

CHAPTER 9: CONCLUSIONS ON THE PUBLIC INTEREST AND RECOMMENDATIONS

The Suppliers of the Gases

237. In this inquiry we have not found any evidence of restrictive agreements or arrangements between the suppliers of oxygen, dissolved acetylene and propane, except for the marketing arrangements on propane referred to below, but, as explained in Chapter 7, at least one supplier of each gas is responsible for more than one-third of the supply in the United Kingdom. Both as producers and distributors The British Oxygen Co. Ltd. and its subsidiary companies account for over 98 per cent. of the oxygen supplied, and over 98 per cent. of the dissolved acetylene*. On the average of the years 1953, 1954 and 1955, "Shell" Refining & Marketing Co. Ltd.† and The British Petroleum Co. Ltd.‡, with Eagle Oil & Shipping Co. Ltd. supplied, through the common marketing agency of Shell-Mex & B.P. Ltd., just over 60 per cent. of the propane produced, and by virtue of their marketing arrangements they so conduct their affairs as to restrict competition in the supply of propane. Imperial Chemical Industries Ltd. supplied about 37 per cent. during the same period and Esso Petroleum Co. Ltd. about 35 per cent. Shell-Mex & B.P. also has an understanding with B.O.C. that it will not, without giving due notice, compete with B.O.C. in direct sales of propane for use with oxygen for cutting gas purposes. The B.O.C. Group supplied about 59 per cent. of the propane supplied by distributors, and Saturn Industrial Gases Ltd. supplied about 36 per cent. About 58 per cent. was supplied by producers to the B.O.C. Group.

238. We are concerned, therefore, with a number of "monopoly" suppliers, of which B.O.C. is much the most important in relation to the gases in our reference. In the case of oxygen and dissolved acetylene, B.O.C.'s monopoly is almost complete, and we deal first with these gases.

Public Interest: Oxygen and Dissolved Acetylene

239. We have to consider whether the "conditions" to which the Act applies operate or may be expected to operate against the public interest, and also whether any "things done" by B.O.C. as a result of or for the purpose of preserving those conditions operate or may be expected to operate against the public interest. It is difficult in a case of this kind to draw a clear distinction between the effects of the conditions and the effects of "things done" as a result of or in order to preserve the conditions. In the analysis which follows we consider these matters together, expressing our conclusions and making our recommendations on the various "things done" as they arise and leaving our conclusion on the "conditions" to the end.

240. There are possible dangers in the control by one supplier of so large a proportion of the market for two essential commodities such as oxygen and dissolved acetylene. It is in a position to determine within wide limits the profit which it wishes to make, and it can then fix its prices in relation to costs at a level which will normally ensure to it the return which it desires.

* Even if account were taken of the acetylene gas generated by consumers for their own use, which is not, of course, dissolved acetylene and is in any case not "supplied", but which is estimated as roughly 20 per cent. of the amount of dissolved acetylene produced by B.O.C. (see paragraph 145), B.O.C. would still be providing well over four-fifths of all the available gas produced by both methods.

† As from 31st December, 1955, The Shell Petroleum Co. Ltd.

‡ As from 31st December, 1954, BP Trading Ltd.

Even if the powers which such a monopoly possesses are at a given time exercised with moderation, the risk will always remain that at some time in the future it may use its position to make excessive profits at the expense of the consumer. There is in addition the danger that the absence of competition may lead to lack of enterprise and inefficiency which in turn may give rise to unnecessarily high prices. We recognise, however, that in this industry there may be some substantial economies in operating as a monopoly, whether on a national or a local basis. We understand that somewhat similar conditions prevail in some other countries, including France where there is something approaching a national monopoly, and Holland where there are a number of regional monopolies.

The Efficiency of B.O.C.

241. A point of great importance is whether because it is a monopoly B.O.C. is operated less efficiently than would be the case if there were more competition and whether, in consequence, the public suffers because resources are wasted, or because of deficiencies in the services rendered by B.O.C.

242. We have had very few complaints from amongst B.O.C.'s many thousands of customers. Indeed, the only subject on which we received a significant number of complaints was the operation of the float system, whereby an allowance of cylinders is made to a customer and he may get no more unless he returns his empties. There is no doubt that for some years after the war there was a serious shortage of cylinders for reasons over which B.O.C. had no control. In recent years B.O.C. has been able to augment its stock of cylinders. If it were to obtain still more and to exert less pressure for the return of empties, this would be regarded by some customers as a convenience. Any considerable easement in this respect would, however, entail a substantial increase in the total number of cylinders carried by B.O.C. The cost of a cylinder far exceeds that of the gas which it contains, and we accept B.O.C.'s evidence that the capital cost of providing any substantially larger float of cylinders could only result in a substantial increase in overall selling prices which would not be justified.

243. Subject to what is said in the following paragraphs, we have no evidence to suggest that the efficiency, technical and otherwise, of B.O.C. falls below the standard which might reasonably be expected of a company of its standing and resources.

B.O.C.'s Technical Services

244. We have considered the technical services provided by B.O.C. to its customers. They are comprehensive, and we have had no complaint about them, but the cost of providing these services has to be covered in the selling price of oxygen and dissolved acetylene, and we have asked ourselves whether many consumers might not in fact be paying for services which they had little, if any, occasion to use. We think that in so far as the extent of the use made of the services by different classes of consumers can be ascertained, it should be reflected in the prices charged to each class. This point is covered by the recommendations which we make later (paragraphs 272 to 276) on the revision of B.O.C.'s price scales.

Research and Development

245. In view of its almost complete monopoly a heavy responsibility falls upon B.O.C. to ensure that the full requirements of industry, of the hospitals and of the Armed Services will continue to be met, and that in the field of research the United Kingdom will at least keep pace with other countries.

So far as development is concerned, B.O.C. has explained to us its plans for expansion over the next few years. These seem to be on a scale adequate to ensure that during, say, the next five years, B.O.C. will be able on any reasonable expectation to supply in full the expanding demands of the United Kingdom. B.O.C. now devotes 2½ per cent. of its income to research, but we cannot determine the proportion which is spent on the reference gases.* It was only immediately after the war that a special research department was set up, and it will be seen from Chapter 4 that in its long history B.O.C. has not been responsible for the discovery of any of the successive important new processes for the production or distribution of oxygen. Indeed, almost all these were first developed abroad and B.O.C.'s part has been to acquire the necessary patent rights or licences and exploit them in this country. Our impression is that at least until recently most of the research work done by B.O.C. has related either to improvements in existing plant or machinery or to research into possible uses for the gases with a view to increasing sales. On such evidence as is available to us, it seems that rapid technical progress is still being made abroad, notably in the U.S.A. and Germany. In view of its monopoly position, it will depend entirely upon B.O.C. whether this country keeps abreast of overseas manufacturers, or whether we lag behind and remain dependent on them for improved methods of production and distribution. We do not find it possible on the information available to reach a definite conclusion as to whether the present research activities are adequate. We attach great importance, however, to a substantial effort by B.O.C. in the field of research.

Steps taken by B.O.C. to Develop and Preserve its Monopoly

246. We next consider :

- (a) Whether B.O.C. has tried to obtain exclusive control over the provision of plant and equipment to other suppliers or to consumers who might wish to make their own gas.
- (b) The steps taken by B.O.C. both to acquire other suppliers and to obtain plants worked by consumers.
- (c) The use which B.O.C. has made of fighting companies.
- (d) The making of agreements under which B.O.C. has the exclusive right to supply certain customers.

247. *Control over Plant and Equipment.* The steps by which B.O.C. has at various periods obtained control over the distribution of oxygen plant are described in paragraphs 39 and 40, and 115 to 123. As will have been seen from B.O.C.'s own explanation of these developments (see paragraphs 197 and 200), B.O.C. denies that it has ever been its policy to secure complete control in the oxygen field. According to B.O.C., there has for many years been little or no demand for customer plant for the production of oxygen, because it has been cheaper and more efficient to obtain the oxygen itself from B.O.C. It is claimed that this situation only began to change recently when the introduction of tonnage plants became possible and that it is for this reason that B.O.C. has not sold any oxygen-producing plant under the various agencies which it has

* In paragraph 212 we quote the figure of £230,000 a year, which was given to us by B.O.C. The cost of research cannot be directly allocated to products, and this estimate of the cost of work done on the reference gases is arrived at by taking the total cost of the research done on all the company's products and charging to each product a proportion of the total based on the proportion which the cost of that product bears to the company's total costs.

acquired. B.O.C. has also stated that at the present time plant could be supplied in this country by any one of five companies:

The Butterley Company Ltd.
Société L'Air Liquide (of France).
Air Products Inc. (of U.S.A.).
British Oxygen Linde Ltd.
Messer G.m.b.H. (of Germany) (through Oxhycarbon Ltd.).

Of these five, however, Oxhycarbon Ltd., which holds the Messer agency, is a wholly-owned subsidiary of B.O.C.; and British Oxygen Linde Ltd., which is half-owned by B.O.C., is in effect the agent for the German Linde plant. B.O.C. has told us in another connection that it is very unlikely that either Linde of Germany or B.O.C. itself would quote in competition with each other or with their subsidiary. L'Air Liquide has told us that in the United Kingdom, owing to import duty and transport costs of roughly 30 per cent., it is only possible in "very exceptional cases to compete with British manufacturers". Butterley is the licensee in the United Kingdom for Air Products Inc., and for this purpose these two companies can be regarded as a single source of supply. The fact, therefore, appears to be that there is only one manufacturer of oxygen plant—Butterley—which is both independent of B.O.C. and able in practice to compete in the supply of plant. There is no evidence that B.O.C. exercises any control over the provision of plant for producing dissolved acetylene, or over the supply of customer generating plant for this gas. The capital cost of each is less than that of oxygen plant, and there are now no limitations on production due to patents.

248. The conclusion that we draw from the facts set out in Chapters 3 and 5 is that in the past B.O.C. has deliberately sought to control the provision of oxygen plant to others in order to maintain its monopoly in the supply of oxygen, and that it has had a considerable degree of success in doing so. On the evidence provided by statements of policy contained in B.O.C.'s Board minutes and internal memoranda (in particular the policy outlined in the memorandum dated 3rd December, 1953, which is quoted in paragraph 131 and of which we have seen no later modification), we are satisfied that B.O.C. is still pursuing this policy and that it is likely to continue to do so, although the extent to which it may be able to retain control may be reduced by two factors: the competition offered by Butterley, and the development of the new-style tonnage plants, which may make it more attractive to large users to produce oxygen for their own consumption. We consider that in so far as this policy is pursued with success this operates and may be expected to operate against the public interest since it may discourage or prevent the acquisition of oxygen plant by other producers, including consumers who might produce oxygen for their own use as well as producers who might supply others. The public may thus be deprived of the advantages of alternative sources of supply and such competition in service, technical development and price as this might produce.

249. Existing legislation does not seem to provide any effective means of dealing with this situation. B.O.C. has operated largely as a licensee under foreign patents and as the sole agent for the sale in this country of machinery of kinds which it uses itself for the production of oxygen and which might have been similarly used by its competitors or customers. At the moment the competition from Butterley provides some safeguard of the public interest but in our opinion there remains a danger to the public interest where a large monopoly such as B.O.C. has a substantial measure of control over the provision of plant and machinery for the production of the goods which the monopoly itself sells.

250. *The Taking over of other Producers.* We have also considered the evidence relating to the taking over of other suppliers of oxygen and dissolved acetylene and of the oxygen and dissolved acetylene plants of firms which formerly produced these gases for their own use. The evidence set out in paragraphs 31 to 37 and 41 to 44* leaves us in no doubt that it has been B.O.C.'s consistent policy, wherever possible, to take over or to buy out other producers of oxygen and dissolved acetylene and that it has done this primarily, though not solely, in order to extend and preserve its own monopoly in the supply of these gases. There is, however, no evidence that B.O.C. is at present seeking to eliminate the small amount of competition that remains.

251. *The Use of Fighting Companies.* The evidence summarised in paragraph 52 shows that B.O.C. made use of Industrial Gases (Scotland) Ltd. as a fighting company and that the activities of this company probably contributed towards the withdrawal of Saturn from the Glasgow area. B.O.C.'s ownership of this company and of two other companies, British Industrial Gases Ltd. and Oxhycarbon Ltd., had still not been publicly acknowledged when the present inquiry started, and they continued to trade ostensibly in competition with B.O.C. It was only in 1955, in B.O.C.'s Report and Statement of Accounts for the year ended 31st December, 1954, that their relationship to B.O.C. was disclosed, though we do not doubt that, as B.O.C. told us, it was known to some customers. We think that the use of Industrial Gases (Scotland) Ltd. as a fighting company and the concealment of the ownership of all three were "things done" by B.O.C. in order to preserve its "monopoly". It is in our view contrary to the public interest that a monopoly such as B.O.C. should take advantage of its position to eliminate competitors by making local and selective reductions in prices instead of extending to all consumers the benefits of any price reductions which may be possible. But since B.O.C.'s ownership of these companies has now been made public we need only recommend that, in meeting any competition which may arise in future, B.O.C. should refrain from making use of fighting companies.

252. *Exclusivity Terms in Contracts.* Certain terms of the standard contract which B.O.C. enters into with the majority of its larger customers make exclusive buying a condition of supply. These provisions are set out in paragraph 76. It will be seen that they applied only to 1,575 out of a total of 99,438 customers in 1954, and the main lines of the contract (which is reproduced in full in Appendix 10) follow normal business practice. We have considered whether the requirement of exclusive dealing is an unreasonable limitation upon the right of the consumer to buy where he pleases. The contract provides that the consumer must take from B.O.C. his total requirements of the named gases for which prices are stated (in the case of oxygen, whether in liquid or gaseous form), unless it is expressly agreed in writing to the contrary. It also lays down that B.O.C. will provide and maintain any necessary apparatus, on terms to be agreed, and that the consumer will use this apparatus only in conjunction with gas supplied by B.O.C. B.O.C. told us that it normally installed and maintained the apparatus free of charge and that it would not in practice enforce the requirement that a consumer

* The origin of B.O.C.'s monopoly in dissolved acetylene lies in the amalgamation of Allen-Liversidge Ltd. with B.O.C. in 1930, and it was strengthened by the later acquisitions of Oxygen Industries Ltd., British Industrial Gases Ltd., Hydrogen Oxygen & Plant Co. Ltd., and Saturn's dissolved acetylene plant and premises at Glasgow. All these firms, with the exception of Allen-Liversidge Ltd., supplied both oxygen and dissolved acetylene. The other take-overs referred to in Chapter 3 related to producers of oxygen only or makers of oxygen plant.

must take his total supplies of gas from itself, but that it could not reasonably be expected to provide free apparatus and allow that apparatus to be used for the supply of gas by some other concern. We have come across one case in which the exclusivity clause in the contract has been expressly modified and a few where it seemed to be ignored, but it is clear that many customers do not question it. We do not object to the rule that any apparatus supplied free by B.O.C. must be used only in conjunction with gas supplied by B.O.C., but the requirement that the consumer must take from B.O.C. his total requirements of the named gases, including in some cases gas for which the apparatus is not used at all, seems to us to be too wide. Its purpose can only be to preserve B.O.C.'s monopoly position, and in our view it limits the customer's freedom of choice to an extent which is contrary to the public interest. A consumer ought not to be forced to use B.O.C. apparatus in order to obtain supplies of gas, and if he does choose to use B.O.C. apparatus for one gas he ought not, as a consequence, to be compelled to take from B.O.C. other gases or gas supplied in a form which permits it to be used without the apparatus. The principles to be applied should, we consider, be that B.O.C. should give the customer a free choice as to whether he buys and maintains the apparatus himself, whether he hires it from B.O.C. and maintains it himself, or whether he accepts B.O.C.'s offer to provide and maintain it free of charge. If he chooses to buy or hire the apparatus, B.O.C. should be prepared to sell or hire it to him at a reasonable price or rental and still to supply him on reasonable terms with any gas which he wishes to buy from B.O.C., while at the same time he remains free to buy from other sources if he so wishes. If the customer chooses free installation and maintenance by B.O.C. he may reasonably be required to take from B.O.C. such minimum quantity of gas as would justify the cost of installation and maintenance, and to use the B.O.C. apparatus only with B.O.C. gas, but he should not be compelled to take from B.O.C. his total requirements of gas if these exceed that minimum. We recommend that the exclusivity clause in B.O.C.'s contracts be amended accordingly.

Special Considerations Applicable to Dissolved Acetylene

253. The position with regard to dissolved acetylene differs from that of oxygen in that a substantial number of consumers possess acetylene generating plant with which they produce acetylene gas for their own use. We have not been able to ascertain the total volume of gas produced in this way but the figures of carbide used suggest that it is probably about 20 per cent. of that produced and supplied by B.O.C. (see paragraph 145).

254. While B.O.C. enjoys some advantages in the supply of carbide, inasmuch as it owns Odda Smelteverk in Norway and unlike the other users of carbide for dissolved or generated acetylene production is also able to buy direct from the Distillers Company's plant at Kenfig instead of through the Carbide Distributing Agency, there is no evidence that any users have difficulty in obtaining adequate supplies of carbide. Nor is there any evidence of shortage of dissolved acetylene.

255. At the Public Interest hearing, B.O.C. told us that the existence of numerous customer plants generating acetylene gas provided substantial competition for its own dissolved acetylene, but at an earlier stage of the inquiry it had argued that, in general, customer production was not economic and that in many cases it was not practicable, owing to the difficulties of sludge disposal and the severe safety precautions necessary. It also stressed that a great advantage of dissolved acetylene over generated acetylene is its

portability as a gas in cylinders. Our impression is that many of the firms generating their own acetylene for welding and cutting are small and that many of the larger users have, as B.O.C. has said, gone over from generated to dissolved acetylene in recent years.

256. For certain cutting purposes propane and coal gas are competitive with dissolved acetylene, and for certain welding processes electric methods are competitive. The evidence which we have received about the use of these alternative processes is summarised in paragraph 112. B.O.C. is thus subject to competition from the use of customer generating plants and from alternative processes for certain limited purposes, but this competition covers only part of the field and over most of the field B.O.C.'s monopoly is virtually unchallenged.

257. The conclusions in paragraphs 250, 251 and 252 apply to dissolved acetylene as well as to oxygen. Nothing which B.O.C. does in respect of dissolved acetylene alone calls for comment in relation to the public interest.

Price Policy : B.O.C.'s Profits

258. In considering the conduct of any monopoly, and particularly one as comprehensive as B.O.C., considerable importance attaches to the price-policy which it follows. This raises a number of questions, the first of which is whether B.O.C. has taken advantage of its position to make profits which are unjustifiably high. It will have been seen from Chapter 6 that on the reference gases taken together*, in 1952 to 1954, B.O.C. made a profit of 23 to 24 per cent. on capital employed, the capital being calculated on an historical cost basis†. In 1939 the rate for gases was 25 per cent., and B.O.C. has told us that it regards 23 to 25 per cent. on capital employed (using the historical basis) as a reasonable return, and about the rate of profit which it requires in order to support its modernisation and research programme and to enable it to raise additional money on the market. From 1945 to 1951, B.O.C. paid a dividend of 20 per cent. on its ordinary capital and in the latter year made a bonus issue equal to 50 per cent. of its existing ordinary stock. From 1952 to 1954 the dividend was 15 per cent. (which was equivalent to 22½ per cent. on the capital before the bonus issue), and in 1954 this was about 5 per cent. on its capital employed (on an historical cost basis). In 1955, B.O.C. raised £8 million of new capital by offering £1 units for 50s., which at the rate of dividend of 15 per cent. would give a return to the stockholder of 6 per cent.‡ on his outlay. Thus, taking together the existing and the new capital, B.O.C. will in future need between 5 and 6 per cent. on capital employed to continue to pay dividends at the existing level. To give shareholders 6 per cent. at present requires a profit before taxation of just over 9 per cent. from which to pay it. Even, therefore, if B.O.C.'s contention that profit on capital employed should be calculated on a replacement basis were to be accepted, it will be seen that a substantial part of B.O.C.'s profits would remain after giving this return to the stockholders.

* In 1954 B.O.C.'s profit as a percentage on cost was 24.3 per cent. for oxygen, 26.6 per cent. for dissolved acetylene and 16.8 per cent. for propane. Even if the profit in relation to capital is higher on propane than on oxygen and dissolved acetylene (see paragraph 182) this could not make any material difference to the figure of 23 to 24 per cent. on capital employed for oxygen and dissolved acetylene because propane represents only a very small part of the reference gases supplied by B.O.C.

† These figures correspond to 16½ per cent. on capital taken on a replacement basis, see paragraph 158.

‡ In 1955 as well as paying a cash dividend of 15 per cent., B.O.C. made a bonus issue equal to 50 per cent. of its existing ordinary stock by utilising premiums arising from share issues.

259. As far as its business in oxygen and dissolved acetylene is concerned, B.O.C. enjoys to a very high degree the advantages of a monopoly position. It has little to fear from competition, it is dealing with essential commodities, the cost of which is a small item in the costs of most of its customers, and it is in a position to make a very close assessment of its share of the available market. The element of risk in its operations is confined mainly to the risks involved in changes in the general level of industrial activity. Its replacement requirements are no more than is normal in industry, while it can operate with lower reserves than companies which have to take a substantial measure of risk. In these respects its position is closely parallel to that of some of the recognised public utility concerns before nationalisation. We are bound to confine our attention to those gases which are included in our terms of reference but in respect of its business in oxygen and dissolved acetylene it should be in a position to raise money on more favourable terms than if it were bearing normal trading risks. It seems to us indeed that it should be able to obtain a considerable part of the capital required for the expansion of its business from debentures and similar forms of borrowing which would require a somewhat lower rate of interest.* In order to maintain and develop its business, a monopoly company in B.O.C.'s position does not, therefore, need to earn the same return on capital as a company in a competitive industry.

260. These are, we think, the considerations which should be taken into account in determining the appropriate level of profit for B.O.C.'s business in oxygen and dissolved acetylene, and we have examined B.O.C.'s profit record with them in mind. Taking the years for which we have figures—1952 to 1954†—there is no doubt that instead of being below the general level B.O.C. made a larger profit on capital employed in its gases business than was earned in manufacturing industries generally. The guidance which is given by our own reports on profit levels in other industries during these years is limited: they only relate to a few industries which cannot be regarded as wholly representative. For the purpose of comparison we have, therefore, relied mainly on the statistics published quarterly in *The Economist* covering the results of over 2,000‡ leading companies (see Appendix 16). According to these statistics the weighted average profits during the years 1952 to 1954 in each of the 17 industry groups which are mainly manufacturing groups, were lower than those made by B.O.C. (23 to 24 per cent.) except in the motors, cycles and aircraft group in 1953 and 1954, with average profit rates of respectively 25 and 27 per cent., and the newspapers, paper and printing group in 1954 only, with an average profit rate of 25 per cent. In the other manufacturing groups the average ranged from 11 per cent. to 20 per cent. in 1954, and the profit rates of B.O.C. in 1952 to 1954 were roughly from one-third to one-half higher than the weighted average for all manufacturing industries. It is true of course that, as we have found in our own inquiries, there are substantial variations of profit rate as between different firms in the same industry. We also recognise that no precise comparison is possible, but

* B.O.C. issued £4,000,000 Unsecured Loan Stock at 3½ per cent. interest in 1950, but repaid this out of the new ordinary capital issue in 1955. This issue was, of course, related to B.O.C.'s business as a whole.

† While our detailed examination did not extend beyond 1954 we have noted that the published results for the B.O.C. Group, including home and overseas subsidiaries and relating to both industrial gases and other products, for a trading period of nine months to 30th September, 1955, show the overall profit to be slightly higher than during the corresponding period a year earlier.

‡ The number of individual companies is much greater than 2,000 because the results of a group of inter-connected companies are counted as one.

we have adjusted the figures in *The Economist* so that they are substantially on the same basis as our own computation of the profits of B.O.C., subject only to the fact that we have insufficient information to make the necessary adjustments in the comparatively few cases where individual companies have revalued their assets in their accounts to allow for higher replacement costs. We are, however, satisfied that *The Economist's* statistics provide a fair measure of comparison for the purpose for which we are now using them.

261. B.O.C. differs from firms which are in competitive industries in the extent to which it is able to set its prices at whatever levels suit it best. We note that both before and since the war B.O.C. has aimed at and secured profits in the region of 23 to 25 per cent. on capital employed and that even in 1952 to 1954, which were prosperous years for industry generally, its profits were well above the average level in manufacturing industry. After making full allowance for the seller's market which has prevailed during most of the post-war period we consider that B.O.C.'s profits have been unjustifiably high for an almost complete monopoly facing a limited financial risk.*

B.O.C.'s Prices

262. It follows that the prices charged by B.O.C. for oxygen and dissolved acetylene are too high. While it may be that some economies could be made, we have no evidence upon which we could base any general finding that B.O.C.'s costs are too high, but to the extent that B.O.C.'s profits are too high there is scope for reduction in the prices charged to consumers. We should not consider it any answer to this to say that it would involve B.O.C. having recourse to the market in future for a greater proportion of the capital which it may require for the extension of its business as distinct from the replacement of its existing assets. We do not think that a monopoly should take advantage of its position to charge current consumers with the cost of its future expansion as distinct from replacement. As an illustration of the scope for reduction, if the profit on capital employed had been limited to 15 per cent. in 1954, prices could have been reduced on average by nearly 7 per cent. If a reduction in price of the order of 7 per cent. had been uniformly applied, the average price of liquid oxygen would have fallen from 13s. 4d. to 12s. 5d. a 1,000 cubic feet; of industrial compressed oxygen from 33s. 9d. to 31s. 6d.; and of dissolved acetylene from 148s. 6d. to 138s. 4d.†

263. We find that B.O.C. charges unjustifiably high prices for oxygen and dissolved acetylene and that this operates and may be expected to operate against the public interest. We recommend that steps should be taken to prevent B.O.C. from charging prices which will produce a higher return of profit on capital employed than is reasonable having regard to the company's monopoly position and to the considerations set out in paragraph 260. We recognise that the appropriate level of profit may vary according to the circumstances, including current rates of interest. In paragraphs 281 and 282 we discuss the way in which effect might be given to this recommendation.

264. *Price Scales and Method of Charging.* We have also, however, to consider whether taking account of its monopoly B.O.C.'s price policy is consistent with the public interest in other respects. In the case of oxygen the evidence shows that B.O.C.'s costs vary widely in different parts of the

* See Reservation, paragraphs 301 to 311.

† The profits made on and prices charged for propane by B.O.C. are considered in paragraph 289.

country. We examined the figures for eleven out of fourteen factories producing liquid oxygen, and the average cost of production over the two-year period 1952 and 1953 varied from 5s. 2d. to 7s. 1d. a 1,000 cubic feet, with a weighted average of 5s. 11d. For compressed oxygen we looked at the figures for thirty out of the thirty-six factories. Their range of costs was from 11s. 7d. to 19s. 0d. a 1,000 cubic feet (with one exceptionally at 24s. 9d.) and a weighted average of 15s. 0d.

265. The consumption of dissolved acetylene is more localised and the range of variation in costs of production is narrower. At the time of our examination, there were in all sixteen factories, whose average costs of production over the two-year period 1952 and 1953 varied from 88s. 0d. to 99s. 11d. a 1,000 cubic feet, with a weighted average of 95s. 0d.

266. We have considered whether the national price scheme operates against the public interest as compared with a regional price scheme under which, in each of the eight districts into which B.O.C. divides the country, there would be a local price scheme based on the average total costs of production in that area. The national price scheme which is at present in force is explained in paragraph 147. With trifling exceptions, all prices are delivered prices.

267. The case against a national scheme and in favour of a regional one may be stated as follows :

- (a) Existing and potential customers should enjoy any local advantages which their district may possess arising from such factors as the volume and concentration of demand in the district, the local cost of power, labour, etc., and the relative efficiency of the supplying plant in the district.
- (b) As a general proposition the establishment of an average national price, regardless of differences in costs of production, tends to engender an uneconomic employment of resources. This may be of small importance in relation to the affairs of the large number of individual users of small quantities of either gas, but it may well become significant in relation to some of the new oxygen-employing processes in the steel industry, where a large volume of oxygen is required and where its cost may be a significant factor.
- (c) If an area has to stand on its own feet in the matter of price, this may have a marked effect upon the company's works and transport policy because old and possibly uneconomic works would become more difficult to carry, and economies in transport, e.g., by the introduction of bulk carriers, would become of increased importance. Higher cost regions would come under pressure to reduce their costs and prices.
- (d) Under a regional scheme there would be a greater incentive for large consumers of oxygen in high cost areas to install their own tonnage plants, possibly also putting themselves into a position in which they could supply their immediate neighbours with oxygen which was surplus to their own requirements.
- (e) By avoiding over-centralisation a regional price scheme might prove to be the cheaper.

268. On the other hand B.O.C. has represented to us strongly that the disadvantages of a regional scheme would greatly outweigh its advantages (see paragraph 221), and we should not be entitled to recommend the abolition of the national scheme unless we were positively satisfied that it operated

against the public interest. There are the following arguments in favour of a national scheme :

- (a) A regional scheme would be more difficult, and almost certainly more expensive, to administer.
- (b) It is doubtful whether in practice a regional scheme would lead to greater efficiency in production.
- (c) Anomalies would be likely to arise where consumers near the boundary between two regions are charged different prices.
- (d) Under a national scheme B.O.C. is in a better position to ensure that a reasonable standard of service is maintained throughout the country. There would be a risk that outlying areas would suffer under a regional scheme.

269. On balance we have reached the conclusion that although a good deal can be said against the national price scheme and in favour of a regional one, the arguments are not sufficiently strong to justify us in finding that the existing national price scheme operates against the public interest.* We see no reason to differentiate in this respect between oxygen and dissolved acetylene.

270. We have also considered whether in view of the relatively high cost of transport (see paragraph 170) it would be preferable that even with a national price scheme the national prices should be ex-works and there should be separate charges for delivery according to distance, no doubt on a zonal system. It seems to us, however, that broadly the same considerations apply as in our discussion of a regional scheme. No customers have suggested that the present arrangements should be changed, the change would be opposed by B.O.C., and although we see the theoretical arguments for it, anomalies would still remain short of a system under which there were separate delivery charges for each journey. In the circumstances we do not find that the present arrangements operate against the public interest*. It is true (see paragraph 147) that an additional charge is made at present for collection ex-depots but this is not a delivery charge. It is a contribution towards the cost of maintaining depots where customers can collect their own supplies in outlying areas, which are not covered by B.O.C.'s normal delivery service.

271. We have also considered the subsidiary question whether B.O.C. should be prepared to sell ex-works leaving customers to collect in their own transport. At present B.O.C. actively discourages customers from collecting cylinders from works in their own transport on the ground that this tends to disorganise the works. In the odd cases where it does allow such collection it makes no reduction in price. We accept B.O.C.'s evidence that if any substantial number of customers were to seek to collect cylinder oxygen or dissolved acetylene in their own transport from B.O.C.'s works (as distinct from depots) this might lead to some degree of disorganisation in the works, which might reduce the efficiency of its service to customers generally. Accordingly, we do not recommend that B.O.C. should be prepared to sell ex-works.

272. In the case of a monopoly in the position of B.O.C., the prices which it charges should in our view operate fairly as between different customers and there should be no discrimination between customers in similar circumstances. B.O.C.'s present prices do not satisfy this condition, because they are not based upon the actual cost of supply to any individual customer or the average cost of supply to any class of customer. B.O.C. appears merely

* See Addendum, paragraphs 296 to 300.

to aim at a sufficient overall return to give what it regards as a satisfactory margin of profit. B.O.C. told us in evidence that it had tried on several occasions to produce a system of prices based on costs, but that it had been unable to do so. We cannot accept the view that any insuperable difficulty would be encountered in setting up such a system, and B.O.C. has submitted no evidence to suggest that it would be more difficult than in the many other cases where it has been done.

273. B.O.C. also said in evidence that even its unpublished price list was not strictly applied, but merely served as a guide to its staff in negotiating prices. In the case of the medium and small users, these negotiations are carried on by local officers in each of the eight districts, while in the case of "special" customers, large buyers not in the special class, and group contracts, they are negotiated from headquarters. These circumstances also suggest some degree of variation in the treatment of individual customers in a like position. In this connection we would attach importance not merely to ensuring that the prices charged were in fact equitable but, in view of B.O.C.'s monopoly, that it should be manifest to everyone that this was so. B.O.C. also told us that "in a general way" its policy is to accept a lower rate of profit per unit on sales of larger quantities. The generalisation of this principle again suggests that the small users, who constitute some 96 per cent. of B.O.C.'s customers, may well be providing a larger share of its profits than they fairly should.

274. We have referred above to the fact that B.O.C.'s prices are not published. A number of users have indicated that they regard this as disadvantageous to them. Clearly it makes it impossible for the individual consumer to know whether he is being treated in the same way as other consumers whose circumstances are similar.

275. In our view the underlying principles should be that there should be no discrimination either between individual consumers or between classes of consumers in similar circumstances; that the scales of charges should be based on relevant costs; and that they should be made known to all consumers. B.O.C.'s present methods of charging for oxygen and dissolved acetylene do not satisfy these conditions, and we find that in this way they operate and may be expected to operate against the public interest.

276. It will be convenient to make one comprehensive recommendation to remedy this state of affairs. We recommend that new scales of prices should be drawn up for all B.O.C.'s customers, who should be grouped into classes according to the method of supply, whether by pipeline, as liquid or as gas in cylinders, and according to the quantities taken within certain ranges. Prices should be fixed for each class of customer which should have regard to the national average cost of supply to customers in that class. These price scales should be published and should be applied without discrimination to all customers in each class. Only very special circumstances should justify the negotiation of special terms outside the scale: e.g. where a firm was embarking upon some new process which, if commercially successful, might ultimately result in a large increase in the consumption of gas. In such a case the consumer might be given from the outset the scale price appropriate to the level of consumption which it was expected that he would ultimately reach, on the understanding that if he did not reach that level within a reasonable and limited time he would revert to the scale appropriate to his actual consumption. B.O.C. should make the necessary changes in its accounting procedures to enable price scales on these lines to be prepared.

277. *Medical Oxygen.* There is no national scale for medical liquid oxygen but, as explained in paragraphs 152 to 155, a national price scheme is in force for compressed medical oxygen. A number of hospitals were amongst those users who indicated that they regard the absence of published prices as disadvantageous, and some of these said that different hospitals within the same Management Group were paying different prices. We note that B.O.C. has it in mind to rearrange prices for medical oxygen when, as it says, the hospitals have settled down, and that in B.O.C.'s view the anomalies in the present price scheme should then disappear. Owing to the arbitrary nature of the costings for "medical" oxygen and the inclusion in them of liquid oxygen supplied to the Air Ministry for high flying, it is not possible to say with any degree of certainty what is the loss (if any) on sales of oxygen for medical purposes in the strict sense of the term. The records of B.O.C. show an average loss of 11 per cent. on cost for "medical" oxygen in all forms, including liquid oxygen for high flying, and there does not seem to us to be any justification for any losses sustained on the sales of "medical" oxygen being, in effect, carried by the industrial consumers. We recommend that published price scales for "medical" oxygen should be prepared on the same lines as for industrial oxygen.

Conclusions on Oxygen and Dissolved Acetylene

278. "Conditions to which the Act applies" prevail in respect of oxygen and dissolved acetylene because B.O.C. has an almost complete monopoly of the supply. We have to consider whether in the manner in which, and to the extent to which, they prevail the conditions we have found to exist, or any of the "things done" as a result of, or for the purpose of preserving, those conditions, operate or may be expected to operate against the public interest. We recognise, as we have said, that in this industry there may be substantial economies in operating as a monopoly, but, as our own inquiry has shown, there are also serious dangers in the control of virtually all the supplies by a single group which has not been content to rely on its advantages of scale and experience but has continued for many years to pursue a policy of suppressing and restricting competition. Among the "things done" with this objective have been the control exercised over plant and equipment, the taking over of other producers, the use of fighting companies, and the incorporation of exclusivity terms in contracts. It is impossible to say how far competition would have developed if B.O.C. had not taken these steps, but we do not think that there is any doubt that B.O.C.'s policy of deliberately restricting competition has had the effect of depriving the public of the possible advantages of greater competition. We have also found that among the "things done" as a result of the "conditions" B.O.C. has taken advantage of the position which it has built up to charge prices which we regard as unjustifiably high, and has pursued a price policy which is in other respects open to objection. In all these circumstances we find that both the existing "conditions" and "things done" as a result of, or for the purpose of preserving them, operate against the public interest and that they may be expected to continue to operate against the public interest unless changes are made, and safeguards introduced, in accordance with the recommendations we have made.

Methods of Implementation

279. Our main recommendations have related to the prices charged by B.O.C. for oxygen and dissolved acetylene (paragraph 263) and the pricing policy which should be followed in other respects (paragraphs 276 and 277). In addition we have recommended in connection with these gases that B.O.C.

should refrain from the use of fighting companies in future (paragraph 251) and proposed that the exclusivity clause in its contracts should be modified (paragraph 252). We have also drawn attention to the desirability of a substantial effort by B.O.C. in the field of research (paragraph 245), and to the danger which arises when a monopoly obtains a substantial measure of control over the provision of plant which might be used by its competitors or customers (paragraph 249).

280. In considering the best method of giving effect to our recommendations on prices we have paid particular attention to the importance of doing nothing which will deprive B.O.C. of adequate incentives to continued and increasing efficiency. For this reason we do not recommend that there should be any formal limitation on the profits which may be earned, and we also hope that it may be possible to avoid the detailed regulation of prices with the rigidity and the interference in day-to-day management which would be involved. The object should be to leave the company with as much freedom as is compatible with the need to safeguard the public interest.

281. This object would, we think, be best secured by an arrangement under which the Board of Trade or other competent authority was able to satisfy itself by periodical reviews that effect was being given to our recommendations.* Such reviews should, we suggest, take place at intervals of two or at most three years. It would be necessary for the Board or other authority to have access to all the information relating to prices, costs, profits, capital employed and other matters which it needed to enable it to exercise its supervision of prices effectively, but the primary responsibility would rest on B.O.C. to satisfy the Board or other authority that full effect was being given to our recommendations. We have set out in paragraphs 259 to 261 the considerations which we think should be taken into account in determining the level of profit in the "monopoly" conditions which prevail as far as oxygen and dissolved acetylene are concerned, and as we indicated in paragraph 261, we think the profit aimed at should be substantially less than the range of 23 per cent. to 25 per cent. which has been aimed at in the past.

282. There is no power at present under Section 10 of the Monopolies and Restrictive Practices Act, 1948, or, as far as we are aware, otherwise, to enforce arrangements such as these. It is not for us to express a view on the question whether legislation would prove to be necessary in practice, but if there should be legislation, we suggest that in view of the conditions of almost complete monopoly the opportunity should be taken to place every supplier of oxygen and dissolved acetylene under a duty to supply any bona fide consumer at a reasonable price provided that he had supplies available.

Propane

283. As a producer of propane Esso Petroleum Co. Ltd. supplies about 35 per cent. of the total supply. "Shell" Refining & Marketing Co. Ltd.† and The British Petroleum Co. Ltd.‡, with Eagle Oil & Shipping Co. Ltd. (taken together since they supply through the common agency of Shell-Mex & B.P. Ltd.) supply just over 60 per cent. Imperial Chemical Industries Ltd., the fourth producer, supplies about 37 per cent.§ We have no evidence

* See Addendum, paragraphs 291 to 295.

† As from 31st December, 1955, The Shell Petroleum Co. Ltd.

‡ As from 31st December, 1954, BP Trading Ltd.

§ As these percentages include propane purchased by one producer from another for resale their total exceeds 100 per cent.

of any restrictive practices operated by the producers either individually or collectively except that "Shell" Refining & Marketing* and British Petroleum† use Shell-Mex & B.P. as a common selling agent disposing of the propane produced by the first two companies on their behalf and on behalf of a third company, Eagle Oil & Shipping. This arrangement restricts competition between these producers to the extent that they sell at a common price and the proceeds are divided in agreed proportions between the three principals. Shell-Mex & B.P. also has an understanding with B.O.C. that it will not, without due notice, compete with B.O.C. in direct sales of propane for use with oxygen. We do not know of any distributor being unable to obtain as much propane as he could sell. The production of propane is expanding, and there is nothing to prevent other refineries from entering the field of propane production if they so wish. It is also possible that substantial new uses may be developed for propane. In either of these events the present pattern of production and distribution might change radically. There is, therefore, both competition and flexibility in the pattern of trade.

284. We have considered whether the prices charged and profits made by the producers of propane are excessive, but because it is a minor by-product produced in the refining of motor spirit we have been unable to obtain any accurate and reliable costings for propane production. "Shell" Refining & Marketing* and British Petroleum† do not cost any of their by-products separately. Esso and I.C.I. deal separately with propane in their internal accounts, and on this basis their profits, and especially those of Esso, seem high.‡ But both emphasised in their evidence the notional character of the figures given and the impossibility of determining what part of the total cost of the whole refining operation should be attributed to propane. In practice, although the methods of calculation of these producers differ slightly, the main yardstick used in determining the minimum selling price of propane seems to be its value to the producer if consumed in the refinery as an alternative to oil fuel.

285. We have no evidence that the producers have used their monopoly position to fix their prices at a level which will yield excessive profits and, as we have pointed out, there is competition between them with the possibility of additional competition from other refineries. Because of the arbitrary element in the computation of costs and profits, we can form no definite opinion about the prices charged by the propane producers. Taken at their face value the profit figures provided by the producers themselves (see paragraph 179) suggest that they could reduce their propane prices considerably and yet continue to make reasonable profits, but there is nothing to show that the prices are fixed as a result of, or in order to preserve, the "conditions" to which the Act applies.

286. In view of the circumstances described towards the end of paragraph 283, we do not attach any particular importance in this inquiry to the fact that "Shell" Refining & Marketing*, British Petroleum†, and Eagle Oil & Shipping use a common selling agency, or to the understanding between Shell-Mex & B.P. and B.O.C.

287. As distributors of propane, B.O.C. and Saturn respectively supply about 58 per cent. and about 36 per cent. of the total supplied, and there is competition between them everywhere, except in Wales.§ This competition seems to be effective, and we do not find that in this respect the "conditions"

* As from 31st December, 1955, The Shell Petroleum Co. Ltd.

† As from 31st December, 1954, BP Trading Ltd.

‡ See paragraph 179.

§ See Table II, paragraph 21.

operate against the public interest. The position would, however, need to be considered again if Saturn were to be taken over by B.O.C. or ceased to supply propane on something like the present scale.

288. We have also considered whether there is sufficient competition between propane and dissolved acetylene in view of the fact that for some processes either gas can be used. A comparison of the relative prices of each gas has been given in paragraph 112. We are satisfied that both B.O.C. nationally and Saturn in the North East of England, where it is also a producer of dissolved acetylene, are to some extent embarrassed in their efforts to sell propane by their natural desire to keep their dissolved acetylene plants fully employed. We do not consider, however, that either practises any deliberate policy of restriction in relation to sales of propane, although B.O.C. has told us that it prefers to sell dissolved acetylene. Moreover, over most of the country Saturn is selling only propane, and its competition is not restrained by its dissolved acetylene interests.

289. The profit of B.O.C. on the distribution of propane was from 9 per cent. to 10 per cent. on cost in 1952 and 1953 and 17 per cent. in 1954, as compared with 24 per cent. and 26 per cent. on cost in 1954 on the production and distribution of oxygen and dissolved acetylene. We have not attempted to calculate the amount of capital employed separately for the three gases, but, as B.O.C. does not manufacture propane, the amount of capital in relation to cost will be considerably less for this gas than it is for oxygen and dissolved acetylene. B.O.C. has told us that if the capital had been separately calculated the profit rate on capital for propane would probably be not less than on dissolved acetylene. We have earlier described B.O.C.'s profits on oxygen and dissolved acetylene as being unjustifiably high having regard to its monopoly position. The circumstances in which a similar rate of profit is earned on propane are, however, different. B.O.C. is not in the same preponderant position. Saturn provides effective competition on a substantial scale over the whole of England and Scotland, and the competition between the two companies is not restricted in any way. In the circumstances, we do not find in the prices which they charge for propane either B.O.C. or Saturn is operating against the public interest. We are, however, of the opinion that the matter should be reviewed if Saturn were taken over or ceased to supply propane on something like the present scale.

290. We do not consider that the monopoly "conditions" in respect of the supply of propane by either the producers or the distributors operate against the public interest, or that they may be expected to do so in the future provided that something like the present degree of competition continues. We have found no "things done" by the suppliers of propane which operate against the public interest or may be expected so to operate.

DAVID CAIRNS (*Chairman*).

T. J. BARNES (subject to the Reservation below).

ALAN BIRCH (subject to the Addendum below).

W. L. HEYWOOD (subject to the Addendum below).

I. C. HILL (subject to the Addendum below).

ARNOLD PLANT (subject to the Addendum below).

C. E. WRANGHAM (subject to the Reservation below).

R. E. YEABSLEY.

J. A. R. PIMLOTT (*Secretary*).

21st June, 1956.

Addendum by Mr. Birch and Mr. Heywood

291. We have signed the Report of the Commission subject to this note. We cannot regard the methods proposed in paragraphs 280 and 281 to give effect to the recommendations on prices as adequate for the future control of B.O.C.'s monopoly position in the interests of users of the reference gases. In paragraphs 259 to 261 it is argued that a monopoly company in B.O.C.'s position does not need to earn the same return on capital as a company in a competitive industry. After comparing B.O.C.'s profits with those in other industries, the conclusion is reached that they have been unjustifiably high. From this arises the further conclusion that prices charged by B.O.C. to consumers are excessive. The case for a voluntary arrangement to limit prices is related directly to these conclusions and the object is stated to be to leave the company with as much freedom as is compatible with the need to safeguard the public interest.

292. Some questions must, therefore, be asked. What curtailment of freedom will be tolerable to private shareholders? Will this be sufficient to ensure that prices will be reduced to and maintained at the lowest possible level? Will investors accept an arbitrary restriction on profits earned while in other respects retaining full control over the company's activities? It seems to us that at the best such an approach will lead only to a continuing source of conflict between shareholders and the statutory authority responsible for price supervision and at the worst to an appearance of Governmental approval of price levels fixed on a basis not differing materially from that adopted in recent years.

293. If, as is clearly intended, the prices to be agreed between the company and the Board of Trade are such as to yield a return on capital less than that which might be justified in a competitive industry, the basis on which an equitable return shall be determined is of paramount importance. No such basis exists, unless the prevailing interest rates on Government guaranteed stocks are taken. But the more the yield on capital invested in B.O.C. is reduced down to this level as a result of Government intervention, the more logical it will become that the Government should assume a similar guarantee. In view of this, and the fact that the only curb on excessive prices in this case is some form of public supervision, we think that the desirability of this taking the form of public ownership and management, with a guaranteed return on capital invested, must be seriously considered.

294. The position might be different were there in evidence any measure of competition from other sources of supply or alternative materials. It is, however, clear to us that the installation by consumers of their own oxygen producing plants is limited by economic considerations and that there is bound to be a very large field of British industry dependent on mass produced oxygen, which is indispensable to present and future production methods. Moreover, the Commission's inquiry into the manufacture and distribution of the reference gases reveals that monopoly production on a national scale, certainly of oxygen in its different forms and to a great extent of dissolved acetylene, has economic advantages not likely to be achieved by a system of unco-ordinated and competitive manufacture and supply. The result of the inquiry, therefore, demonstrates to us that a publicly owned monopoly for the bulk production and supply of industrial gases, from which the element of private profit has been removed, is both feasible and would provide an essential service to industry on the most economical lines.

295. As to the application of the principle of public ownership in this case, we do not consider ourselves called upon in the circumstances of an inquiry under Section 2 of the Monopolies and Restrictive Practices Act,

to particularise. While the company's trading operations in industrial and medical gases have recently been transferred to a subsidiary, British Oxygen Gases Ltd., some indication has been given in this Report of the other activities of B.O.C. It was not the Commission's function to inquire closely into them. Such an inquiry and its relation to our own proposal would be a necessary preliminary step, as would consideration of the position of present shareholders. Another matter to be investigated would be whether a newly created public body to take over the bulk production and distribution of the reference gases should be given a complete monopoly over all or certain of them or whether, as we think likely, it would be sufficient for our purposes for the present range of B.O.C.'s activities as a producer and distributor of oxygen and acetylene and as a distributor of propane to be publicly owned and managed. Nevertheless, the nature of the present Report and general conclusions justifies, in our view, a more far reaching decision as to the future of this industry, pending which the recommendation to which we have appended our signatures may be regarded as an interim measure.

ALAN BIRCH.

W. L. HEYWOOD.

Addendum by Mr. Hill and Sir Arnold Plant

296. Whilst, in the absence of any effective means of introducing a general measure of competition in oxygen and acetylene in the face of a monopoly as firmly entrenched as B.O.C., we support the main conclusions and recommendations of our colleagues, we believe that the recommendations overlook some of the possibilities of bringing about a higher degree of competition and may even result in the elimination of such competition as at present exists. Furthermore, we are of the opinion that the form of Board of Trade supervision suggested, unaided by an active awareness on the part of industrial users of the widely varying regional costs of oxygen production and distribution, can at best be only a partial palliative of the more obvious effects of monopoly: indeed, at worst, it might induce a measure of technical stagnation.

297. We believe, therefore, that such positive recommendations in relation to regional and ex-works pricing as are practicable should be put forward on the grounds that where costs vary widely either in production or in transport, steps should be taken to ensure that such variations are reflected in the prices charged. Such a step would have not only the direct advantages enumerated in paragraph 267 but also the indirect advantage of introducing a quasi-competitive atmosphere within B.O.C. and of indicating those regions where competition, unhampered by those practices employed by B.O.C. in building up its monopoly and aided by the new conditions introduced by the competitive sale of tonnage plants, might have some expectation of being successfully established.

Regional Prices

298. B.O.C.'s claims in arguing for the retention of a national price basis are mainly summarised in paragraph 221. The arguments forwarded are partially of a negative nature based on the assertion that a local price scheme would bring neither greater economy nor greater efficiency in

production*, whilst the positive arguments, namely that only on a national basis can prices be kept reasonable and stable and that a regional scheme would reduce the flexibility of the organisation as a whole, are difficult to understand. Whether or not prices are reasonable is a matter of pricing in relation to cost, whilst stability of price over a period is a decision of sales policy which would in any case be made at headquarters. Reference to paragraphs 163 and 164 shows that regional works costs (for a two year period) varied for liquid oxygen between 5s. 2d. and 7s. 1d. a 1,000 cubic feet and for compressed oxygen between 11s. 7d. and 19s. 0d. (with one exceptionally at 24s. 9d.) a 1,000 cubic feet. As regards flexibility, it is difficult to understand why in production or distribution any desirable overlap between regions could be arranged better at headquarters (paragraph 268 (c)) than between the zones affected, whilst in the case of selling prices the Commission is recommending price scales based on quantity to classes of consumer which are specifically aimed at eliminating "flexibility" in the sense of discrimination in the treatment of similar classes of customer. It should further be noted (paragraph 273) that regional arrangements are already in force for negotiating prices with medium and small users.

Ex-works Pricing

299. An analysis of the journeys and their mileage within distribution areas shows that distribution of oxygen may be effected as much as 85 miles distant from the producing plant. Where transport and delivery for compressed oxygen, for example, amounts overall to as much as 28.3 per cent. of the combined production and distribution costs or 23.5 per cent. of the total costs (see paragraph 170), because of the large element represented by carriage of full and empty cylinders, it would appear to be not unreasonable to assume that there is a wide variation in the delivered cost of oxygen. Although it may be sound policy for B.O.C. in its endeavour to maintain its monopoly to subsidise outlying areas at the expense of the more compact zones, such a distortion of price in relation to cost is against the public interest in so far as it restricts the possibility of specialised local competition in gases and adds to prices elsewhere. It is relevant that Saturn negotiates selling prices with individual customers on the basis of transport as well as production costs. Whilst it is not argued that prices should be ex-works prices allowing the customer to collect at works, it is our contention that an ex-works price plus a distribution charge based on zones of delivery would be in the national interest.

300. We therefore recommend that :

- (a) Price lists should be published regionally and based on regional costs and
- (b) The regional price lists should list an ex-works price plus a variable addition for delivery based on the cost of transport.

I. C. HILL.

ARNOLD PLANT.

* In paragraph 268 (a) and (b) the Commission's arguments have gone beyond the claims made by B.O.C.

Reservation by Sir Thomas Barnes and Mr. Wrangham

301. We do not agree with the finding in paragraph 261 that B.O.C. profits are unjustifiably high. In our view the evidence does not justify that finding.

302. The arguments and evidence on which the finding is largely based are set out in paragraphs 258 to 260. In paragraph 260 a comparison is drawn between the profits of B.O.C. in respect of gases to which the reference relates and the profits of a number of miscellaneous industries taken from the statistics published in *The Economist* for the years 1952 to 1954 adjusted as mentioned in the report.

303. It is said that during those years B.O.C. made a larger profit on capital employed in its gases business than was earned in manufacturing industries generally. This may be so, but it will be seen that for the purposes of the comparison the Company's operations in gases have been isolated from its other operations and no account is taken of those other operations.

304. The fact is, of course, that B.O.C. was a composite Company carrying on a number of different activities both within and without the United Kingdom. The reference gases activities in the United Kingdom comprised something less than 50 per cent. of the total activities of the Company. In our view the directors of B.O.C. in past years were entitled—and, indeed, were bound—to consider the whole of their undertaking when planning prices, profits and the general financial policy of the Company and would be justified in using the general revenue for the general benefit of the whole undertaking.

305. Looking at the matter in this light it is significant to observe that if the percentage of profit calculated on the capital used in the whole undertaking is ascertained it will be found that in 1953 and 1954 that percentage was approximately 17 per cent. and in 1952 slightly less than 17 per cent. These figures are almost identical with the average percentage of profits of the large number of industrial companies comprised in the statistics published in *The Economist*, referred to and relied upon in paragraph 260.

306. It is not perhaps irrelevant to mention here the point made by the Company (see paragraph 224) that even if its gases undertaking is isolated and the percentage of profit is calculated on replacement values as distinct from historical values, that percentage of profits is no more than the percentage calculated on the same basis by the State-owned Iron and Steel Corporation for the purposes of its 1952 accounts. In these circumstances we do not accept the view that the profits have been unreasonably high.

307. Neither do we agree with what is said in paragraph 259 with regard to the Company's capital requirements. We have not had the benefit of hearing the views either of the Company or of those who advise it on appropriate methods of raising capital from time to time, but we think it doubtful whether it was practicable for the Company to treat its gases activities differently from its whole undertaking when raising capital for the general purposes of the Company.

308. The finding in paragraph 262 that the prices for oxygen and dissolved acetylene are too high is apparently based on the argument that as the profits were too high the prices must also have been too high. We do not accept this. We do not think there is any evidence that the prices have been fixed at too high a level. We are impressed by the fact (see paragraph 242) that there have been so few complaints from amongst B.O.C.'s many

thousands of customers. Of these a very small number relate to price and are in the main based on general statements that as there is no competition the prices are probably too high. This is very far from affording evidence that the prices are in fact too high. As will be seen from Chapter 4, Part III, most of B.O.C.'s customers appear to be satisfied both with the service provided by the Company and with the prices they are asked to pay.

309. In our view therefore it cannot be said with justification that in the matter of profits and prices B.O.C. has acted in any way contrary to the public interest.

310. Nevertheless we agree with the statement in paragraph 240 that "there are possible dangers in the control by one supplier over so large a proportion of the market of two essential commodities such as oxygen and dissolved acetylene". In our view the operations of the Company should be examined from time to time by or on behalf of the Government to ensure that there is no abuse of the monopoly, and the fact that B.O.C. has now transferred its activities in gases to a separate operating Company will facilitate the examination. Any legally enforceable control of prices would, we assume, require legislation, but this might be unnecessary if the Company were prepared to enter into arrangements with the Board of Trade or other competent authority to give to them such information as the authority may require in order to satisfy itself from time to time that the prices charged are reasonable.

311. With the other recommendations in the report we are in general agreement.

T. J. BARNES.

C. E. WRANGHAM.