	116·20	95·63	110·67	82·3	86·4

2.65. It will be seen from Statements III and IV above that the production of Saleable Steel during 1974-75 was 4.9 million tonnes, as compared to 4.35 million tonnes in the previous year, thereby registering an increase of 12.4 per cent. over the previous year, that is an additional production of 5.4 lakh tonnes of steel. The target of production for the main integrated steel plants for the financial year has been fulfilled to the extent of 96.9 per cent in the case of saleable steel. In case of ingot steel fulfilment was 95.3 per cent and represents an increase of 9.5 per cent in production of ingot steel over the previous year.

2.66. It is claimed that the production could have been still higher but it was affected during the earlier part of the year by the following factors:—

(a) Railway Strike in May, 1974.

(b) Restrictions in power supply from D.V.C. upto August, 1974 and from Orissa State Electricity Board from September, 1974.

(c) Inadequate supply of coking coal.

2.67. It has been stated that production of steel would have been higher by 2 lakh tonnes but for the reduction in scale of operations during April, May and partly June, 1974 in view of the threatened strike which actually materialised in May, 1974.

2.68. The improvement in the levels of efficiency and productivity achieved during 1974-75 is stated to have been possible principally due to very close and effective liaison with the agencies supplying power, coal, railway movement and also due to the close cooperation by the workers and trade unions. It is stated that very special attention has been paid during the year to effective maintenance, specially during production.

2.69. The Steel Authority of India Limited (SAIL) is confident that production in 1975-76 will substantially increase over and above the all-time record production of 1974-75. This will enable the country to export nearly a million tonnes of pig iron and steel products for the current financial year (1975-76) earning over Rs. 100 crores in foreign exchange. The contribution and role of individual steel plants in the increased production is stated in the succeeding paragraphs.

2.70. Rourkela Steel Plant achieved an all time record production of 8 lakh tonnes of finished steel in 1974-75. Considering that Rourkela is the main plant producing plates and flat production, which are in great demand, this improvement has helped to provide larger quantities of these critical categories of steel for industrial development. Production in this plant would have been higher but for the dislocation in power supply owing to low water levels in the Hirakud reservoir. With a better monsoon and improved inplant power generation, Rourkela is planning to further increase the production in 1975-76. D.V.C. in recent months has substantially improved power-generation and has come to rescue to partly make up the deficit by diverting more power.

2.71. Durgapur Steel Plant produced 5.20 lakh tonnes of saleable steel as compared to 3.77 lakh tonnes in the previous year, showing an increase of 38 percent. This plant has still to come a long-way as compared to its capacity.

2.72. The biggest contribution to the total steel production continues to be from Bhilai and TISCO. In the last six months, the operations at Bhilai had shown a particularly significant improvement with the plant operating at a rate of 1.82 million tonnes of saleable steel per annum, which is equivalent to 93 per cent of the rated capacity, the corresponding figure for Rourkela being 78 per cent of rated capacity for last six months' operatioss. This indicates an improved trend in capacity utilisation.

2.73. The Alloy Steels Plant at Durgapur made an important breakthrough. During the last six months, the capacity utilisation

in Alloy Steels Plant has been 89 per cent of ingot steel and 60 per cent of saleable steel.

2.74. The Bokaro Steel Plant has commissioned during the last year the second converter in the Steel Melting Shop and the Stabbing Mill. The blast furnace operations have established a high level of efficiency. For the last three months, the Bokaro Steel Plant has been working at 106 per cent of the rated capacity. Work has been progressing in the Hot Strip Mill. This will be one of the largest mills of this type in the world and will be commissioned by the middle of this year.

2.75. Production of electric arc furnances and mini steel plants was estimated at 7 lakh tonnes in 1974-75 in addition to 4.89 million tonnes from the five integrated steel plants. Total production of all categories of steel from all sources, including Mysore Iron and Steel Company and alloy Steels Plants, Durgapur was about 5.72 million tonnes. Mini—steel plants use mainly iron and steel scrap and were handicapped owing to power shortage and lately, to some extent economics of production.

2.76. As would be seen from Statement V below the input of saleable steel into the economy has been 6.58 million tonnes during 1974-75 campared to 5.48 million tonnes in 1973-74. The increase has been to the extent of 20 per cent.

Statement V

Input of Saleable Steel into the Economy

(In '000 Tonnes)

Plant	1974-75	1973-74	Increase Col.(1-2)	% Increase Col.3 X 100 Col. 2
1	2	3	4	5
Home Despatches				
Rourkela	818	710	108	15
Bhailai .	1737	1518	219	14
Durgapur .	554	442	112	25
TISCO	1481	1143	338	30
IISCO	420	325	95	29
Total —	5010	4138	872	21
ARC FURNACES/SCRAP RE-ROLLERS	655	600	55	9
IMPORT ARRIVALS	917	740	177	24
GRAND TOTAL :— .	6582	5478	1104	20

2.77. The Committee in Paragraph 2.59 of their original Report had pointed out that production of steel had ben around 65 to 70 per cent of the installed capacity and that in none of the plan periods from 1955-56 onwards the production targets had been achieved. The Committee regret to note that shortfall in production of steel, as compared to the rated capacity and the targets fixed, has persisted during the 4th Plan period also. Against the rated capacity of 9.9 million tonnes of ingot steel of the major steel plants and the targets of 7.32 million tonnes, 7.2 million tonnes and 7.09 million tonnes fixed for the years 1971-72, 1972-73 and 1973-74, the actual production has been 5.8 million tonnes, 6.12 million tonnes and 5.7 million tonnes respectively, during the last three years of the 4th Plan. Similarly, against the rated capacity of 6.72 million tonnes of saleable steel and the targets of 5.61 million tonnes, 5.47 million tonnes and 5.44 million tonnes for the years 1971-72, 1972-73 and 1973-74, the actual production of saleable steel has been of the order of 4.5 million tonnes, 4.8 million tonnes and 4.35 million tonnes respectively. Thus, apart from the rated capacity, the shortfall in actual production of ingot steel and saleable steel during the last three years of the 4th Plan period, as compared to the targets fixed which are substantially lower than rated capacity, work out to 20.6 per cent, 15.3 per cent and 18.6 per cent for ingot steel and 20.2 per cent, 12.4 per cent and 20.4 per cent for saleale steel respectively which is regrettable.

2.78. The Committee are however glad to note that production of steel, both ingot Steel and saleable Steel, has shown encouraging trends during the year 1974-75. Against a target of 6.57 million tonnes of ingot steel and 5 million tonnes of saleable steel, the actual production during the year 1974-75 was 6.26 million tonnes of ingot steel and 4.9 million tonnes of saleable steel respectively, thereby achieving a fulfilment of 95.3 per cent of the target in the case of ingot steel and 96.9 per cent of the target in the case of saleable steel. Ths net increase in production of ingot and saleable steel during 1974-75, compared to 1973-74, amounted to about 5 lakh tonnes in each case.

2.79. The Committee appreciate the assurance given by the SAIL that production of steel during 1975-76 will substantially increase, compared to 1974-75, which will enable the country to export a million tonnes of pig iron and steel products, thereby earning over Rs. 100 crores in foreign exchange. The Committee have no doubt that the trend in increased production of steel, established in 1974-75, would be further accelerated by SAIL and no impediments would be allowed to come in the way of increased production of Steel in the country in coming years.

2.80. The Committee note that the targets of production of steel have been fixed much below the rated capacity on account of a number of factors such as possible build up of production possibilities with reference to past production, availability of infrastructure inputs, viz., power, rail transport etc. and the likely market demand. They further note that a programme has already been prepared to achieve 90 per cent of the rated capacity in the five main steel plants in a phased manner by the end of the 5th Plan. While the Committee appreciate the constraints which are taken into account by Government in fixing the targets of production, they feel that there is still a large gap between the rated capacity of these plants and actual production. The Committee cannot overemphasise the imperative need to optimise the production from these steel plants on which heavy investments have been made, not only to meet the internal demand but also to effect sizable exports to earn the much-needed foreign exchange. The Committee would therefore like Government to fix and achieve higher targets of production in the steel plants by formulating a detailed programme and taking well-directed and determined measures for this purpose. The Committee have no doubt that with the setting up of SAIL and its dynamic leadership, it should be possible to remove all bottlenecks in stepping up the production of steel in the major steel plants at the earliest possible time and to achieve the maximum production from these plants, well before the end of the 5th Plan.

2.81. The Committee further desire that the rated capacity, targets fixed and production achieved in each of the major plants should be mentioned in the Annual Report of the Steel Plants as also the Ministry to enable Parliament and the public to judge the working of these steel Plants with reference to their achievements.

2.82. The Committee note that one of the main reasons for shortfall in production of steel during the 4th Plan period has been the unsatisfactory working of the coke oven batteries and backlog of maintenance/inadequate maintenance of the plants, leading to equipment troubles and frequent breakdowns. The Committee consider that equipment troubles and breakdown of plant and machinery are largely due to the failure of management to ensure timely and regular maintenance of the costly plants and machinery. It is surprising that with the experience of nearly a decade and a half of the working of the steel industry in the public sector, effective measures were not devised to ensure the healthy working of the steel plants by well-planned maintenance schedules. The Committee note that recently fairly large scale and well-planned

programmes have been undertaken by the SAIL authorities for repair/replacement of coke oven batteries and that a great deal of stress has been laid on ensuring that technical requirements for maintenance production are fully adhered to. The Committee need hardly emphasise the importance of well-planned measures for the maintenance and upkeep of plants and equipment in sound working conditions so as to avoid a recurrence of break downs and ensure uninterrupted production to the maximum extent. The Committee would therefore like Govt. to ensure that concerted measures are taken urgently by each steel plant to set up well-organised repairing and maintenance teams for carrying out preventive and regular maintenance and repair of plant and machinery, according to a well-laid down maintenance schedule.

2.83. The Committee are concerned to note that shortage and interruptions in power supply from the Damodar Valley Corporation, Bihar State Electricity Board and Orissa State Electricity Board have also been responsible for shortfall in production of steel during recent years. In 1973-74, the loss in production of steel on account of power cuts has been estimated to be 4 lakh tonnes. The Committee note that the power supply position has improved during the last four or five months. They further note that SAIL has taken some effective steps in this regard. Great emphasis has been laid to maximise internal generation of power; State Electricity Boards have been impressed to accord higher priority to the requirements of power for the steel plants; a direct line from Bokaro to Dugda Washery has been completed. The Committee have no doubt that with concerted efforts and effective liaison with the State Electricity Boards and D.V.C., it should be possible to ensure regular supply of power to the steel plants to meet their full requirements. The Committee would however like to emphasise that with the increase in production of steel envisaged in future, the requirements of power would also go up considerably. It is therefore imperative that plants and programmes are formulated in advance to ensure that additional supply of power is available in time so as to avoid interruptions and shortfall in production.

2.84. The Committee note that the Department of Steel is considering to set up captive power plants, to make good the inadequacy of power supply from the common grid. They note that the unit cost of captive power plants would be higher than that of a large plant, set up with a common grid. The Committee would like Government take a comprehensive and integrated view of the national economy and industrial development in the country as a whole while taking a decision regarding the setting up of captive power units by the Steel Plants.

2.85. The Committee are distressed to note that irregular supply of coal, particulary, the medium coking coal, has been one of the reasons for shortfall in production of steel. The inadequate supplies were due both on account of lack of availability of coal as also its movements to the steel plants. The Committee note that linkages have been established between the coal mines and the steel plants concerned. New sources of coal supplies have also been tried to maintain regular supply. The production in coal washeries has also improved during the recent months.

2.86. The Committee would like to stress that assured and uninterrupted supply of coal is basic for steel production and it is therefore necessary that linkages for supply of coal to the steel plants should be definite, firm and effective in the interest of smooth and efficient functioning of the steel plants. In this connection, the Committee would like to emphasise that in fixing the linkages, it should be ensured that the steel plants are linked to the nearest coal field so as to reduce the lead time and transportation cost involved. The Committee would further like Government to review the linkages from time to time with a view to remove bottlenecks that crop up with the passage of time. In this connection the Committee would like to invite attention to the recommendations made in Paragraph 5.53 of their 68th Report (Fifth Lok Sabha) on 'Availability and distribution of coal' and Paragraphs 2.32 and 2.33 of their 75th Report (Fifth Lok Sabha) on Ministry of Shipping and Transport—Transport Coordination wherein they have dealt with this matter in detail.

2.87. The Committee regret to note that there has been heavy loss in production of steel, particularly in the Alloy Steel Plants, due to labour unrest. They note that efforts have been made towards normalisation of relations by setting up Joint Production Committees. The Committee note that while the floor level Committees and the State level consultative councils have not proved successful so far at Durgapur, the plant level committee at the middle tier had functioned effectively for some time. The Committee however note that the Joint Wage Negotiation Committee for the Steel industry is functioning as a Joint Negotiating Committee to solve production problems at the steel plants and to meet the situation arising out of work stoppages etc. The Committee need hardly point out that good industrial relations are the corner-stone of industrial productivity and are mainly responsible for stepping up industrial production. They would therefore like Government to take effective measures to improve industrial relations in all the steel plants. It is also necessary that the workers are encouraged to involve themselves in attaining higher production in the steel plants so that they make maximum efforts to achieve and even exceed the rated production.

D. Indian Iron and Steel Company

2.88. In para 1.34 of their original Report, the Committee had urged Government to take necessary measures to step up production of steel in order to achieve the targeted capacity of steel plants envisaged in the Plan. While furnishing their reply, Government had indicated that one of the measures taken to achieve this end, was that the management of Indian Iron and Steel Company Limited had been taken over by Government with effect from the 14th July, 1972 to arrest the decreasing trend of production and that a Plant Rehabilitation Scheme was being implemented to enable Indian Iron and Steel Company to achieve its rated capacity.

2.89. The Committee desired to know the improvements effected in the working of I.I.S.C.O. since its take-over in July, 1972 to arrest the decreasing trend of production. It has been stated by the Department of Steel that on taking over the management in July, 1972, it was found that immediate problems hampering production were:—

(a) Shortage of coke and cokeoven gas arising out of unsatisfactory condition of cokeovens;

(b) Poor condition of cranes and ground chargers in Casting Bay and Steel Melting Shop;

(c) Non-availability of material handling equipment.

2.90. The old cokeoven batteries No. 5 and 6 which were first commissioned in 1929 and 1939 respectively and which had been out of production for about 4½ years from 1967 onwards were commissioned after necessary repairs. Emergency and hot repairs were also taken up in cokeoven batteries No. 7, 8 and 9. Thus, from a state of near collapse, a sustained output of 1500 tonnes of coke per day was achieved. To correct the energy imbalance, crude tar was made available from Bokaro. It has been stated that these steps taken immediately after the take-over, arrested the steep fall in production.

2.91. Simultaneously, a comprehensive scheme of plant rehabilitation was undertaken on a vigorous basis. The total cost of this scheme amounting to Rs. 43 crores is being financed by a term loan from a consortium of financial institutions/commercial banks headed by the Industrial Development Bank of India. The essential features of the Plant Rehabilitation Scheme are:—

(a) Improvement of raw material handling facilities particularly in relation to coal and iron ore;

(b) Emergency and hot repairs of Nos. 7, 8 and 9 coke oven

batteries and re-building of No. 7 battery;

(c) Building a new Ladle House for Blas Furnace;

(d) Repairs of open Hearth Furnaces and Converters;

(e) Augmentation of steam generation capacity and thus of power generation;

(f) Rehabilitation of handling equipment like cranes and ground chargers;

(g) Modernising and fully rehabilitating rolling stock; and

(h) Providing facilities for oil firing.

2.92. The most important item of the above programme relates to re-conditioning of cranes and ground chargers. From ladle house to soaking pits, there are 28 cranes and ground chargers out of which 16 were purchased prior to Second World War and no equipment was bought by the erstwhile management after 1961. Run-down condition of the cranes and ground chargers has been one of the major factors affecting production. The Committee have been assured that the entire Plant Rehabilitation Programme is likely to be completed by 1976-77 when the production is expected to reach the rated capacity i.e. one million tonnes of ingot steel or about 8,00,000 tonnes of saleable steel.

2.93. After the take-over of the management of the undertaking of the Company, a number of measures were also taken to reorganise and streamline the administrative set up. A positive beginning is stated to have, been made in providing the professional management in the Company.

2.94. As against the installed capacity of 1 million tonnes of steel ingots, corresponding to 8,00,000 tonnes of saleable steel, the production in Indian Iron and Steel Company Limited since 1971-72 has been as follows:—

(Tonnes)

Year	Steel Ingots	Saleable steel
1971-72	617,000	493,000
1972-73	431,000	347,000
1973-74	439,000	358,000

2.95. Stating the reasons for the shorfall in production after the take over of the I.I.S.C.O. in July, 1972, the representative of the Department of Steel stated during evidence:—

"If, instead of the last three years, we go over the last, say, ten years and examine the position, the picture will be a little clearer. In 1962-63, the production was more than the rated capacity. The rated capacity is one million tonnes ingot steel. But if we examine the position subsequently, there had been a progressive decline. In 1964-65, it was 9,50,000 tonnes; in 1965-66, it was 9,17,000 tonnes; in 1966-67 it was 7,91,000 tonnes; in 1967-68, it was only 7 lakh tonnes. Thus it came down from one million tonnes to 7 lakh tonnes. Then again in 1971-72, it fell down to 6,17,000 tonnes. After this year, there was a serious fall in production. In the first three months of 1972-73, the production per month came down only to 20,000 to 23,000 tonnes of saleable steel. This was a steep fall. It was at this stage that the Government had to come in. If we examine the position why it has been so and correlate the capital expenditure incurred during all these years, we find, over the last ten years from 1963 to 1971-72, that the previous management had hardly spent about Rs. 40 crores. Apart from the Steel Plant, this included capital expenditure on captive collieries, washeries, iron ore mines and also on the acquisition of land, So, considering that this plant was originally set up in 1922 and its various equipments even before the Second World War, there was hardly any capital repair which was undertaken. So, this gradually resulted in the run down condition of the plant and equipment. So, the basic cause, which led to the progressive fall in production in these years, is directly related, if I may say, to the deterioration in the condition of the plant and equipments and the ineffective and irresponsive management at the top. They did not bother. Secondly, it is due to the neglect of the rehabilitation programme over the last ten years. Thirdly, it is due to inadequacy of replacement, repair and maintenance. So, after its take-over, the Government took stock of the situation through an expert committee and certain measures were taken both as short-term steps as well as longterm measures. A long-term measure, a comprehensive plant rehabilitation scheme was drawn up."

2.96. The representative stressed that in view of the measures taken by the Department, the production which had come down to

an average of 22,000 tonnes of saleable steel in April-June, 1972, quickly rose up after the take over in July, 1972, for instance in August, 1972, 28,000 tonnes, September, 1972, 33,000 tonnes and October, 1972—31,000 tonnes. He explained:

> "Here I would like to clarify one thing that though we were able to immediately pick up production from a virtual grinding halt by certain quick measures, it will not be easy to show any substantial rise in production within a period of one year or so. That is why, production during the remaining period of 1972-73 and even in 1973-74 has not made a very significant progress. There has been some slight improvement in 1973-74 over the earlier years. But, this is only marginal. We feel that if the plant rehabilitation programme is completed by the end of 1976-77, it should be possible thereafter to take the steel production to near about the capacity level, namely, one million tonnes ingot steel and 800,000 tonnes saleable steel.

2.97. Asked to indicate the latest figures of production, the representative stated thus:—

> "I have got figures for the period April to October, 1974 in respect of saleable steel ..... The target for this period has been 2,31,000 tonnes—April to October, 1974 and actual production was 2,10,000 tonnes. Thus, the production is roughly 90 per cent of the target for the year and 45 per cent of the rated capacity for the relevant period."

2.98. The target for 1974-75 was stated to be 4,82,000 tonnes of saleable steel.

In reply to a question regarding the measures taken to ensure that the whole Plant Rehabilitation Scheme would be completed by 1976-77, the Department of Steel have in a written note furnished to the Committee, stated that the progress of the scheme is being closely watched by the Management and SAIL/Ministry. The measures taken, in this regard, are as follows:

(i) PERT and BAR charts have been prepared for various activities under the PRS.

(ii) Progress is reviewed every month in detail and remedial action is taken, where necessary, by the Management.

(iii) Review of progress takes place in every meeting of the Board of Management.

(iv) MECON have been made Consultants for the implementation of the PRS and they have been commissioned to make a critical and detailed review of the progress periodically.

(v) Monthly and quarterly progress reports are obtained by the Government and the position is scrutinised on the basis of this data.

(vi) Public Financial Institutions who have provided the finance also keep a close watch on the progress on their own.

2.99. The Committee have also been informed that out of the total estimated cost of the Plant Rehabilitation Scheme *viz.*, Rs. 43 crores, the actual expenditure incurred upto he end of November, 1974 was Rs. 20.44 crores as against the expenditure of Rs. 34.37 crores committed upto that date. It has been stated further in a written note furnisheed to the Committee that there is no short-fall as a result of any expenditure not being committed so far and that there has been no non-utilisation of funds as such. It has, however, been admitted that there have, no doubt, been some delays in the procurement of th various items of plant and equipment. It has also been stated that every effort is being made to ensure that the target date of completion of the scheme is adhered to.

2.100. The Committee note that due to steep fall in the production of steel in the Indian Iron and Steel Co. Plant (IISCO) the Government took over the management of that Company in July, 1972 to arrest the decreasing trend of production. They note that as against the rated capacity of one million tonnes of ingot steel and 8 lakh tonnes of saleable steel, the production in the IISCO Plant had fallen to 3.47 lakh tonnes in 1972-73 and 3.58 lakh tonnes in 1973-74. This steep decline in production has been attributed to inadequacy of replacement, repairs and maintenance of the plant by the previous management.

2.101. The Committee note that after the take over of the Company, a number of measures were taken by Government to reorganise and streamline the administrative set up and it has been possible to marginally improve the production of the steel in the Company, as a result of some short term measures. The Committee further note that Government have undertaken a comprehensive scheme of plant rehabilitation at an estimated cost of Rs. 43 crores. This scheme is scheduled to be completed in 1976-77 when it will be possible to achieve production of steel of a near capacity level of one million tonnes of ingot steel.

2.102. The Committee are, however, concerned to note that there have been some delays in procurement of the various items of plant

and equipment required in connection with the implementation of the Plant Rehabilitation Scheme. The Committee would like Government to take all necessary measures to ensure that the delays in procurement of various items of plant and equipment are not allowed to delay the implementation of the Plant Rehabilitation Scheme and that the targets fixed in this regard are strictly adhered to so that the plant produces to its rated capacity at the earliest.

E. Ferro-Alloys

2.103. In para 2.14 of the original Report, the Committee had noted that the demand exceeded production in respect of ferro-alloys like Ferro-Silicon, Ferro-molybdenum, Ferro-Tungsten, Ferro-Vanadium and Ferro.Titanium etc., and the letters of intent for creating additional capacity had been granted to certain parties to fill the gap between the demand and production. The Committee had urged Government to keep a close watch that the additional capacity of these ferro alloys was established at the earliest. They had suggested that pending establishment of the requisite capacity of these ferro-alloys, Government should take steps to arrange timely and adequate imports to meet industrial requirements.

2.104. While noting the recommendation of the Committee, Government in their reply had stated that the import policy already provided for import of ferro-alloys to the extent of shortfall between the indigenous availability of the material and the demand.

2.105. During evidence before the Estimates Committee in January 1971, the representative of Government had given the following projections regarding production and demand of ferro-alloys in the country:

> "Ferro-silicon, the production in 1970-71 was 28,464 tonnes, the requirements as assessed in 1971-72 is 42,000 tonnes. Ferro Molybedenum, the production is 211 tonnes and the demand is 500 tonnes. Ferro-Chrome, the production is 9,838 tonnes and the demand this year is 4,500, Ferro Tungsten the production is 5 tons and the demand this year is 300 tonnes. Ferro vanadium, the production in 1970-71 was 23 tonnes but the demand this year is 350 tonnes. Ferro Titanium—the production was 42 tonnes and the demand this year is 100 tonnes. Silicon-Manganese, the production during 1970-71 was 3,282 tonnes and the demand in this year is 4,000 tonnes."

2.106. It would be observed from the above that the requirements exceeded production in respect of ferro-alloys. The following measures were enumerated towards meeting the gaps in demand and production:—

(i) Expansion of production facilities at MISL and Indian Metals Ferro Alloys Ltd.

(ii) Setting up of a ferro-alloy plant for production of 120,000 tonnes of ferro-manganese and other ferro alloys like ferro-tungsten, ferro titanium.

(iii) Setting up of a Ferro Vanadium project of 350 tonnes production by Industrial Development Corporation of Orissa Ltd.

2.107. The Committee wanted to know the precise progress in respect of each of these projects and the net outcome thereof. In this connection, a statement furnished by Government indicating the position regarding the demand and availability of various ferro-alloys during 1974-75 and 1980-81 is given below:—

(Tonnes)

	1974-75			1980-81		
	Demand	Availability	Shortfall/ surplus	Demand	Availability	Shortfall/ surplus
1. Ferro-manganese	130,000	190,000	+ 60,000	248,000	250,000	Nil
2. Ferro-silicon	30,000	30,000	Nil	77,000	65,000	(—)12,000
3. Ferro-chrome	6,000	11,000	+ 5,000	32,000	35,000	(—)3,000
4. Ferro-mulybdenum .	575	120	(—)455	1,740		
5. Ferro-tungsten .	100	20	(—)80	2,025	1,800*	(—)2,625
6. Ferro-vanadium . . .	180	55	(—)125	610		
7. Ferro-titanium (Low aluminium variety) . . .	25	..	(—)25	50		

(4425)

*In-built capacity available with existing units to meet the future demand. Availability of 300 tonnes from the Orissa Project for Ferro-Vanadium has been included.

2.108. It has been pointed out by Government that the current availability is in excess of demand for ferro-manganese and ferro-chrome and, therefore, exports are being permitted to the extent possible. In the case of ferro-silicon, the availability is almost equal to the demand. There are shortfalls with regard to ferro-molybdenum, ferro-tungsten, ferro vanadium and ferro titanium, all of which are met through imports. In so far as 1980-81 is concerned, the indigenous availability of ferro-manganese would be adequate to meet the demand while in the case of ferro-chrome, there is likely to be small surplus. However, the position with regard to availability of the three principal ferro-alloys viz., ferro-manganese, ferro-silicon and ferro-chrome would be kept under constant review and, capacities would be created as required taking into account the needs of the steel development programme.

Expansion of Ferro-silicon capacity

2.109. M/s. Indian Metals and Ferro Alloys Ltd., had proposed expansion of their capacity for ferro-silicon and creation of new capacity for ferro-chrome. In view of the large capacity created for ferro-chrome, it was considered that there was no scope for sanctioning new capacity and the firm was not keen on implementing the capacity for ferro-silicon only and, hence, they dropped their proposal. M/s Sandur Manganese and Iron Ore Ltd., in the State of Karnataka have been licensed in May 1971 for 24,000 tonnes of ferro-silicon and they are taking steps to implement the scheme. Mysore Iron and Steel Co. Ltd., have deferred further expansion of their ferro-silicon capacity for the present.

Setting up of ferro-alloy plant for production of 120,000 tonnes of ferro-manganese and other ferro-alloys like ferro-tungsten, ferro titanium.

2.110. There was a proposal to set-up a ferro-manganese project by Hindustan Steel Ltd., with a capacity of 120,000 tonnes with an outlay of Rs. 16 crores. The project was included in the draft Fifth Plan and during discussions held in the Planning Commission, it was felt that there was sufficient capacity in the country for the production of ferro-manganese and if further capacity is required to some extent, the private sector units could be considered for augmenting the capacity. Further in view of the constraint on resources, funds could not be provided for this project.

Setting up of a Ferro-vanadium project

2.111. The Industrial Development Corporation of Orissa Ltd., have proposed to set up a ferro vanadium project at Rairangpur in Orissa. However, due to constraint on resources, the State Government are not in a position to implement this project and it has been

decided that this project would be undertaken by the Steel Authority of India Ltd. The manufacturing process envisages recovery of vanadium pentoxide from slag arising out of the smelting of vandadiferrous iron ore. The project is included in the draft Fifth Plan proposal of the Department of Steel. The project estimates are being updated to enable investment decisions to be taken by Government.

2.112. In this connection, the representatives of the Department of Steel stated during evidence:

> "We have given a letter of intent to Orissa State Development Corporation for Ferro-Vandadium. It is our intention to try and give it a push because in national interest and taking the general position, this is a strategic material. Its producers are USA and South Africa. With the latter we have no trade. Looking from our national point of view, we are trying to give this project a push."

2.113. The representative stated that to the extent possible some of the private sector plants were being given assistance in the State of Orissa. Basically, however, there was the question of availability of power. But whenever they wanted further assistance and it was possible to give, the assistance was being given. The most important was ferro-vanadum in respect of which the Department was helping them.

2.114. The Committee regret to note that gaps still persist between the demand and production of Ferro-Silicon, Ferro-molybdenum, Ferro-tungsten, Ferro Vanadium and Ferro Titanium etc., and that Government's efforts at creating additional capacities have not borne fruit so far, with the result that shortages are expected to continue during the Fifth Plan period also. The Committee urge that concerted efforts should be made to achieve self-reliance in respect of the various ferro-alloys and particularly in respect of Ferro-Silicon where the shortfall is expected to be of the order of 12,000 tonnes in 1980-81. They would stress that effective measures should be taken to set up capacity for the production of strategic material like Ferro Vanadium, at the earliest.

F. White Paper on Production

2.115. In para 2.61 of their original Report, the Committee had recommended that Government should bring out a comprehensive White Paper on the existing state of production in each of the Steel Plants and the measures that they had taken or proposed to take to improve their performance. The Committee had desired that this Paper might be laid on the Table of the House so that Members

could have an opportunity to go into the matter in detail. Government had in their reply dated 18th October, 1972 promised to lay a White Paper on the Table of the House as soon as possible, furnishing the current position in this regard. Subsequently, in a written note dated 15th October, 1974 Government stated that the White Paper on the existing state of production on steel in each of the integrated steel plants and the measures taken or proposed to be taken to improve their performance was under preparation and that every effort would be made to lay it on the Table of both Houses of Parliament towards the end of the next Session.

2.116. During evidence the representative of the Department of Steel agreed to the need to lay the White Paper on production of steel. He explained the position thus:

> "I think I must frankly say this. It is an area where there is a weakness. We will have to pull ourselves up and present a White Paper as promised. There is a certain data collected from the H.S.L. There is probably need to up date it. It was felt that the White Paper should also portray and project as to how the Government had viewed the change in the management of the steel industry. All I can say is that the preparation of the White Paper will be energetically taken up. It may not be possible to do it by the end of the year; but we will make a determined effort to see that it is done early, because it is necessary and it is in line with your recommendations."

2.117. The Committee are constrained to observe that although in Paragarh 2.61 of their original Report, they had desired Government to bring out a comprehensive White Paper on the state of production in each of the steel plants and the measures taken or proposed to be taken to improve their performance and the Government, in October, 1972, had promised to place the White Paper on the Table of the House, "as soon as possible", the White Paper is yet to be prepared by Government.

2.118. The Committee attach the greatest importance to the implementation of the recommendation accepted by Government. It is unfortunate that even after accepting this recommendation, action to implement it has been inordinately delayed. The Committee note that it is proposed to up-date the data to be included in the White Paper in which the Government would project its views regarding the change in the management of the steel industry. The Committee urge that energetic steps should be taken to complete the White Paper and lay it on the Table of the House as early as possible, at any rate, before the end of the current year.

CHAPTER III

PLANNING

A. Perspective Planning

3.1. In paragraph 1.35 of their original Report, the Committee had recommended that there should be a perspective Plan for production of Iron and Steel for the next ten to fifteen years aiming at a surplus in this key sector so that timely steps could be taken to bring about the desired increase and generate a climate of optimism that this basic raw material required by engineering and other industries would be available indigenously on an assured basis.

3.2. Government had stated in reply that considering the massive size of integrated steel plants and the huge volume of work involved in every stage right from project formulation to the commissioning stage and the fact that it takes about 7 to 8 years to commission large integrated steel plants in this country after decisions are taken on locations, it had been decided to draw up a perspective plan up to 1985, so that detailed pre-investment studies could be made and investment decisions could be taken after a thorough study of the economics of expansion of existing steel works/new capacities in green field sites. With this object in view a Study Group had been set up by the Ministry of Steel and Mines (Department of Steel) for creating additional capacity in steel in the most economical manner, either by way of expansion of capacity of existing steel plants and/or setting up new steel plants in green field sites. Detailed studies would be undertaken after the report of the Study Group which was expected to be submitted by the end of September, 1972 became available.

3.3. Asked to state the present position regarding the preparation of perspective plan for production of Iron and Steel upto 1985, the Department of Steel have in written note furnished to the Committee stated that for drawing up a programme for steel development in the Fifth Plan, a Planning Group was set up on August 11, 1972 for making projections of demand and availability of iron and steel upto the end of the Sixth Plan. The Planning Group submitted its report in April, 1973. Taking into account these projections, the programme for steel development in the Draft Fifth Plan was drawn up keeping in view the likely availability of funds. The following statement gives a summary of the demand forecast and likely availability of Iron and Steel for the Fifth and Sixth Plan periods as assessed by the Planning Group.

STATEMENT I

Demand and Estimated Production of Mild Steel (Finished)

According to the estimates of the Planning Group on Demand and availability of Steel, April, 1973

(in '000 tonnes)

	FIFTH PLAN					SIXTH PLAN				
	74-75	75-76	76-77	77-78	78-79	79-80	80-81	81-82	82-83	83-84
Demand (Domestic) . .	7,294	7,973	8,882	9,707	10,723	11,847	13,076	14,376	15,869	17,395
Estimated Production	6,379	7,297	7,658	8,323	8,853	9,403	9,563	9,753	9,933	9,983

Assumptions

(i) *Commissioning Schedule*

BHILAI	. 4·00 m.t. stage	= 1977-78
BOKARO	1·7 m.t. stage	= 1974-75
BOKARO	4·0 m.t. stage	= 1976-77

(*ii*) Production from Visakhapatnam Vijayanagar and expansion of TISCO & Bhilai exapansion to 7·0 m.t. capacity has not been considered.

3.4. Four statements showing domestic demands, capacities planned to be created and estimated production in regard to Mild Steel, Alloy and Special Steels, Pig Iron and Ferro-Alloys during each of the years of the Fifth and Sixth Plans are appended below.

STATEMENT I

Demand and Estimates Production of Mild Steel (Finished) (As per present estimates).

(in '000 tonnes)

	FIFTH PLAN					SIXTH PLAN				
	74-75	75-76	76-77	77-78	78-79	79-80	80-81	81-82	82-83	83-84
1. Demand (Domestic) . .	7,283	7,957	8,753	9,628	10,591	11,847	13,076	14,376	15,869	17,185
2. Capacity planned in integrated steel plants . . .	6,729	8,093	9,949	11,134	11,134	11,734	11,734	13,734	13,734	19,268
3. *Estimated Production*										
(i) Steel Plants . . .	5,190	6,470	7,260	7,850	8,840	10,030	10,360	11,010	11,600	13,500
(ii) Electric Arc Furnaces .	630	840	910	1,000	1,050	1,140	1,350	1,430	1,880	2,370
Total . . .	5,820	7,310	8,170	8,850	9,890	11,170	11,710	12,440	13,480	15,870

Assumptions

1. Estimates of Domestic Demand are based on the assessment made by the Planning Group.
2. Estimated production during the Vth Plan period is based on the assessment made by SAIL.
3. Commissioning schedule of additional steel capacity (provisional)

Bhilai 4·00 m.t. (1977-78)
Bokaro 1·7 m.t. (1975-76)
Bokaro 0·0 m.t. (1976-77)
Bokaro 4·75 m.t. (1979-80)
*TISCO 4·5 m.t. (1981-82).
Visakhapatnam 3·09 m.t. (1983-84)
Vijayanagar 3·45 m.t. (1983-84)
*Scheme not yet approved.

4. Build-up of production in VI plan from new capacities has been considered on the following basis :— Ist yr. 25%, 2nd yr. 50%, 3rd yr. 75%, 4th yr. 90%.
5. Present Electric Arc Furnace capacity 3·9 m.t. which is expected to increase gradually upto 7·00 m.t. by the end of 6th plan perold. Due to the constraint on availability of ferrous scrap and power, production during the Vth Plan period is expected to be about 50% of the installed capacity. Increased availability is anticipated from 1979-80 due to expected improved power position and sponge iron availability —50% of the total liquid steel production is expected to be in the form of mild steel.

STATEMENT II

Demand and Estimated Production of Alloy and Special Steels.

(in '000 tonnes)

	FIFTH PLAN					SIXTH PLAN				
	74-75	75-76	76-77	77-78	78-79	79-80	80-81	81-82	82-83	83-84
1. Demand (Domestic) . .	362	400	450	520	600	690	800	900	1010	1130
2. Capacity Planned . .	280	280	280	316	316	386	411	411	411	411
3. Estimated production . .	270	290	300	310	320	325	339	370	390	400

Assumptions

1. Demand estimates based on SAIL's assessment of 1974-75 and Planning Group's assessment for 1980-81 and 1985-86.
2. Capacity planned does not include :—
   (i) Special steels production from Bhilai and Durgapur Steel Plants.
   (ii) Alloy and Special Steel for Mini Steel Plants.
   (iii) Expansion of ASP, Durgapur (expansion proposals still under examination).
3. Commissioning Schedule of new Alloy Steel Capacity.
   (i) Bihar Alloys 40,000 tonnes 1974-75
   (ii) MUSCO expansion 60,000 tonnes 1977-78
   (iii) Salem Steel Plant 70,000 tonnes 1979-80
   (iv) General Alloy Steels 25,000 tonnes West Bengal . 1981-82
4. Estimated production of Alloy and Special Steels includes special steel production from H.S.L. integrated steel plants also.
5. The gap between demand and estimated production by the end of the Vth Plan period is likely to be bridged by Mini Steel Plants/ which have been permitted, to produce low Alloy Steels. The Alloy Steels permitted for Mini Steel Plants/cover Electrode quality Carbon Steels, cold heading quality carbon steels; Hardening and tempering quality carbon steels; carbon, carbon-Manganese and silico Manganese qualities of spring steels, carbon tool steels, case hardening quality carbon steels and free cutting quality carbon sulphur steels.
6. In order to meet the demand during the VIth Plan period the setting up of additional capacity would have to be considered ind cous*l*.

STATEMENT III

Demand and Estimated Production of Pig Iron

(in '000 tonnes)

	FIFTH PLAN					SIXTH PLAN				
	74-75	75-76	76-77	77-78	78-79	79-80	80-81	81-82	82-83	83-84
1. Domestic (Demand) . .	1,260	1,387	1,510	1,650	1,810	1,995	2,188	2,400	2,840	3,120
2. Estimated Production . .	1,781	1,958	1,958	2,008	1,972	£	£	£	£	£

Assumptions

1. Demand estimates are based on N.C.A.E.R. projections for 1975 and 1980.

2. The existing capacity of saleable pig iron with Bhilai, Durgapur, Bokaro and secondary producers is 1·587 m.t. The capacity after commissioning of Bokaro's 4·0 m.t. stage would go down to 1·457 m.t. The actual production however, depends on the surplus availability of Hot metal after meeting steel making requirements.

3. Estimated production for 1974-75 is on the basis of production target enviasged and for the remaining period of Vth Plan, on the basis of assessment made by the Working Group on Ferrous Scrap set by Department of Steel in 1971.

£4. Additional capacity would have to be considered in the integrated steel plants as well as with secondary producers to meet the total demand for pig iron in VIth plan period.

£Projections yet to be made.

STATEMENT IV

Demand and Estimated Production of Ferro-Alloys

(in '000 tonnes)

	FIFTH PLAN					SIXTH PLAN				
	74-75	75-76	76-77	77-78	78-79	79-80	80-81	81-82	82-83	83-84
Demand Domestic . . .	130	175	200	230	265	325	400	440	480	520
Estimated Production . .	175	210	245	280	315	£	£	£	£	£

Assumptions

1. Domestic demand figures are based on current year's assessment. Projections made gy the Planning Group for 1980-81 and 1985-86 have been adopted.

£2. Capacity sanctioned for Ferro-Alloys production is about 347,600 tonnes. This capacity is mainly in private sector. In order to sustain the export market and to meet our internal requirement, the setting up of additional capacity is reviewed every year. As the gestation period is 2 years or so, additional capacity can be set up at a later date so as to meet future requirements.

3. Estimated production during the Fifth Plan period is on the besis of the progressive increase in the utilisation of capacity in the existing ferro-alloy units.

£Projections yet to be made.

N.B. :—Ferro-Alloys included in the above Table are the following alloys consumed in bulk for Steel making :—

(i) Ferro-maganese
(ii) Ferro-Silicon
(iii) Ferro-chromium
(iv) Ferro-Molybdenum
(v) Ferro-Tungsten
(vi) Ferro-Vanadium.

3.5. The department has stated in a written note furnished to the Committee that the steel development programme in the Fifth Plan centres round the expansion of Bhilai from 2.5 million ingot tonnes to 4.0 million ingot tonne apacity and continuing work at Bokaro to achieve a capacity of 4.75 million ingot tonnes by the end of the Fifth Plan. Work would also be continued on the three new steel plants at Salem, Visakhapatnam and Vijaynagar.

3.6. It has been stated further that while the steel development programme for the Fifth Plan was drawn up, the demand for finished mild steel in 1978-79 was estimated at about 10 million tonnes and steel capacity was so planned as to aim at near self-sufficiency by 1978-79. The Department feel that due to several anti-inflationary measures subsequently taken, it is likely that there may be a drop in demand for steel from the levels earlier estimated. Also, due to the constraint on resources, the availability of steel from the new steel capacity may also be less than what was envisaged earlier. The endeavour, however, would be to adhere to the objective *viz.* achieving near self-sufficiency by the end of the Fifth Plan period.

3.7. In so far as the Sixth Plan is concerned, the new capacity for wild steel which is envisaged would be available from Visakhapatnam and Vijayanagar steel plants. For purposes of planning, availability from the expansion of T.I.S.C.O is also being taken into account in the Sixth Plan period

3.8. The Steel Authority of India Ltd. have also taken action for commissioning Feasibility Studies for new Steel capacity in the two green-field locations.

3.9. It is observed from the statement furnished by Government that there is a big gap of 14.63 lakh tonnes between the domestic demand and estimated production of mild steel during 1974-75. Whereas the demand amounts to 72.28 lakh tonnes, the estimated production during that year would be only 88.2 lakh tonnes. Similar shortfall is noticed throughout the Fifth and Sixth Plan periods. Asked what steps were being taken to meet the big gap between the demand and estimated production of mild steel, the representative of the Department of Steel stated during evidence thus:—

> "In the projection made for the Fifth Plan, we had worked out things in detail, including the production from the integrated steel plants and the production likely to come from the furnaces and rollers. All told, it was estimated that there would be a total availability of 9.4 m.t. against a projected demand of 10.00 m.t. The difference which arises during the plan would be made up from imports.

It is known that the demand forecast may not keep pace with the figures worked out. After one or two years, we may have an additional spurt. I believe that we should be able to attain the production level which was so far planned."

3.10. It has been stated in a subsequent note furnished to the Committee that the net gap between demand and estimated production will not be as high as 1.5 m.t. It will be very much lower. In fact, in several categories like rails, billets and bars and rods there will be surplus in 1974-75. It has also been pointed out that taking into account technological and economic conditions, it is not considered desirable that country should produce every item and category of steel which it requires. Some exports and some imports are inevitable

Imports:

3.11. Steel Imports during 1972-73 were about 12 lakh tonnes valued at Rs. 180 crores. As would be seen from statement V in Chapter-II during 1973-74 the total import of mild steel including high carbon steel in 1973-74 was 9.4 lakh tonnes valued at Rs. 196 crores and including alloy steel the imports amounted to 1.02 m.t. valued at Rs. 237 crores. During 1974-75 the total imports were estimated to be of the order of 1 million tonnes valued at Rs. 275 crores.

3.12. The Committee note that in implementation of the recommendation contained in para 1.35 of their original Report, Government have formulated a perspective plan for production of iron and steel for the next ten years from 1974-75 to 1983-84 based on the Report of the Planning Group submitted in April, 1973. The Committee, however, find from these projections that there is a big gap of 14.63 lakh tonnes between the demand and estimated production of mild steel (finished) during 1974-75. The gap persists till the end of the Sixth Plan. The Committee are constrained to observe that even after twenty years of planning the country is not self-sufficient in a vital material like steel whilst the other countries like Japan made tremendous progress in spite of comparative disadvantages from which they are suffering. The Committee are deeply concerned to note that steel will have to be imported with a view to bridge the gap between the demand and production. Total steel imports during 1973-74 were over a million tonnes valued at over Rs. 237 crores. During 1974-75 the total imports will be of the order of Rs. 275 crores. The Committee regret that substantial amounts had to be spent on imports resulting in outgo of scarce foreign exchange. While the Com-

mittee agree with the Government's view that taking into account the technological and economic considerations it is not desirable that the country should produce every item, they would like to emphasise that the imports should be minimised to the extent possible by stepping up production upto the rated capacity, creating new capacities, and also by changing the product mix of steel plants to meet the emerging pattern of demand in the country.

B. Augmentation of Capacity

3.13. In reply to the Committee's recommendation contained in paragraph 3.16 of the original Report, Government had detailed the following steps being taken towards augmenting steel making capacity in the country for keeping pace with the growing demand:—

(i) efforts are being made to see that the first stage of 1.7 million tonnes of the construction of Bokaro Steel Plant is completed by the middle of 1973, the intermediate stage of 2.5 million tonnes (introduced at the beginning of 1971 to expedite the utilisation of installed capacity) by March, 1974 and the next stage of 4 million tonnes by the end of 1975.

(ii) the possibility of further expansion of Bokaro is also being examined. The Central Engineering and Design Bureau of Hindustan Steel have already prepared a feasibility report on further expansion of capacity of Bokaro to 4.75 million ingot tonnes. They have been asked to examine the possibility of its further expansion to 5.5 million ingot tonnes.

(iii) further expansion of capacity at Bhilai from 2.5 to about 4 million tonnes to be commissioned by the end of 1976.

(iv) expansion of IISCO beyond 1 million tonnes is also under examination.

(v) The techno-economic feasibility reports on the Vijayanagar and Visakhapatnam Steel Plants have been received and are under examination.

(vi) For setting up additional capacities in the eighties, studies are in hand for assessing the scope of expansion of existing steel plants (Durgapur and Rourkela).

(vii) It is proposed to take up preparation of Techno-economic feasibility Reports on a few new locations.

(viii) Letters of Intent/Industrial licences have been issued in respect of 20 units for manufacture of about 1 m. t. of steel ingot/Billets by electric furnaces and convention/ continuous casting process. These units will be in addition to those already in operation.

(i) *Bokaro*

3.14. In para 3.6 of their oringinal Report the Committee had noted that due to a variety of reasons like shortage of steel, delay in delivery of equipment by suppliers and labour unrest, the first stage of 1.7 m. t. of Bokaro Plant had been delayed.

3.15. Similarly the revised Bhilai Expansion Scheme was likely to be completed by 1976-77.

3.16. The Committee had been perturbed to note that due to the above factors the production of steel at the end of the Fourth Five Year Plan would fall short of the target by about 1.4 m. t. The Committee had urged that Government should make concerted efforts to improve the utilisation of existing plants to make up this shortage. The Committee had also urged that the expansion programmes for Bokaro and Bhilai should be implemented on priority basis.

3.17. Government in their reply had stated that the expansion of Bhilai Steel Plant to 4 m. t. capacity was scheduled to be commissioned by the end of 1976. The expansion programme was being implemented on priority basis.

3.18. Regarding expansion of Bokaro Government had stated:—

"The expansion of Bokaro Steel Plant has already been taken up on a priority basis. According to the present schedule the expansion is to be completed by the end of December, 1975. All efforts would be made to complete the expansion in time."

As indicated at item (i) referred to above the first stage of 1.7 m. t. of construction of Bokaro Steel Plant was to be completed by the middle of 1973. The intermediate stage of 2.5 m. t. (introduced at the beginning of 1971 to expedite the utilisation of installed capacity) was to be completed by March, 1974 and the next stage of 4 m. t. was to be completed by the end of 1975.

3.19. The Committee desired to know the progress in this regard. The Department has stated in a written note that the completion dates for the 1.7 m.t. and the intermediate stage of 2.5 m. t., mentioned in the Committee's Report, were projected while up-

dating the construction schedule of Bokaro in 1969. The completion schedule for 4 m. t. stage was not determined at that stage. For several reasons, such as continued delay in the supply of equipment by the indigenous manufacturer, delay on the part of contruction and fabricating agencies and shortage of matching section of steel, industrial gases etc., these dates could not be adhered to.

3.20. Towards the middle of 1973, a Co-ordinated Construction Schedule for m.t. stage was drawn up by Bokaro Steel Ltd. in consulation with the major suppliers, construction agencies as well as the Soviet experts, having regard to the balance volume and quantities of work for the First Stage. According to this Co-ordinated Schedule, the First Stage (1.7 m. t.), excluding the cold rolling mill, was to have been completed by December, 1974, the cold rolling mill following one year later. The intermediate stage of 2.5 m. t. was to be completed by January, 1975 and the 4 m. t. stage (excluding 5 stand cold rolling mill complex) by March, 1977.

3.21. As per this co-ordinated construction schedule, the balance equipment for the 1.7 m. t. stage should have been supplied by September, 1973. In spite of concerted and sustained efforts by the manufacturers and Bokaro Steel Limited, it has not been possible by the indigenous manufacturers to maintain this commitment. Fairly large quantities of equipment are yet to be received, from H.E.C. and their other sub-contractors like GRW, GWITC etc. There has also been some slippage in the construction work resulting in non-availability of fronts for equipment erection. There has also been some delay in he receipt of equipment data for the second steel mill shop which is a part of the 4 m. t. Stage, resulting in delay in the preparation of working drawings by the Consultants, MECON, and consequent delay in the commencement of the civil construction work in the second SMS area. This would mean some slippage. All efforts are, however, being made by Bokaro Steel Limited to keep this slippage to the minimum possible level.

3.22. As regards further expansion possibilities of Bokaro Steel Plant to 5.5 million ingot steel which were stated to be under consideration at the time of furnishing action taken reply in respect of paragraph 3.16 of the Report, the Committee have now been informed that it has now been decided to expand the plant to 4.75 m. t. during the Fifth Plan period. A feasibility report for this expansion has been prepared by MECON and a detailed project report is being prepared.

3.23. When pointed out that there had been slippages and delays in the construction of Bokaro Steel Plant at all stages and it would not be possible to adhere to even the re-revised schedules, the representative of the Ministry while conceding that there had been delays, stated during evidence that the delay at each stage had been for specific reasons. He explained that the other three steel plants of the Hindustan Steel, when they came up originally, were of 1 m.t. capacity each. They were more or less turn-key projects. Bokaro on the other hand could be called a "Swadeshi" plant where maximum amount of indigenisation had taken place. This had helped greatly in the growth of the country's electrical industry and heavy engineering industries. It had also given a major fillip to construction agencies. At the same time it had meant some delays also.

3.24. Regarding indigenisation, the representative pointed out that in the first stage to 95 per cent of the building and technological structure had been done indigenously in the country, 65 per cent of the mechnical equipment required for Bokaro's first stage had been manufactured indigenously and 86 per cent of the second stage. It compared favourably with Bhilai where indigenisation had been to the tune of only 13 per cent (of the equipment manufactured) and in the second stage it was 23 per cent.

The representative explained further:—

> "The major reason for delay, I would say, was due to the delay in the supply of equipments by the indigenous suppliers as they had their own difficulties. Heavy Engineering Corporation is now picking up."

The representative informed the Committee that according to the present estimates the first stage of Bokaro (1.7 m. t.) was expected to be completed by December, 1975 excluding cold rolling mill which would be coming by Decemer, 1975. The 2.5 m. t. intermediate stage which would convert available hot metal into steel would also come with the first stage. In other words, 2.5 m. t. tonnes capacity of ingot steel was likely to be commissioned by December, 1975, though the finished steel would start coming up earlier. 4 m. t. capacity as per present estimates was likely to be installed by December, 1977. The representative stated that the plant was originally conceived for 4 m. t. capacity and with the completion of the first stage i.e. 1.7 m. t., a major portion of m. t. stage would also have been completed.

3.25. It has been estimated by the Department that in 1974-75 most of the ingot steel produced in Bokaro will go to other plants. In 1975-76 about 4 lakh tonnes of finished steel will be available

from Bokaro. In 1976-77 it will be 9 lakh tonnes and in 1977-78 it will be 15 lakh tonnes.

3.26. The Committee wanted to know the total cost differences caused by delays/slippages according to the present indications. The Committee were informed during evidence that the original estimate sanctioned by the Government for the first stage was Rs. 671 crores. That estimate was revised in 1972 and the sanction of the Government was obtained for Rs. 758 crores.....that is, it increased from Rs. 671 crores to Rs. 758 crores. Recently, revised estimates have been made of the expenditure at the completion of the first stage; the total cost would be Rs. 926 crores. So, the increase is Rs. 255 crores or 38 per cent roughly.

3.27. The Committee note that there have been considerable delays in the construction schedules of the Bokaro Steel Plant. The first stage of 1.7 m.t. capacity was to be completed by the middle of 1973. The schedule was revised in the middle of 1973, and according to the revised schedule, this stage should have been completed by December, 1974. It has not been possible even to adhere to the revised schedule. The first stage is now expected to be completed by December, 1975 (excluding the cold rolling mill which will be coming by December, 1976) although by that time the whole project with 4 m.t. capacity was intended to be completed. The 4 m.t. stage is now expected to be completed by December, 1977.

3.28. The Committee note that the delays have been caused by the failure on the part of indigenous manufacturers to maintain the commitment for supply of equipments, delays in construction work and delay in preparation of equipment data for the second steel mill shop which is part of the 4 m.t. stage, resulting in delay in preparation of working drawings by the consultants and consequent delay in the commencement of civil construction work in the second steel mill shop area.

3.29. The Committee appreciate the efforts of the Department of Steel for indigenising the whole effort at Bokaro and striving to make it a "Swadeshi" plant, thereby giving a tremendous fillip to the indigenous industry. The Committee note that in the first stage 90 to 95 per cent of the building and technological structure had been completed indigenously. 65 per cent of the mechanical equipment required for Bokaro's first stage and 86 per cent for the second stage had been manufactured indigenously. Moreover, the Committee note that simultaneously with the 1.7 m.t. stage, a major portion of the 4 m.t. stage will also be completed. The Committee endorse the efforts made at indigenisation of the plant and machinery required for the Bokaro Steel Plant even though it

has meant a little delay. They hope that with the experience gained in the erection of this plant, it would be possible to make the future steel plants fully 'Swadeshi' and avoid delays which have occurred in this case.

3.30. The Committee would, however, like to point out that the delay has resulted not only in increase in the cost of the plant but also in depriving the country of the supply of sufficient quantities of steel which is an essential raw material for the development of the indigenous industry. They would, therefore, strongly urge Government to take all effective and concerted steps to ensure that the revised schedules for the completion of Bokaro Plant are strictly adhered to and that no further slippages are allowed to occur in these schedules.

(ii) *Bhilai* ..—

3.31. Asked to indicate the steps taken in regard to further expansion of capacity at Bhilai from 2.5 to about 4 m.t. to ensure its commissioning by the end of 1976, the Department of Steel have in a written note furnished to the Committee, stated that there has been some delay in the receipt of drawing and technical project reports relating to the programme of expansion of the Bhilai Steel Plant. The Committee have been informed that according to an assessment made earlier this year by S.A.I.L., the expansion of the Bhilai Steel Plant to 4 m.t. capacity which was to have been completed by the end of 1976 was likely to be delayed by a little more than two years. The details of the revised schedule are now being discussed by all the agencies concerned and it is expected that this schedule will be finalised early next month.

3.32. The expansion is stated to have got delayed on account of the following reasons:

(i) Delay due to late receipt of technical project and civil assignment from USSR to HEC and MECON respectively;

(ii) Delay due to late supply of manufacturing drawings for continuous casting machines from USSR to HEC; and

(iii) Delay due to the additional time requested by HEC for supply of continuous casting machine.

The Committee have been informed that expenditure on Bhilai expansion is now being further discussed with the Planning Commission keeping in view:

(a) the present tight resources position; and

(b) likely demand of plates after completion of the plate mill.

3.33. The Committee are unhappy to note that the expansion scheme of Bhilai Steel Plant from 2.5 m.t. to 4 m.t. ingot steel which was to have been completed by the end of 1976 was likely to be delayed by more than two years. The Committee strongly urge that Government should take effective measures to expedite the completion of the project so as to minimise the delays as far as possible.

(iii) *I.I.S.C.O.*

3.34. The expansion of the Burnpur Steel Plant of Indian Iron and Steel Company Ltd. from 1 m.t. to 1.3 m.t. was conceived of quite some years ago under the previous management, and in 1965 the World Bank had, with Government's approval, advanced a loan of $30 million for the expansion scheme. The loan provided for procurement of about Rs. 12 crores of capital equipment for expansion. Import licences had also been issued for a substantial value. It has, however, been stated that the Company was advised not to utilise the licences as the World Bank had suspended the disbursements against the loan in 1969 and later cancelled it in 1970 as the World Bank wanted to be satisfied not only about the question of import licences, but also about the management of the company being sound and about its financial viability.

3.35. As pointed out earlier, the management of the undertaking of the Company was taken over by the Government of India with effect from July 14, 1972 because of continuing downward trend in steel production for some years and particularly steep fall in production during April to June, 1972. A comprehensive Plant Rehabilitation Scheme was, therefore, drawn up in order to improve the technical health of the plant for increasing the production to the rated capacity of one million tonnes ingot per annum in about three years' time. The scheme involving a capital investment of Rs. 43 crores is now being implemented and is expected to be completed during 1976-77. As the primary task now is to implement the Plant Rehabilitation Scheme in order to achieve first the rated capacity, Government have decided not to proceed with the plan for expanding the capacity beyond 1 million tonnes for the present. After the Plant Rehabilitation Scheme is more or less implemented, feasibility of expansion of the capacity of the Burnpur Steel Plant beyond 1 million tonnes ingot a year will be examined.

3.36. The Committee agree with the view held by the Department of Steel that priority has to be given to the implementation and

completion of the Plant Rehabilitation Scheme to restore and improve the health of the I.I.S.C.O. Plant by bringing it first to its rated capacity of one million tonnes of ingot steel. The Committee would like to reiterate their view expressed earlier that Government should make all-out efforts to accomplish the whole scheme in time.

(iv) *New Plants*

3.37. In para 3.29 of their original report the Committee had noted that the need for achieving increased capacity of steel was felt at the beginning of the Third Five Year Plan and that in 1962 the Steering Group on the formulation of the Fourth Five Year Plan for iron and steel had recommended the study of Goa-Hospet and Bailadila-Visakhapatnam areas for setting up the new steel plants. Similarly in 1962 a Technical Committee had also been appointed by the Government to consider setting up a steel plant in the Salem-Neyveli region. The Committee were unhappy to note that Government took nearly eight years in announcing its decision for setting up steel plants in these areas. While the Government's decision about the steel plants had been announced in April, 1970 the techno-economic feasibility report in respect of only Salem plant had been received from the consultant which was under examination of the Government and the techno-economic feasibility reports in respect of Vijayanagar (Hospet) and Visakhapatnam steel plants were till awaited. As the gestation period for integrated steel plants was between 7-8 years, the Committee had urged Government that final decision about the product-mix, etc., of the steel plants should be taken expeditiously and high priority should be given for commissioning of the steel plants within the shortest period. The Committee had expressed an apprehension that any delay in final decision about the product-mix and commissioning of the steel plants would not only deprive the country's economy of reaping the benefits of additional steel capacity, but would also result in higher cost for setting up the steel plants.

3.38. Government had stated in their reply that due to developments such as the financial difficulties to support the programme in the draft outline of the Fourth Plan which had crept in on account of the after-effects of the hostilities with Pakistan in 1965 and the two successive years of drought as well as economic recession during the years 1966-67 and 1967-68, the commencement of the

Fourth Plan itself (originally scheduled to commence in the year 1966-67) had to be postponed to 1969-70. There was also the question that for purposes of a meaningful decision regarding setting up of new steel capacity, a study on the demand for steel at least up to 1975-76, if not for a later date, should be made. The report of the National Council for Applied Economic Research who were commissioned for making a long-term projection of steel demand up to 1975 and 1980 was received only in September, 1968.

3.39. It was stated that since the announcement in April, 1970 of Government decision in regard to the setting up of three new steel plants in the South, substantial progress had been made on preliminary items of work on these three new steel plants. In respect of Salem, Government had already taken an investment decision and negotiations were at that time being held with the Consultants for the preparation of the Detailed Project Report and for engineering of the Project. Meanwhile, 1355 acres of land for the plant proper had been acquired. Topographical surveys and soil investigations had been completed. Preliminary survey for the construction of the railway exchange yard, sidings etc. had also been completed by the Railways; and site levelling work had also been taken up on the advice of the Consultants. A scheme for meeting the water requirements of the plant had been drawn up by the Government of Tamil Nadu and it was under scrutiny.

3.40. The techno-economic feasibility reports on the Vijayanagar and Visakhapatnam steel plants had been received on January 29, 1972, and February 16, 1972 respectively. On account of the high capital and operating costs, the Consultants for both these projects reported that there would be substantial losses in these plants every year even on 100 per cent utilisation of capacity. These feasibility reports were therefore, under detailed scrutiny with a view to reducing costs, wherever possible and to improve the economics of the projects. A Special Study Group was set up for this purpose in May, 1972, and its report was expected shortly. An investment decision was to be taken after the Report of the Study Group had been received and the scope for economies had been fully assessed. Meanwhile, the plant areas had been demarcated and land acquisition proceedings were being speeded up. Topographical surveys and soil investigations had been completed. The Railways had completed their preliminary survey for the exchange yard, sidings etc. Water supply schemes had also been prepared. Preliminary work on a number of other items had also been taken up.

Progress

3.41. The progress in regard to the establishment of three new plants at Salem, Vijayanagar and Visakhapatnam has been as follows:

Salem Steel Plant is being designed for the production of:—

Sheets and Strips	Tonnes per year
Stainless steel	70,000
Electrical steel	75,000
Other steels	50,000
	195,000

3.42. The estimated cost of the project on the basis of the prices prevailing in 1971-72 is Rs. 340 crores.

3.43. The steel plant is to be established in phases. The first phase involves setting up of a cold rolling mill and related equipment for producing 30,000 to 35,000 tonnes of cold rolled stainless steel sheets and strips utilising purchased hot coils.

3.44. In succeeding phases, facilities would be added for melting and hot rolling of all the items included in the product-mix.

3.45. To implement Salem Steel Project, a new company by the name of Salem Steel Ltd. was incorporated on October 25, 1972 with an authorised capital of Rs. 100 crores. After the setting up of the Steel Authority of India Ltd. as the Holding Company for Steel and allied input industries, Salem Steel Ltd. has become a subsidiary of the steel Authority of India Ltd.

3.46. Salem Steel Ltd. have engaged M/s. M. N. Dastur and Co. for preparation of the Detailed Project Report for the entire plant and for rendering engineering services for the first phase of the project. The Detailed Project Report is expected to be received by the end of 1974. Meantime, most of the land required for the project has been acquired. Out of the total requirement of 1.540 hectares, 1,448 hectares have already been acquired. 90 per cent of the site levelling work of the cold rolling mill complex has also been completed. There is also good progress on the planning of necessary infrastructure facilities.

Vijayanagar and Vishakhapatnam Steel Plants

3.47. The Committee have been informed that the techno-economic Feasibility Reports on the Vishakhapatnam and Vijaya-

nagar Steel Plants were received early in 1972. These reports which were based on the installation of a capacity of about 2 million ingot tonnes at each location for the production of sectional products indicated that on the basis of the then prevailing steel prices, the operations of these two plants would result in substantial recurring losses. The reports were considered by the Department of Steel in consultation with the other Government Departments concerned and it was decided that a Study Group should be set up to examine the scope of reducing the capital and operating costs of these projects. The report of the Study Group was received in October, 1972, which showed that on the basis of the prevailing J.P.C. prices at that time, (i) a 2 million ingot tonnes plant would not be economically viable unit whether designed for production of sectional products or even of flat products; (ii) Even with an annual capacity of 3 or 4 million ingot tonnes, a plant producing only sectional product *viz.*, bars, rods, structurals, light merchant products or billets for sale would incur losses; and (iii) for a plant producing only flats, to make a marginal profit a capacity of over 2.5 million tonnes per annum would have to be provided for.

3.48. As for the latest progress in regard to setting up of the two plants the Committee have been informed that while the Steel Authority of India Ltd. have already initiated action for the preparation of the Detailed Project Reports for a 3 million tonne capacity plant at each of these two places, land acquisition work and studies for the development of infra-structure facilities are in progress in the meantime. In the case of Vijayanagar Steel Project, out of an area of 3,440 hectares (8,600 acres) required for the plant (excluding township), an area of 2,560 hectares (6,420 acres) has already been acquired. As regards Vishakhapatnam Project, out of a total area of 2,240 hectares (5,510 acres) required for the plant (excluding township), an area of 2,134 hectares (5,335 acres) has already been acquired. The General Managers of these projects are maintaining close liaison with the State Government concerned for completion of land acquisition and for progressing action on preliminary items of work.

3.49. Taking these recommendations into account, the Department of Steel proposed that the Vijayanagar Steel Project may be designed for 3.35 million tonnes of liquid steel to be processed into hot rolled coils and billets for sale and the Vishakhapatnam Steel Plant may be designed for the production of 3.09 million ingot tonnes of steel to be processed into wire rods, structural and billets. The Public Investment Board had, at its meeting held on 25th October, 1973, supported these proposals and the Steel Authority of India Ltd. are taking steps for the preparation of the Detailed Project Reports.

3.50. It will be observed that according to the original assessment the integrated steel plants at Vijayanagar and Vishakhapatnam each with a capacity of 2 million tonnes, would start production by the end of the Fifth Plan. Asked what were the revised schedules for commissioning/production from these plants, the representative of the Department of Steel stated during evidence thus:—

> "We think that production from these plants would be available only by about the middle of the Sixth Plan and not earlier."

3.51. The Capital cost of Vijayanagar and Vishakhapatnam projects have been envisaged at Rs. 854.00 and Rs. 854.47 crores respectively based on cost estimate in 1971. The work relating to the acquisition of lands required for the projects and for development of infra-structure facilities has made progress. Expenditure in the Fifth Plan on account of these two projects will be relatively small and may amount to about Rs. 25.00 crores only. Considering the small amount sanctioned for 1974-75, *viz.* Rupees two crores each, it is to be considered whether at this rate Rs. 250.00 crores will be available in Fifth Plan.

3.52. The Committee note that while the need for additional capacity for steel was felt during the Third Plan and the studies for the setting up of three new plants at Salem, Vijayanagar and Vishakhapatnam were initiated as early as in 1962, the decision to set up these plants was taken in 1970. The Committee note that while the detailed project report for the Salem Plant has almost been finalised the detailed project Reports for the Vishakhapatnam and Vijayanagar projects are still at the initial stages of preparation even after a lapse of 5 years from the date of the decision. The Committee understand that the delay in the setting up of these three projects has to an extent resulted from the Government's anxiety that the economic feasibility of the plants should be ensured before launching upon these projects. Now that work on the detailed project Reports has been initiated in respect of all these projects which are proposed to be completed in the Sixth Plan period, the Committee hope that every effort will be made by Government to complete the projects in time so that additional steel is available during the Sixth Plan period.

(v) *Additional Capacities in Durgapur and Rourkela*

3.53. Among the measures indicated for making up the gap between demand and production on a long term basis, was setting up of additional capacities in eighties in Durgapur and Rourkela Steel Plants. It has been stated by the Department of Steel in this connection that Metallurgical and Engineering Consultants (India) Limited have been requested to prepare a detailed feasibility study

on the possible expansion of the Durgapur Steel Plant. This is yet to be completed. The view has also been taken that further expansion of the Durgapur Steel Plant cannot be considered unless the industrial relations situation improves perceptibly and the production is increased at least to 85 per cent of the dated capacity. The Committee have been informed that there is no provision for expansion of Durgapur Steel Plant in the draft Fifth Plan.

3.54. The question of further expansion of the Rourkela Steel Plant beyond 1.8 million tonnes of ingots capacity was studied by the CEDB (Now MECON). This study revealed that there might be major difficulties in creating the necessary additional capacity with in the present perimetre in the implementation of an expansion scheme as well as in the production flow after expansion.

3.55. CEDB was thereafter asked to examine the matter further taking all the constraints into account. After further examination CEDB considered that further expansion was possible without shutting down some units of the Plant contrary to what was feared earlier.

3.56. It has been stated that further expansion of the Rourkela Steel Plants would depend upon the availability of resources. In the meanwhile, facilities for the manufacturing of (i) Cold rolled oriented electrical sheets (ii) Spirally welded pipes and (iii) increased quantity of special steel are being planned in the Fifth Plan period.

3.57. At present Rourkela Steel Plant is working at 65 per cent of its capacity of 1.8 million tonnes. It is hoped that production will be increased to 80 per cent of the capacity by next year and upto 1.6 million tonnes within the next two or three years.

3.58. The Committee note that Durgapur Steel Plant which has a capacity of 1.6 million tonnes in terms of ingot steel is, at present working at about 50 per cent of its rated capacity. The Committee note that a detailed feasibility study of the possible expansion of this plant is also under preparation. The Committee are inclined to agree with Government that the emphasis should, in the first instance, be laid on maximising production in this plant so as to reach the existing rated capacity as early as possible. They would therefore urge that concerted efforts should be made to improve industrial relations in this plant on a durable basis as also to re-

move other constraints on production such as, power restrictions from DVC, short availability of gas due to deteriorating conditions of coke oven, short availability of coke etc., so as to optimise production at the earliest.

3.59. The Committee further note that Rourkela Steel Plant which has a rated capacity of 1.8 million tonnes in terms of ingot steel, is at present working at about 65 per cent of its capacity and that it expects to reach 80 per cent of its capacity by next year. They further note that the expansion of the capacity of this plant is also under consideration. The Committee would urge that concerted measures should be taken by Government to step up production in the plant so as to reach the rated capacity at the earliest.

3.60. The Committee realise that expansion of capacity of the existing plants is economical compared to setting up of new plants. At the same time, they feel that all out efforts should be made to reach the rated capacities so as to create a congenial climate for undertaking expansion of the existing plants.

(vi) *Greenfield sites*

3.61. As pointed out earlier, Government had stated in their reply to para 1.35 of the Committee's original Report that a Study Group had been set up by the Ministry of Steel and Mines (Department of Steel) for creating additional capacity in steel in the most economical manner, either by way of expansion of capacity of existing steel plants and/or setting up new steel plants in greenfield sites and that detailed studies would be undertaken after the report of the Study Group which was expected to be submitted by the end of September, 1972 became available. It has been stated in a note submitted to the Committee that a Planning Group had been set up to make recommendations for expansion of the existing steel plants and for setting up new steel plants at greenfield sites to meet the future demand of steel in the country. The Planning Group, in its report, submitted in February, 1973, was of the view that a prudent and practical approach would be to expand the existing steel plants progressively and at the same time to draw up a long term programme for new plants at greenfield sites, which, in turn, would serve as nucleii for future expansion. In this context, it had recommended that feasibility studies might be undertaken for steel plants at the following locations:—

(i) A Plant drawing its requirements of Iron ore from the Bailadila range in Madhya Pradesh.

(ii) A plant based on iron ore from Rowghat (Madhya Pradesh) Surajgarh (Maharashtra) iron ore deposits.

(iii) A plant based on Bonaigarh/Mayagarh from ore deposit in Orissa.

(iv) A Plant on the West coast based on Kudremukh iron ore deposits; and

(v) A plant based on iron ore deposits of Goa supplemented by iron ore from Bellary-Hospet reserves.

3.62. The Committee have been informed that provision has been made in the draft Fifth Five Year Plan for undertaking feasibility studies. However, due to severe constraints on resources even for the ongoing schemes such studies are likely to be accorded a lower priority and made use of only for steel development programme in the Sixth and succeeding Plan periods.

3.63. The Steel Authority of India Ltd. was stated to have commissioned MECON(I) Ltd., in 1974 to prepare feasibility reports for plants to be based on Suratgarh (Maharashtra) and Bailadilla (Madhya Pradesh) deposits.

3.64. The Committee note the view taken by the Planning Group that a prudent and practical approach would be to expand the existing steel plants progressively and at the same time to draw up a long term programme for new plants at greenfield sites. The Committee, however, note that due to severe constraint on resources even for the ongoing schemes, such studies are likely to be accorded lower priority and made use of only in the steel development programme in the Sixth and succeeding Plan periods. Since, however, these projects are expected to serve as nuceii for future expansion and in view of the long gestation period involved in the setting up of such propects, the Committee hope that advance action on these prospects will be taken in time.

(vii) *Electric Arc furnaces-cum-continous casting plants.*

3.65. In para 3.47 of their original Report the Committee noted that since the announcement of new licensing policy in February, 1970, Government had issued letters of intent to four State Industrial Development Corporations with total capacity of 2,80,000 tonnes and eleven units in the private sector with total capacity of 5,10,000 tonnes for production of billets based on continuous

casting process and that further licensing of continuous casting units was pending decision by Government on the findings of the Report of the Departmental Working Group on the availability of crap within the country. The Committee had also noted that till the time of reporting only one sponge iron unit had been given letter of intent and further licensing of such units pending success of this unit.

3.66. The Committee had observed that in the context of shortages experienced in steel production and in view of the low gestation period with comparatively smaller capital requirement the scrap-based electric furnace-cum-continuous casting plants had obvious advantages as they would make for decentralised production and distribution besides putting scrap to productive use.

3.67. The Committee had recommended that Government should continuously review the position and take timely decision so that total indigenous production could be increased in the shortest possible time to meet the present requirements and save precious foreign exchange which was being spent on imports.

3.68. Government had in their reply stated that setting up of an electric furnace-cum-continuous|conventional casting unit for manufacture of steel ingots/billets in the country both in private/joint sector was one of the measures taken by Government to meet the prevailing shortages of steel. Government had informed that 21 units with an aggregate capacity of about 10.75 lakh tonnes per annum had been granted letters of intent/licences.

3.69. As a result of the review made by Government recently, based on the recommendations of the Working Group Report, it had been decided that further licensing of about 200,000 tonnes could be possible every year for the next 2 or 3 years, taking into account certain basic considerations.

3.70. The Committee have been informed in a note furnished to the Committee in October, 1974 that out of the 21 units granted letters of intent/C.O.B./Industrial Licences for manufacture of steel ingots|billets through electric furnace-*cum*-conventional or continuous casting process, 11 units with total licenced capacity of 4,70,800 tonnes per annum have commenced production so far.

3.71. The ingot production of nine of these units, which were in production in 1973 has been reported as 1,49,133 tonnes during 1973. Production figures in respect of two units which have commenced production only recently are awaited. Production has been below licenced capacity mainly due to inadequate availability of electric power.

3.72. As on 1-11-1974 letters of intent|C.O.B. licences|industrial licences have been granted to 130 parties for setting up electric arc furnace units maily for the production of mild steel ingots. In addition, 52 units registered with the Iron and Steel Controller under the Liberalised Industrial Licensing Policy remain to be regularised by grant of C.O.B. licences. Thus, in all, 182 units have so far been permitted with an aggregate capacity of 40.65 lakh tonnes per annum. A statement showing the position Statewise, is enclosed.

3.73. Out of these, 59 units having a total capacity of 16.7 lakh tonnes per annum are reported to have gone into production.

3.74. A number of new units which are ready for going on stream have not been able to commence production for want of power supply. As soon as the power supply position improves, these units are expected to go into production.

3.75. In addition to three existing units who have been operating continuous casting plants for a long time 14 units have been approved specifically for setting up of continuous casting machines. By and large, therefore, most of the electric furnace units may be using only the conventional process. However since continuous casting machines are now indigenously manufactured, it is expected that some more of the larger units may be progressively switching over to this process.

3.76. The representative of the Department of Steel stated during evidence that continuous casting in the country has proved a success and competitive and according to international standards. The representative informed the Committee that in the electric arc furnaces industry, 14 units had already been licenced to use the continuous casting technology. Some of these were already in operation. In regard to the others which had been licenced to put them up, the machinery would be mostly produced indigenously and it was hoped that in the next two years, the parties would be able to raise the necessary finances and install the machinery.

3.77. The Secretary, Department of Steel added:—

> "Firstly, in the matter of both alloy and special steels, we are already going in for further expansion in Rourkela, but a very large production will come due to a recent decision by the Government by which we have allowed the mini steel plants which are capable of producing special steels like carbon construction steels, spring steels etc. to do this. I think that the Indian entrepreneurship

will be able to supplement the mild steel which they were hitherto making. The margin will be larger on this; and those who can develop this technology, will be able to do it."

3.78. He affirmed that there was a good response from the entrepreneurs for this industry.

As on 1-11-1974

Statement showing Electric Furnace units (State-wise for manufacture of Steel INGOTS BILLETS

State	COB/Indl. Licence (capacity in tonnes)	Letters of Intent (capacity in tonnes)	Authorised under LILP (capacity in tonnes)	Total (capacity in tonnes)
ASSAM .	..	50,000(1)	10,000(1)	60,000(2)
ANDHRA PRADESH .	1,61,300(1)	..	..	1,61,300(11)
BIHAR	1,16,000(5)	50,000(1)	30,000(2)	1,56,000(8)
DELHI	9,000(1)		..	9,000(1)
GUJARAT	94,000(4)	50,000(1)	68,000(3)	2,12,000(8)
HARYANA .	1,85,500(8)		91,400(5)	2,76,900(13)
HIMACHAL PRADESH	16,000(1)		..	16,000(1)
KARNATAKA	1,83,000(7)		20,000(1)	2,63,000(8)
KERALA . . .	50,000(1)		9,000(1)	59,000(2)
MADHYA PRADESH .	1,88,500(10)	..	76,800(5)	2,65,300(15)
MAHARASHTRA	6,00,600(20)	8,000(1)	1,99,500,(11)	8,08,100(32)
ORISSA	..	36,000(2)	..	36,000(2)
PUNJAB .	1,84,000(9)		64,000(3)	2,48,000(12)
RAJASTHAN .	1,30,500(9)	50,000(1)	7,000(1)	1,87,500(11)
TAMIL NADU .	1,00,000(1)	..	23,250(2)	1,23,250(3)
UTTAR PRADESH	4,69,200(18)	1,00,000(1)	1,82,833(10)	7,52,033(20)
WEST BENGAL .	3,20,900(17)	..	1,30,500(7)	4,51,400(24)
TOTAL .	28,08,500(122)	3,44,000(8)	9,12,283(52)	40,64,783(182)

Figures in brackets indicate number of units.

3.79. When pointed out that the production of the units which were in production was much less than the licensed capacity for

want of power, Government have stated that in most of the States there was power shortage and this had led to the under-utilisation of the capacity of scrap based electric arc furnaces. The situation was particularly bad in Uttar Pradesh.

3.80. The State Governments are compelled to restrict the supply of power in su h situations and essential consumers have necessarily to be accorded the highest priority in the matter of power supply. Power intensive units such as electro-metallurgical and electro-chemical units would have to take a cut which is inescapable, so long as power shortages continue. The State Governments are keeping a close watch on the situation and relaxing the restrictions imposed in the matter of power supply as and when the situation improves.

3.81. The Department expect that there will be perceptible improvement in power supply after the next two to three years when there will be better utilisation of the capacity created in the electric arc furnace industry.

3.82. The Committee wanted to know the future long range programmes/prospects of the licensing|setting up of such units considering availability of inputs materials and power etc.

3.83. Government have stated in this connection that the highest priority has to be accorded to the effective utilisation of the capacity which has already been installed/licenced. The capacity already authorised for production of mild steel and alloy steels and steel castings has reached the 5 m.t. level. Every effort has, therefore, to be made to ensure that power supply is available to these units along with availability of scrap and sponge iron. It is, therefore, proposed to organise scrap collection and processing to improve the availability of scrap for such units and also to take up a programme for production of sponge iron.

3.84. As the full utilisation of the capacity already licensed will itself involve a few years, it is proposed to consider applications for setting up of such units in a very selective manner giving preference to States/Union Territories where power supply is adequate and scrap collection can be organised. Preference will be given to State Sector/Joint Sector Projects. The capacity to be created in accordance with this policy will be marginal so that the problems being faced by the existing units are not aggravated by and large scale growth of new units.

3.85. The Committee are happy to note the accelerated efforts made by Government towards meeting the prevailing shortages of

steel by means of setting up electric furnace-cum-continuous/conventional casting units for manufacture of steel ingots/billets in the country in the private as well as public sector units. The Committee also note that Government have so far permitted 182 units with an aggregate capacity of 40.65 lakh tonnes per annum which are dispersed over as many as 17 States in the country. Out of these, 59 units, having a total capacity of 16.7 lakh tonnes per annum, are reported to have gone into production.

3.86. The Committee, however, regret to note that a large number of units have not been able to start production for want of power as the States concerned are not in a position to help them in this matter and further licencing of such units has been discouraged on this account. The Committee desire that the matter regarding shortage of power supply to these units should be taken up at the higest level and adequate programmes for augmentation of power supply for the steel industry may be drawn up on a priority basis.

3.87. The Committee are happy to note that continuous casting process for production of steel ingots/billets has been successful in the country and hope that as soon as the power position improves, the setting up of these units will be encouraged.

C. Alloy and Special Steels

3.88. It is noticed from statement No. II, page 83 that the gap between estimated demand and production of alloy and special steels, would increase from about 90,000 tonnes in 1974-75 to about 2,80,000 tonnes by the end of the Fifth Plan and to over 7,00,000 tonnes by the end of the Sixth Plan. Asked what special measures had been taken to bridge this gap between the estimated demand and production during the Fifth and the Sixth Plan periods, it has been stated that Government have been following a policy of curbing consumption of steel in view of its shortage and have also been pursuing a policy of preventing the use of high quality steels like stainless steel for non-essential end uses. Taking into account these factors it is considered that the demand for alloy and special steels is bound to come down. On this basis an assessment has been made of the demand and availability of alloy and special steels during the Fifth Plan. With the rapid growth of scrap based electric arc furnace units for the steel making and the fall in demand for mild steel bars and rods, the mini-plants would also be diversifying into the production of the following varieties of steel:—

(a) Carbon constructional steel;
(b) Spring steel;
(c) Free machining and other special quality steels.

3.89. With the increased contribution of carbon steels from the electric are furnaces, the main plants are expected to reduce production of such special steels.

3.90. In this connection, a revised statement (on the next page) regarding demand and availability of alloys and special steels has been furnished which shows that there is likely to be some surplus of alloy and special steels.. It has been stated that as the electric arc furnace units are not technologically equipped to produce the higher alloys, there would still be deficits which might have to be met through imports (e.g. stainless steel die steel electrical steel etc.). The demand and availability of alloy an dspecial steels is being reviewed periodically.

391. .New alloy steel capacity expected to be commissioned in the Fifth Plan is as follows:—

Bihar Alloy Ltd. Patratu (Bihar)—40,000 tonnes 1974-75)

Expansion of capacity of Mahindra Ugine Steel Co. Maharastra from 24,000 to 60,000 tonnes—(1977-78).

Revised estimate of demand and availability of Alloy & Special Steels for the Fifth Plan.

('000 tonnes)

	1974-75	1975-76	1976-77	1977-78	1978-79
Demand	3623	398	436	478	524
Availability					
(i) Ministeel Plants	140	240	200	310	340
(ii) Alloy Steel Plants	240	260	270	286	250
(iii) Main Plants	30	30	20	10	..
Total	410	530	580	600	630
Surplus	47	132	144	122	106

3.92. The Committee note that according to Plan figures furnished to them in October, 1974 the gap between estimated demand and production of Alloys and Special Steels would increase from about 90,000 tonnes in 1974-75 to about 2,80,000 tonnes by the end of the Fifth Plan and to over 7,00,000 tonnes by the end of the Sixth Plan. On the other hand the revised figures furnished in November,

1974 show a surplus in production of these varieties of steels in comparison to the requirements as it has been stated that the demand is bound to come down in view of the policy of curbing the use of high quality steels for non-essential end uses. The Committee wish to point out in this connection that the arc furnace units which are expected to increase the production of special steels, may not be able to do so as they are present severely handicapped for want of power. The Committee are, therefore, doubtful if these projections made regarding the production of Alloy and Special Steels are likely to come true. Moreover, even according to Government the demand may rise again during the course of one or two years. The Committee, therefore, recommend that Government should reivew the estimates for demand and supply of alloy and special steels more realistically and take suitable measures to increase the production of these steels in adequate quantities and plan to create additional capacities to meet future requirements so as to reduce dependence on imports.

CHAPTER IV

DISTRIBUTION

A. Guidelines for allocation of priorities

4.1 In para 4.29 of their original Report the Committee had noted that there were no definite guidelines for fixing priorities for allotment of steel to various indentors except that the priorities were allotted on merits of each case determined at the discretion of the Steel Priority Committee. As there was an acute shortage of steel, discretion had of necessity to be exercised. The Committee had observed that howsoever well-intentioned the dispensing body might be, the public was entitled to have definite indications as to how and on what basis a demand was preferred to another. In this connection the Committee had drawn attention to the legal maxim that it is not enough to do justice but it must also appear that justice has been done.

4.2 The Committee had, therefore, suggested that Government should evolve guidelines for fixing priorities in the light of experience gathered so far.

4.3 In implementation of the recommendations of the Committee the following guidelines have been laid down by Government w.e.f. 25th September, 1972:—

> "The Steel Priority Committee may take into consideration the estimated availability during a quarter and allocate priority for despatches of different categories of steel to consumers. In doing so, they will also earmark the quantities to be despatched to trade and to the stockyards. In deciding the allocations to others, the criterion mainly should be the end-use for which the material is required. Broadly, speaking, any demand classified as "Operational" by Defence should be given highest priority and met in full before other demands are considered. Other Defence demands, the demands of the Steel Plants themselves and export-oriented demands should also be given high priority. Important public sector projects, rural electrification schemes, food grains godowns etc. are to be given priority. Some allocations may also be made to the industrial units, both in the large scale and small scale

sector, for their normal functioning. After meeting the Defence "Operational" demands, the total picture of the demand from various sectors for the particular category of the particular size and quality under consideration may be taken, as against the availability and a judicious allocation made, bearing in mind the considerations mentioned above. After the draft proposals are finalised, detailed discussions may be held with all sponsoring authorities and any readjustments in the allocations among the different projects under the same authority may be agreed to, if so desired. These proposals will then be discussed and approved at a meeting of the Steels Priority Committee."

4.4. Askd if any effort had been made by Government to assess the reaction of the consumers in regard to the above guidelines and whether the guidelines had been helpful in arriving at expeditious decisions on allocation of priorities, the representative of the Department of Steel stated during evidence as follows:

"Before the allocations are made by the Steel Priority Committee, discussions are held with the sponsoring authorities, the Director of Industries of various States and the Managing Directors of Small Scale Industries Corporations. They represent the consumers. During these discussions which take place from quarter to quarter (now half yearly) before allocations are made, we have come to know from the sponsoring authorities that the guidelines have been useful in arriving at expeditious decisions on allocation of priorities."

B. New Distribution System

4.5. The following main problems relating to Distribution of Steel were identified:

(i) Procedures which sometimes caused delays|long waiting periods for indentors of steel.

(ii) Uncertainty in supplies which affected indentors' planning of their production.

(iii) Movement bottlenecks which caused delay in supplies.

4.6. With a view to solve the problems identified above, the following changes have been introduced and a revised distribution policy is under implementation:

(a) Doing away with indents and sale order system for about 1300 Steel Priority Committee allottees, saving them almost

four months' time in procuring steel, by supplying them from the stockyards.

(b) Abolition of Earnest Money Deposit for other customers and refund of pending Earnest Money Deposits with producers.

(c) Reduction of time lag in processing demands before steel Priority Committee from the present 4 to 3 months.

(d) Annual allocation for more than half of the Steel Priority Committee allottees and for the rest six monthly allocations with a quartely review.

(e) Rake movement of steel which leads to quick turn around of wagons and clearance of stocks at the steel plants.

(f) High priorities in allocation of steel to requirements for Defence, Power Steel Plants, Coal and Engineering Exports.

4.7. The distribution system can be looked at under two heads, *viz.*, allocation and movement. Explaining the changes made in the distribution and the rationale behind it, the representative of the Department of Steel stated during the evidence before the Committee that so far as allocation was concerned; there were a number of defects in the old system which had been removed. Under the old system, the Steel Priority Committee met every quarter and dealt with the distribution from within its total available quantity. It was found that even though it was specifically meant to be a quarterly allocation the demand raised on the Committee was highly exaggerated to the extent that in a year the total demand was somewhere nearer to 15 or 16 million tonnes whereas the total available steel was about 2.5 million tonnes. Secondly, as there were excessive indentings, the entire production programme was unrealistic. Thirdly, it was desirable that the priority industries as laid down in the guidelines, should get all their requirements. If the steel was distributed across the board, the chances were that almost all the projects would either be completed half or two thirds or even one third, rather than the priority units completing the projects on time to the benefit of the country.

4.8. The representative stated that in the new system the allocation were shifted from quarterly to half-yearly basis and in accordance with the basic guidelines, with the total available quantity of steel, the full requirements of priority sectors like coal, power, engineering exports and major public sector units should be met first and balance distributed for other purposes. Further, with a

view to avoid excessive indenting, the requirements of various Ministries and other constituents were discussed to arrive at their real needs. Previously, there were two lists of units for allocations List 'A' for Priority consumers and List 'B' for other consumers. Since the priority consumers were not getting their quota, List 'B' was abolished and one priority and one allocation system was evolved.

4.9. As regards the movement part of the distribution, the representative stated that with the present availability of transport facilities in the country it was not possible to move steel in a single wagon to 1200 destinations. Therefore, it was agreed in consultation with Railways, to move steel in bulk and rake loads. Movements from the plants to the consuming centres had also been rationalised under the new system. Since it was difficult to move direct to the consumers, the problem was analysed and it was decided that any consumer who got more than one wagon load per quarter per mill would get directly from the Plants and anybody who got less than one wagon load, would get it from the stockyard.

4.10. One of the difficulties experienced in the earlier distribution system was that the customer had to write to the Allocation Authority every quarter.

4.11. Now the allocation has been rationalised as under:

(1) Those industries who can anticipate demand once a year, like most Government departments, large public sector undertakings, and compact group industries, etc. where allocation is required for one category of steel.

(2) For the rest, six monthly allocation.

(3) For export industry, there was no time limit.

4.12. The representative stated that with the revised system it had been possible to handle a larger quantity of steel. Last year 140,000 tonnes of steel was handled as against 70,000 in the previous year.

4.13. It has been stated that in view of the increased availability of steel and the streamlining of the distribution system, there is very little difference between the main producers stockyard prices and the open market prices at present as compared to a few months ago. The following table shows the market prices at present in relation to the stockyard prices and the position a few months ago:

PRICE LEVELS

Rs. Tonne

	Main Producers' Stock-yard Prices	Market Price				
		May '74	end Nov, '74	end Dec '74	end Jan '75	end Feb 75'
GC Sheets 24 Gauge	4930	5600	5200	5200	5000	5000
Rounds 25 mm	1835	2400	1800	1650	1550	1600
Channels 150x75	1485	5400	2600	2300	2150	2150
Angles 75x75x6 mm	1500	2325	1900	1800	17000	1700
Plates 10 mm	1735	5100	3600	3400	28000	2600
HR Sheets 10—14 Gauge . .	2315	2750	2900	2700	2500	2350
CR Sheets 24 Gauge	3245	4750	4000	3900	3800	3800

4.14. The Committee note that in implementation of the recommendations contained in Paragraph 4.29 of their original Report Government, have laid down broad guide lines for fixing priorities for allocation of steel to the various steel indentors and that the guidelines have proved useful in simplifying the procedure and taking expeditious decisions on allocation of priorities.

4.15. The Committee note that with a view to avoid delays and uncertainty in supplies of steel as also to remove bottlenecks in the movement of stetel a revised distribution policy in respect of steel is being implemented by Government. This distribution policy has, inter alia, done away with indents and sale order system for about 1300 Steel Priority Committee Allottees, abolished earnest money deposit, reduced time lag in processing of demand, made allocations annually for a number of Steel Priority Committee Allottees, and arranged the movement of steel in bulk and rake loads etc. The result has been that under the new distribution system, there is an easy and increased availability of steel to the various consumers. The Committee are particularly happy that the new distribution system has practically wiped out black market in steel which was rampant previously. There is very small difference in the stock-yard prices and the market prices except in respect of a few items. The Committee are confident that with the increased production of steel as also with further simplification and streamlining of the distribution procedure it would be possible to make steel easily available to all consumers at the fixed prices. The Committee however urged that the working of the new distribution system should

be kept under constant review and necessary improvements made, in the light of experience gained, to ensure that steel is available to all consumers readily and at stock yard prices.

C. Small Industries

4.16. In para 4.72 of the original Report the Committee had taken note of the difficulties and apprehensions of the Small Scale Sector in regard to new procedure for distribution of steel materials to it through the Small Industries Corporations. In view of the difficulties stated in paragraphs 4.71, the Committee were of the opinion that if the cost of steel material was higher of the procedure was more combtrssome, the Small Scale Industries especially those, in producing common items with larger units, were bound to be at competitive disadvantage. The Committee had urged Government to take note of the difficulties and ensure that the new procedure of distribution to steel to small Scale sector did not result in excessive burdens or hardship. In para 4.96 also the Committee had held the view that the smal scale sector should not be placed at a disadvantageous position as compared to the organised sector and had recommended that Government should critically examine the remunerative and overhead charges of the stockyards which were being recovered on defective and scrap materials sold to small scale industries so as to reduce the burden on the small scale sector.

4.17. It was stated in reply to the recommendation contained in para 4.72 that the question of charging a suitable concessional price from S.S.I. Corporations is under consideration. In regard to procedural difficulties for small industries arising from the new distribution system, it was stated by Government in reply that the procedure was being discussed periodically by the Iron and Steel Controller with the Directors of Industries and small Scale Industries Corporations to ensure that the procedure worked smoothly.

4.18. The Committee desired to know the latest position in regard to the charging a suitable concessional prices from the Small Industries Corporations. It has been stated by Government that steel supplies to small scale industries are routed through Small Scale Industries Corporations. As the Corporations charge some amoun as their remuneration, prices of steel materials supplied through them, are a little higher than the prices of the materials supplied from the Steel Plant direct.

4.19. It has been stated further that Government have accepted in principle that supplies channelled through State Small Industries Corporations should be available to the units at about the same prices, as others getting supplies from the Steel Plants direct. The

Report of a Departmental study Group which examined this matter in detail, was received in January, 1974 and is considered by Government.

4.20. The Committee wanted to know if a final decision had been taken in the matter. The representative of the Department of Steel stated during evidence in November, 1974 that although a final decision had not been taken, the decision was likely to be taken soon. The representative, however, stated that more than the question of pricing, it was a question of making steel available to Small Scale sector in a timely manner. He explained that efforts were being made to make Steel available in time. The percentage of steel allocations to Small Scale Sector had also been increased. In regard to equalisation of price an early decision had to be taken.

4.21. Asked why it had not been possible to arrive at a decision in this matter for such long time, the representative of the Department stated during evidence that in April, 1973, Government accepted in principle that the Small Scale Industries prices should be equalised with Joint Plant Committee. Thereafter this matter had been under consideration. Asked to state in concrete terms when the decision would be taken in the matter, the representative stated:—

> "We hope to do it within a short time. The main point is this. If this is done, we will have to put this burden of the additional amount on some one else. It was felt that in the context of the current inflationary situation, effecting a pricing increase on other categories is not a desirable thing to do. This is basically the position. We are trying to do it. We are trying to help the small scale sector."

4.22. As regards the difficulties faced by the Small Industries in the distribution system, it has been stated by the Department of Steel that the supply of steel to the small scale industrial units all over the country, is mainly routed through the respective State Small Scale Industries Corporations. Who make their own assessment of the requirements of the units and place consolidated demands with the Joint Plant Committee. Material received against these demands is distributed by the Corporations through their depots. The Department feel that the present system of distribution has been working satisfactorily. The Committee have been informed that of late, most of the small scale industries corporations have been reporting accummulation of steel stock with them and consequently non-lifting of steel by the Small Scale Units.

4.23. It has been stated further that according to the present policy, Small Scale Units in the compact groups of Industries viz., bright bar manufacturing units, wiredrawing units and tube manufacturing units also qualify for direct allocation by the Steel Priority Committee. Those of the bright bar manufacturing units and wire drawing units set up subsequently draw their supplies of raw materials from the following three sources:—

(1) Billet Re-rollers Committee, Calcutta.

(2) The Small Scale Industries Corporations of their States.

(3) The Stockyards of the main producers.

4.24. In the opinion of the Department, considering the large number of Small Scale Units, the present system of supply of steel to them through the State S.S.I. Corporations seems to be more appropriate but this will be watched and remedial measures taken in the light of experience.

4.25. The Committee regret to observe that although Government in April, 1973 accepted in principle that the prices of steel charged from the Small Scale Industry Units who are getting their supplies through the Small Scale Industres Corporations, should be the same as those being charged from other indentors who are getting their supplies from the Steel Plants direct, and the Report of a Departmental Study Group which examined this matter in detail was also received in January, 1974, no final decisions has yet been taken in the matter.

4.26. The Committee need hardly emphasise that the small units should not be placed at a disadvantageous position in regard to prices compared to the large units as these are mainly run by men of small means. The Committee, therefore, stress that Government should take immediate steps to ensure that steel materials are made available to the Small Scale Industries Corporations at a concessional price so that after adding their margin, the prices to the small scale units purchasing material from them, are roughly the same as is paid by the units which obtain material directly from the steel plants.

4.27. The Committee would also reiterate the recommendation made in para 4.72 of their original Report and urge Government to review the working of the new procedure of distribution of steel to the small scale sector through Small Scale Industries Corporations, from time to time in the light of difficulties explained in para 4.71 thereof and take adequate remedial measures to ensure that the new procedure does not result in hardship to the small scale units.

D. Misuse of Allocations

4.28. In paragraph 5.26 of the original Report the Committee had noted that it was not obligatory at that time on the Directors of Industries/Small Scale Industries Corporations, stockyards etc. to furnish information about the steel distributed through them to the Regional Iron and Steel Controller. The Committee were of the view that in order that the Regional Steel Controllers could discharge their responsibilities effectively, there was a need to make it obligatory on the steel distributing institutions and stockyards etc. to furnish such information regularly to the Regional Steel Controllers.

4.29. In paragraph 5.29 also the Committee had recommended that Government should take effective measures to see that steel was put to proper use by the allottees and was not surreptitiously sold in the market thereby vitiating the atmosphere. Government had accepted this recommendation and informed the Committee that the Iron and Steel (Control) Order had been suitably amended and Regional Offices of Iron and Steel Controller had been set up. Government had further stated that the position was under constant review and such further measures as might be necessary would be taken.

4.30. The Committee have been informed in this connection that there are six Regional Offices of the Iron and Steel Controller at Bombay, Calcutta, Delhi, Hyderabad, Madras and Kanpur. These Regional Offices exercise check on proper utilisation of allotted iron and steel materials. Iron and Steel (Control) Order had been amended to provide specifically that utilisation of steel materials for any purpose other than that for which these have been allotted or applied for, is a penal offence punishable under the Essential Commodities Act, 1955. Over 7000 inspections are stated to have been carried out by these Offices since their establishment over three years ago till February, 1975. The inspections have been stepped up and more than half the number of inspections were made during the last twelve months.

4.31. During evidence the representative of the Department of Steel stated that the matter was also being taken up with the State Governments with whom some of the Small Scale Units had been registered. In cases where misuses were detected, the supplies were suspended and follow up action was taken.

4.32. The Committee note that in implementation of the recommendation contained in paragraph 5.29 of their original Report regarding measures to ensure that steel was put to proper use and

was not surreptitiously sold in the market, thereby vitiating the atmosphere, Government had suitably amended the Iron and Steel (Control) Order and set up the regional offices of the Iron and Steel Controller. The Committee are happy to note that the Department has stepped up inspections and enforcement drive to check misuse of allocations of steel which had a salutary effect. The Committee urge that these measures should be carried on vigorously and on a continuous basis, so as to ensure that steel has been used for the purpose for which its was allotted and there is no black market.

E. Storage facilities in Stockyards

4.33. In paragraph 4.55 of the oringinal Report, the Committee had noted that steps were being taken for providing storage space to stockyards. The Committee had desired Government to ensure that the Regional Iron and Steel Controllers while carrying out inspections of the stockyards, also furnish reports that adequate and proper storage facilities exist in the stockyards. Government had accepted the recommendation. When asked to indicate the steps taken to ensure adequate and proper storage facilities in the stockyards since the recommendation made by the Committee in this regard the Department of Steel have in another note furnished to the Committee stated that the stockyards have since been properly equipped by the provision of siding, provision of additional cranes, taking on rent additional land etc. As result of taking these steps, the stocking capacity in Hindustan Steel Ltd's stockyards alone has gone up from an average of about 70,000 tonnes during 1973-74 to 1,40,000 tonnes at present. The sale through Hindustan Steel Ltd's stockyards has also increased from an average of 70,000 tonnes per months during 1973-74 to an average of 1,20,000 tonnes per month during the last three months.

4.34. It has been stated further that the Regional Iron and Steel Controllers also inspect the stockyards from time to time.

4.35. According to the assessments of the Department, Hindustan Steel Limited stockyards will have to handle 2,00,000 tonnes of steel per month by 1975-76. Plans are stated to have been prepared to provide these stockyards with additional space and equipment and will be implemented as and when the volume of tonnage handled in the stockyards is increased.

4.36. The Committee note that storage capacity in Hindustan Steel Ltd., stockyards has gone up from an average of about 70,000 tonnes during 1973-74 to 1,40,000 tonnes at present. The Committee also note that by 1975-76 the H.S.L. stockyards will have

to handle 2,00,000 tonnes of steel per month. The Committee desire that periodical review of the requirements of space and equipment at the stockyards should be made and suitable measures should be taken so that there is no difficulty in handling increased volume of tonnage in the stockyards, with maximum efficiency and least cost.

R. K. SINHA,
Chairman,
Estimates Committee.

NEW DELHI;
April 29, 1975 | *Vaisakha* 9, 1897 (*Saka*).

APPENDIX I

Summary of Recommendations

S. No.	Reference to Para No. in the Report	Summary of Recommendations
1	2	3
1	2.77	The Committee in Paragraph 2.59 of their original Report had pointed out that production of steel had been around 65 to 70 per cent of the installed capacity and that in none of the plan periods from 1955-56 onwards, the production targets had been achieved. The Committee regret to note that shortfall in production of steel, as compared to the rated capacity and the targets fixed, has persisted during the 4th Plan period also. Against the rated capacity of 9.9 million tonnes of ingot steel of the major steel plants and the targets of 7.32 m. tonnes, 7.2 m. tonnes and 7.09 m. tonnes fixed for the years 1971-72, 1972-73 and 1973-74, the actual production has been 5.8 m. tonnes, 6.12 m. tonnes and 5.7 m. tonnes respectively, during the last three years of the 4th Plan. Similarly, against the rated capacity of 6.72 m. tonnes of saleable steel and the targets of 5.61 m. tonnes, 5.47 m. tonnes and 5.44 m. tonnes for the years 1971-72, 1972-73 and 1973-74, the actual production of saleable steel has been of the order of 4.5 m. tonnes, 4.8 m. tonnes and 4.35 m. tonnes respectively. Thus, apart from the rated capacity, the shortfall in actual production of ingot steel and saleable steel during the last three years of the 4th Plan period, as compared to the targets fixed which are substantially lower than rated capacity, work out to 20.6 per cent, 15.3 per cent and 18.6 per cent for ingot steel and 20.2 per cent, 12.4 per cent and 20.4 per cent for saleable steel respectively which is regrettable.

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	2.78	The Committee are however glad to note that production of steel, both ingot steel and saleable steel, has shown encouraging trends during the year 1974-75. Against a target of 6.57 m. tonnes of ingot steel and 5 m. tonnes of saleable steel, the actual production during the year 1974-75 was 6.26 m. tonnes of ingot steel and 4.9 m. tonnes of saleable steel respectively, thereby achieving a fulfilment of 95.3 per cent of the target in the case of ingot steel and 96.9 per cent of the target in the case of saleable steel. The net increase in production of ingot and saleable steel during 1974-75, compared to 1973-74, amounted to about 5 lakh tonnes in each case.
	2.79	The Committee appreciate the assurance given by the SAIL that production of steel during 1975-76 will substantially increase, compared to 1974-75, which will enable the country to export a million tonnes of pig iron and steel products, thereby earning over Rs. 100 crores in foreign exchange. The Committee have no doubt that the trend in increased production of Steel, established in 1974-75, would be further accelerated by SAIL and no impediments would be allowed to come in the way of increased production of Steel in the country in coming years.
2	2.80	The Committee note that the targets of production of steel have been fixed much below the rated capacity on account of a number of factors such as possible build up of production possibilities with reference to past production, availability of infrastructure inputs, *viz.*, power, rail transport etc., and the likely market demand. They further note that a programme has already been prepared to achieve 90 per cent of the rated capacity in the five main steel plants in a phased manner, by the end of the 5th Plan. While the Committee appreciate the constraints which are taken into account by

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		Government in fixing the targets of production, they feel that there is still a large gap between the rated capacity of these plants and actual production. The Committee cannot over-emphasise the imperative need to optimise the production from these steel plants on which heavy investments have been made, not only to meet the internal demand but also to effect sizeable exports to earn the much-needed foreign exchange. The Committee would therefore like Government to fix and achieve higher targets of production in the steel plants by formulating a detailed programme and taking well-directed and determined measures for this purpose. The Committee have no doubt that with the setting up of SAIL and its dynamic leadership, it should be possible to remove all bottlenecks in stepping up the production of steel in the major steel plants at the earliest possible time and to achieve the maximum production from these plants, well before the end of the 5th Plan.
3	2.81	The Committee further desire that the rated capacity, targets fixed and production achieved in each of the major plants should be mentioned in the Annual Report of the Steel Plants as also the Ministry to enable Parliament and the public to judge the working of these steel Plants with reference to their achievements.
4	2.82	The Committee note that one of the main reasons for shortfall in production of steel during the 4th Plan period has been the unsatisfactory working of the coke oven batteries and backlog of maintenance/inadequate maintenance of the plants, leading to equipment troubles and frequent breakdowns. The Committee consider that equipment troubles and break down of plant and machinery are largely due to the failure of management to ensure timely and regular maintenance of the costly plants and machinery. It is surprising that

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		with the experience of nearly a decade and a half of the working of the steel industry in the public sector, effective measures were not devised to ensure the healthy working of the steel plants by well-planned maintenance schedules. The Committee note that recently fairly large scale and well-planned programmes have been undertaken by the SAIL authorities for repair/ replacement of coke oven batteries and that a great deal of stress has been laid on ensuring that technical requirements for maintenance production are fully adhered to. The Committee need hardly emphasise the importance of well-planned measures for the maintenance and upkeep of plants and equipment in sound working conditions so as to avoid a recurrence of break downs and ensure uninterrupted production to the maximum extent. The Committee would therefore like Government to ensure that concerted measures are taken urgently by each steel plant to set up well-organised repairing and maintenance teams for carrying out preventive and regular maintenance and repair of plant and machinery, according to a well-laid down maintenance schedule.
5	2.83	The Committee are concerned to note that shortages and interruptions in power supply from the Damodar Valley Corporation, Bihar State Electricity Board and Orissa State Electricity Board have also been responsible for shortfall in production of steel during recent years. In 1973-74, the loss in production of steel on account of power cuts has been estimated to be 4 lakh tonnes. The Committee note that the power supply position has improved during the last four or five months. They further note that SAIL has taken some effective steps in this regard. Great emphasis has been laid to maximise internal generation of power; State Electricity Boards have been impressed to accord higher priority to the re-

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		quirements of power for the steel plants; a direct line from Bokaro to Dugda Washery has been completed. The Committee have no doubt that with concerted efforts and effective liaison with the State Electricity Boards and D.V.C., it should be possible to ensure regular supply of power to the steel plants to meet their full requirements. The Committee would however like to emphasise that with the increase in production of steel envisaged in future, the requirements of power would also go up considerably. It is therefore imperative that plans and programmes are formulated in advance to ensure that additional supply of power is available in time so as to avoid interruptions and shortfall in production.
6	2.84	The Committee note that the Department of Steel is considering to set up captive power plants, to make good the inadequacy of power supply from the common grid. They note that the unit cost of captive power plants would be higher than that of a large plant, set up with a common grid. The Committee would like Government to take a comprehensive and integrated view of the national economy and industrial development in the country as a whole while taking a decision regarding the setting up of captive power units by the Steel Plants.
7	2.85	The Committee are distressed to note that irregular supply of coal, particularly, the medium coking coal, has been one of the reasons for shortfall in production of steel. The inadequate supplies were due both on account of lack of availability of coal as also its movements to the steel plants. The Committee note that linkages have been established between the coal mines and the steel plants concerned. New sources of coal supplies have

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		also been tried to maintain regular supply. The production in coal washeries has also improved during the recent months.
	2.86	The Committee would like to stress that assured and uninterrupted supply of coal is basic for steel production and it is therefore necessary that linkages for supply of coal to the steel plants should be definite, firm and effective in the interest of smooth and efficient functioning of the steel plants. In this connection, the Committee would like to emphasise that in fixing the linkages, it should be ensured that the steel plants are linked to the nearest coal field so as to reduce the lead time and transportation cost involved. The Committee would further like Government to review the linkages from time to time with a view to remove bottlenecks that may crop up with the passage of time. In this connection the Committee would like to invite attention to the recommendations made in Paragraph 5.53 of their 68th Report (Fifth Lok Sabha) on 'Availability and Distribution of Coal' and Paragraphs 2.32 and 2.33 of their 75th Report (Fifth Lok Sabha) on the Ministry of Shipping & Transport—Transport Coordination wherein they have dealt with this matter in detail.
8	2.87	The Committee regret to note that there has been heavy loss in production of steel, particularly in the Alloy Steel Plants due to labour unrest. They note that efforts have been made towards normalisation of relations by setting up Joint Production Committees. The Committee note that while the floor level Committees and the State level consultative councils have not proved successful so far at Durgapur, the plant level committee at the middle tier had functioned effectively for some time. The Committee however note that the Joint Wage Negotiation Committee for the Steel industry is functioning as a Joint Negotiating Committee to solve produtcion problems at the steel

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		plants and to meet the situation arising out of work stoppages etc. The Committee need hardly point out that good industrial relations are the corner-stone of industrial productivity and are mainly responsible for stepping up industrial production. They would therefore like Government to take effective measures to improve industrial relations in all the steel plants. It is also necessary that the workers are encouraged to involve themselves in attaining higher produtcion in the steel plants so that they make maximum efforts to achieve and even exceed the rated produtcion.
9	2.100	The Committee note that due to steep fall in the production of steel in the Indian Iron and Steel Co. Plant (IISCO) the Government took over the management of that Company in July, 1972 to arrest the decreasing trend of production. They note that as against the rated capacity of one million tonnes of ingot steel and 8 lakh tonnes of saleable steel, the production in the IISCO Plant had fallen to 3.47 lakh tonnes in 1972-73 and 3.58 lakh tonnes in 1973-74. This steep decline in produtcion has been attributed to inadequacy of replacement, repairs and maintenance of the plant by the previous management.
	2.101	The Committee note that after the take over of the Company, a number of measures were taken by Government to reorganise and streamline the administrative set up and it has been possible to marginally improve the production of the steel in the Company, as a result of some short term measures. The Committee further note that Government have undertaken a comprehensive scheme of plant rehabilitation at an estimated cost of Rs. 43 crores. This scheme is scheduled to be completed in 1976-77 when it will be possible to achieve production of steel of a near capacity level of one million tonnes of ingot steel.

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	2.102	The Committee are, however, concerned to note that there have been some delays in procurement of the various items of plant and equipment required in connection with the implementation of the Plant Rehabilitation Scheme. The Committee would like Government to take all necessary measures to ensure that the delays in procurement of various items of plant and equipment are not allowed to delay the implementation of the Plant Rehabilitation Scheme and that the targets fixed in this regard are strictly adhered to so that the plant produces to its rated capacity at the earliest.
10	2.114	The Committee regret to note that gap still persist between the demand and production of Ferro-Silicon, Ferro-molybdenum, Ferro-tungsten, Ferro-Vanadium and Ferro-Titanium etc. and that Government's efforts at creating additional capacities have not borne fruit so far, with the result that shortages are expected to continue during the Fifth Plan period also. The Committee urge that concerted efforts should be made to achieve self-reliance in respect of the various ferro-alloys and particularly in respect of Ferro-Silicon where the shortfall is expected to be of the order of 12,000 tonnes in 1980-81. They would stress that effective measures should be taken to set up capacity for the production of strategic material like Ferro-Vanadium, at the earliest.
11	2.117	The Committee are constrained to observe that although in Paragraph 2.61 of their original Report, they had desired Government to bring out a comprehensive White Paper on the state of production in each of th steel plants and the measures taken or proposed to be taken to improve their performance and the Government, in October, 1972, had promised to place the White Paper on the Table of the House, "as soon as possible", the White Paper is yet to be prepared by Government.

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	2.118	The Committee attach the greatest importance to the implementation of the recommendation accepted by Government. It is unfortunate that even after accepting this recommendation, action to implement it has been inordinately delayed. The Committee note that it is proposed to up-date the data to be included in the White Paper in which the Government would project its views regarding the change in the management of the steel industry. The Committee urge that energetic steps should be taken to complete the White Paper and lay it on the Table of the House as early as possible, at any rate, before the end of the current year.
12	3.12	The Committee note that in implementation of the recommendation contained in para 1.35 of their original Report, Government have formulated a perspective plan for production of iron and steel for the next ten years from 1974-75 to 1983-84 based on the Report of the Planning Group submitted in April, 1973. The Committee, however, find from these projections that there is a big gap of 14.63 lakh tonnes between the demand and estimated production of mild steel (fiinished) during 1974-75. The gap persists till the end of the Sixth Plan. The Committee are constrained to observe that even after twenty-years of planning the country is not self-sufficient in a vital material like steel whilst the other countires like Japan have made tremendous progress in spite of comparative disadvantages from which they are suffering. The Committee are deeply concerned to note that steel will have to be imported with a view to bridge the gap between the demand and production. Total steel imports during 1973-74 were over a million tonnes valued at over Rs. 237 crores. During 1974-75 the total imports will be of the order of Rs. 275 crores. The Committee regret that substantial amounts had to be spent on imports resulting in outgo of scarce

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		foreign exchange. While the Committee agree with the Government's view that taking into account the technological and economic considerations it is not desirable that the country should produce every item, they would like to emphasise that the imports should be minimised to the extent possible by stepping up production upto the rated capacity, creating new capacities, and also by changing the product mix of steel plants to meet the emergingg pattern of demand in the country.
13	3.27	The Committee note that there have been considerable delays in the construction schedules of the Bokaro Steel Plant. The first stage of 1.7 m.t. capacity was to be completed by the middle of 1973. The schedule was revised in the middle of 1973, and according to the revised schedule, this stage should have been completed by December, 1974. It has not been possible even to adhere to the revised schedule. The first stage is now expected to be completed by December, 1975 (excluding the cold rolling mill which will be coming by December, 1976) although by that time the whole project with 4 m.t. capacity was intended to be completed. The 4 m.t. stage is now expected to be completed by December, 1977.
	3.28	The Committee note that the delays have been caused by the failure on the part of indigenous manufacturers to maintain the commitment for supply of equipments, delays in construction work and delay in preparation of equnpment data for the second steel mill shop which is part of the 4 m.t. stage, resulting in delay in preparation of working drawings by the consultants and consequent delay in the commencement of civil construction work in the second steel mill shop area.
	3.29	The Committee appreciate the efforts of the Department of Steel for indigenising the whole

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		effort at Bokaro and striving to make it a "Swadeshi" plant, thereby giving a tremendous fillip to the indigenous industry. The Committee note that in the first stage 90 to 95 per cent of the building and technological structure had been completed indigenously. 65 per cent of the mechanical equipment required for Bokaro's first stage and 86 per cent for the second stage had been manufactured indigenously. Moreover, the Committee note that simultaneously with the 1.7 m.t. stage, a major portion of the 4 m.t. stage will also be completed. The Committee endorse the efforts made at indigenisation of the plant and machinery required for the Bokaro Steel Plant even though it has meant a little delay. They hope that with the experience gained in the erection of this plant, it would be possible to make the future steel plants fully 'Swadeshi" and avoid delays which have occurred in this case.
	3.30	The Committee would, however, like to point out that the delay has resulted not only in increase in the cost of the plant but also in depriving the country of the supply of sufficient quantities of steel which is an essential raw material for the development of the indigenous industry. They would, therefore, strongly urge Government to take all effective and concerted steps to ensure that the revised schedules for the completion of Bokaro Plant are strictly adhered to and that no further slippages are allowed to occur in these schedules.
14	3.33	The Committee are unhappy to note that the expansion scheme of Bhilai Steel Plant from 2.5 m.t. to 4 m. t. ingot steel which was to have been completed by the end of 1976 was likely to be delayed by more than two years. The Committee strongly urge that Government should take effective measures to expedite the completion of the project so as to minimise the delays as far as possible.

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15	3.36	The Committee agree with the view held by the Department of Steel that priority has to be given to the implementation and completion of the Plant Rehabilitation Scheme to restore and improve the health of the I.I.S.C.O. Plant by bringing it first to its rated capacity of one million tonnes of ingot steel. The Committee would like to reiterate their view expressed earlier that Government should make all-out efforts to accomplish the whole scheme in time.
16	3.52	The Committee note that while the need for additional capacity for steel was felt during the Third Plan and the studies for the setting up of three new plants at Salem, Vijayanagar and Visakhapatnam were initiated as early as in 1962, the decision to set up these plants was taken in 1970. The Committee note that while the detailed project report for the Salem Steel Plant has almost been finalised the datailed project Reports for the Visakhapatnam and Vijayanagar projects are still at the initial stages of preparation even after a lapse of 5 years from the date of the decision. The Committee understand that the delay in the setting up of these three projects has to an extent resulted from the Government's anxiety that the economic feasibility of the plants should be ensured before launching upon these projects. Now that work on the detailed project Reports has been initiated in respect of all these projects which are proposed to be completed in the Sixth Plan period, the Committee hope that every effort will be made by Government to complete the projects in time so that additional steel is available during the Sixth Plan period.
17	3.58	The Committee note that Durgapur Steel Plant which has a capacity of 1.6 million tonnes in terms of ingot steel is, at present working at about 50 per cent of its rated capacity. The Committee note that a detailed feasibility study of the possible expansion of this plant is also

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		under preparation. The Committee are inclined to agree with Government that the emphasis should, in the first instance, be laid on maximising production in this plant so as to reach the existing rated capacity as early as possible. They would therefore urge that concerted efforts should be made to improve industrial relations in this plant on a durable basis as also to remove other constraints on production such as, power restrictions from DVC, short availability of gas due to deteriorating conditions of coke oven, short availability of coke etc., so as to optimise production at the earliest.
18	3.59	The Committee further note that Rourkela Steel Plant which has a rated capacity of 1.8 million tonnes in terms of ingot steel, is at present working at about 65 per cent ofits capacity and that it expects to reach 80 per cent of its capacity by next year. They further note that the expansion of the capacity of this plant is also under consideration. The Committee would urge that concerted measures should be taken by Government to step up production in the plant so as to reach the rated capacity at the earliest.
	3.60	The Committee realise that expansion of capacity of the existing plants is economical compared to setting up of new plants. At the same time, they feel that all out efforts should be made to reach the rated capacities so as to create a congenial climate for undertaking expansion of the existing plants.
19	3.64	The Committee note the view taken by the Planning Group that a prudent and practical approach would be to expand the existing steel plants progressively and at the same time to draw up a long term programme for new plants at greenfield sites. The Committee, however, note that due to severe constraint on resources even for the ongoing schemes, such studies are

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		likely to be accorded lower priority and made use of only in the steel development programme in the Sixth and succeeding Plan periods. Since, however, these projects are expected to serve as nuclii for future expansion and in view of the long gestation period involved in the setting up of such projects, the Committee hope that advance action on these projects will be taken in time.
20	3.85	The Committee are happy to note the accelerated efforts made by Government towards meeting the prevailing shortages of steel by means of setting up electric furnace-cum-continuous/conventional casting units for manufacture of steel ingots/billets in the country in the private as well as public sector units. The Committee also note that Government have so far permitted 182 units with an aggregate capacity of 40.65 lakh tonnes per annum which are dispersed over as many as 17 States in the country. Out of these, 59 units, having a total capacity of 16.7 lakh tonnes per annum, are reported to have gone into production.
	3.86	The Committee, however, regret to note that a large number of units have not been able to start production for want of power as the States concerned are not in a position to help them in this matter and further licencing of such units has been discouraged on this account. The Committee desire that the matter regarding shortage of power supply to these units should be taken up at the highest level and adequate programmes for augmentation of power supply for the steel industry may be drawn up on a priority basis.
21	3.87	The Committee are happy to note that continuous casting process for production of steel ingots/billets has been successful in the country and hope that as soon as the power posi-

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		tion improves, the setting up of these units will be encouraged.
22	3.92	The Committee note that according to Plan figures furnished to them in October, 1974 the gap between estimated demand and production of Alloys and Special Steels would increase from about 90,000 tonnes in 1974-75 to about 2,80,000 tonnes by the end of the Fifth Plan and to over 7,00,000 tonnes by the end of the Sixth Plan. On the other hand the revised figures furnished in November, 1974 show a surplus in production of these varieties of steels in comparison to the requirements as it has been stated that the demand is bound to come down in view of the policy of curbing the use of high quality steels for non-essential end uses. The Committee wish to point out in this connection that the arc furnace units which are expected to increase the production of special steels, may not be able to do so as they are at present severely handicapped for want of power. The Committee are, therefore, doubtful if these projections made regarding the production of Alloy and Special Steels are likely to come true. Moreover, even according to Government the demand may rise again during the course of one or two years. The Committee, therefore, recommend that Government should review the estimates for demand and supply of alloy and special steels more realistically and take suitable measures to increase the production of these steels in adequate quantities and plan to create additional capacities to meet future requirements so as to reduce dependence on imports.
23	4.14	The Committee note that in implementation of the recommendations contained in Paragraph 4.29 of their original Report Government, have laid down broad guide lines for fixing priorities for allocation of steel to the various steel indentors and that the guidelines have proved useful in simplifying the procedure and taking expeditious decisions on allocation of priorities.

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24	4.15	The Committee note that with a view to avoid delays and uncertainty in supplies of steel as also to remove bottlenecks in the movement of steel a revised distribution policy in respect of steel is being implemented by Government. This distribution policy has, *inter alia*, done away with indents and sale order system for about 1300 Steel Priority Committee Allottees, abolished earnest money deposit, reduced time lag in processing of demand, made allocations annually for a number of Steel Priority Committee Allottees, and arranged the movement of steel in bulk and rake loads etc. The result has been that under the new distribution system, there is an easy and increased availability of steel to the various consumers. The Committee are particularly happy that the new distribution system has practically wiped out black market in steel which was rampant previously. There is very small difference in the stockyard prices and the market prices except in respect of a few items. The Committee are confident that with the increased production of steel as also with further simplification and streamlining of the distribution procedure it would be possible to make steel easily available to all consumers at the fixed prices. The Committee however urge that the working of the new distribution system should be kept under constant review and necessary improvements made, in the light of experience gained, to ensure that steel is available to all consumers readily and at stock yard prices.
25	4.25	The Committee regret to observe that although Government in April, 1973 accepted in principle that the prices of steel charged from the Small Scale Industry Units who are getting their supplies through the Small Scale Industries Corporations, should be the same as those being charged from other indentors who are getting their supplies from the Steel Plants direct, and the Report of a Departmental Study Group which examined this matter in detail was also received in

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		January, 1974, no final decision has yet been taken in the matter.
	4.26	The Committee need hardly emphasise that the small units should not be placed at a disadvantageous position in regard to prices compared to the large units as these are mainly run by men of small means. The Committee, therefore, stress that Government should take immediate steps to ensure that steel materials are made available to the Small Scale Industries Corporations at a concessional price so that after adding their margin, the prices to the small scale units purchasing material from them, are roughly the same as is paid by the units which obtain material directly from the steel plants.
26	4.27	The Committee would also reiterate the recommendation made in para 4.72 of their original Report and urge Government to review the working of the new procedure of distribution of steel to the small scale sector through Small Scale Industries Corporations, from time to time in the light of difficulties explained in para 4.71 thereof and take adequate remedial measures to ensure that the procedure does not result in hardship to the small scale units.
27	4.32	The Committee note that in implementation of the recommendation contained in paragraph 5.29 of their original Report regarding measures to ensure that steel was put to proper use and was not surreptitiously sold in the market, thereby vitiating the atmosphere, Government had suitably amended the Iron and Steel (Control) Order and set up the regional offices of the Iron and Steel Controller. The Committee are happy to note that the Department has stepped up inspections and enforcement drive to check misuse of allocations of steel which had a salutary effect. The Committee urge that these measures should be carried on vigorously and on a continuous basis, so as to ensure that steel has been used

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		for the purpose for which it was allotted and there is no black market.
28	4.36	The Committee note that storage capacity in Hindustan Steel Ltd. Stockyards has gone up from an average of about 70,000 tonnes during 1973-74 to 1,40,000 tonnes at present. The Committee also note that by 1975-76 the H.S.L. stockyards will have to handle 2,00,000 tonnes of steel per month. The Committee desire that periodical review of the requirements of space and equipment at the stockyards should be made and suitable measures should be taken so that there is no difficulty in handling increased volume of tonnage in the stockyards, with maximum efficiency and least cost.

APPENDIX II

(*vide* Introduction)

Analysis of Recommendations/ Conclusions contained in the Report.

I. CLASSIFICATION OF RECOMMENDATIONS

A. Recommendations for improving the organisation and working.

1 to 28.

B. Recommendations for effecting economy.

Nil.

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