

## 2 Conclusions to the Fair Trading Act references

2.1. This chapter summarizes the background and presents the main issues relevant to the inquiry as follows:

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### **The references and the monopoly situations**

2.2. Under a reference dated 31 July 1992 (made under sections 47(1), 49(1) and 51(1) of the Fair Trading Act-see Appendix 1.1 of this volume) the Secretary of State asked us to investigate and report on whether a monopoly situation exists in relation to the supply within Great Britain of gas through pipes to tariff customers and to non-tariff customers, and, if so, by virtue of which provision of section 6 of the Fair Trading Act that monopoly situation is to be taken to exist, and in favour of what person or persons that monopoly situation exists.

2.3. Section 6 of the Fair Trading Act is concerned with supply of goods: a monopoly situation in relation to the supply of goods of any description in the UK can be found under section 6(1)(a) of the Fair Trading Act when at least one-quarter of the supply is by or to the same person. BG in its trading business is currently the only supplier in Great Britain of gas through pipes to tariff customers. As apparent in paragraph 3.6 of Volume 2, in 1992 it also, in the course of its trading business, supplied over 80 per cent of all gas supplied in Great Britain to non-tariff customers. We therefore conclude that monopoly situations exist in relation to the supply of gas through pipes to tariff customers and the supply of gas through pipes to non-tariff customers, in each case by virtue of section 6(1)(a) of the Fair Trading Act. We also conclude that each of these monopoly situations exist in favour of BG.

2.4. Under a second reference, made on the same date and under the same provisions of the Fair Trading Act (see also Appendix 1.1), the Secretary of State also asked us to investigate and report on whether a monopoly situation exists in relation to the supply within Great Britain of the services of the conveyance (generally referred to in this report as 'transportation') or storage of gas by public gas suppliers, and, if so, by

virtue of which provision of section 7 of the Fair Trading Act that monopoly situation is to be taken to exist, and in favour of what person or persons that monopoly situation exists.

2.5. Section 7 of the Fair Trading Act is concerned with supply of services: a monopoly situation in relation to the supply of services of any description in the UK can be found under section 7(1)(a) of the Fair Trading Act, when at least one-quarter of the supply is by or to the same person. As noted in paragraph 1.10 of Volume 2, BG is the only public gas supplier in Great Britain with the rights and obligations specified in the Gas Act and is responsible for and conducts a business in the conveyance and storage of the gas which it supplies. There are a few short stretches of onshore gas pipeline within Great Britain owned by companies other than BG, which are not public gas suppliers, but whereas the total length of the BG pipeline system is about 250,000 kilometres, the longest independently-operated pipeline of which we are aware is only some 50 kilometres. We therefore conclude that a monopoly situation exists in relation to the supply of the services of the conveyance or storage of gas by public gas suppliers by virtue of section 7(1)(a) of the Fair Trading Act. We also conclude that this monopoly situation exists in favour of BG.

2.6. In relation to the monopoly situations identified, we have, therefore, to consider:

- (a) whether any steps (by way of uncompetitive practices or otherwise) are being taken by BG for the purpose of exploiting or maintaining any monopoly situation identified, and, if so, by what uncompetitive practice, or in what other way;
- (b) whether any action or omission on the part of BG is attributable to the existence of any monopoly situation, and, if so, what action or omission and in what way it is so attributable; and
- (c) whether any facts found in pursuance of our investigations operate or may be expected to operate against the public interest.

2.7. On the same day we were also sent a reference by the Director, under section 24(1) of the Gas Act, asking us to investigate and report on whether the operation by BG of its pipeline system and other facilities used for the conveyance and storage of gas as part of the gas supply business operates or may be expected to operate against the public interest; and, if so, whether the effects adverse to the public interest could be remedied or prevented by modification of the conditions of BG's Authorisation. Shortly thereafter, on 10 August 1992, we were sent a second reference by the Director, under the same provision of the Gas Act, asking us whether the exercise by BG of its function as a public gas supplier of fixing tariffs for the supply of gas operates or may be expected to operate against the public interest, and, if so, whether the effects adverse to the public interest could also be remedied or prevented by modification of the conditions of the Authorisation.

2.8. Making four references to the MMC almost simultaneously, under two different Acts, is unusual. There is a considerable overlap between the subject matter of the four references, and while we have approached each of the references in its own terms we cannot sensibly reach conclusions on any one of them without taking into account the factual background of, and, where appropriate, our potential conclusions on, the others. The Fair Trading Act references cover, in effect, BG's entire UK gas supply operation; the Gas Act references, on the other hand, do not relate to the supply of gas to the non-tariff market, over which the Director has no statutory powers to make a reference to the MMC. We did not, however, find it possible to reach a conclusion on those matters where the Director does have jurisdiction-in particular the transportation and storage of gas-without taking into account, *inter alia*, those matters-such as the supply of gas to non-tariff customers-where the Director has no jurisdiction to make a reference. In practice, therefore, so far as is possible and legally permissible, we have had to approach the four references as one inquiry. We have done so in the belief that this was the most sensible method of fulfilling our statutory duties as well as the most helpful course for those seeking to give evidence or make submissions to us.

2.9. Under section 84 of the Fair Trading Act, we are required, in considering the public interest, to take into account all matters that appear to us in the particular circumstances to be relevant; among other things, we must have regard to matters such as the maintenance and promotion of effective competition, and promotion of the interests of consumers, purchasers and other users of goods and services. The Gas Act references require us to have regard to the duties imposed on the Secretary of State and the Director by

section 4 of that Act (see paragraphs 1.7 and 1.8 of Volume 2), including the duty to exercise their functions in a way best calculated to secure effective competition between gas suppliers, and protection of the interests of gas consumers. In practice, we have not found any conflict in public interest criteria between the two Acts.

2.10. While we are required to report on each of the four references, separate reports are not required in each case. We have taken the view that it is correct to submit two reports in all: one to the Secretary of State on the two Fair Trading Act references, the other to the Director on the two Gas Act references. The bulk of the subject matter of our two reports is common to both because of the interrelationship of the issues and the need to facilitate a proper understanding of the questions and our conclusions. In general, the evidence submitted to us also did not distinguish between matters relevant to the Fair Trading Act or Gas Act inquiries: we have, therefore, presented this evidence in two volumes common to the two reports. We have not, however, included in the Fair Trading Act or Gas Act conclusions any matters that we do not regard as relevant to the respective references. Since the subject matter of the Fair Trading Act references is wider than that of the Gas Act references, our report under the Fair Trading Act provides a somewhat more comprehensive discussion of our conclusions and recommendations.

## **British Gas**

2.11. As shown in Table 2.2 of Volume 2, gas accounts for nearly one-half of final energy used in the UK, excluding transport uses—a significant increase since the mid-1960s when it accounted for less than 10 per cent. Gas is particularly important for domestic consumers, for whom it accounts for about two-thirds of energy used, and it is now supplied to some 18 million out of about 22 million UK households. It also accounts for about one-third of the energy used by industry. In 1992 BG sold over 90 per cent of all gas supplied to final customers in Great Britain, and it provides almost all facilities for the transportation and storage of gas in Great Britain: its competitors, therefore, are also almost totally dependent on BG's facilities for the transportation and storage of gas.

2.12. BG is one of the largest public companies in the UK. Its interests comprise UK gas supply (the operation of the pipeline system and sale of gas in the UK); appliance sales and installation and maintenance in the UK; Global Gas representing interests in several overseas gas businesses in countries including Canada, the USA, Argentina and India; and Exploration and Production (E&P), with interests in the UK and overseas, such as its proposed investment in Kazakhstan. As well as its dominance in the supply, transportation and storage of gas, BG directly owns some 17 per cent of UK gas production, substantially from gas fields in the North Sea.

2.13. As shown in Appendix 6.4 of Volume 2, in 1992 BG's turnover was almost £10.3 billion, of which £8.1 billion arose from UK gas supply activities, with which our various terms of reference are concerned. Capital employed on a current cost (CCA) basis, which BG has used in preparing its accounts since the late 1970s, was some £24.6 billion at December 1992, of which £19.1 billion was in UK gas supply. On a historic cost (HCA) basis, its capital employed was some £12.8 billion. Its market capitalization at the end of December 1992 was some £12.6 billion. Since it was privatized in 1986, BG has increasingly diversified into other activities: as shown in Table 8.1 of Volume 2, of BG's total investment in 1992 of £2.7 billion, over £1.4 billion, slightly over one-half, was on E&P and Global Gas.

2.14. Within the UK, BG supplies gas to almost 18.5 million customers. Of those, there are some 17.8 million domestic customers, about 570,000 commercial customers and 91,000 industrial customers: some commercial and industrial customers purchase gas for use at a number of premises. The Gas Act distinguishes between supply to non-tariff and to tariff customers. Until August 1992 non-tariff customers—the larger industrial and commercial users—were those using more than 25,000 therms at any individual premises and supplied at those premises under the terms of special agreements with BG. They were supplied on either a 'firm' basis, BG supplying gas to meet their demands throughout the year, or (an option available only to users of more than 200,000 therms a year) on an 'interruptible' basis, under which BG was entitled to stop supplying up to a fixed number of days in the year, normally exercised at time of peak demand. Customers using 25,000 therms a year or below at individual premises were classified as 'tariff' customers, the price of gas to tariff customers being regulated by the Director according to the terms of BG's

Authorisation. Until August 1992 companies other than BG were allowed to supply gas only to premises using over 25,000 therms a year and in almost all cases this involved supply through BG's pipes. As from August 1992 competition was also allowed in supply of gas to premises using between 2,500 and 25,000 therms a year: customers of BG's competitors in this consumption range would also now be 'non-tariff' customers, as would any customers supplied by BG under special agreements, which BG has not to date chosen to do in that range.

2.15. Table 2.1 summarizes the volume and value of gas supplied by BG to tariff and non-tariff customers in 1992, and the volume of gas transported for third parties over BG pipelines in that year and associated income. Table 2.1 also distinguishes between supply to domestic and non-domestic tariff customers, the main basis on which BG currently collects information. As is apparent from the table, domestic users account for some 85 per cent of gas supplied to tariff customers, the remainder being accounted for by smaller commercial, and to a lesser extent industrial, customers. Most domestic customers use less than 2,500 therms a year; by contrast most gas supplied to non-domestic tariff customers is to premises using over 2,500 therms a year-see also Appendix 4.1 of Volume 2.

TABLE 2.1 **BG supply of gas to tariff and non-tariff customers and of third party transportation services, 1992**

	Volume of gas supplied		BG revenue		BG allocated costs*	Allocated operating profit	Current cost return on BG assets
	m therms	As %	£m	As %	£m	£m	%
Tariff customers	13,127	65.7	6,541	81.8	5,733	808	4.9
of which:							
-domestic	11,151	55.8	5,649	70.6	5,026	623	4.2
-non-domestic	1,976	9.9	892	11.1	707	185	11.2
Non-tariff customers	5,804	29.1	1,392	17.4	1,229	163	5.2
of which:							
-firm	2,404	12.0	765	9.6	686	79	5.6
-interruptible	3,400	17.0	627	7.8	543	84	N/A
Gas transportation for third parties	1,047	5.2	67†	0.8	49	18	4.8
Total‡	19,977	100.0	8,000	100.0	7,011	989	5.3

Source: BG.

\*Returns for individual market sectors are not audited and reflect BG's methods of cost allocation.

†Transportation income only.

‡Excludes release gas (see paragraph 2.27) which accounted in 1992 for some 121 million therms, £23.1 million income, and £0.3 million profit.

Note: 'Contract customers', referred to in the chapter, are the non-tariff customers supplied by BG or by third parties over BG's pipelines.

2.16. Table 2.1 also shows estimated costs and CCA returns on assets on each category of business under BG's current system of cost allocation (see paragraphs 6.32 to 6.52 of Volume 2 for an explanation). HCA returns would be significantly higher: in 1992 the CCA return for the BG group was 6.0 per cent, the HCA return 14.1 per cent. Table 2.2 summarizes the CCA return on net assets (RONA) for gas supply overall and, as calculated by BG on a consistent cost allocation basis (see paragraphs 6.35 and 6.57 to 6.60), for supply to tariff and contract customers and for third party transportation since 1987/88.

TABLE 2.2 **Gas supply: current cost rates of return on net assets**

	per cent					
	1987/88	1988/89	1989/90	1990/91	1991	1992
RONA						
Tariff	4.1	5.3	4.3	6.5	6.8	4.9
Contract-firm	18.7	15.5	11.9	10.0	8.9	5.6
-interruptible	*	*	*	*	*	*
Third party transportation				1.7	3.7	4.8
Gas supply overall	6.3	6.6	5.4	7.2	7.1	5.2

Source: BG.

\*BG does not allocate capacity-based assets to interruptible turnover and so does not calculate RONAs for interruptible sales.

## **The regulatory framework of the gas industry**

2.17. The privatization of BG in 1986 included the setting up of a complex regulatory framework. This is described in some detail in Chapter 1 of Volume 2; but the following paragraphs summarize some of the main elements of relevance to our inquiry.

2.18. The Gas Act gives BG as a public gas supplier a general duty, *inter alia*, to meet all reasonable requests to supply gas, as far as it is economical to do so (section 9), and to avoid undue preference in supply of gas and in the fixing of tariffs to customers using below 25,000 therms a year at any individual premises. It is also required (section 10) to supply on a tariff basis any customers using less than 25,000 therms a year within 25 yards of a relevant main, or connected to a main. BG's consent was required for the supply by competitors to any premises using less than 25,000 therms a year (subsequently amended by statutory instrument to 2,500 therms a year, as explained in paragraph 2.31). BG had no such monopoly in supply of gas to non-tariff customers, other suppliers being entitled to use BG pipelines for this purpose.

2.19. As a public gas supplier, BG can operate only under the terms of its Authorisation, granted by the Secretary of State in July 1986. This was for a minimum period of 25 years, with provision for revocation under certain circumstances set out in Schedule 2 of the Authorisation. Section 7(7)(a) of the Gas Act provides that 'an authorisation may include such conditions relating to the supply of gas, or requiring information to be furnished to the Director or published, ... as appear to the Secretary of State to be requisite or expedient having regard to the duties imposed by Section 4'. The initial Authorisation granted by the Secretary of State covered separation of accounts; restriction of prices to tariff customers and standing charges; requirement to publish maximum prices for contract customers and a statement of principles upon which connection charges would be payable; provision of information to the Director and the Gas Consumers' Council (GCC); requirement to publish guidance on charges for conveyance of gas for others; provision for supply of back-up gas and emergency service; requirements for a code of practice for tariff gas supplies and of services for persons of a pensionable age or disabled; and provision for promotion of efficient use of gas, supply to public lamps, and payment of fees. The Secretary of State, having granted an authorization to a public gas supplier, has no powers subsequently to modify it, other than in order to remedy any adverse effects found by the MMC during an inquiry under the Fair Trading Act or the Competition Act.

2.20. The Director is entitled to modify the BG Authorisation by agreement with BG (although the Secretary of State could overrule such a modification). The Director can, however, in the event of a dispute with BG on such a proposed modification, also make a reference to the MMC to establish whether a matter specified in the reference operates or may be expected to operate against the public interest; if so, whether any adverse effects could be remedied by a modification of the Authorisation; and, if so, to specify such a modification. In the event of these conditions being satisfied, the Director may modify the Authorisation as he thinks appropriate to remedy the adverse effects identified but having regard to the modifications specified in the MMC's report. The Director's powers to make references to the MMC under the Gas Act are limited to the tariff market, apart from his additional power to refer matters relating to the conveyance and storage of gas, subsequently conferred by the later Competition and Service (Utilities) Act 1992 (the 1992 Act), section 38(4).

2.21. The Gas Act also gives the Director the power to determine conditions for conveyance of gas by BG for other parties, in the event of dispute between BG and independent shippers of gas, according to criteria specified in section 19(5) of the Gas Act (see paragraphs 1.19 to 1.21 of Volume 2). Otherwise, however, supply to the non-tariff market was not made subject to any formal system of price regulation; at the time of the MMC's 1988 report, the Department of Energy told us that this was because of greater competition from other fuels than in the case of tariff customers, and the scope for competition from other suppliers using the BG pipelines (see paragraph 8.15 of the 1988 report). Matters relating both to the non-tariff market, as well as to the conveyance and storage of gas, remained within the responsibility of the DGFT under the Fair Trading Act. The making of monopoly references as to the supply of gas to the tariff market was excluded from the powers of the DGFT under the Fair Trading Act, but the Secretary of State

may refer any aspect of the supply of gas including the tariff market, to the MMC under the Fair Trading Act, as in the present instance.

2.22. It was strongly put to us that, at the time of privatization in 1986, shareholders were given firm assurances in, for example, the prospectus as to the future structure of BG and that, as a consequence, there were limits to the recommendations we can make in order to remedy any adverse effects we may identify. We have been advised and accept that such a consideration does not affect our statutory obligations and should not deter us from proposing whatever action we believe necessary to remedy any adverse effects that we may identify during the course of an inquiry under the Fair Trading Act; we have reached the same conclusion on this point as did our 1988 inquiry. The references in the prospectus (for example, to BG being an integrated gas supply business, to the provisions of the Gas Act such as BG's rights and obligations as a public gas supplier and to BG's expectations that it will remain the sole supplier to the domestic market) were qualified, amongst other things, by reference to the provisions of competition legislation, and alternatively to policy changes consequent upon change in the Government. The Gas Act and Fair Trading Act both contemplate the possibility of investigation by the MMC, and action consequent upon the results of that investigation. We are not restricted, therefore, from a full consideration of any action necessary to remedy any effects adverse to the public interest. We have taken the interests of shareholders into account as one of a number of matters relevant to considering the public interest and any remedies under the Fair Trading Act references.

### **The MMC's 1988 report and subsequent developments**

2.23. Shortly after privatization of BG and in response to a number of complaints from users, the DGFT referred to the MMC the supply of gas to non-tariff customers. The MMC's main conclusions were that:

- (a) Many users had no immediate or realistic alternative to gas, nor an alternative gas supplier.
- (b) There was extensive discrimination in the pricing of gas to contract customers, attributable to the existence of the monopoly situation: prices were indeed directly and inversely related to the ease with which customers could use alternative fuels. The MMC believed that this was against the public interest, since it imposed higher costs on customers less able to use alternative fuels; and that, by relating prices to those of the alternatives available to each customer, BG was in a position selectively to undercut potential competing gas suppliers, acting as a deterrent to new entry and inhibiting competition.
- (c) Other BG practices operated against the public interest, namely:
  - lack of transparency in prices;
  - BG's refusal to supply interruptible gas to some consumers;
  - the pricing of gas for Combined Heat and Power Schemes (processes producing both useful heat, eg steam, and electricity);
  - certain of its contract terms;
  - BG's failure to provide adequate information on the costs of common carriage;
  - its ability to use information obtained when negotiating common carriage terms to identify potential customers of competing suppliers and the potential source of gas; and
  - BG's position as a dominant (indeed, at that stage sole) purchaser of gas.

2.24. To remedy these adverse effects, the MMC's main recommendations were that:

- (a) BG should publish a schedule of prices for firm and interruptible gas, and not discriminate in pricing or supply.
- (b) It should not refuse to supply interruptible gas on the basis of the use made of the gas, or the alternative fuel available.
- (c) It should publish further information on common carriage terms.
- (d) It should contract initially for no more than 90 per cent of any new gas field.

The MMC also, however, stated, 'If competition in the supply of gas fails to develop over the next five years, further consideration will then be appropriate as to whether changes in the structure of the gas industry are necessary to ensure competition in the supply of gas' (paragraph 8.98 of the 1988 report).

2.25. The recommendations were implemented broadly as proposed by modification of the Authorisation and by undertakings agreed with the DGFT. The '90/10' rule was introduced only for a two-year period. Where the MMC had recommended this be applied to individual fields, the Secretary of State chose to apply it to BG's gas purchases as a whole: in the event, BG initially applied the rule on a field-by-field basis. The Government also announced that there would be a further review in July 1991 by the DGFT of progress towards the establishment of a competitive market.

### ***The Office of Fair Trading review, 1991***

2.26. The review by the DGFT was completed in September 1991 (and published in summary version in October of that year). The review found that BG had complied with the undertakings given following the MMC's report: it had, indeed, by a 'swap' arrangement released more gas than required by the 90/10 target, but much of the gas released had been for power generation (a development largely unforeseen at the time of the MMC's 1988 report), rather than for general industrial or commercial use. The Office of Fair Trading (OFT) review concluded that the remedies introduced following the 1988 report had been 'ineffective in encouraging self-sustaining competition to BG'.

2.27. Particular obstacles to the growth of competition identified were the lack of available gas for competing suppliers to the industrial and commercial sector, BG's monopoly supply to tariff customers, and, finally, BG's special position in relation to the storage and distribution system. The DGFT referred to BG's 'ability to cross-subsidise, to act in a predatory manner, and to set price levels in the interruptible market that the competition cannot match'. The review identified key areas for competition that would need to be addressed, namely that BG should:

- release a significant proportion of its contracted gas, and reintroduce a revised version of the 90/10 undertaking;
- agree an appropriate undertaking to relax its tariff monopoly; and
- establish a separate subsidiary to operate the gas transmission and storage system on a non-discriminatory basis at arm's length from the rest of BG, and agree to regulation by the Office of Gas Supply (OFGAS) of its charges.

Unless BG agreed to undertakings in these areas, the DGFT stated that he would refer the matter to the MMC.

2.28. The review also suggested consideration of Government action in other areas, namely:

- the development of policies to allow greater freedom for international trade in gas;
- abolition of the tariff threshold;

- strengthening the powers of the Director; and
- modification of the planning procedures for new pipelines.

### ***The subsequent undertakings***

2.29. After protracted negotiation, BG agreed undertakings with the OFT in March 1992. These are reproduced at Appendix 1.2 of Volume 2. In summary they required BG to:

- (a) Create the conditions by which suppliers other than BG should be able to supply at least 60 per cent of gas to contract (non-tariff) customers by 1995, excluding gas used for power generation, feedstock (use of natural gas as a raw material for production of ammonia and methanol) and vehicles powered by natural gas. This target would be equivalent to less than 20 per cent of total gas supplied (excluding power generation) in the UK. This included a requirement that BG release (ie sell) to other suppliers a sufficient volume of gas previously contracted to BG to enable its competitors to supply that share of the market (the release scheme).
- (b) Establish a separate gas transportation and storage unit (BG T&S), with separate accounts in a form agreed by the OFT, and to endeavour to reach agreement with the DGFT on the basis on which BG T&S will be regulated. BG also undertook to develop a transparent pricing system for transportation to apply 'equally and even-handedly' to BG Trading and other shippers (other suppliers transporting gas over the BG pipelines), to provide services for BG Trading and other companies, and to put in place arrangements to provide gas conveyance, system reinforcement, and extension and site connection on the basis of non-discrimination between BG and other shippers. The undertakings also required BG T&S to treat information received from other parts of BG and other shippers on the same basis, and to provide quotations for shipping of gas in five to ten working days, on a non-discriminatory basis between BG Trading and other shippers (see also paragraph 2.135).

With the making of the current references, both the Director and the DGFT announced that they no longer regarded the undertakings on transportation and storage as in force: BG told us that it still regarded those undertakings as its 'decided policy', although with some slippage from the time-scale originally envisaged. The undertakings on release of gas and market share are, however, still in force (although extrastatutory and unenforceable, were they to be breached, other than by further reference to the MMC).

2.30. Shortly after these undertakings, also in March 1992, BG published a consultation document on the methodology of transportation charges. However, following lack of progress in discussions between BG and OFGAS on a number of key aspects, on 31 July 1992 the Director made the conveyance and storage reference to the MMC under the Gas Act. BG, however, had become increasingly concerned about the financial impact upon it of a number of regulatory changes; it also disagreed with OFGAS on the rate of return (ROR) appropriate for third party transportation charges. Following discussion between the Secretary of State and BG, the Secretary of State on the same day made the two references to the MMC under the Fair Trading Act; finally, some ten days later, the Director made the further reference under the Gas Act relating to the fixing of tariffs.

2.31. After the OFT report, the 1992 Act came into force. It provided for the Secretary of State by statutory instrument to remove or lower the threshold below which competitors could not supply gas. As noted earlier, this threshold was reduced on 6 August 1992 to supply to premises using 2,500 therms a year or below; the Department of Trade and Industry (DTI) also announced that the scope for further change would be reviewed in 1993.

2.32. Following the references, both OFGAS and the OFT have continued work on the subject matter of the OFT undertakings, in particular on the operation of a separate transportation and storage unit within BG. In November 1992, for example, OFGAS issued a discussion document, *Gas Transportation and Storage*, and, in February 1993, BG and OFGAS issued a joint consultation document on the same topic, based primarily on BG's proposals, which gave rise to considerable comment from shippers and other third parties. As we discuss in Chapter 5 of Volume 2, considerable efforts have been made, by both BG and OFGAS, to devise the operational basis necessary for the further development of competition in gas supply, without

putting the safety and security of the system at risk. During the course of our inquiry, not only has the market continued to evolve, but so too has the debate on the complex technical issues associated with the transition from a fully integrated to a competitive gas supply system. We have taken the view that it is not appropriate for us to make detailed recommendations on a number of these technical issues, which can be better pursued by the Director. Resolution of these issues, however, will itself be affected by the recommendations of this report, and the decision as to how they will be implemented.

### ***US and European developments***

2.33. We received a considerable amount of information on recent and proposed changes in gas markets in the USA and elsewhere in the EC. In the USA, there is a high degree of competition between interstate pipeline operators, who have also been under pressure to withdraw from the sale of gas to end users. Competition to supply gas to end users tends to be confined to the largest industrial and commercial customers and most trading and distribution activities within each state have remained under integrated ownership. There are differences both in geography, and in the balance of supply and demand for gas between the two countries, but a number of recent developments in the USA (see, for example, paragraph 2.150, and paragraph 5.171 of Volume 2) provide a pointer to the scope for future developments in the UK gas market in the longer term. The EC Commission has recently introduced proposals to provide for third party access to the pipeline system and allow larger users to buy gas from suppliers anywhere in the EC, but with little immediate likelihood of being adopted.

### **The non-tariff market**

2.34. The Gas Act and our terms of reference distinguish between non-tariff customers, who are the larger industrial and commercial users (also referred to as 'contract' customers), and tariff customers, namely the smaller industrial and commercial users and domestic users. Supply of gas to non-tariff customers was the subject of the MMC's previous report. In 1992 it accounted for about 35 per cent of the total volume of gas supplied in Great Britain, some 29 per cent of gas sold by BG, 17 per cent of BG's revenue, and 16 per cent of BG's operating profit (excluding BG's revenue and profit from transportation of gas for third parties)-see Table 2.1. Although the distinction between tariff and non-tariff customers is now less clear than in the past and may, over time, cease to be of any relevance, in our approach to the public interest we also have to distinguish between the non-tariff and tariff markets. In so doing, it is useful, as a starting point for discussion, to retain the former distinction in the Gas Act, between supply to premises of above 25,000 therms and below. Supply to premises using between 2,500 and 25,000 therms a year would also now be 'non-tariff', if BG chose to offer 'special terms' to such users, or if they were supplied by competitors to BG. BG has, to date, not offered special terms to customers in this size category, and continues to supply over 85 per cent of the market according to the published tariff, at prices regulated by the Director. For the purposes of our report, we have, therefore, regarded it as more sensible to treat supply to all premises of between 2,500 and 25,000 therms a year still as part of the 'tariff market'.

## ***Prices***

2.35. The non-tariff market is discussed in detail in Chapter 3 of Volume 2. As shown in Table 3.5, between 1986/87 (when BG was privatized) and 1992, BG's average revenue per therm from contract sales fell by over 30 per cent in real terms (interruptible by 25 per cent, firm by 30 per cent; the decline in average revenue also reflects an increase in the share of interruptible gas over the period). In part this reflected falls in beach prices of gas of about 25 per cent which accounted initially for about 70 per cent of contract prices: but much of the reduction results from a decline in the margin over gas costs. Nevertheless, there are still complaints by some users that gas prices are higher than for their European competitors. Prices are now based on published schedules, as recommended in the 1988 report, in order to eliminate discrimination. This did (as expected) produce winners and losers; some 60 per cent of customers were charged lower prices and only 20 per cent were subject to increases above the rate of inflation. There were some transitional problems, the schedules providing at one stage an incentive to use more gas to benefit from lower charges at higher volume levels, but most of these have now been resolved. BG is, therefore, no longer in a position to categorize customers according to the ease with which they could use alternative fuels, and charge accordingly.

2.36. Prices vary according to volumes used: in 1992, for example, firm prices ranged from below 25p per therm (the three largest contracts, accounting for 10 per cent of firm non-tariff load) to 39p to 41p per therm (about one-half of contracts, but in total accounting for less than 10 per cent of firm non-tariff load), with an average of 31p per therm (see Table 3.6 of Volume 2 for details). Interruptible prices varied from below 16p to above 30p per therm, around an average of 19p. The schedules applicable for particular customers currently allow for aggregation of use across qualifying premises (prices being somewhat lower for customers with multiple premises as recommended in the 1988 report), but not for load factor (the variation in demand over the year) or location (such as distance from beach terminals).

## ***Competition***

2.37. It is clear that there is now more competition for non-tariff customers than at the time of the 1988 report. In 1988 virtually all supply was by BG. By the time of the OFT report in 1991, some 5 per cent of all supply to non-tariff customers by volume was by third parties. BG told us that by May 1993 this had increased to about one-third: about 55 per cent of firm gas supplied to non-tariff customers (again excluding power generation) was by companies other than BG, but all interruptible gas (some 40 per cent of the total non-tariff market as defined by volume) was still supplied by BG. Over 30 companies are now actively marketing gas. Competitors to BG include subsidiaries of oil and gas production companies, subsidiaries of regional electricity companies (RECs) and a number of independent businesses. There are an increasing number of companies involved in the buying and selling of gas, some of which are operating on a very small scale, including a further 70 companies which have received allocations in the release of gas by BG in 1993.

2.38. Competition is not, however, evenly distributed. We are not aware of any sales of interruptible gas by competitors. Competition for firm customers is strong for high load factor, medium-volume customers, but is weak for large-volume customers. As at February 1993, for example, competitors' market share was greatest, at some 60 per cent, for users of between 500,000 and 1 million therms of firm gas a year. It was below 30 per cent for the smallest non-tariff customers, users of between 25,000 and 50,000 therms of firm gas a year; and below 20 per cent for the largest users (excluding power generation), of between 10 million and 25 million therms of firm gas a year. The average load factor of the customers of independent shippers is some 65 per cent, compared with 47 per cent for BG's firm contract customers. There is less variation in the extent of competition by region. The percentage of firm gas supplied by competitors (other than for power generation) varies from about 34 per cent of firm gas supplied by competitors to BG in North Thames and South Eastern to some 50 per cent in the West Midlands.

2.39. Competition in the firm contract market is still evolving rapidly: most of the competitors have only been selling gas to end users for less than two years. A number of shippers told us that they did not wish to supply the largest customers, owing to limited availability of gas, and their preference not to be dependent on a few large customers. The variation in market share mentioned above also reflects the nature and structure of BG's price schedules which do not fully take account of variations in all its transportation costs:

by contrast its transportation charges, a main element of its competitors' costs, vary according to load factor and distance.

2.40. The development of present competition has been much assisted by the existence of BG's price schedules and by the undertakings given by BG to the OFT on release of gas and market share. It may also, however, to an extent reflect what BG would regard as its inability so far to incorporate more than a low ROR in its transportation charges. The vulnerability of the shippers is shown by comparing their gross margins, that is their selling prices less their costs of gas, with the transportation charges they pay to BG. The final selling prices to users of companies responding to our questionnaire (see Table 3.14 of Volume 2) averaged about 31.7p per therm; of this gas costs accounted for about 19.6p per therm, with a gross margin of 12.1p per therm. Transportation costs represented on average about 8.4p per therm, nearly three-quarters of the available gross margin. The margins taken by independent shippers, therefore, averaged only some 3.6p per therm.

2.41. BG's competitors have effectively no option but to use its transportation network but, as shown by these figures, their viability depends both on their selling prices for gas, which can still be influenced by BG given its continuing market share, and their transportation costs determined directly by BG. BG itself regards the current level of transportation charges as too low and as under-recovering the costs of the low-pressure distribution system. As discussed in Chapter 5 of Volume 2, during our inquiry BG proposed eventual increases in transportation charges of about 18 per cent averaged over all shippers, and of up to 30 per cent for some individual shippers (although these increases were to be phased over several years, and were subsequently postponed until October 1994). Charges could increase further if BG was allowed a higher ROR on transportation assets than previously permitted by OFGAS: see Table 5.9. Such higher charges, unless there were to be a corresponding increase in BG's own price schedules reflecting the additional cost of gas transported to its own customers, would seriously reduce the gross margins taken by its competitors. A change in the structure of BG's transportation charges could also affect the basis upon which competitors' prices had been set.

2.42. To date competition has brought benefits to most users, customers of BG's competitors quoting savings of about 10 per cent on average and of up to 20 per cent in some cases on BG's own prices. The replies to our questionnaire to shippers (see Tables 3.12 and 3.13 of Volume 2) suggest that prices offered by shippers are, on average, just over 10 per cent lower than those of BG. These savings in part reflect the level and structure of BG's transportation charges, as discussed in paragraph 2.39, but also reflect lower margins and efficiency gains, leading BG itself to examine the level of its overheads and its own pricing policy. The benefits could, however, rapidly be reduced or removed if BG were significantly to increase its transportation charges without corresponding increases in its own price schedules. It should be noted that some major users (for example, those using above 10 million therms a year and users of interruptible gas) claim not to have had any benefits from competition.

### ***Profitability of supply to non-tariff customers***

2.43. As shown in Table 2.2, on present methods of cost allocation, CCA RONA from firm contract sales has fallen from some 18.7 per cent in 1987/88 to 5.6 per cent in 1992, but is still somewhat higher than the regulated tariff business. Return on interruptible turnover has fallen from 19.8 per cent to 12.9 per cent. The profitability of BG's sales to the non-tariff sector has, therefore, fallen significantly since the time of the MMC's 1988 report, if a consistent cost allocation procedure is adopted.

### ***Quality of service to non-tariff users***

2.44. The quality of service provided by BG directly affects BG's own non-tariff customers, but the service provided by BG to shippers also affects the customers of BG's competitors. The great majority of non-tariff customers supplied directly by BG are either very satisfied or fairly satisfied with the service provided by BG, although 6 per cent of contract customers in one survey we saw were critical (see Table 10.18 of Volume 2). One source of criticism is the inflexibility in BG's terms, partly attributable, however, to the requirement to publish price schedules following the MMC's previous report. By contrast, we received strong criticisms of the service provided to shippers, which affected the service they could provide to their own customers, as discussed in paragraph 2.51.

### ***Public interest issues in the non-tariff market***

2.45. The public interest issues in this market involve considerations which are inseparable from transportation and storage, this topic being further dealt with in paragraph 2.132 onwards. As is clear from the above summary of recent developments, key aspects of the non-tariff market are significantly different from those applicable at the time of our previous report. Many of the adverse effects identified in our 1988 report have been addressed. BG prices and profitability have fallen. Following BG's recent undertakings to the DGFT, competitors now account for about 55 per cent of the firm contract market. They have yet to enter the interruptible market.

2.46. The introduction of competition has given non-tariff customers a wide choice of supplier, and the benefit of lower prices and more flexible contract terms, such as the duration of contracts. It has also stimulated BG to look at the scope to reduce its overhead costs in supplying the firm contract market. BG's flexibility in dealing with its customers has, however, been limited by the requirement that it price according to published price schedules, which its competitors are not required to do.

2.47. BG said that competition was now 'self-sustaining', and that the rapid growth of competition showed that barriers to entry to the market were now negligible even before transportation and storage has been established as a separate unit of BG, to the extent that some of the current constraints on BG could be relaxed.

2.48. We disagree with these views. The present situation is, in many ways, artificial since it is supported by market share restrictions and the gas release scheme, which are only temporary measures restricting BG's freedom to compete in order to allow competitors to become established and requiring BG to abstain from any active form of competition for non-tariff customers.

2.49. In our view, to bring into existence competition that will be genuinely self-sustaining requires a framework in which barriers to entry can be progressively lowered; and secondly, measures to deal with the market power which BG as the incumbent enjoys at the outset. The MMC's previous recommendations on gas purchasing and the more recent gas release scheme have helped to overcome the barrier to entry that arose from BG's position as the dominant purchaser of gas: this is discussed further in paragraphs 2.122 to 2.131. BG's undertakings to limit its market share have also helped to ensure access for competing suppliers to a wide range of customers. In the longer term, however, we would regard the ability of competitors to access the transportation network and other facilities such as storage on non-discriminatory terms (including, for example, the balancing regime adopted by BG to ensure adequate availability of gas in the system to meet demands) as essential if competition is to be sustained.

2.50. BG operates an integrated business as both a trader supplying gas and the owner of the transportation system over which its competitors must operate. We discussed in paragraphs 2.40 and 2.41 the vulnerability of BG's competitors to BG's transportation charges, resulting from the integrated nature of BG's business and their dependence on the transportation and storage facilities provided by BG: higher charges, such as those which BG itself has recently proposed, would undermine the margins taken by its competitors unless there was to be a corresponding increase in BG's own price schedules.

2.51. BG is in a position not only to price competitors out of the market but to handicap their operation in many other ways, as indeed some shippers alleged BG was currently doing. In paragraphs 2.136 to 2.139 we refer to and discuss the large volume of complaints we received that BG has not met the recent requirements of shippers. We have indicated (paragraph 2.138) that BG admits not having recently provided the standard of service which shippers have a right to expect. While we accept (paragraph 2.139) that there were extenuating circumstances, we consider, nevertheless, that these complaints are indicative of what could be expected to occur in the absence of adequate arrangements to ensure neutrality of transportation and storage. They also provide evidence of the uncertainty in the minds of shippers as to the fairness and efficiency of the treatment they will receive from BG's transportation and storage activities. Complaints have arisen in the context both of the original 'non-tariff' market over 25,000 therms, but also in the 2,500 to 25,000 therm sector of the market in which competition has more recently been allowed. They necessarily raise issues both of competition in these markets, and operation of the transportation and storage system.

2.52. Although we accept that this situation is partly explained by transitional operational problems that resulted from the lowering of the tariff threshold in August 1992, it does show how BG's performance of its transportation and storage function can act as a serious barrier to BG's competitors, by disrupting the management of their businesses and preventing them from providing a high-quality service to their new customers. For example, delays in providing quotations and offers for transportation or in providing meter readings, the structure as well as the level of transportation charges, and the operational requirements imposed on shippers can seriously affect the shippers' ability to compete with BG (discussed further in the context of BG's own proposals on these matters in paragraphs 2.144 to 2.153). By contrast, we saw little evidence that BG's own contract customers suffered such quality of service problems.

2.53. The undertakings agreed with the OFT were an attempt to provide a basis on which the transportation and storage system would be available to independent shippers on fair and non-discriminatory terms. We received complaints that BG had not acted in accordance with the spirit of the undertakings and was 'not committed' to ensuring the establishment of competition. The Chief Executive of BG for his part emphasized to us that the Board was fully committed to bringing about competition. BG's agreement to lose market share represents an extraordinary and difficult position for any company to find itself in (although the gas sold by other shippers still has to be transported by BG), and we acknowledge that the task of evolving from an integrated gas supply business to one with a high degree of separation between trading and transportation is highly complex. Despite the difficulties facing BG, however, we believe that there is some validity to the criticism by shippers of its recent performance, to which we return in paragraph 2.139.

2.54. More fundamentally, we believe that the present integrated nature of BG's business, in which it exclusively controls and provides the vital transportation facilities which its competitors have to use, is unable to provide the necessary conditions for self-sustaining competition. There is, in our view, an inherent conflict of interest between BG's duty to its shareholders of pursuing its own business interests of promoting its own profitability and market share, and its duty to its shipper customers which are also its competitors in its trading activities. The complex regulatory structure which we have outlined above (paragraphs 2.17 to 2.22), aspects of which apply to the non-tariff as well as to the tariff market, is consistent with the existence of such a conflict of interest and is a clear recognition of it. We have considered BG's proposals, which are on the lines agreed with the OFT, for operation of a separate transportation and storage unit within the same company in this light. Our view, as we discuss further in paragraphs 2.155 to 2.166, is that these proposals will not finally resolve the conflict of interest that arises from the integrated nature of BG's business: for example, the BG Board, in exercising ultimate control over the transport company, would continue to take into account the interests of BG's other businesses, information barriers would prove insufficient and key decisions of the transportation unit would continue to be influenced by the interests of its trading business.

2.55. Competition in the non-tariff market cannot, therefore, in our view, be fully effective or self-sustaining unless long-term arrangements can be put in place to secure the effective neutrality of the transportation system in such a way that this is in the interests of those who run it and that such neutrality can be readily perceived by shippers, which find themselves treated by BG as welcome customers of the system, rather than simply as competitors in the supply of gas. The absence now of such a perception appears to us to be demonstrated by the volume of complaints to which we have referred (paragraph 2.51). The perception will not, in our view, be changed while the present fundamental conflict of interest continues; that is, while BG is both a trader and the owner of the transportation system over which its competitors must operate. As

we argued above, the competition occurring to date has clearly been to the benefit of users, increasing choice, reducing prices and stimulating BG to lower its costs. We also see scope for competition in the longer term to stimulate innovation in service provision and pricing structure-in particular, the development of greater differentiation between peak and off-peak pricing. Any weakening in competition or constraint on its further development would undermine these benefits, reducing choice and leading to a higher level of gas prices than would otherwise be the case. The emergence of competition has required the imposition of artificial targets for loss of market share by BG and the unnatural internal separation of the core transportation business from the related core business of trading. For competition to continue to develop and become self-sustaining, the present conflict of interest has to be addressed. Failure to provide the conditions for a fully competitive market, by failure to provide for the effective neutrality of the transportation and storage system, backed by the appropriate motivation to attract customers, may, in our view, be expected to inhibit choice, restrict innovation in service provision and pricing structure, and lead to a higher level of gas prices to non-tariff users than would otherwise be the case. We accept that there have been benefits from maintaining the present integrated trading and transportation system, as discussed in Chapter 2 of Volume 2, but these do not, in our view, offset the expected adverse consequences.

### ***Formal findings on the non-tariff monopoly situation***

2.56. Expressed generally, the absence of effective neutrality, and its perception and the required incentives, in order to provide access to shippers on non-discriminatory terms may, in our view, be expected to reduce the effectiveness of competition in the supply of gas to the non-tariff market and to undermine the benefits of the competition that has occurred to date. It is our duty to examine this result, and the situation which we have described above, in terms of the relevant provisions of the Fair Trading Act, and in particular section 48(c) and (d) and section 49(1)(a) and (b). The substance of these provisions was summarized in paragraph 2.6 above; they relate to the identification by the MMC of, on BG's part, steps for the purpose of exploiting or maintaining a monopoly situation and actions or omissions attributable to the existence of a monopoly situation. The provisions relate also to the finding by the MMC of facts which operate or may be expected to operate against the public interest.

2.57. While the application of these factors to the present circumstances is considered below (paragraphs 2.63 to 2.68), it may be of use to mention that, in our view, such 'steps' (section 48(c)) are to be distinguished from such 'actions or omissions' (section 48(d)) by reason of 'steps' being identifiable only where the person concerned (here, BG) is taking them for the purpose mentioned ('exploiting or maintaining the monopoly situation'), whereas it is sufficient, for the identification of an 'action or omission', if it is attributable to the monopoly situation, no 'purpose' having necessarily to be shown. Furthermore, as to such 'facts' (section 49(1)(b)), there is a distinction to be made between those which the MMC consider 'operate' or, as the case may be, do not operate against the public interest (ie a current situation) and those which 'may (or may not) be expected' to do so, ie where (irrespective of the current situation) the MMC consider there to be a reasonable expectation that they may so operate in the future.

2.58. Sections 48(c) and (d) and section 49(1)(b) have been considered by the Court in two recent cases.<sup>1</sup> In his judgment in the National House Building Council (NHBC) case, the Honourable Mr Justice Auld held that, on the true construction of section 49(1)(b), it is not open to the MMC to make an adverse public interest finding under that section, unless it is based on a fact found by the MMC in direct answer to one or other of the questions specified in section 48. The Applicants for judicial review in the NHBC case have appealed and the MMC have issued a Respondent's Notice seeking to have this finding of the Honourable Mr Justice Auld reviewed and set aside by the Court of Appeal. BG has submitted to us that such finding of the Honourable Mr Justice Auld is *obiter* and incorrect and that we should not follow it. We agree that such finding is *obiter*. It is also the case that the arguments which the MMC propose to put to the Court of Appeal on its Respondent's Notice accord with the reasoning advanced by BG to support its contention that such finding is incorrect.

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<sup>1</sup>Firstly *The Queen v The Monopolies & Mergers Commission & Others, Ex Parte Visa International Service Association*, 15 June 1990 (Hodgson J), 4 October 1990 (Court of Appeal), unreported. Secondly, *The Queen v The Monopolies & Mergers Commission & Another, Ex Parte The National House Building Council*, 1 October 1992 (Auld J), unreported.

2.59. We are advised and consider that it is clear that our answers to the questions specified in section 48 are 'facts found by us in pursuance of our investigations' within section 49(1)(b) (see paragraph 2.57) and that the point of construction and thus of law that is in issue on the Respondent's Notice in the NHBC appeal is whether facts which do not come within the matters specified in section 48(a) to (d)<sup>1</sup> can nonetheless be 'facts found by us in pursuance of our investigations' within section 49(1)(b). In view of the above position, the uncertainty as to the true construction of section 49(1)(b) and our own preference for the conclusion that such finding of the Honourable Mr Justice Auld is incorrect, we are advised and consider that the appropriate approach for us is as follows: first, to answer the questions posed by sections 48 and 49(1)(b) on the basis that such finding of the Honourable Mr Justice Auld is correct and then, secondly, to reach conclusions that would be relevant if such finding is incorrect.

2.60. In considering the result which we have identified in paragraph 2.55 we have had regard in particular to the fact, noted in paragraph 2.37, that most gas to non-tariff users is still supplied by BG, and to the other factors set out in paragraphs 2.40, 2.41 and 2.45 to 2.55. In essence, the problem arises from the integrated nature of BG's business (in particular as to BG's trading and transportation interests) and the conflict of interest which, as we have indicated above, we believe that this necessarily involves. In considering the integrated nature of BG's business and such conflict of interest, we have had regard to two separate but interrelated matters in connection with the operation by BG of its business. First, as pointed out in paragraph 2.50, BG operates and has organized itself as an integrated business as both a trader in the supply of gas to tariff and non-tariff customers and the owner of the transportation system necessarily also used by its competitors. Second, BG has made proposals, which we set out and consider more fully at a later stage (paragraphs 2.155 to 2.166), which, if they were to be implemented, would result in BG continuing to operate an integrated business but in a way which involved (amongst other things) an internal separation of its trading and transportation activities which does not exist at present. A summary of our view as to the effect that the implementation of these proposals would have is set out in paragraph 2.54.

2.61. The fact that BG owns and controls both the trading and the transportation businesses referred to in paragraphs 2.3, 2.5 and 2.60 enables BG to operate its trading businesses and its transportation business, or its business as a whole, as an integrated business. For it is both a trader, in the supply of gas, and at the same time the owner of the transportation system over which its competitors must operate. This would be so whether the business as a whole is run according to BG's present organization and system (ie with complete integration of the two functions) or otherwise with a lesser degree of integration, for example after implementing BG's proposals for internal separation referred to in paragraph 2.60.

2.62. We now turn to consider, specifically in terms of section 48(c) and (d) of the Fair Trading Act, BG's conduct in undertaking, in accordance with its present operation and system, its integrated business as both a trader in the supply of gas through pipes to non-tariff customers and the owner of the transportation system over which its competitors must operate. We have identified the existence of monopoly situations in respect of both such businesses. In paragraph 2.3 we identified a monopoly situation in relation to the supply of gas through pipes to non-tariff customers and in paragraph 2.5 we identified a monopoly situation relating to the supply of the services of the conveyance and storage of gas.

2.63. We do not consider that this conduct represents 'steps (by way of uncompetitive practices or otherwise) being taken by [BG] for the purpose of exploiting or maintaining' the monopoly situations referred to in paragraph 2.62.

2.64. We now consider whether this conduct is an 'action ... on the part of BG ... attributable to the existence' of each of the monopoly situations referred to in paragraph 2.62. This conduct, which involves BG carrying out the businesses both, as a trader, of the supply of gas to non-tariff customers and of the operation of the transportation and storage system for gas, in our view constitutes an action. We have had regard to the matters referred to in paragraph 2.61, the existence of these monopoly situations, the commonality of ownership of and the integration between these businesses, BG's size and its degree of control over the terms on which other shippers do business with their customers, because BG is effectively the sole provider of transportation and storage facilities. We have, on the other hand, noted that BG's ownership and control of these businesses is based on statutory authority. We also recognize that BG might be in a position to conduct

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<sup>1</sup>See paragraph 2.57 for (c) and (d); our findings under (a) and (b) appear in paragraphs 2.3 and 2.5.

these businesses in an integrated manner, even if these monopoly situations did not, as we have found, exist in favour of BG. Having taken both sets of considerations into account, we conclude that this conduct is an action which BG has implemented and pursued by reason of these monopoly situations-and is thus attributable to the existence of each such situation. (As regards our analogous findings in respect of the tariff monopoly situation, see paragraphs 2.94 and 2.120.)

2.65. We have also considered whether, for the purposes of section 48(d), there is any 'omission' on the part of BG which is attributable to the existence of the monopoly situations referred to in paragraph 2.62. Having regard to our earlier reasoning (in particular paragraphs 2.55, 2.60, 2.61 and 2.64), we consider that there is a reciprocal aspect (although less compelling) to the action which we have identified, which constitutes an omission which is attributable to such monopoly situations and demonstrates the connection with them referred to in paragraph 2.64. This omission is, we believe, the failure by BG to conduct the businesses referred to in that paragraph in such a way as to secure an effective separation between them. In reaching this conclusion, we of course recognize that, at least since March 1992, BG has been, and is, willing to conduct its business in accordance with the undertakings (see, for example, paragraph 2.29(b)) which it agreed with the OFT or modifications and developments of these. However, we consider that, if the monopoly situations had not existed, BG's position with regard to the trading in and transportation of gas would have been less strong and influential, producing a greater likelihood that BG would itself have introduced separation. Accordingly we regard the omission to do so as attributable to each of these monopoly situations.

2.66. Having regard to paragraphs 2.58 and 2.59, we have further considered whether the action and the omission which we have identified constitute, for the purpose of section 49(1)(b) of the Fair Trading Act, facts 'found by the Commission in pursuance of their investigations under the preceding provisions of [section 49(1)]' which 'operate or may be expected to operate against the public interest' (the distinction having been explained in paragraph 2.57). It appears to us to follow from our foregoing reasoning that both the action and the omission represent facts found in pursuance of our investigations, that is to say:

- (a) BG's conduct in undertaking, in accordance with its present operation and system, its integrated business as both a trader in the supply of gas through pipes to non-tariff customers and the owner of the transportation system over which its competitors must operate; and
- (b) BG's failure to conduct its businesses both, as a trader, of the supply of gas to non-tariff customers, and of the operation of the transportation and storage system for gas, in such a way as to secure an effective separation between them,

which may be expected to operate against the public interest. We consider this to be so in view of the factors described above, in paragraphs 2.37, 2.40, 2.41, 2.45 to 2.55, 2.60 and 2.61, in particular because of the conflict of interest to which we have drawn attention. We also consider that these facts may be expected so to operate by reason of the lack of provision for neutrality (and its perception) as between BG's trading and transportation interests. We recognize that the failure by BG, described in (b) above, may be considered the less detrimental of the two facts. In its terms, it may be capable of being met, in part at least, by measures falling short of those necessary fully to resolve the problems mentioned earlier in this paragraph. In paragraphs 2.54 and 2.65, we have noted and commented on (and see, further, paragraphs 2.155 to 2.166) BG's willingness to arrange a limited degree of separation of its transportation and storage business. Nevertheless, we are in no doubt that the failure constitutes a fact which may be expected to operate against the public interest. We further conclude that these facts have the particular effects adverse to the public interest that they may be expected to inhibit choice, restrict innovation, and lead to a higher level of gas prices to non-tariff users than would otherwise be the case. We deal with the consideration of remedies in this respect in paragraphs 2.154 to 2.184.

2.67. On the basis of the first approach referred to in paragraph 2.59, we are, therefore, satisfied that we have correctly identified as, respectively, an action and an omission, and as facts found in pursuance of our investigations which may be expected to operate against the public interest, the matters set out in paragraphs 2.62 to 2.66.

2.68. On the basis of the second approach referred to in paragraph 2.59, we also consider that the matters which we have found to be an action and omission within section 48(d) are, independently of such findings and whether or not they are correct, facts found by us in pursuance of our investigations under section 49(1), which may be expected to operate against the public interest, with the particular effects adverse to the public interest described in paragraph 2.66.

### ***Other issues in the non-tariff market***

2.69. During our inquiry, a number of other public interest issues were raised with us by third parties. As well as the relationship between BG's trading activities and its transportation and storage activities, some concern was expressed at the relationship between BG's contract trading and its tariff trading activities: we return to this in the context of the tariff market below (paragraph 2.117).

2.70. Some of BG's own contract customers continued to express unease about the level of prices, and what they saw as BG's ability to increase prices in future, notwithstanding the fact that competition has brought benefits to parts of this market. The fact that competition for the largest firm customers is so limited, in part reflects the current low level of BG prices relative to its cost of gas. There is a risk that the restructuring of prices BG is considering, to reduce the current variation in margins between selling prices and gas cost, could, in the short term, be to the detriment of some customers. BG told us that this effect would be mitigated by limiting the increase in charges to any individual user. One option under consideration by BG is to limit the change to any consumer of gas to 4 per cent in any year. In our view, extension of competition by removal of current barriers to entry already noted is the best safeguard for those areas of the market, where competition is currently limited. Simply to extend price control to this market, as suggested to us by some users, would introduce serious distortion to the gas market and prove incompatible with the development of competition. Some users were also concerned that the requirement to lose market share would itself cause BG to raise prices. We have seen no evidence to support this, and see no reason to suppose that further reduction in BG's share of the contract market would necessarily increase the overall level of prices generally. Nevertheless it is quite possible that an increase in competition in that market may well result in a change in the structure of prices, with a closer relationship to the structure of costs.

### ***Interruptible gas***

2.71. A particular problem is that of interruptible gas, where there is currently no competition to BG, and considerable unease amongst users that BG would wish to reduce the amount of gas offered on an interruptible basis and increase prices.

2.72. BG contracts for gas from producers at 'swing factors'-the ratio of peak supply to average supply over the year-which vary for individual contracts. BG's older contracts tend to be at a relatively high swing factor, allowing it to take more gas at times of peak demand: its contracts from the Sean field, indeed, allow it to purchase gas only in peak periods. More recent contracts, particularly from the northern North Sea where gas is produced with oil, tend to be at a lower swing, the rate of output of gas being dependent on a required output of oil, which is subject to less seasonal fluctuation in demand. Variation in demand between seasons, and day-to-day variations over and above that which can be met from variations in supply at the beach, are met in two main ways. One is the use of storage facilities. The other is by the supply of gas to large customers on an interruptible basis which can, in effect, be switched to the more weather-sensitive customers, in particular domestic users.

2.73. From BG's perspective, the value of interruptible gas would decline as its storage capacity increases, reducing the need to call on interruption. BG assured us, however, that there would be a continuing 'very substantial' need for interruptibility, although it expected the relative price of interruptible gas to increase in the short term. The prices of interruptible gas are also affected by the prices of heavy fuel oil (HFO), the main alternative fuel available to users, although interruptible prices have recently been above those of HFO. BG was unsure what the trend in interruptible prices would be in the longer term; its projections assume that prices will increase in line with those of HFO which are themselves highly uncertain. It is clearly important that any price increase by BG should be phased in to minimize the dislocation to users.

2.74. The value of interruptible gas to users will depend on the price of interruptible gas relative to other fuels or firm gas, and the probable cost of being interrupted; this is a function of the cost of any adaptive measures they have to take (including the cost of alternative fuels) and the probability of being interrupted. In a competitive market, we would expect a range of contracts, with different rights to interrupt over future periods. The discount for this supply compared with a contract for firm gas would be larger, the greater the anticipated frequency of interruption. This would be balanced on the other side by the value to BG and other sellers of having gas to call upon when unforeseen scarcity is actually experienced. Sellers would get the reward for bearing the uncertainty associated with the occurrence of such scarcity by being able to sell when gas is scarce.

2.75. Interruptible gas has not been subject to competition. BG has reduced the variation in terms offered, while maintaining a substantial margin against firm gas. The extent of interruption has fallen in recent years, due both to warm weather and to the increase in BG's storage capacity. We have considered the effect of BG's current arrangements in relation to users of interruptible gas but despite the lack of competition BG, in effect, appears to be offering users low prices combined with a low probability of being interrupted. On the other hand, as we discuss further in paragraphs 2.77 to 2.79, the current lack of market mechanisms has the disadvantage that there is no adequate means of evaluating alternative methods of meeting peak demands, in particular storage. This may result in higher costs and the adverse effects of higher prices to gas consumers generally, but the effect of developing market mechanisms is currently uncertain. Were BG significantly to raise interruptible prices, the balance of these considerations may well change: but our current view is that there is insufficient evidence to establish that any aspects of the supply of interruptible gas, additional to those identified in the general context of the non-tariff market, can, in themselves, be regarded as against the public interest.

2.76. The main constraint on competitors supplying interruptible gas is its role in balancing supply and demand at peak periods: BG is, at present, the only supplier of gas to the domestic market, which has the greatest variance of demand over the year. Only BG, therefore, has, to date, been capable of obtaining the peak load balancing benefit from the sale of interruptible gas to this part of the market.

2.77. We see the question of creating competition in interruptible gas not in terms of remedies to adverse effects attributable to actions-or lack of them-in the interruptible market, but rather in terms of developing competition in other aspects of gas supply. In principle, non-market or market means can be used to trigger interruptions. Non-market means are rights to instruct suppliers to exercise their options to interrupt. Market means involve cash payments to call forth the necessary gas. In the latter case, suppliers with potential spare gas will exercise their options and sell. In effect there would emerge a spot market in gas, not to cover peaks in general, but for on-the-day adjustments. It would offer users of interruptible gas an extra means to avoid interruption, should they wish. The development of such a market would offer the possibility of testing a more flexible system than the exercise of rights to instruct sellers, which may result in unnecessary rules to guard against risks that may not occur, leading to higher costs than could arise in a more market-orientated framework.

2.78. BG's proposals for developing a 'peak' market in gas, whereby it would bid for peak gas from other shippers or large users, would not provide a full 'spot market', but is a first step towards encouraging market mechanisms. BG saw this approach not only as establishing competition in supply of interruptible gas, but also in attracting users-particularly power generators-to switch some firm gas to the domestic market in peak periods. Developments of a market in peak gas would also allow the value of peak gas to be determined by the market, stimulate developments of alternative sources of peak gas and improve BG's ability to evaluate alternative means of meeting peak demand. The effects of pursuing BG's proposals are, however, still uncertain.

2.79. Increased competition in supply of firm gas would itself narrow the differences between firm and interruptible prices. Extending competition to the former tariff market, in particular any extension to the domestic market, will open the opportunity to competition in supplying interruptible gas, in order to meet the variation in demand from shippers supplying more weather-sensitive users. We would also expect competition to result in the introduction of differential pricing to end users: by time of year, or to reflect the balance of supply and demand for gas in particular peak periods. Such peak pricing to end users is the main

means to ensure efficient use of gas at times of peak demand, against which seasonal supplies of gas, investment in storage facilities, or the use of interruptibility can be adjusted so saving on facilities which may well be very expensive at the margin. It is by introducing competition into these other markets, therefore, that any solution lies.

2.80. Some users, and the GCC, were concerned that BG's undertakings (paragraph 2.29(a)) that suppliers other than BG should supply at least 60 per cent of gas to contract customers by 1995 (excluding gas used, *inter alia*, for feedstock, power generation and in natural gas vehicles) could lead BG to an increase in interruptible prices, in order to reduce market share or to reduce the overall level of sales. As is apparent in Table 3.15 of Volume 2, interruptible gas accounts for some 40 per cent of the contract market, as defined in the undertakings. To meet the current limit on BG's share, BG would have to lose either all its firm contract sales, or a significant proportion of interruptible sales in addition to some loss of firm sales. BG was concerned that the market share target was unrealistic in so far as it required loss of share of the interruptible market, which competitors had to date not supplied: on the other hand, the market share requirement would seem to have been a stimulus to BG's development of its proposals for a market in peak gas.

2.81. We believe that there is a risk that the current limitation on BG's market share could impose an unnecessarily tight constraint on its supply of interruptible gas. On the other hand, we believe that there is some need to continue the market share targets, previously agreed by BG in supply to users of over 25,000 therms a year to prevent BG exploiting its dominant position, as an interim measure until the more fundamental remedies to the adverse effects we have identified have been introduced and self-sustaining competition has been established. Whereas we see some need for varying the market share targets to take into account the special situation of interruptible gas, there are, as we argue below, grounds for extending that target to supply to users of between 2,500 and 25,000 therms. An element of flexibility is also desirable to provide an incentive to BG to develop its proposals for acquisition of peak gas. We suggest, therefore, that, as from December 1993, the target should be re-expressed with reference to sales to all users of over 2,500 therms a year; but the volume of sales to be lost by BG to its competitors should remain the same as that implied by the target previously agreed by BG. On the figures in Table 3.15 of Volume 2, this implies that BG's market share from that date be limited to 55 per cent of sales to all users of 2,500 therms and above (firm and interruptible), excluding sales for use in power generation, as feedstock or in natural gas vehicles.

2.82. BG argued further that, with the development of competition, there was scope to relax many of the other constraints on its performance. It argued, for example, for the immediate removal of the requirement to publish interruptible price schedules (which it also suggested was necessary if it was to pursue its proposed market in 'peak gas'), and scope for more gradual relaxation of the requirement to publish firm price schedules. Immediate relaxation of the requirement to publish price schedules would, in our view, be premature, but we do see scope, in the longer term, to replace the requirement to charge on the basis of published price schedules, by a more general requirement not to discriminate unduly in pricing. We do, however, see a need for a degree of flexibility in interpreting the requirement to publish price schedules: it may not, for example, be appropriate in the context of new or previously unpredicted uses or of high-volume, longer-term uses for gas or in those sectors of the market where competition is clearly self-sustaining.

## **The tariff market**

2.83. The tariff market (which, as a starting point for discussion, we have initially continued to regard as the entire market up to 25,000 therms) is normally thought of as the market for domestic users. As shown in Table 2.1, domestic users account for 85 per cent of gas supplied by BG to tariff customers, smaller industrial and commercial users accounting for the remainder. Over 95 per cent of supply to premises using below 2,500 therms a year is to domestic users of gas, of whom there are about 17.7 million in this size range, the remainder being to about 440,000 industrial and commercial customers. By contrast, about 85 per cent of supply to premises using between 2,500 and 25,000 therms a year is to some 210,000 industrial and commercial customers, the remainder being to some 65,000 domestic users.

2.84. Competition has since August 1992 been permitted above 2,500 therms. This accounts for almost 15 per cent of the former 'tariff market' and is predominantly supply to industrial and commercial users. BG is also free to agree special terms above that level: such supply by competitors, or under special terms by BG, would be excluded from the definition of 'tariff market'. BG has not, however, yet offered any such special terms and also retains its full obligation to supply above 2,500 therms. We are aware of a dispute between BG and OFGAS on BG's policy of not offering special terms above 2,500 therms, partly on account of the adverse financial consequences on BG of doing so if the basis of the present tariff formula was unchanged. Given the introduction of competition in this part of the market, we find it difficult to see any public interest aspect of the dispute as to whether BG ought to offer special terms.

### ***Regulation and profitability***

2.85. The main aspects of the tariff market include an evolving and increasingly tight system of price regulation. BG acknowledged that the first price regulation formula, for the period until 1 April 1992, of RPI-2 plus full pass-through of gas costs, resulted in a better than expected performance: the RPI-X regulatory system was intended to give an incentive to improve performance, the rewards for which would be passed on to users only in the long term. The regulatory formula for the five-year period from April 1992 represents a significant tightening, to RPI-5 compared with the RPI-1 sought by BG. We return to this in paragraph 2.187.

2.86. As shown in Table 2.2, the real return on CCA average net assets for tariff sales improved from 4.1 per cent in 1987/88 to 6.8 per cent in 1991, but fell to 4.9 per cent in 1992 on the present basis of cost allocation. The non-domestic tariff market (consisting predominantly of premises using over 2,500 therms a year) is more profitable than the domestic market: an ROR of 11.2 per cent in 1992, compared with 4.2 per cent for the domestic market, 4.9 per cent overall, the lower cost of supplying higher-volume customers not being fully reflected in prices. BG said that shareholders had done well from privatization during the initial period and that it had been able to use the cash flow from the gas supply business for its policy of diversification.

### ***Prices***

2.87. As shown in Table 3.5 of Volume 2, income per therm from tariff sales fell by about 16 per cent in real terms from 1986/87, the year of privatization, to 1992. This reflects mainly the reduction in the costs of purchase of gas over that period, which accounted in 1986/87 for about 40 per cent of gas prices, and declined by almost 25 per cent in real terms to 1992, but also the effects of the regulatory formula on allowable income (net of gas costs) which declined by about 10 per cent in real terms (see also Table 4.14 of Volume 2). There have been limited changes to the tariff structure over the period. Standing charges as well as commodity charges are now uniform, and there is a gradual tapering in tariffs for high-volume users, bringing them closer to the level of contract prices, as a means to reduce the incentive for large tariff customers to burn gas wastefully to gain access to cheaper contract prices available at higher consumption levels.

### ***Quality of service to tariff customers***

2.88. Quality of service is a central aspect of performance and of the value for money offered to customers. BG has long had a good reputation for safety and the engineering of the system about which, as at the time of our previous report, we have received very few complaints. Also of importance, however, is BG's relationship with its customers. The surveys we have seen suggest that most users now have a high perception of BG's quality of service for tariff customers, one MORI survey, for example, rating it at the top end of consumers' views of a number of public and private sector organizations, as did a more recent MORI survey for the Office of Electricity Regulation (OFFER) comparing customers' views of the service provided by the privatized utilities. A recent MORI survey for the GCC found that 78 per cent of domestic users sampled rated BG's overall service as 'very good' or 'fairly good', 13 per cent as average, and only 3 per cent as 'poor' or 'very poor' (6 per cent answered 'don't know'). On the other hand, about 60 per cent believed it important to have a choice of supplier. The high regard for BG is, in our view, to the credit not only of BG, but also of OFGAS and the GCC in stimulating BG to improve its performance in this respect since privatization.

2.89. The Gas Act initially had limited provision for quality of service, but provided protection for BG's customers to the extent that the Director could use his enforcement powers to ensure that BG continued to give a gas supply to its tariff customers. The Authorisation provided further protection in a number of service aspects, requiring BG to consult the Director about the nature of service available and consider any representation made by the Director. The Director subsequently sought to increase his powers in this respect, and recently agreed a modification of the Authorisation with BG to require it to set and publish key and established standards of service, and not to make any change in these standards without the Director's agreement. Additional powers to set performance standards were granted to the Director in the 1992 Act, although it is his current intention to set standards for 1993 by making a further modification to the Authorisation, rather than using the powers in the 1992 Act.

2.90. Failure to meet a range of quality of service indicators, developed between BG and OFGAS, could result in the reopening of the tariff formula. Sixteen key standards, linked directly to the tariff formula, were agreed for 1992 and these were supplemented by 14 additional established standards. These standards provide performance measures and targets for many aspects of BG's performance, particularly in the tariff market. Standards for 1993 are to be finalized shortly.

2.91. BG's performance against the key and established standards is good and improving in most areas. In all cases where quantified data are monitored, BG's performance is either above the standard set, or within 2 per cent of the target. The shortfall giving most rise to complaint is BG's failure to meet the standard related to making and keeping appointments.

2.92. A code of practice for service to older and disabled customers and a 'Gas Care' register of these customers have been established. We received a number of favourable comments about BG's approach to dealing with disadvantaged sections of society, including those who have difficulty paying their bills, and provision of subsidized services.

### ***Competition to supply users of 2,500 to 25,000 therms a year***

2.93. This market has only been open to competition since August 1992, but competitors already account for some 13 per cent of supply to users of between 2,500 and 25,000 therms a year, which BG projects will increase to 50 per cent by 1997. Although there has been a rapid initial increase in competitors' market share, it is too soon to assess how competition will develop, both in terms of market share and the profile of competition, for example whether there are particular market sectors to which competitors will be most attracted.

2.94. Despite this initially rapid growth of competition to supply users of between 2,500 and 25,000 therms a year, competition in this sector of the market raises similar considerations to those we discussed in the context of the non-tariff market above 25,000 therms, and more acutely. BG's competitors remain totally dependent on BG's facilities for transportation of gas. As shown in Table 3.14 of Volume 2,

transportation charges to shippers, for supply to customers in this size range, are greater than in the non-tariff market. The final selling price of sales to users of 25,000 therms a year and below, of companies responding to our questionnaire, averaged about 36.5p per therm. Of this, gas costs averaged 19.9p per therm, with a gross margin of 16.6p per therm. Transportation costs represented 11.5p per therm. Shippers remain, therefore, highly vulnerable to changes in the level and structure of BG's transportation and storage charges, unless such charges are also reflected in BG's charges to its own customers, and to its terms and conditions for transportation and storage. As the size of supply falls the number of customers increases sharply: complaints about poor standard of service to shippers also partly resulted from BG's inability to cope with the growth of competition in this sector of the market. The reasoning which we have set out and the conclusions which we have reached in paragraphs 2.56 to 2.68 in respect of the non-tariff market apply equally to this sector: in particular, the identification, in paragraphs 2.63 to 2.66, of actions and omissions, and of facts which may be expected to operate against the public interest, with the particular effects adverse to the public interest described in that context in paragraph 2.66, namely that those facts may be expected to inhibit choice, restrict innovation and lead to a higher level of gas prices to users in this sector of the market.

2.95. The limitation on BG's market share does not formally apply to this sector of the market. BG argued that the loss of share in this sector of the market should be credited against the loss of share required in the market above 25,000 therms. As discussed in paragraph 2.81, we believe that there is a continuing need for market share targets above 25,000 therms as an interim measure; although we accept that there should be relaxation of the target in so far as it impacts on interruptible gas, we see no case for relaxing the target in relation to firm gas over 25,000 therms. Between 2,500 and 25,000 therms, BG remains in a dominant position, due both to its current market share and to the vulnerability of competitors to BG's transportation charges and its service to shippers. As proposed in paragraph 2.81, therefore, we believe that the market share target should be redefined to include this sector of the market, to ensure the growth of competition and to limit BG's dominance until more fundamental remedies are in place.

2.96. BG is currently required to supply gas up to 25,000 therms a year to any premises connected to a main, or situated within 25 yards of a main. It argued that this obligation to supply should be revised to match the current and any future revisions of the tariff threshold. In our view, the obligation to supply should be retained as long as BG has a *de facto* monopoly in this sector of the market. Since it still accounts for over 85 per cent of the market between 2,500 and 25,000 therms, the removal of its obligation to supply would seem premature, until the Director is satisfied that there is effective competition throughout this sector of the market.

2.97. BG also argued that the scope of the tariff formula should no longer apply to users of between 2,500 and 25,000 therms. BG retains a dominant share of this sector of the market, but we believe that the scope of the tariff formula could be reduced, particularly if the limit on BG's market share is also redefined, as we have suggested, to include this sector of the market. If this is done, the tariff formula should, in our view, be replaced by an extension to supply to users of 2,500 to 25,000 therms of the obligation on BG to charge on the basis of published price schedules, while also maintaining the existing obligation not to discriminate unduly between such users. The maintenance of price schedules, both in this sector of the market and in supply to users of over 25,000 therms, should itself be seen as a temporary measure: when, in the judgment of the Director, competition can be regarded as 'self-sustaining' and BG's position as no longer dominant, it would be preferable to rely on a general obligation not to discriminate unduly between users (as is currently incorporated in the Gas Act for supply to users of up to 25,000 therms a year).

### ***The tariff monopoly***

2.98. A main issue raised by BG about the tariff market was whether the tariff formula would now provide adequate profitability, in view of recent regulatory developments. This raises financial issues which, in our view, have to be considered in the context of related financial issues relevant also to transportation and storage, as we do in paragraphs 2.186 to 2.220.

2.99. The main issue raised with us by other parties concerned BG's current monopoly of supply to users of 2,500 therms or below. BG's statutory monopoly remains in supply to premises of 2,500 therms a year or below, although it can waive these monopoly rights. In introducing the Competition and Service (Utilities)

Bill in November 1991, the Secretary of State announced that, after a first reduction in the threshold to not less than 2,500 therms (as implemented in August 1992), the next step would be a review in 1996 to determine the date at which the monopoly will end, opening the rest of the market to competition. The date for that further review was subsequently brought forward to 1993. The DTI suggested to us that the next step would be abolition of the monopoly, the date for which could soon be decided. Many suppliers are clearly keen to enter this market, some of them suggesting that their entry into the UK market was largely based on the assumption that the domestic monopoly would be removed in the near future.

2.100. The reduction of the threshold to date, from 25,000 to 2,500 therms, has primarily affected non-domestic users, who account for 85 per cent of gas supplied in this sector: allowing competition for domestic users raises a number of important additional considerations. The vast majority of evidence from users and user bodies favoured retaining the existing monopoly in supply to domestic customers, given BG's generally good record. The few complaints we did receive from users concerned charges for new connections to the system, and promotion of energy efficiency, specific problems that OFGAS and the GCC seem well able to resolve. If the monopoly were removed, among the fears were that a 'free-for-all' could increase prices, lead to the introduction of cost-reflective prices, and the withdrawal of 'postalized' prices (charges unaffected by geographical location irrespective of any cost differences). There was also concern that there could be significant increases in charges to users of relatively small volumes of gas, such as the elderly, or reductions in quality of service. We recognize that, while the introduction of competition may well result in a fall in the overall level of prices, some groups may be worse off than at present.

2.101. Several shippers, especially those associated with subsidiaries of the RECs, argued strongly for early liberalization, not only on the grounds that they could offer prices about 10 per cent or so below those of BG, but also because they felt that competition in gas supply generally could not be sustained if confined to the non-tariff market. The Director also saw scope to remove the monopoly (subject to a system of licensing suppliers to domestic markets) within a three- to five-year period. BG, on the other hand, argued strongly that the retention of the monopoly at the existing 2,500 therm level was in the public interest, though it did acknowledge that there may be scope to redefine the existing distinction between the tariff and non-tariff markets. The Chief Executive of BG stressed that BG had no wish to retain the monopoly for its own sake, but had real concerns about its ability, if the monopoly were abolished, to safeguard security of supply and to cope in such circumstances with all the problems arising from the need to balance supply and demand for gas.

2.102. We received a great deal of evidence on the existence and continuation of the tariff monopoly, an issue so important to our inquiry that we feel it necessary to express our views. Given the generally high quality of service offered by BG and the effectiveness of the regulatory system, we do not believe that BG's conduct in operating its monopoly of supply to the tariff market is against the public interest. On the other hand, the disadvantages of monopoly and the benefits of competition cannot be fully predictable: competitors could, for example, develop different product attributes, such as differentials between peak and off-peak tariffs, the scope for which BG now regards as limited. An important economic benefit of abolition of the monopoly in the longer term would be to bring cost-reflective prices, and more efficient allocation of resources.

2.103. A major consideration is the implication of any removal of the monopoly below 2,500 therms, particularly in supply to domestic consumers, for safety, security of supply, and cost. The supply of gas presents certain problems which are different from those of other commodities. As it was put to us by BG and others, the gas system (unlike electricity, for example) 'fails unsafe': without action to reduce consumption, too little gas in the pipeline on a particular day or over a particular period can reduce gas pressure to the point where air can enter the system, possibly resulting in an explosion. Interruption of supply may also result in pilot lights being extinguished, requiring all premises to be visited before supply can be restored. The actions of individual shippers or users can, therefore, have highly adverse consequences on other shippers or users of the system if they result in greater demand for gas than the supply physically made available. The inability readily to disconnect the particular customers whose supplier runs out of gas-or to prevent those customers from still using gas-means that an individual supplier's failure to supply can have a wider impact on all users of the system. To avoid danger, other users' supply may have to be interrupted, or contingency measures may have to be taken, at some cost, to ensure that such a situation will not occur, for example by holding an additional stock of gas in storage. Supply to domestic users is no different from

supply to industrial and commercial customers in this respect: but the potential problems are much increased by the large number of domestic users.

2.104. Against this background, we accept that a full degree of competition for all tariff customers would require safeguards to ensure that shippers have adequate gas available to handle peak demands in severe winters, or other measures to allow ready disconnection of customers if their suppliers had insufficient gas to meet their demand. Alternatively, safety of supply could be safeguarded by developing more advanced metering or information systems than are currently available, and the imposition of charges sufficient to deter customers using gas if their shippers do not have gas available. Competition in this market, therefore, would require licensing of suppliers over and above the current obligation of authorized gas suppliers, to ensure standards, including the imposition of obligations to ensure gas availability.

2.105. BG argued that competition would also increase gas costs (for example, by requiring additional storage of gas) to allow for greater risks in matching supply and demand. In our view, as long as competition was introduced in the manner and over the time-scale we suggest below, the longer-term benefits of competition on price and as an incentive to reduce costs would be likely to offset any price increase that may be necessary in the short term for such reasons.

2.106. A further consideration is the impact of competition on different sectors of the market, and on the structure of BG's prices. Although shippers were enthusiastic to become involved in supplying the full range of domestic customers, the impact of competition may vary for different sectors of the market. Both BG's figures and the shippers' estimates suggested that, on the present structure of costs and charges, the scope for undercutting BG may be mainly at the top end of the tariff market-the larger-volume users such as non-domestic users or larger households with central heating systems. It is this sector which is currently most profitable and likely to prove most contestable by other shippers with consequent benefit from lower charges. Table 4.11 of Volume 2, for example, suggests, on BG's own figures, and before allowing for the different costs which competitors may incur, scope for reductions in prices of between 8 and 10 per cent for users of between 1,500 and 2,500 therms a year.

2.107. BG's logical response to competition would be to rebalance its tariffs to reflect the structure of its costs and restore its profits, also reducing the scope for competitors to undercut BG. Supply to lower-volume users (whose use of gas may be confined to cookers or water heaters and who probably include a high proportion of elderly and poor customers) is currently unprofitable, and may require significant price increases. BG's figures (see again Table 4.11), suggest that charges to the 1.4 million users of below 100 therms a year could almost double; those to the further 1 million users of between 100 and 200 therms could increase by almost 40 per cent, and those to the further 1.4 million users of between 200 and 300 therms could increase by about 20 per cent. These estimates are based on the structure of transportation charges as proposed in the public consultation document, but also reflect BG's view as to the structure of its trading costs.

2.108. BG's estimates are uncertain: the actual impact on individual users would depend on the transportation charging structure that was adopted, in particular on the extent to which this varied between or within regions, and the method of charging for the local distribution system. It would also depend on whether the pricing structure of BG's competitors would be subject to regulatory constraints, for example, not to discriminate between users. In our view, a main and normal benefit of competition is to provide an incentive to relate the structure of prices to the structure of costs and to reduce the level of costs, and hence to reduce prices to users as a whole. Customers who might have to pay relatively more as a result of rebalancing could include users of small volumes of gas. The current 'postalization' of prices could end. We think it likely, therefore, that competition could result in price increases to some users in the shorter term, but this would itself encourage competition in the market. Competition could well, therefore, produce winners and losers in the short term, but with the prospect of increased efficiency and price reduction in the longer term.

2.109. BG also pointed to the need to reconcile competition with the social obligations currently imposed upon it, for example, the treatment of customers who have difficulty paying their bills, or special treatment of the elderly. We accept that it would clearly be inequitable for BG alone to be subject to such obligations and difficult to sustain such obligations as competitors select the more profitable customers. Many of the

shippers from which we heard, however, said that, if the domestic monopoly were removed, they would also be prepared to take on such social obligations, as a condition of their licence: they pointed out that their parent companies, some of the RECs, were already doing so.

2.110. In view of the uncertainty about the effects of competition, we considered whether a regional trial would be appropriate to evaluate the probable costs and benefits of removing the monopoly threshold. A regional trial would not, however, be able adequately to reflect the effects on the system as a whole of introducing competition. Moreover, the balancing problems that could arise in a limited area would be less than those that would arise if there was competition in the UK as a whole.

2.111. Transportation and storage charges account, on BG's figures, for as much as 40 per cent of current charges to domestic users (see Table 4.12 of Volume 2). In our view, it is highly unlikely that effective competition in gas supply across the board could emerge as long as BG's trading activities were under the same ownership as the transportation and the storage system. It would be extremely difficult for BG to charge its own trading unit for transportation and storage on exactly the same basis as other shippers and impossible for it to be perceived to be doing so on a neutral basis. By imposing a high level of transportation charges, for example, BG could prevent other shippers competing, while the impact on its own trading activities will simply be balanced by the transfer of profit to its transportation activities. All the decisions taken by BG bearing on the conditions faced by shippers would be capable of favouring BG's own business.

2.112. We believe, therefore, that no decision as to the timing of so significant a step as removal of the monopoly should be taken, except after the fullest consideration of the advantages and disadvantages of doing so and in the context of our other recommendations below, in particular for the separation of the ownership of transportation and storage from trading. We believe that the conditions necessary for competition to be permitted can be met. It may well be necessary to impose various legal obligations on all competitors, not only BG. This implies changes in the Gas Act to impose on competitors in the domestic market duties that go wider than those currently imposed on authorized gas suppliers, equivalent to some of the duties of the public gas supplier. It will also be necessary to benefit from experience of close monitoring of the balancing of supply and demand by competing shippers, including developments in information and control systems such as metering, and of the separation of transportation and storage from trading, which we regard as necessary for effective competition in all sectors of the market, before the date for removal of the monopoly is finally set. We would expect removal of the tariff monopoly some three to five years after implementation of the measures we recommend below to ensure the full neutrality of BG's transportation and storage from its trading activities (although given the uncertainty over the date when the monopoly should be removed, this is not a factor in our conclusions on transportation and storage).

2.113. There is still uncertainty, once the statutory monopoly had been removed, as to the extent of competition for large parts of the market. BG may, as it argued, continue to benefit from economies of scale in serving lower-volume customers, although some shippers believed that they could establish similar economies of scale by combining gas supply with other utility services. Even if BG were to retain a *de facto* monopoly, removal of the formal tariff monopoly, with tariff rebalancing by BG and the imposition of equal obligations (and quality standards) on all suppliers, would allow the division between the primarily competitive and the *de facto* monopoly sectors of the market to be established by the market on technical and economic considerations, rather than on the basis of the current unavoidably arbitrary and volumetric distinctions between users. This would maximize the benefits of competition, although there would, at least initially, be a continued need for regulation (including price control) in the *de facto* monopoly sector of lower-volume customers. When the Director was satisfied as to the strength of actual or potential competition in all sectors of the market, price regulation could be replaced by more general obligations, such as an obligation to supply customers on the basis of published prices and the prevention of undue discrimination.

2.114. In the shorter term, there would be advantage in redefining the distinction between the tariff and non-tariff markets so as to release further customers to third party supply and thus maintain the momentum to competition. BG said that it would prefer the distinction to be between domestic and non-domestic users. Such a distinction, itself requiring change in primary legislation, may make it more difficult subsequently to reduce the threshold for competition. Domestic users account for over 95 per cent of gas supplied to premises using below 1,500 therms and a somewhat lesser proportion (almost 80 per cent) of gas supplied to

premises using 1,500 to 2,500 therms. As is apparent from Appendix 4.1 of Volume 2, reduction of the threshold to 1,500 therms would allow competition to a further 100,000 non-domestic customers and some 400,000 out of almost 18 million domestic customers; there is clearly scope for competition to reduce prices in this segment of the market.

2.115. The transitional problems resulting from the increase in the number of customers of the independent shippers following the most recent reduction in threshold (which we discuss in paragraph 2.139) are still not fully resolved. The likely extension of BG's competitors' share of the market above 2,500 therms, together with the further development of the balancing regime necessary over the next few years, could impose further strains on the transportation business. In the context also of our other proposals below, we suggest that there should be no further reduction in the tariff threshold below the current 2,500 therms to take effect within the period of the existing tariff formula, ie until April 1997. Loss of market share above 2,500 therms could affect the level of prices required in the remaining monopoly sector to generate any required return, although BG's figures suggested that the effect would be relatively limited: this would be a factor to be taken into account in setting the next tariff formula. We propose, therefore, that the threshold should be lowered to allow competition to supply users of over 1,500 therms a year as from 1 April 1997.

2.116. When we discussed with BG the question of a reduction in the threshold to 1,500 therms, it argued that this would very substantially increase the number of customers whose consumption was close to the threshold. This could lead to an increase in boundary disputes, as to whether individual users would qualify for competition in supply, a problem exacerbated by the extent to which individual customers' consumption levels-particularly those of domestic users-would vary from year to year across the threshold with weather. Problems would arise, whatever threshold was adopted, including any alternative distinction between domestic and non-domestic customers, and it would be necessary to ensure that any objections raised by the trading business, currently operated by BG, to retain its market share did not operate as a barrier to entry. We are convinced that any such problems could readily be overcome. One option, for example, would be for any user accepting a 'take-or-pay' obligation for the threshold level of usage on normal terms to be regarded as qualifying for treatment as a non-tariff customer with access to non-BG suppliers. We see scope for such issues to be resolved locally, through, for example, the local GCC operating a joint panel with BG, subject to guidelines laid down by OFGAS, rather than requiring frequent intervention by OFGAS in individual cases in order to carry out its obligations under the Gas Act.

2.117. Some shippers were concerned that BG's continued retention of the monopoly of the tariff market inhibited competition in the non-tariff market. The recent growth of competition in the non-tariff market tells against this view. There are still considerable opportunities for competitors to increase their market share in supply to users of between 2,500 and 25,000 therms, particularly if the limitation on BG's market share is redefined to include this sector of the market. These opportunities would be enhanced by lowering the threshold to 1,500 therms in 1997, with the expectation of removal of the monopoly three to five years thereafter.

2.118. During the inquiry, BG proposed the establishment of separate contract (BG CT) and tariff (BG PGS) businesses including separation of gas purchases (see paragraph 2.155) but remaining within BG. BG's proposals in this respect could improve transparency and help to detect any cross-subsidy; they would also assist in the development of a market for peak gas, between the contract and tariff trading businesses, as with other shippers. We would, however, expect the distinction between the two markets in any case to diminish over time.

## ***Conclusions on the tariff monopoly situation***

2.119. Our conclusions with respect to supply of gas to users of above 2,500 therms a year were presented in paragraph 2.94. We have considered BG's conduct in operating its monopoly of supply to the tariff market of 2,500 therms and below. For reasons which are explained in paragraph 2.186, we believe that it would be sensible to examine the effects of the present tariff formula and to set out our conclusions on these later on in our report, in the context of other financial matters. Disregarding at this point questions relating to the formula, we have not identified any 'steps (by way of uncompetitive practices or otherwise) being taken by BG for the purpose of exploiting or maintaining' the monopoly situation in relation to the supply of gas through pipes to tariff customers, existing in favour of BG, which we have identified in paragraph 2.3.

2.120. The question of whether there is any action or omission on the part of BG which is attributable to the existence of this monopoly situation is more difficult. In this context, we have reviewed our reasoning in paragraphs 2.64 and 2.65. We have had regard to the fact that the supply of gas to tariff customers forms part of BG's trading business and that this is subject to the commonality of ownership and to integration, and clearly contributes to BG's size mentioned in paragraph 2.64. We therefore consider that BG's conduct in undertaking, in accordance with its present operation and system, its integrated business as both a trader in the supply of gas to tariff customers and the owner of the transportation system over which its competitors must operate is an action on BG's part and one which is attributable to the existence of this monopoly situation. However, we consider that, in the conditions of the tariff market, this action does not constitute a fact, found in the pursuance of our investigations, which operates or may be expected to operate against the public interest. Nor (having regard to the penultimate sentence of paragraph 2.65) have we found any omission on the part of BG which is attributable to the existence of this monopoly situation. These findings, we must emphasize, relate only to the tariff market of 2,500 therms and below, as paragraph 2.94 indicates.

2.121. Nonetheless, we believe that removal of the tariff monopoly, as the Secretary of State intends, would be beneficial, as long as it is done with careful consideration of the consequences. The date for the removal of the monopoly should depend, in our view, on legislative change, to impose obligations for safety, security of supply and social obligations on all competitors in the market. It should also depend on experience of the monitoring of supply and demand by competing shippers in other sectors of the market, including developments of information and control systems such as metering, and of the operation of a separate transportation and storage business. The principal precondition for effective competition in all sectors of the market is, however, the neutrality of the transportation and storage system. The precise date for removal of the monopoly should depend on monitoring by the Secretary of State and the Director of such developments, but we would expect removal of the tariff monopoly some three to five years after the measures we recommend below to ensure the independence between BG's trading on the one hand and its transportation and storage activities on the other—ie between 2000 and 2002. We have proposed an interim reduction in the threshold to 1,500 therms at the end of the current quinquennium in 1997.

## **Production and acquisition of gas**

2.122. Various concerns were expressed about aspects of production and acquisition of gas (see, for example, Chapter 12 of Volume 3), which, it was argued, could adversely affect, or be adversely affected by, competition in supply of gas to users.

2.123. BG's position as a gas purchaser is different from the time of the previous MMC report, when it acquired virtually all gas produced in, or imported into, the UK. The MMC recommended that BG be required to contract for no more than 90 per cent of gas from new fields in the UK Continental Shelf. This policy was adopted broadly as the MMC recommended. The undertaking given to the Secretary of State required BG not to purchase more than 90 per cent of gas on offer to it, including gas imported from foreign sources. BG took the view that it should, nevertheless, not buy more than 90 per cent of any individual field. The undertakings were supplemented by 'swaps' of gas to be subsequently repaid to BG. The OFT estimated that, at the time of its report in September 1991, some 37 per cent of gas from new fields had been acquired by purchasers other than BG. This represented, however, only some 7 per cent of gas acquired for uses in the industrial and commercial contract market other than power generation, a development not foreseen at the

time of the MMC's 1988 report, which was the basis of the OFT conclusion that the 90/10 scheme had not been successful.

2.124. The current release programme requires BG to release stated minimum volumes of gas (at least 500 million therms in the gas years commencing in October 1992, 1993 and 1994, and at least 250 million therms in the year commencing 1 October 1995) and such additional quantities as are necessary to achieve the contract market share targets. BG estimated that competitors supplied around 40 per cent of the firm contract market above 25,000 therms (excluding power generation) in 1992/93, and that 77 per cent of their supply-30 per cent of the firm contract market as a whole-was from purchases of gas independent of BG.

2.125. We received a number of criticisms of the release gas scheme: for example, that gas had been released to too wide a range of buyers, some of whom immediately resold it to other shippers, or released at too high a price, or on unduly stringent terms. The terms of this scheme were agreed between BG and the OFT. Given the uptake of release gas, the ease with which some recipients have sold it on to shippers, and its success in allowing competing shippers to become established, we can see no serious disadvantages from the operation of the scheme, which has clearly achieved its purpose. More difficult an issue is whether the release scheme should be extended beyond the end of September 1996. As we discussed in paragraph 2.49, adequate availability of gas remains a key condition for self-sustaining competition in the supply of gas. BG's forecasts appear to show that there is sufficient gas available for competitors. Any such forecasts are subject to a degree of uncertainty (we noted, for example, the forecast of one major producer of a significant shortage of gas over the next few years, whereas BG forecast a temporary and more limited shortage) but the availability of gas for competitors is clearly much greater than at the time of our previous report. Although the release scheme is not an acceptable or necessary element for sustaining competition in the longer term, we believe that it would be appropriate for the regulator to review, at a later date, whether there is a need for an extension of the scheme for a further short period after 1995/96.

2.126. Some shippers argued that it might be necessary to extend the release scheme, or restrict BG's acquisition of gas, if it were decided to allow competition in the tariff market at a relatively early date. Such measures could have the effect of artificially limiting BG's market share, irrespective of the value of competition. It would be undesirable for there to be any such restraints on BG, or extension of the release scheme, at the time the tariff monopoly is eventually removed.

2.127. A more general concern was raised by some production companies, shippers and OFGAS about the link between BG's trading and its E&P activities, although most third parties from whom we heard were indifferent. BG directly owns some 17 per cent of UK gas production but many other gas producers now themselves have a direct or indirect interest in trading. BG's direct interest in production of this magnitude does not, in principle, cause us concern.

2.128. There were complaints that BG could use its position as a party to product allocation agreements (eg controlling access to pipelines, and onshore terminals) to restrict competitors' ability to bring gas on shore or to increase transportation costs. There was not significant evidence that problems have occurred to date, and BG itself favoured allowing other shippers to participate in such agreements, but problems could occur more frequently in future. Some concern was also expressed to us about the links between E&P and the transportation and storage system, and cases where BG had refused to 'blend' gas or accept it on the transmission system. It is clearly important that there should be adequate provision in future to ensure that gas is accepted for transmission on reasonable and non-discriminatory terms.

2.129. OFGAS and others expressed concern about whether the lack of competition in, and difficulty in accessing, offshore pipelines could obstruct competition or hinder the development of new gas fields. The DTI has powers under the Petroleum and Submarine Pipelines Act 1975 to control the building of offshore pipelines, and is in a position to assist in the resolution of some of the disputes involving offshore pipelines. Most of the problems about which we have heard seem to have been eventually resolved. This issue may well need further consideration by the competition authorities if problems arise in future.

2.130. Some producers argued that uncertainty resulting from recent developments, or indeed our own inquiry, could adversely affect exploration and production. We noted the wide range of opinion from gas producers. Some producers felt that competition increased risk and would inhibit exploration and

production, and were particularly apprehensive about significant restructuring of the industry. Other producers pointed to developments that would not have gone ahead if BG had remained the sole gas purchaser and some suggested highly radical and innovative approaches to the restructuring of BG. On balance, gas producers now seem prepared to be actively involved in the development of a competitive gas market by selling substantial volumes of gas to shippers or direct to end users, and by reacting more flexibly to the more varied market that now exists. None of the proposals we put forward below should, in our view, adversely affect exploration and production.

2.131. Criticisms were also made to us about constraints (both political and physical) on international trade in gas. A working party with representatives from the Government and industry has been examining the prospects for construction of an interconnector to continental Europe, and a prospectus has recently been prepared to invite participation in such a scheme. This could affect both imports and exports of gas, and lead to greater price fluctuations as elsewhere in Europe. As acknowledged in the DGFT's report, however, free international trade in gas would help to sustain competition in the UK gas market and secure access to alternative sources of gas such as Eastern Europe.

## **Transportation and storage**

2.132. We are aware of only a few stretches of onshore gas pipelines in the UK owned by companies other than BG. Virtually all the parties from whom we heard accepted that the transportation of gas could be regarded as a natural monopoly which, due to its cost structure, can only be supplied by one firm, with relatively limited scope for competition. We did, however, receive evidence that there could be competition to provide storage facilities (see paragraph 5.107 of Volume 2).

2.133. The Gas Act provides for determination by the Director, in the event of dispute, of the terms on which transportation facilities are made available by BG. Since the MMC's 1988 report the Director has intervened several times and this has involved one formal determination. The effect of his intervention has been:

- (a) to limit the ROR on assets included in BG's transportation charges;
- (b) to limit the charges for the use of the low-pressure distribution system-BG sought 5p per therm; the OFGAS determination implied a charge of 1p per therm; and
- (c) to influence other transportation terms, eg charges for the use of back-up gas.

2.134. OFGAS's intervention set a framework for negotiation between BG and shippers. In part as a result of this, transportation charges have fallen significantly since the time of our last report. BG's figures in Appendix 5.1 of Volume 2 show that illustrative charges for transmission to customers on the regional transmission system (RTS) have fallen by a third or more in real terms from September 1988; charges for transmission to users on the medium pressure distribution system by about 20 per cent in real terms; and charges for transmission to users on low-pressure systems have halved in real terms.

2.135. The undertakings to the OFT introduced additional measures to ensure open access to BG's transportation and storage facilities. These are reproduced at Appendix 1.2 of Volume 2. In summary they involved:

- establishing a separate transportation and storage unit (BG T&S) with separate accounting and charging;
- producing a discussion document outlining alternative pricing principles for gas transportation, together with a recommendation as to its preferred pricing approach (as was done);
- publishing a transparent pricing system for shippers other than BG, and subsequently for BG Trading, charges and other policies to apply 'equally and even-handedly' to BG Trading and shippers other than BG;

- publishing a discussion document outlining storage services;
- introducing non-discriminatory arrangements for gas conveyance, system reinforcements, customer and site connections and storage, including arrangements with BG Trading and other independent shippers and producers to obtain gas purchasing and nomination rights (though gas would not be purchased by BG T&S for resale to final customers);
- publishing separate audited accounts;
- endeavouring to reach agreement on the basis for regulation of BG T&S;
- agreeing information barriers with the OFT, and to receive from or provide information to the trading parts of BG on the same basis as it deals with other shippers;
- providing quotations within five working days (for sites of over 25,000 therms), and within ten working days for smaller sites if appropriate (BG told us that this is not feasible without the proposed restructuring of charges); and
- providing quotations on a non-discriminatory basis.

These undertakings have formally lapsed but, as stated above, are referred to by BG as still its policy, and it has continued to discuss key elements with OFGAS, albeit with some slippage on the original timetable to the extent that many of the arrangements will not be in place by the time of our report. In our view, however, as we discuss in more detail in paragraphs 2.155 to 2.166, these undertakings would not be sufficient fully to remedy any adverse effects of the current arrangements.

2.136. Most of the shippers from which we heard said that adverse effects were currently occurring. Their complaints are summarized in Chapter 13 of Volume 3. As is apparent in Chapter 16 of Volume 3, BG denied many of the allegations of discrimination and most of the specific complaints forwarded to it. It argued further that when transportation and storage had been set up as a separate unit, and when proposed changes to the pricing structure and operation of transportation and storage were in place, BG CT would be treated on the same basis as other shippers and many of the problems raised by shippers would be resolved.

2.137. BG acknowledged, however, some cases where errors had been made or its procedures had been inadequate. It acknowledged, for example, that problems had occurred in some cases in estimating the capacity available for its competitors when they have sought to supply customers previously supplied by BG. There had also been some delays in responding to requests for site works from shippers' customers, due to more lengthy chains of communication involved and the introduction of information barriers that hindered effective communication between the customer and the region. Such delays, it argued, would be avoided by its separation proposals and recent changes in its siteworks procedures. On the time taken to provide quotations and offers, BG told us that, until September 1992, it had largely achieved its commitment to provide quotations within 28 days. The reduction in the threshold for competition led to a dramatic increase in the number of quotations and nominations dealt with (from 20,000 in July 1992 to almost 150,000 in September), and a temporary deterioration in service levels. BG also acknowledged recent serious delays and errors in meter reading and communicating customer consumption data to shippers, owing to inadequate computer and manpower provision. This was also owing to its having underestimated the substantial increase in workload that occurred in the months following the reduction, in August 1992, in the threshold for competition to 2,500 therms. Among other problems which it agreed had arisen were instances of BG Trading continuing to bill customers when they had transferred to other shippers.

2.138. BG admitted, therefore, that, following the reduction in the threshold for competition in August 1992, and the unexpected increase in workload that resulted, it had recently not provided the standard of service which shippers had a right to expect. Towards the end of our inquiry, shippers told us that the service provided by BG was still unsatisfactory in many respects.

2.139. Many of the problems raised by shippers would, if continued over a period of time, impact seriously on their competitive position, and, unless remedied, would clearly operate against the public interest. We accept that there were recently extenuating circumstances owing to the scale of new entry to supply users of between 2,500 and 25,000 therms, and that BG is making a determined effort to resolve many of these problems. The complaints of third parties are, however, indicative of what could be expected to occur in the absence of adequate arrangements to ensure the neutrality of transportation and storage as part of a business that also included trading, and evidence of the uncertainty in the minds of shippers as to the fairness and efficiency of the treatment they will receive from BG's transportation and storage activities. The remedying by BG of the particular problems that have occurred to date would not, in our view, by themselves, therefore, be sufficient to remedy the underlying problem arising from the joint ownership of BG's trading and transportation facilities. This is essentially one of structure. The increase in competition that has already occurred is, itself, largely a result of the other constraints on BG (namely the requirement to publish price schedules, the market share targets, and the release programme), which have created the scope for competitors to gain business at the expense of BG, despite these problems with transportation arrangements.

### ***Formal findings on transportation and storage***

2.140. It seems to us clear that competition in the supply of gas requires that transportation and storage facilities should be available on non-discriminatory terms. Indeed, BG's original acceptance of the OFT undertakings suggests that it recognized the need for measures to ensure such a regime, which supports our view. We have had regard to the considerations discussed in paragraph 2.139. We have also considered, but independently and in the context of transportation and storage, the factors which led us, in that of the non-tariff market, to the conclusions discussed and formulated in paragraphs 2.56 to 2.68. We have, further, borne in mind, so far as is relevant, the connection between transportation and storage and the tariff market, noted, for example, in paragraph 2.111. It is, however, on the factors mentioned above, in the context of transportation and storage, that our reasoning is primarily based. In particular, we have considered our views as regards competition and BG's conduct in undertaking its business as an integrated business (especially the conflict of interest which we believe this necessarily involves), as set out in paragraphs 2.37, 2.40, 2.41, 2.45 to 2.55, 2.60 and 2.61 and with the same result. The absence of effective neutrality and its perception for transportation and storage and for the provision of access to transportation and storage for shippers on non-discriminatory terms may, we consider, be expected to reduce the effectiveness of competition in the supply of gas and to undermine the benefits of the competition that has occurred to date: this may, in our view, for the reasons given in paragraph 2.55, be expected to inhibit choice, restrict innovation and lead to higher levels of gas prices to users of more than 2,500 therms a year than would otherwise be the case.

2.141. We have, therefore, considered the monopoly situation, relating to the supply of the services of the conveyance or storage of gas, which we have identified as existing in favour of BG (paragraph 2.5), against this background. In relation to section 48(c) of the Fair Trading Act (paragraph 2.6(a) above), we have concluded that no 'steps', for the purpose of that provision, are being taken by BG for the reasons indicated in paragraph 2.63 above. In relation to section 48(d) of the Fair Trading Act (paragraph 2.6(b) above), we have considered paragraphs 2.64 and 2.65. We have, similarly, concluded, in the context of the conveyance and storage of gas, that BG's conduct in undertaking, in accordance with its present operation and system, its integrated business as both a trader in the supply of gas through pipes to non-tariff customers and the owner of the transportation system over which its competitors must operate, constitutes an action, on BG's part, attributable to the existence both of that monopoly situation and to the monopoly situation, which we have also identified, relating to the supply of gas through pipes to non-tariff customers (paragraph 2.3). We have further concluded in the same context and consistently with our reasoning in paragraph 2.65 that BG's failure to conduct its business both, as a trader, in the supply of gas to non-tariff customers and of the operation of the transportation and storage system for gas, in such a way as to secure an effective separation between them, represents an omission on the part of BG which is attributable to the existence of those monopoly situations.

2.142. By parity of reasoning with paragraph 2.66, we conclude that this action and this omission represent, in this context, facts found in pursuance of our investigations under section 49(1) of the Fair Trading Act which may be expected to operate against the public interest, with the particular effects adverse

to the public interest namely to inhibit choice, restrict innovation and lead to higher levels of gas prices to users of more than 2,500 therms a year than would otherwise be the case.

2.143. On the basis of the first approach referred to in paragraph 2.59, we are, therefore, satisfied that we have correctly identified as, respectively, an action and omission, and as facts found in pursuance of our investigations which may be expected to operate against the public interest, the matters set out in paragraphs 2.141 and 2.142. On the basis of the second approach referred to in paragraph 2.59 we also consider that the matters which we have found to be an action and omission are, independently of such findings and whether or not they are correct, facts found by us in pursuance of our investigations under section 49(1), which may be expected to operate against the public interest, with the particular effects adverse to the public interest described in paragraph 2.142.

### ***Other transportation and storage issues***

2.144. A number of other issues about BG's transportation and storage activities were raised with us. As we have discussed, transportation is and will remain a natural monopoly, requiring, as acknowledged by BG, regulation both of the level and structure of charges, and of other aspects of its operation, in particular the balancing regime, which can impact significantly on competition between its users.

2.145. As stated in paragraph 2.135, the undertakings to the OFT required BG to endeavour to reach agreement on the basis for regulation of BG T&S. No formal regulatory system is now applied to transportation and storage, but shippers are entitled to request determination by OFGAS in the event of a dispute. Following one application by a shipper for a determination, OFGAS, as part of an 'intended determination', referred to 4.5 per cent as an appropriate pre-tax CCA ROR on assets for third party transportation charges; although this particular dispute was settled without a formal determination, this return was subsequently adopted by BG in setting transportation charges. We discuss in paragraph 2.186 onwards the question of the appropriate ROR for transportation and storage in the context of the appropriate regulatory formulae. With the significant increase in the level of third party transportation, a more explicit means of regulation is necessary, to include charges to BG's current trading activities. BG proposed regulation of revenue from transportation and storage charges per therm transported by reference to an RPI-X formula, but with an adjustment for any significant differences between actual throughput and that assumed when the formula was set (see paragraph 8.26 of Volume 2), a suggestion broadly accepted by OFGAS. Such an approach would give the transportation and storage business the incentive to minimize costs and expand the system, while reducing the sensitivity of profits to unpredictable variations in demand resulting, for example, from weather. Connection charges would not be included in the formula-but would be subject to regulatory intervention in the event of dispute. BG's approach to the structure of the charging formula (but not for the level of charges, which we discuss in paragraph 2.219 onwards) would, in our view, seem appropriate, although further consideration could be given as to whether storage be included in the formula or be subject to a separate but similar regulatory formula.

2.146. A number of shippers expressed concern to us about the excessive allocation of costs or assets to transportation and storage. There has not yet been any significant dispute between OFGAS and BG on this point, but as long as the businesses remain under common ownership there will be difficulty in establishing full transparency of the costs of operating the transportation and storage business.

2.147. We received a range of views about BG's proposed structure of costs and charges for transportation and storage, including an 'entry/exit' basis of charging, the appropriate means of charging for the local distribution system, and continuation of the current split of various charges between commodity and capacity elements on a 50:50 basis. BG regards the 'entry/exit' approach (see Appendix 5.3 of Volume 2) to charging as necessary if charges are to be applied to its trading activities on an even-handed basis, and if simplified procedures are to be introduced for making quotations and offers. Broadly, this scheme seemed acceptable to shippers which have so far entered the market and its early introduction would be welcome. There is still, however, a large element of subjective judgment in BG's methods for allocating both costs and charges to different categories of customer. Charges to shippers for use of the local distribution system may, for example, be somewhat too low; on the other hand, there may be a case for adjusting the structure of charges to impact more on capacity than commodity requirements in the longer term, which would reduce

charges to some shippers and their customers. BG and OFGAS are agreed on some of the main elements of BG's proposed charging structure, but, in our view, a transportation and storage company in separate ownership from the trading interests of BG has a far stronger incentive to reflect its costs in charges, the more so if price cap regulation remains in force.

2.148. A main concern of users was the significant increase in the level of transportation charges which BG proposed during the course of the inquiry (referred to in paragraph 2.41), although its implementation by BG is to be postponed. A possible change in charges of such a scale in future shows the need irrespective of ownership, for continued regulation of the charging structure, which should include a requirement on the transportation and storage unit not to discriminate unduly between shippers. It also shows the need for BG to provide to users more information, on a regular and more systematic basis, on the costs and bases of allocation underlying charges. As importantly, it confirms the need for transportation and storage charges to be seen as neutral in their impact on BG's current trading activities and those of its competitors. This requires the confidence that charges will equally affect BG and its competitors. Were this not to be so, the profits and viability of BG's competitors would be adversely affected. As long as BG's trading activities are under the same ownership as transportation, the effect of higher transportation charges is chiefly to transfer profit from trading to transportation, with no impact on its overall performance. More importantly, it reinforces BG's position as a dominant incumbent leaving BG the option of accepting lower margins on trading, or more deliberately cross-subsidizing its trading activities from transportation, in a way which it judges will inhibit challenge.

2.149. As discussed in Chapter 5 of Volume 2, establishing a separate transportation and storage unit requires a major revision to the operation of BG's gas supply system to allow competition in the supply of gas (and, where feasible, in other facilities such as storage or meter reading), without putting security of supply at risk, or requiring major expenditure to preserve security of supply. At a late stage of the inquiry, we received expressions of concern from shippers and OFGAS on BG's proposals for the continuing functional responsibility of transportation and storage for system balancing. In particular, BG suggested a 'core:non-core' distinction between users, and rights for BG to renominate supplies to balance the system. These proposals are discussed in more detail in paragraphs 5.122 to 5.177; in principle, the core:non-core distinction attempts to resolve the problem that there is no feasible way for BG of monitoring the supply and demand of individual shippers or their customers, or of quickly stopping one shipper's customers from drawing on another shipper's gas. Hence BG initially proposed that shippers for core customers-those using less than 100,000 therms a year-would be required to use BG's transportation and storage facilities on a 'bundled' basis, subject to a joint charge, and deliver required volumes of gas. Shippers argued that these proposals would prevent them developing alternative and less costly storage facilities, and also give BG too much control over their supplies of gas, jeopardizing their competitiveness.

2.150. BG stressed that its proposed distinction between core and non-core users, of 100,000 therms, need only be a starting point and that its proposals would allow flexibility also for core users. BG agreed, for example, that if a shipper established that it could deliver more at the beach, it could choose not to take the seasonal storage allocated to it in respect of core load, or could resell or reassign the Rough capacity to BG's transportation and storage business. In our view, the proposed approach should allow more for the different capabilities of shippers or their customers, for example customers with dataloggers, and to ensure that there is no unreasonable inhibition on the development of new suppliers, in particular of storage and, where feasible, other balancing and transportation facilities. Our attention was drawn to the development in the USA of 'market hubs' and reselling of capacity through electronic bulletin boards (see paragraph 5.171), which may form part of future development in the UK. Activities such as meter reading should also be subject to competition, where feasible, to increase the range and frequency of information relevant for balancing purposes. As long as transportation and storage remains under the same ownership as trading, BG is, in our view, unlikely to develop its approach constructively and neutrally, without damaging the prospects or confidence of independent suppliers.

2.151. We also received complaints that BG had acted anti-competitively against independent pipelines. BG said that it had not brought forward any pipeline schemes or reduced prices in response to competition: it explained one specific case put to us, in which it had reduced prices at a time a new entrant was tendering for a contract, by reference to the general changes in its methodology for transportation charges at that time, in particular the introduction of an allowance for 'back-haul' (see also paragraph 16.285 of Volume 3). It

further argued that independent pipelines were uncompetitive mainly due to the higher ROR required on investment. The evidence provided by BG suggests that its conduct could not be regarded as anti-competitive or against the public interest in this respect.

2.152. We were told, however, that procedures for BG to construct new pipelines were easier than for its competitors. BG told us that any delays in the planning or construction of pipelines, by, for example, any requirement that it adopt the procedures of the Pipelines Act, could inhibit its ability to meet its obligations as a public gas supplier. In our view, if independent pipeline operators are prepared to take on the same duties and obligations as BG, they should also have the same rights and privileges, and be subject to the same approval procedures as BG for construction of pipelines. We understand that this question is under current consideration by Ministers (see paragraph 1.22 of Volume 2).

2.153. The concerns raised in these areas confirm the need for a new regulatory framework for transportation and storage-building on the undertakings given by BG to the OFT. They also, however, reinforce the need to ensure the neutrality of the transportation and storage system.

## **Remedies**

2.154. We have concluded, in paragraphs 2.66 to 2.68, 2.94, 2.142 and 2.143, that there are facts which may be expected to operate against the public interest, namely:

- (a) BG's conduct in undertaking, in accordance with its present operation and system, its integrated business as both a trader in the supply of gas through pipes to non-tariff customers and the owner of the transportation system over which its competitors must operate; and
- (b) BG's failure to conduct its businesses both, as a trader, of the supply of gas to non-tariff customers, and of the operation of the transportation and storage system for gas, in such a way as to secure an effective separation between them.

We have also concluded that these facts have the particular effects, adverse to the public interest, that they may be expected to inhibit choice, restrict innovation and lead to higher levels of gas prices to users than would otherwise be the case. It is, therefore, our duty to consider what action (if any) should be taken for the purpose of remedying or preventing those adverse effects and, if we think fit, to include in our report recommendations as to such action. In doing so, in view of the nature of the facts which we have described in this paragraph and the related conflict of interest to which we have referred, in particular, in paragraph 2.66 (and also relevant, therefore, to the findings expressed in paragraphs 2.94, 2.142 and 2.143), we have thought it proper to have regard particularly to remedies of a structural nature.

### ***BG's proposals for separate operation of transportation and storage***

2.155. An appropriate starting point in considering options for remedying the adverse effects are BG's own proposals, on the lines agreed with the OFT, for establishment of transportation and storage as a separate unit of BG, and whether those are sufficient to allow effective and self-sustaining competition in gas supply. BG developed these proposals further during the course of the inquiry. It proposed establishing four separate units within the UK gas business still under the ownership of BG:

- BG PGS, supplying gas to tariff customers;
- BG CT;
- appliance sales, installation, and maintenance; and
- BG T&S;

BG did not propose that these units would be separate subsidiary companies, but did not object in principle to their being so. It believed that this could require legislative change. The separation between tariff trading and contract trading within BG would, BG argued, be sufficient to avoid conflicts of interest, while keeping costs down and retaining for domestic users the benefits of 'one-stop shopping'-ie the availability to the public of a single telephone number able to respond to any emergency calls or enquiries relating to any aspect of gas supply. Except for retaining a degree of co-operation and co-ordination at the district offices between the BG PGS and BG T&S, BG T&S would be a separate free-standing business unit within the group, dealing at arm's length with the BG trading units and other shippers.

2.156. We put to BG the arguments of OFGAS and other parties from whom we received evidence (see, for example, Chapters 11 to 15 of Volume 3) that a separate transportation and storage unit, as long as it remained under the same ownership as BG's trading activities, would not be sufficient to ensure access to transportation and storage by all shippers on fair and non-discriminatory terms. Among the potential conflicts of interest argued by OFGAS and others were that, to serve the interests of its shareholders, the company would have incentives to give undue preference to its own supply business, and could discriminate in price and non-price terms against competitors; investment and other decisions would be distorted by the effect of competition on the supply business; cost allocation would be influenced by the perspective of the business as a whole; the Board and senior management would have access to information about BG's competitors; and the lack of confidence by shippers and users that the unit would operate even-handedly would itself adversely affect competition.

2.157. BG argued (see Chapter 16 of Volume 3) that BG T&S would not be in a position to give undue preference to its own supply business. A well-defined regulatory framework would be established to ensure that all shippers would be treated on an even-handed basis: any complaints about discriminatory treatment could be dealt with by the regulator. Matters such as cost allocation or pricing structure, for example, were also subject to discussion with OFGAS and could not, BG argued, prejudice other shippers.

2.158. BG argued that, with its businesses separate and free-standing, investment decisions would be taken on their own merits in relation to each business alone, subject also to earning a satisfactory ROR. Each of the units would have a separate Managing Director who would not be a Board member: in these circumstances, the Managing Director and managers in each business unit would be clearly responsible for the performance of the business unit in which they operate and there would be full allegiance to that business unit and a commitment to its success.

2.159. On information flows, BG argued that its proposals would ensure that BG CT would gain no competitive advantage from being owned by BG: information about individual competitors would be retained within each unit, and so too would much of the strategic information about the plans of each of the units. The management of each unit would have total responsibility for the unit and its profitability, without reference to other businesses or the corporate centre. The Managing Directors of the separate units would report to separate Board members; Gas Business projects which needed to be approved by BG's management executive would exclude sensitive information on prices and projected sales volumes growth by named shippers, and would not be available to the management of other regulated businesses; similarly, detailed budgets or budgeted information on any one regulated business would not be available to employees within another business. This type of structure, BG argued, would combine the required measure of control of the company's operation by the Board, while ensuring that the necessary information barriers (or 'Chinese walls') are installed and maintained between the businesses. The movement of individuals between jobs which involve knowledge of competition-sensitive information would also be limited.

2.160. We accept that BG has put considerable effort into formulating a framework for operation of a separate transportation and storage unit. Its proposed approach, notably to charging its own trading activities and competing shippers on an even-handed basis, and to the balancing of supply and demand by the separate transportation and storage unit, would represent a significant change from its operation as an integrated gas supply business.

2.161. In our view, BG's proposals for a separate transportation and storage unit under the same ownership as its trading activities may alleviate but cannot resolve the inherent conflict of interest that arises from BG T&S owning facilities on which independent shippers are fully dependent while competing with

BG T&S's own parent company. This conflict of interest would be manifest in many ways. The BG Board would have to be involved in the strategy of BG T&S, and we find it inconceivable that it could do so without taking into account the interests of its other subsidiaries. Even without such an overt influence, the ultimate responsibility of BG T&S must be to the interests of BG as a whole.

2.162. 'Chinese walls' below the level of senior management are likely to be insufficient, particularly because they would obstruct flows of information that naturally occur and would continue to occur; hence there would be pressure to circumvent them. They may in time be expected to prevent desirable information flows that would otherwise occur between independent businesses, hence complicating decision-taking and reducing efficiency. Moreover, the natural promotion of managers within a single integrated structure would itself involve, over time, the weakening of such barriers.

2.163. We further believe that the separation proposed would not be sufficient to allow the change in culture at all levels of BG T&S, which the Chief Executive acknowledged was necessary if there is to be even-handed treatment of BG's trading and contract activities and its competitors, particularly among middle managers used over many years to working together and giving priority to the interests of BG as a group. The problem would become particularly acute if, as we suggest above, there may in time be a further reduction in, or eventual removal of, the tariff monopoly which would threaten BG's core trading business.

2.164. We see a wide spectrum of decisions, for example matters of pricing, investment, cost allocation, and operation of the network such as the regime for balancing supply and demand, which involve large elements of judgment. As long as BG remains an integrated business, even if its units are run separately as BG has proposed, these decisions are likely to be influenced by the interests of BG Trading. There may be no overt or intentional discrimination. Such a situation is likely to involve constant appeals to the regulator, and lack of confidence on the part of both shippers and the regulator that decisions are being taken on an objective basis, rather than from the perspective of favouring BG's contract and trading interests. The regulatory uncertainty and instability of which BG and others have complained would be perpetuated.

2.165. BG's proposals rely on the role of the regulator to resolve disputes on such key issues. The regulator, in contrast, doubts his ability to carry out his duties adequately without separation of the ownership of trading from that of transportation and storage. In our view, greater ease and clarity of regulation is itself an important argument for adopting a fundamental structural remedy to the adverse effects identified, which result from the conflict of interest inherent under common ownership. Separation of ownership is important in terms of the generation of adequate information, both for shippers and the regulator, eliminating incentives to suppress and distort information relating to individual sectors. By separating ownership the established boundaries of the businesses would also prevent any shifting of financial returns between sectors.

2.166. We comment further on BG's proposals in paragraph 2.171 below.

### ***Other remedies***

2.167. We considered a wide range of remedies put to us by other parties. One suggestion to us was that BG's trading activities should be divested, not as one business, but as several, in order to encourage potential competition between regional (or district) gas trading companies, particularly in the domestic market when that should finally be liberalized: a related option put to us involved the franchising of such local trading companies. We believe that such options are of much less significance than the primary move of separating the ownership of trading from transportation and storage. Any such measures would also, in our view, involve excessive costs in restructuring the industry, the discounted present cost being estimated by BG (discounted at the 10.8 per cent pre-tax discount rate proposed by BG) at some £2.3 billion over ten years. These estimates may, in some respects, be on the high side, although they do not take account of additional expenditure BG believed necessary on storage (see Appendix 8.8 of Volume 2 and paragraph 16.480 of Volume 3). In our view, such measures would be unreasonably prejudicial to the interests of BG and its shareholders and of limited benefit to consumers. As long as the neutrality of the transportation system can be secured, there will, in our view, be no shortage of potential competitors and no need, therefore, for the further subdivision of BG's current trading activities.

2.168. A further option suggested to us was for the national transmission system, plus, possibly, the RTS, to be separately owned from a series of regional or district integrated distribution and trading companies. Such an approach would be similar to that of the US 'City gates' system, and to the arrangements in some parts of Europe. This fails to make the separation that we believe essential between distribution and trading at the local level. In our view, therefore, it does not remedy the adverse effects we have identified and would also be of limited benefit to BG's customers, and prejudicial to the interests of BG and its shareholders. BG also pointed to its calculation of the much greater costs of such an approach—a net present cost of some £2.9 billion over ten years—although this calculation may again be on the high side. We also noted the view of the Health and Safety Executive that safety management is helped by the integrated management of the transportation and storage system and better communications.

2.169. It was also suggested to us that there should be separate ownership of seasonal storage facilities such as Rough. We received evidence from competitors that they would be able to develop competitive storage facilities. We do not see storage as a natural monopoly. It is important, therefore, that there should be separate charging for transportation and storage services to allow shippers choice of storage facilities and access, should they so choose, to competing facilities. We find it difficult to accept that there is currently a need for separate ownership of BG's existing storage facilities from transportation: they are used not only to meet seasonal imbalances in demand, but to provide security of supply against technical difficulties (eg problems with offshore supplies) throughout the year. In our view, BG's transportation and storage business should be given the means necessary to ensure supply, and reduce the costs associated with any restructuring of the industry. BG's trading business might, under separate ownership, wish to develop or use competing storage facilities, as may other traders: but as long as BG T&S remains the dominant supplier, the existing facilities, in particular Rough, must remain under separate ownership from BG Trading, and subject to regulation. We also see advantage in a requirement that BG's seasonal storage facilities produce separate accounts as a means of ensuring that there is no cross-subsidy from transportation.

2.170. It was also suggested to us that restructuring should extend to the other parts of BG: for example, separation of BG's gas purchasing or its exploration and production activities. Such options go wider than the adverse effects we have identified, although, as suggested in paragraph 2.128, there may be aspects of BG's involvement in gas production which may require further consideration if they give rise to problems in future. A further area of concern was the use of cash flow from BG's UK gas supply activities, the bulk of which will continue to relate to its ownership of transportation and storage facilities, to diversify into activities overseas. We have seen no evidence that BG has, to date, underinvested in the UK, nor that the UK gas supply business has been adversely affected by the growth of BG's overseas interests: such diversification is, therefore, primarily a matter for BG's shareholders, and may indeed be to the benefit of other UK companies. It is not, however, possible to isolate the effect of diversification on BG's cost of capital, which may affect the UK gas supply business: we note the reduction in BG's credit rating due, in part, to its diversification overseas and to the borrowing which has accompanied this. This effect has so far been limited, but reconsideration may be necessary in future. Similarly, consideration by the regulator will be necessary in future of the relationship between BG's UK and overseas activities, should any evidence emerge of any failure by BG to invest in transportation and storage in the UK at reasonable RORs.

### ***The proposed remedies***

2.171. We discussed in detail BG's own proposals for operation of transportation and storage in paragraphs 2.155 to 2.165. These already go much of the way to separating the operation of transportation and storage from trading without putting security of supply, or safety at risk. They involve, for example, evolution of a new regime for balancing supply and demand to substitute for the previous integrated gas supply system. That new balancing regime would also allow full separation to be implemented without putting safety or security of supply at risk. Among their other features, the BG proposals involve a further degree of separation than at present. In our report under the Gas Act, in a different legal context from that of the Fair Trading Act, we have, for reasons explained in that report, recommended that the conditions of BG's Authorisation should be modified to establish its transportation and storage business, and its trading business, as separate units.

2.172. In the present report, however, we must have regard to the wider remedial scope of the Fair Trading Act (see, particularly, section 56 and Schedule 8). In this context, we consider that a more fundamental remedy can, and should, be implemented: separation of the ownership of BG's gas trading (both tariff and non-tariff) activities from its transportation and storage activities would directly remedy the adverse effects we have identified.

2.173. We considered a more limited option, for separation only of contract trading from transportation and storage. Separation of contract trading alone from transportation and storage, leaving tariff trading partially integrated with BG transportation and storage, would still leave conflicts of interest, with BG being likely to favour the interests of its tariff trading arm over other suppliers' contract trading business. A full separation between contract and tariff trading would, in our view, also prove undesirable given the current importance of the availability of interruptible gas from the contract business for peak supply to the domestic market, although, as mentioned in paragraph 2.118, there may be some benefit from some operational separation of the two businesses. The distinction between tariff and contract trading would, moreover, fade over time, if the monopoly is reduced, or removed. A separate transportation and storage business would have a strong interest in developing the means to allow competition in tariff trading, rather than argue against or even obstruct such developments. A full separation of the contract trading from the tariff trading businesses would also impose probably unnecessary rigidities on the future evolution of the market. In our view, therefore, separation of both the tariff and non-tariff trading activities of BG from its transportation and storage activities is necessary to remedy the adverse effects identified.

2.174. Such a structure at the level of the local distribution system would differ from that of any other gas industry in the world, but no such measure should or need be carried out in such a way that would put at risk security of supply or safety, or impose undue costs on BG or its customers. Working arrangements could also, in our view, readily be devised between the transportation and trading businesses that would prevent any reduction in service to users, for example by continuing to provide the 'one-stop shop', referred to in paragraph 2.155, were it advantageous to do so, although some changes from the present arrangements might be inevitable. We do not, therefore, accept BG's argument that there would be disadvantages to users from full separation of the businesses: on the contrary, users will benefit from the maintenance of competition and choice.

2.175. Total separation between trading on the one hand, and transportation and storage on the other, would give rise to additional costs, compared with BG's proposals, but considerably less than some of the other options put to us. BG's own proposals, for establishing transportation and storage as a separate unit of BG but still under the same ownership as trading, themselves involve significant costs, which it estimates at some £50 million a year, a discounted present cost of £330 million spread over the next ten years. These costs primarily result from the need to establish and operate a supply and demand balancing regime: a regime which would also apply, without any additional cost being incurred, in the event of full separation. Nevertheless, BG estimates (see Appendix 8.8 of Volume 2 and paragraph 16.475 of Volume 3) that full separation of the ownership of transportation and storage from trading could give rise to costs of up to £130 million a year, a discounted present cost of some £870 million spread over ten years, mainly from the need to provide additional accommodation at the district and depot level, sub-optimal use of labour due to some loss of cross-functional flexibility, duplication of corporate overheads, increased transaction costs, and potential loss of the benefit associated with BG's Supplies and Transport policy (eg less discount on purchase of vehicles). We have not been able to make an independent estimate of such costs, which BG acknowledges are uncertain, and we would be surprised if there was not scope to reduce the costs or to develop offsetting savings under separate ownership, in addition to the unquantified benefits to users from the development of self-sustaining competition such a measure would bring about. On BG's estimates, therefore, the additional costs of divestment compared with those of its own proposal could be up to £80 million a year over ten years. This relates to the extra cost of a step we consider fundamental, namely divestment of its trading business. Although sizeable, this must be seen in the context of the annual turnover and operating profits of the UK gas supply business, currently some £8 billion and £1 billion respectively.

2.176. We considered whether the separation we believe necessary should be brought about by divestment of BG's trading, or of its transportation and storage activities. It is clearly important that each business must be viable. When we put the possibility of divestment hypothetically to BG, it strongly favoured divestment of trading. BG argued that divestment of trading rather than transportation would

enable it to continue to benefit from the relationship between the bulk of its UK activities (including its transportation and storage expertise) and its activities overseas, and be least prejudicial to the interests of its shareholders. We accept this. In our view, divestment of trading should also have only limited impact on research and development, from which BG argued it currently derived significant benefits. Given the concerns expressed to us and summarized in paragraph 2.170, however, effective regulation would require provision for 'ring-fencing' of the accounts of the transportation and storage business and for it to be run in all respects as a separate subsidiary of BG. The transportation and storage business, of which transportation would remain a natural monopoly, would continue to be subject to regulation by the Director and to general competition legislation: separation of accounts is necessary to monitor the cash flows of the business to ensure that resources are not unreasonably used elsewhere.

2.177. We have, therefore, concluded that the adverse effects we have identified may be adequately remedied by requiring BG to divest the ownership of its UK gas trading business. We would consider it reasonable for BG to decide on the basis of the interests of its shareholders on the most appropriate method of divestment, which could be by demerger, flotation or disposal, and it should also be primarily for BG itself to determine any other activities to be allocated along with trading: the details of divestment would, however, be subject to the approval of the DGFT, in consultation with the Director. A separate trading business would, in our view, be a viable entity, and would be made stronger by continuing, in the short term, to benefit from the maintenance of BG's tariff monopoly below 1,500 or 2,500 therms. Separation of trading from transportation and storage will provide a sound base for effective competition when the monopoly is ended. If our recommendations are adopted, there is likely to be a period after ownership of the trading activities is divested from BG before this finally occurs. We recommend that the measures requiring a divestment be taken as soon as possible, to enable divestment to have been fully completed at the latest before the expiration of the current tariff quinquennium (31 March 1997).

2.178. Such divestment would require the use of the order-making powers of the Fair Trading Act (sections 56 and 89 and Schedule 8) and amendments to the Gas Act, in particular to allow for the apportionment of the responsibilities of a public gas supplier between a separate trading business and a separate transportation and storage business. We anticipate that this might require the creation of new authorizations for the companies concerned and also that an order for divestment might involve consequential modifications of the conditions of BG's existing Authorisation (Gas Act, section 27). As we have mentioned, modifications, which we have recommended in our report under the Gas Act, are noted in paragraph 2.185 below.

2.179. We recognize that the preceding paragraph is expressed in relatively general terms but, in the circumstances, we believe this to be highly desirable and inevitable. Necessary as we consider it to be, the divestment is bound to be a highly complex operation including numerous preparatory measures, prior to and in addition to the divestment itself. It will involve the participation of BG and, as we make clear, several authorities, acting under different powers. We have sought, necessarily on a hypothetical basis, to canvass a wide range of views on how the substantive remedy might best be given effect, including from BG and OFGAS. The more detailed recommendations which appear below are, we believe, realistic, both in substance and, where this applies, as regards the methods suggested. Nevertheless, we should emphasize that our principal concern is with the effective achievement of the remedy described in paragraph 2.177, rather than with the adoption of any particular methods which may be recommended below, whose details may necessarily be subject to amendment in the light of the future course of events.

2.180. It is also the case, as noted in paragraph 2.185, that, in our report under the Gas Act, we recommend a number of modifications to the conditions of BG's Authorisation. We further recognize that the matters dealt with in this way may, in some instances at least, be capable of being dealt with under the provisions of the Fair Trading Act, in particular of section 89, relating to the making of interim orders, where the Secretary of State (among other matters) has under consideration the making of an order under section 56. In what follows, we do not attempt to analyse the extent to which such remedies may be dealt with concurrently, this being primarily a question for consideration by and collaboration between the respective authorities concerned. These comments apply equally to the recommendations discussed in paragraphs 2.215 to 2.217.

2.181. In the first place, the divestment of the ownership of BG's UK gas trading business could, for example, include the divestment of functions such as gas purchasing, including the existing gas contracts, customer accounting, many of the essential services (such as safety services on the customer side of the meter), marketing, and perhaps part of research and administration. The transportation and storage business remaining with BG would retain all onshore pipelines and associated assets at and from the BG reception terminals to customers' meters, together with all onshore and offshore storage facilities. We would, for example, expect the appliance sales, installation and maintenance business to fit most easily with gas trading; E&P and Global Gas may continue to benefit from links with transportation and storage, although E&P would be unable to contract directly with customers in the UK and we would not wish to preclude the trading business from having some production interests. A relatively small part of BG's assets would, therefore, be divested as part of its trading business: but it would be for BG to ensure that trading took over the benefits of BG's gas purchasing contracts. This would provide trading with considerable strength, but an advantage that would diminish over time as its existing contracts expired.

2.182. Total separation of BG's trading from its transportation and storage activities would itself require a more formal system of regulation of transportation and storage, including its relationship with the former BG trading activities. Without this, in any degree, affecting our view that the divestment recommended in paragraph 2.177 is the substantive remedy, under the Fair Trading Act, we consider it sensible to regard the implementation of this, together with the preparatory measures, which must necessarily precede it (see paragraph 2.179 above), as part of a single process. Some of these measures may be appropriate both to its earlier and later stages.

2.183. In particular, it appears to us that the conduct of BG's transportation and storage activities will need to be subject to various rights or duties: for example, the current various obligations to supply will need to be apportioned between the trading business and the transportation and storage business, with the obligation relating to the supply of gas imposed on the trading business, and obligations to meet all reasonable demands for capacity and to provide new connections to the system on the transportation and storage business. Additional obligations related to balancing may need to be imposed on the transportation and storage business. There would need to be imposed, on the transportation and storage business and on the trading business separately, the relevant duties currently imposed on BG, for example accounting conditions, provision of information to the Director and safety requirements. Amendments to the Gas Act appear necessary to apportion such rights and duties currently relating to the public gas supplier between the trading business and the transportation and storage business, and also to provide for separate authorizations for the two businesses. (Other possible amendments to the Act are canvassed in paragraph 2.184.)

2.184. The points set out in the preceding paragraph are of a general nature. Other, more specific, provision would clearly be requisite, in both the shorter and longer term, including:

- (a) ensuring that while the trading business and the transportation business remain in common ownership, the latter can be organized and operated as a wholly separate unit, or alternatively as a subsidiary company although it is our understanding that primary legislation would be necessary to secure this (and see, further, (j) below);
- (b) regulating the charges of the transportation and storage business: in paragraph 2.145, we agreed in principle with regulation of transportation and storage according to an RPI-X formula, subject to a volume adjustment, but with consideration of whether there should be a separate formula for storage. We return in paragraph 2.219 to the factors which should be taken into account in setting such a formula;
- (c) ensuring that any information supplied to the transportation and storage business should not be made available to or used by or to the advantage of the trading business. Appropriate arrangements should be made at Board level to safeguard the confidentiality of transportation and storage information which could be of advantage to the trading business;
- (d) requiring the transportation and storage business to publish regularly information on the costs of providing 'unbundled' transportation and storage services (subject only to the need to protect the

commercial interests of users of these services) and the methods by which such costs are translated into prices;

- (e) placing such requirements on the transportation and storage business as are necessary to maintain security of the system, and to balance supply and demand, while ensuring fair and non-discriminatory access to the system for all users. Such requirements should include as a minimum:
  - (i) through appropriate contract provisions, to allow the transportation and storage business to acquire whatever information is necessary for purposes of monitoring security of supply (without prejudicing the confidential information of the traders) and balancing supply and demand for gas;
  - (ii) through appropriate contract provisions, to allow the transportation and storage business to nominate, renominate or interrupt receipt of supplies at terminals, or to interrupt supplies to customers as necessary to maintain security of supply. These should allow development in the longer term of market-based mechanisms for system balancing;
  - (iii) to prevent the transportation and storage business from buying or selling gas except for system balancing and own-use purposes; and
  - (iv) to require the transportation and storage business to offer 'unbundled' transportation and storage services for supply to certain categories of users with reference to volume or factors such as whether users have metering equipment capable of giving daily readings; and through appropriate contract provisions to require shippers to demonstrate that they have adequate access to peak supplies or storage or are entitled to interrupt supplies to customers sufficient to ensure that each shipper can balance its expected supply and demand taking account of weather variation. In this context also, the provision appropriate in the short term should allow flexibility in the light of operational experience;
- (f) an obligation on the transportation and storage business through its system to facilitate access to independent storage or pipeline facilities on fair and reasonable terms. We suggest such a provision be supplemented by the Secretary of State taking measures to ensure that independent pipeline operators who become subject to the same or similar duties and obligations as BG should also have the same rights and privileges and be subject to the same procedures for approval of construction of new pipelines;
- (g) an obligation on the transportation and storage business to enable there to be competition in the provision and reading of meters in such a way as would safeguard the legitimate interests of the transportation and storage business, users and other shippers;
- (h) a requirement for the charging structure for transportation and storage and for balancing and other network operations to be subject to the Director's approval in the light of OFGAS's consultations and to ongoing regulation by him. It is nevertheless possible that, on further examination once an overall charging structure had been approved by the Director, section 19 of the Gas Act might require amendments;
- (i) the placing of the transportation and storage business under a general requirement not to discriminate unduly between shippers. While not, we consider, dependent for this on its efficacy, such a general requirement might usefully be included in primary legislation;
- (j) the 'ring-fencing' of a separate transportation and storage unit (or see (a) above, subsidiary company) including (but not limited to) requirements to:
  - (i) create separate management structures and terms of employment and allocate employees (on a non-transferable basis) to transportation and storage;

- (ii) physically separate to the maximum extent possible all common services, eg information technology systems, databases, treasury functions, career management, accounting and financial services, operational services and buildings at national, regional and district (including depot) level;
  - (iii) publish separate accounts to include as a minimum profit and loss accounts, balance sheets and cash flow statements;
  - (iv) have any contracts or agreements with the other parts of the business on fully arm's length bases with any cross-charging to be kept to a minimum; and
  - (v) report to OFGAS should, in the view of the management of the transportation and storage business, the resources available to it be inadequate to discharge the statutory and other duties in respect of providing transportation and storage services;
- (k) to require the transportation and storage business to participate in a representative forum for users of transportation and storage services to discuss matters of common interest, such as BG's investment programme, any research and development expenditure associated with transportation and storage, and BG's costs and charges;
- (l) to institute quality of service standards for transportation and storage (like (a) and (h) above, this too might prove to require primary legislation); and
- (m) to provide for local resolution of disputes concerning customers' entitlement to competitive supply above the monopoly threshold.

The precise form and timing of the remedies recommended will need to be determined by the authorities concerned, in the light of any consultations with BG and others. We hope that, as far as possible, they will proceed by agreement with BG and that, also as far as possible, the arrangements underpinning the separation of ownership may be able to be introduced in advance of the necessary formal steps.

2.185. We would add that in our report under the Gas Act, we have recommended that the conditions of BG's Authorisation should be modified in respect of matters referred to in paragraph 2.184 above: full details may be found in paragraphs 2.131 to 2.136 of Volume 1 of that report.

## **The tariff formula and financial considerations**

2.186. We stated in paragraph 2.98, in the context of supply of gas to tariff customers, that it would be appropriate to consider the tariff formula in the context of related financial issues. We referred in that paragraph to BG's argument that the current tariff formula would now provide inadequate profitability in view of recent regulatory developments. This argument has to be considered, in our view, in the context of other financial issues that arise in the inquiry, including the ROR appropriate for transportation and storage, relevant in the context of the separate regulation of such a business and of our other recommendations for restructuring the business. The discussion that follows below, therefore, is of relevance both to further aspects of the remedies that have just been considered, and also to the operation of the tariff formula which, as we indicated in paragraph 2.119, seem most conveniently considered at this point, but also takes account of some of the other matters considered in paragraphs 2.83 to 2.118. Both BG and OFGAS indeed said that they were looking to the MMC to resolve BG's argument that the ROR currently underlying transportation charges is too low.

2.187. The regulatory formula for the five-year period from April 1992 represents a significant tightening to RPI-5, as compared with the RPI-1 sought by BG. The background to the RPI-5 formula is discussed further in paragraphs 8.11 to 8.19 of Volume 2. It was designed by OFGAS to give a CCA ROR of between 5 and 7 per cent on the assets allocated to the tariff business (both the assets specifically related to tariff trading activities, but also the transportation and storage assets allocated to trading sales). This compared with the higher figure of 9.5 per cent return on assets sought by BG. The formula also included a more

demanding treatment of gas costs in the price formula. Formerly these had been fully passed on to users, but allowable gas costs were now based on an index of factors determining gas costs rather than the costs actually incurred by BG, less 1 per cent a year (see also paragraph 4.56 of Volume 2), requiring BG to minimize the level of its gas costs. In setting the formula, OFGAS also assumed annual savings in non-gas costs of 2.4 per cent (compared with the 0.4 per cent a year which BG argued to OFGAS was the maximum attainable). Partly in response to the new regulatory formula, BG developed plans for reduction in staff numbers by some [ \* ] (almost [ \* ] per cent) over the next five years (also see Table 9.6), although in a more competitive environment it may well have come under pressure sooner to have improved efficiency to this degree, or even to a greater extent than it currently plans.

2.188. Nevertheless BG projects (see Table 8.3 of Volume 2) a decline in CCA ROR on the gas supply business as a whole to below 4 per cent, which it attributes to loss of share of the contract market and of the tariff market over 2,500 therms, and to a number of economic factors. RORs would be further reduced by any costs associated with the divestment of the trading business, as we have recommended. BG's projections also imply that the trading business could make a loss if its charges for use of the transportation system were based on the ROR currently adopted by BG. BG argued that it was necessary to amend the existing tariff formula from the present RPI-5 to RPI-1, but with pass-through of transportation and storage charges, and hence the formula would be applied to only about 20 per cent of the revenues of the trading activities. The overall level of transportation and storage charges should, in BG's view, be subject to a separate RPI-3 regulatory formula. In both cases, BG proposed that the formulae should apply from April 1992, requiring an increase in price above the present levels: see Appendix 8.6.

### ***Financial considerations***

2.189. In considering these issues, among the factors we should take into account is to ensure that BG's UK gas supply activities as a whole, or as separate companies after any divestment, can attract capital to finance new investment. We regard this as relevant to the references under the Fair Trading Act. It is also relevant to the criteria for considering the public interest under section 4(1)(b) of the Gas Act. Additionally, existing shareholders must be allowed a reasonable return on their investment in the company, but not an excessive return at the expense of the interests of consumers (a further criterion of the Gas Act). Any regulatory system must also continue to provide incentives to improved efficiency.

2.190. In our view, ROR is only one of a number of factors to be taken into account in considering an appropriate level of profitability or a future level of charges. The ROR arguments have to be considered both in relation to the cost of capital on new investment and returns on existing assets. It is also necessary to consider the appropriate value for assets to which the ROR should be applied, particularly when, as was the case with BG, the CCA book value of the assets was considerably greater than the price paid for the company by shareholders. The cash flows generated are equally relevant in considering financial viability.

2.191. The various arguments presented to us on ROR are summarized in Chapter 7 of Volume 2: it should be noted that the arguments have been expressed, following BG's accounting policies, in RORs on a CCA basis, which would be significantly greater on the HCA basis used by most UK companies. BG argued that it requires a real pre-tax ROR<sup>1</sup> of 10.8 per cent on new investment in transportation and storage, representing its estimated cost of capital. Taking account of the divergence between the book value of its assets, and the shareholders' valuation of the company, BG argued that it required a CCA return of 6.7 per cent on existing assets, and that at a lower ROR it would significantly reduce investment. OFGAS, by contrast, previously suggested a CCA ROR of 4.5 per cent as appropriate for third party transportation charges, previously a relatively small part of the business and now of great importance, particularly in the context of any separation of transportation and storage from BG's trading activities. The present tariff formula was set by OFGAS on the basis of allowing BG a 5 to 7 per cent CCA ROR on the tariff business. During our inquiry, OFGAS initially argued for a 2.5 to 5 per cent CCA ROR on transportation and storage, and, after further research, reduced the proposal to a CCA ROR of between 2 and 4 per cent.

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\*Figures omitted. See note on page iv.

<sup>1</sup> A 'real' ROR is one adjusted for inflation. A 'current cost' return is one adjusted for specific price changes using CCA conventions.

2.192. Both BG and OFGAS put forward well-researched and highly technical arguments in support of their positions on ROR. Both were intellectually respectable, but we find neither to be compelling. BG relied heavily on cost of capital calculations based on the Capital Asset Pricing Model (CAPM) approach, as, to a lesser extent, did OFGAS which also used comparisons with other companies' RORs. An important step in the calculation of cost of capital was the use of CAPM to derive BG's beta coefficient—the relationship of BG's risk to general market risk: see Appendix 7.2 of Volume 2. For this step BG and OFGAS derived very similar values for beta and also agreed that the beta derived for BG as a whole was applicable to transportation and storage, which accounts for the bulk of the assets of BG. They did, however, adopt very different, but arguably equally valid, assumptions on some of the other elements used in calculating the cost of capital, namely the market ROR to which beta is to be applied, and the relation of this rate to risk-free debt. These are summarized in Appendices 7.2 and 7.3. It is necessary to forecast what BG will need in future to attract the necessary amount of capital: but in making such a forecast past experience is relevant. In looking at the market's historic return on equities, BG used a rate based on an arithmetic average (adding up RORs over  $n$  years and dividing by  $n$ ). OFGAS used a rate based on a geometric average (multiplying past RORs over  $n$  years, and taking the  $n$ th root). Another area of debate was the period of time taken for averaging historic rates. BG used 1919 to 1991, OFGAS 1946 to 1991. There were other differences between BG and OFGAS in calculating the risk-free rates to be used, and in the calculation of the equity premium and the cost of equity. The disagreement between BG and OFGAS on these points shows that any assessment of the required ROR on new investment on this basis is unavoidably subjective in several key respects. The calculations are also sensitive to changes in economic conditions: interest rates, for example, fell significantly during the course of our inquiry, and there were also changes in the company taxation rates.

2.193. OFGAS additionally referred to returns earned by comparable industries, including regulated utilities overseas. We are doubtful about the validity of many of these comparisons: overseas utilities, for example, operate in a regulatory environment very different from that in the UK. We are, however, aware of other utilities in the UK which have regulatory formulae based on CCA returns on capital employed of 7 to 8 per cent or below (for example, BAA plc); we have noted that the public sector uses an expected real ROR of 6 per cent for non-trading activities, with 8 per cent as a required real ROR for nationalized industries and public sector trading activities; and the only available evidence for real returns in the economy generally in the UK currently suggests figures of about 8 per cent or less (see Table 7.7 of Volume 2). Some fund managers and pension funds provided information on the pre-tax real RORs to the shareholder which they looked for on their equity investments. The rates ranged between 6 and 8 per cent, with some funds expecting 1 per cent lower from privatized utilities.

2.194. As discussed in Chapter 7 of Volume 2, OFGAS and BG agreed on the need to allow for the difference between the amounts realized from the sale of BG and BG's CCA asset value at that time, and for subsequent discrepancies between the ratio of the stock market's valuation and CCA-based values, referred to in Chapter 7 as the market to assets ratio (MAR). The MAR was some 41 per cent at the date of privatization, some 62 per cent at the end of 1991, and 68 per cent at the end of 1992. If there was no allowance for the MAR, shareholders would enjoy significant and excessive gains at the expense of BG's customers. There is, however, no clear-cut way to allow for the MAR: indeed, there is necessarily circularity between what 'X' is permitted and stock market valuation of shares, which will reflect current and expected profitability, including the effect of regulatory uncertainty. There can clearly be no absolute precision in deriving an appropriate MAR, which will be subject to the daily fluctuations of the stock market. On balance, an MAR of about 60 per cent would seem reasonable, allowing shareholders to retain many of the gains since privatization. This ratio is of course to be applied only to the return on existing assets: it does not affect the return on new investment. To assume, on the other hand, as OFGAS did at one point, that only transportation and storage assets were sold at less than CCA book value, but not BG's E&P activities, seems an arbitrary distinction. These difficulties can be lessened by putting emphasis on a forward-looking, cash-flow-oriented approach to setting 'X', but this approach has had a limited role in exchanges between OFGAS and BG, and, in its evidence to us, BG could not look beyond a five-year horizon, despite an average expected life of pipeline assets of nearly 50 years. In these circumstances, a great deal of judgment has to be exercised in coming to conclusions about 'X'.

2.195. As we note in paragraph 7.80 of Volume 2, for the purpose of assessing the appropriate level of the price cap, we have concentrated not only on whether the marginal rate of profit is sufficient to induce the

desirable level of investment, during the period for which the price cap is set; but also on whether the projected cash flows are adequate to sustain the business.

2.196. Despite projections of return on the gas supply business as a whole falling below 4 per cent, BG's own projections suggested that expected cash flow is far from unhealthy over this period. As shown in Table 8.5 and Appendix 7.9 of Volume 2, requirements of the UK gas supply business to raise cash externally, even after allowing for a contribution to tax and dividends, amount to some £200 million in total over the next five years, compared with total cash generated over the period of about £8 billion. Cash requirements over a five-year period could be a misleading indicator of financial needs if a significant tranche of investment was projected shortly thereafter. We, therefore, asked BG to describe the cash needs to maintain the business beyond that period, being particularly concerned about the level of replacement expenditure at that time. Such figures as we have seen do not suggest that any major increase in capital investment is necessary within 10 to 15 years, implying that the strong cash flow position will be maintained for the foreseeable future.

2.197. The cash requirements of the UK gas supply business suggest, therefore, that an ROR as high as that proposed by BG is not necessary to sustain the financial viability of the business. BG's proposals for amending the current regulatory formulae involve cash flows generated by the Gas Supply business increasing to about £[ \* ] million a year by 1997 (after a contribution to BG's corporation tax and dividends), to be used in part to finance diversification in activities outside the UK (see Table 8.16).

2.198. In our view, the cost of capital considerations summarized in paragraphs 2.192 and 2.193 suggest that a real return of between 6.5 and 7.5 per cent on new investment would be reasonable, under current conditions, to attract capital to the industry. We consider it appropriate that replacement expenditure should also earn the cost of capital. Allowing for the stock market to asset ratio of about 60 per cent at the end of 1991 (see paragraph 2.194) implies a return on current cost assets, as at the end of 1991, of between 4 and 4.5 per cent. BG's own cash flow projections also suggest that an ROR as high as that sought by BG is too high.

2.199. In conclusion, therefore, we regard the current ROR used in third party transportation charges (4.5 per cent) as a reasonable upper limit for the RONA at present held by transportation and storage. The realized average rate may be expected to increase as a result of continued investment (both capital and replacement expenditure) in the system which would need to earn the full ROR in the range of between 6.5 and 7.5 per cent, under current conditions, to attract capital. In the longer term, the MAR will, for this reason, cease to have effect. Such a development would require more dialogue between BG and OFGAS on the justification for the planned levels of investment in transportation and storage, than has been the case in the past. Consideration should also be given to the provision of incentives for technical innovation in the transportation network and in storage (for example, in metering technology) that would promote competition in trading.

2.200. BG also argued that a trading business, in which capital employed is relatively low, required a sufficient margin, of about 3.5 per cent on turnover (equivalent to about 11 per cent on capital employed), in part to offset the 'price risk' of trading: such a return should also apply, it argued, within trading to the public gas supply business (the remaining monopoly element, of supply to users of below 2,500 therms a year). We do not believe that return on turnover (ROT) is an appropriate criterion for the trading business: there would still be substantial capital employed-fixed assets and working capital-in trading, and we doubt whether there are any appropriate comparators in assessing ROT for such a business. Nor do we believe that, before divestment, it is necessary for BG PGS on its own to earn any minimum ROR, particularly given the difficulty of cost allocation between BG PGS and the other trading businesses, for example, in allocating gas costs between interruptible and domestic customers. We do not, therefore, believe or accept that any higher return on new investment, or on existing assets, is necessary for the trading business than for transportation and storage: our views on the appropriate ROR apply equally, therefore, to trading as to transportation and storage, and hence to the UK gas supply business as a whole.

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\*Figure omitted. See note on page iv.

## ***The tariff formula***

2.201. We referred in paragraph 2.188 to BG's financial projections. We accept that these are subject to considerable uncertainty: as shown in Table 8.3 of Volume 2, for example, the structure of transportation charges can significantly affect BG's profitability. We see no case for any adjustment of the formula at the present time, for changes in external circumstances which represent normal business risks: nor do BG's projections indicate a need for any adjustment on the lines proposed by BG to sustain the financial viability of the business. Similarly, we see no reason for adjusting the tariff formula for the effects of change in BG's contract market share: BG is still projecting satisfactory profits on its contract trading activities (firm and interruptible), as shown in Appendix 8.1, and it is unreasonable that it should be compensated for its profitability falling because of competition. In our view, however, it is likely that the current tariff formula will, under the current circumstances, produce a RONA below the range we regard as reasonable, and hence adversely affect BG's ability to earn a ROR of between 6.5 and 7.5 per cent on new investment, which we regard as necessary, under current conditions, to attract capital.

2.202. This shortfall can, in our view, partly be explained by the loss of contribution resulting from the loss of share in the tariff market following the reduction in the monopoly threshold in August 1992. It was reasonable for BG, in accepting the tariff formula, to have had regard to the contribution from the tariff market of 25,000 therms and below as a whole, with its varying margins between larger and smaller users. Given the expectation now of an inadequate level of profitability, it would seem appropriate for the formula to be adjusted for loss of share of this sector of the market given its higher contribution.

2.203. A second effect of loss of market share in supply to users of over 2,500 therms (where average revenues are relatively low) is to raise the average revenue from tariff customers supplied by BG to above the level of the price cap, requiring a reduction in prices to the remaining tariff customers if the price cap is maintained unchanged (see paragraph 8.23 of Volume 2). Amending the formula and to apply it only to supply to users of 2,500 therms a year and below, could prevent this occurring.

2.204. As we discussed in paragraph 2.97, the extension of competition in this sector would also justify confining the scope of the formula to supply to users of 2,500 therms a year and below.

2.205. We referred, in paragraph 2.175, to the costs of the restructuring we have recommended, estimated by BG as up to £130 million a year by 1997. Such costs are uncertain, but represent a relatively limited proportion of the turnover of BG; we believe that they would be justified by the benefits of the restructuring we have recommended on the development of competition in the longer term. The imposition of such costs might, however, inevitably have an adverse effect on BG's future return and put at risk its requirement to attract capital to the industry. We return to this in paragraph 2.218.

2.206. BG also proposed a restructuring of the tariff formula to allow for the pass-through of transportation and storage costs, which would be subject to separate regulation. This would clearly be necessary following divestment, but not, in our view, as long as trading remains under the same ownership as transportation and storage given the unavoidable degree of judgment in allocating costs and returns between activities. The appropriate profitability of BG PGS should, in our view, be further assessed by the regulator in the period before divestment, with a view to establishing a tariff formula to apply after separation. Were, however, progress to divestment to be more rapid than we have assumed, we would expect an earlier review by OFGAS of the tariff formula, with a view to ensuring adequate profitability of the public gas supply business, at the time of divestment.

2.207. BG proposed three other changes to the tariff formula: firstly the removal of the 'Z' factor in the gas costs index (GCI) which allows it to pass on increases in a GCI less 1 per cent a year. The adoption of a GCI and the existing 'Z' factor give BG a useful incentive to minimize gas costs. BG argued that the restriction on its market share gave it less scope to reduce the costs of gas purchase. Nevertheless, BG's new purchases of gas remain substantial and we would not wish to remove incentives provided by this element of the tariff formula. BG also argued for a change in the 'E' factor, whereby it is allowed to pass on approved expenditure in promoting energy efficiency. BG argued that the mechanisms of the existing 'E' factor required schemes to be approved both by OFGAS and by the Energy Savings Trust, an overly bureaucratic

process in its view. We would, nevertheless, accept OFGAS's arguments that its statutory duties enable it to consider the wider interests of gas users: it would seem too early in the operation of the scheme to change the existing arrangements. Finally, BG proposed the addition of an 'S' term, to allow it to recover the annual costs of any improvements in quality of service required by or agreed with OFGAS. We acknowledge BG's concern that OFGAS could impose considerable additional quality of service obligations without allowing BG to recover the costs. OFGAS told us, however, that it would allow adjustments to the tariff formula for the costs of any additional such obligations, which would then be subsumed into the formula for subsequent years, providing BG with the incentive to reduce such costs. This would seem preferable to allowing continuous cost pass-through of such expenditure. We see, therefore, no reason at present for any such changes to these elements of the tariff formula.

### ***Formal conclusions on the tariff formula***

2.208. We have considered what conclusions should be drawn from paragraphs 2.201 to 2.207. In this instance, we examine, at this point, whether the application of the tariff formula by BG enables us to identify, for the purposes of section 48(c) and (d) of the Fair Trading Act, such steps, actions or omissions as are described in those provisions and the nature of which is explained in more detail in paragraphs 2.56 and 2.57. We have found no evidence to justify a finding of such a step, nor of an omission by BG attributable to the monopoly situation, which we have identified (paragraph 2.3), relating to the supply of gas through pipes to tariff customers (referred to, in paragraph 2.209, as 'the monopoly situation').

2.209. We have, however, concluded that the application of the tariff formula clearly represents an action by BG and we consider that this action is attributable to the existence of the monopoly situation. It is true that the formula arises from BG's Authorisation (condition 3), granted by the Secretary of State (for more details, see paragraph 2.19), so that the application of the formula could be said to derive from a concept which is itself based on statutory authority. Consistently with our reasoning in paragraph 2.64, we regard this as a matter to be taken into account and we have done so. However, we have drawn attention, in paragraph 2.99, to BG's 'statutory monopoly', its current monopoly of supply to users of 2,500 therms or below. It seems clear to us that it was, in part at least, because of the scope of this monopoly-in terms of the Fair Trading Act, the monopoly situation-that the regulatory structure was created, of which the tariff formula is an important element. In applying the formula, therefore, BG performs an action which is, in our view, attributable to the existence of the monopoly situation. That BG is under a duty to apply the formula does not, we consider, affect this position.

2.210. In consequence, we have considered whether, as it constitutes such an action, BG's application of the tariff formula also constitutes a fact found in pursuance of our investigations which operates or may be expected to operate against the public interest, for the purpose of section 49(1)(b) of the Fair Trading Act. In doing so, we have initially disregarded the conclusions already reached elsewhere in this report (paragraphs 2.66, 2.94 and 2.142) as to the existence of such factors and (particularly paragraphs 2.177 to 2.184) action which should, in our view, be taken to remedy or prevent the adverse effects which these facts may be expected to have. On the basis of the considerations discussed in paragraphs 2.201 to 2.206, it seems to us that BG's application of the tariff formula may be expected to operate against the public interest, in that the continued existence and application of the present tariff formula may, in our view, be expected to affect adversely the supply of capital to the industry, particularly for the financing of new investment.

2.211. While we believe this to be the potential effect of the application of the present tariff formula, we recognize that this is not the sole, or necessarily the most important, consideration. We have sought to consider generally the working of the formula and, in particular, the position of the tariff customer in relation to it and to any change which might be necessary in order to rectify the detriment to which we have drawn attention. Consumers clearly benefit from the price reductions required by the current formula, but at the cost of an unreasonably low prospective ROR to BG, and, in our view, a risk to further investment in the system. The changes we put forward below would still protect consumers, but reduce the risk of underinvestment. We believe, therefore, that our conclusions provide the appropriate balance between achieving low prices, and the need to attract capital.

2.212. The current loss of market share above the 2,500 therm level is relatively limited, and BG's current financial performance remains satisfactory. We have found no evidence, therefore, that the conduct specified represents a fact which currently operates against the public interest. Having assessed the relevant considerations, we have, however, concluded that BG's application of the tariff formula constitutes a fact found in pursuance of our investigations which may be expected to operate against the public interest (the distinction being explained in paragraph 2.57) for the reason and with the particular effect adverse to the public interest mentioned in paragraph 2.210.

2.213. On the basis of the first approach referred to in paragraph 2.59, we are, therefore, satisfied that we have correctly identified as an action, and as a fact found in pursuance of our investigations which may be expected to operate against the public interest, the matters set out in paragraphs 2.209, 2.210 and 2.212. On the basis of the second approach referred to in paragraph 2.59 we also consider that the matters which we have found to be an action constitute, independently of such findings and whether or not they are correct, facts found by us in pursuance of our investigations under section 49(1), which may be expected to operate against the public interest, with the particular effect adverse to the public interest described in paragraph 2.210.

### ***Recommendations on the tariff formula***

2.214. It is now our duty to consider what action (if any) should be taken for the purpose of remedying or preventing the adverse effect which we have identified in paragraphs 2.210 and 2.212 and, if we think fit, to include in our report recommendations as to such action.

2.215. As discussed also in paragraph 8.36 of Volume 2, if the scope of the formula is limited to supply to users of 2,500 therms and below, a modification of the formula from 1 April 1994 from RPI-5 to RPI-4 would generate a level of additional income similar to the loss of profit to BG from reducing the tariff threshold. We therefore recommend that:

- (a) the application of the tariff formula should be restricted to apply only to supply to users of 2,500 therms a year and below; and
- (b) the tariff formula should be amended to allow BG average charges to users of 2,500 therms a year and below to increase as from 1 April 1994 by no more than the change in the RPI less four percentage points—an amendment of the current RPI-5 formula to RPI-4.

We consider, however, that different approaches are necessary to these two remedies (which are referred to in paragraphs 2.216 and 2.217 as (a) and (b)), although we hope that these will be able to be implemented in time for our recommendation to be operative from 1 April 1994.

2.216. To take (b) first, we consider that, in terms of the Fair Trading Act, it may be the subject of an order under section 56 and paragraph 10 of Schedule 8 (an order to '... regulate the prices to be charged for any goods ...'); the requirement in paragraph 10(2) is, in our view, satisfied by the conclusions as to a fact which may be expected to operate against the public interest, and the particular effect adverse to the public interest which this fact may be expected to have, which are set out in paragraphs 2.210, 2.212 and 2.213. However, we also recommend, in our report under the Gas Act, that (b) should be the subject of a modification of the conditions of BG's Authorisation.

2.217. It appears to us, however, that (a) can be achieved only by legislation (including, in that expression, an order by the Secretary of State, made by virtue of section 8A of the Gas Act, inserted by section 37 of the 1992 Act).

2.218. We referred in paragraph 2.205 to the adverse consequences on BG's ability to raise capital, of the costs of the restructuring of BG we have proposed in paragraph 2.175. As long as there is any uncertainty as to whether some or all of our recommendations will be implemented or as to their timing, we consider that it is not open to us formally to conclude that the tariff formula may be expected to operate against the public interest on such a contingent basis. The Director should, however, in our view agree to adjust the tariff

formula further to allow an appropriate proportion of the costs of such restructuring to be passed on to tariff users, and take account of such costs in setting a regulatory formula for transportation and storage. It would be for the Director to validate that no more than the necessary costs of restructuring had been incurred and would be passed on to users in this way.

### ***Regulation of transportation and storage***

2.219. As we stated in paragraph 2.184(b), provision will be necessary for a more explicit means of regulation of transportation and storage, initially to include revenue from transfer charges to BG's trading activities as long as the two businesses remain under common ownership, as well as subsequently (should our recommendations be accepted) when trading is separately owned. We support the implementation of BG's undertakings to the OFT, requiring charges to apply equally and even-handedly to BG Trading and other shippers, and progress towards adoption of an RPI-X system for transportation and storage. An appropriate charging formula should, in our view, be based on factors including the required ROR for new investment (in the present circumstances, of between 6.5 and 7.5 per cent), the reasonable ROR on existing assets, which we suggested above should initially be no greater than the 4.5 per cent currently used in third party transportation charges, the cash flows generated by the business and the incentive to promote efficiency and technical innovation.

2.220. We considered BG's proposals for a separate transportation and storage formula in the context also of its proposal for a revised tariff formula, including the pass-through of transportation and storage costs. We recommended above a much more limited adjustment of the tariff formula than proposed by BG, and do not accept BG's proposals for a transportation and storage formula which would result in an ROR higher than that we consider reasonable. We feel it inappropriate, however, to recommend any particular value of 'X' for transportation and storage. Financial projections for transportation and storage, summarized in Chapter 8 of Volume 2, necessarily reflect BG's assumptions, not least as to the allocation of costs and assets between its activities and as to the structure of transportation charges by the end of this period. There are particular uncertainties in how the application of transportation charges to trading would work, since there has previously been no such charge, nor is there any agreement on a starting level of charges. BG's own views on these issues may well change in the light of the divestment of its trading activities which we have proposed. In our view, therefore, the appropriate formula for transportation and storage should continue to be discussed between BG and OFGAS, with a view to its determination by OFGAS, to take effect not later than 1 October 1994.

### **The regulatory system**

2.221. We feel it appropriate to comment on the criticisms put to us by BG and some other parties, of the system of regulation. Criticisms included:

- (a) instability and uncertainty in the regulatory system, including the succession of regulatory changes over the last 18 months;
- (b) unsatisfactory overlap between the OFT, DTI, and OFGAS;
- (c) inadequate procedure and processes for the management of regulation, including insufficient consultation, or information as to the reasons for decisions; and
- (d) the public perception of acrimonious relationships between OFGAS and BG.

2.222. On the other hand, BG itself acknowledged that, although OFGAS's style had not always been to BG's liking, OFGAS had been an effective regulator. We have indeed already noted in this report the benefits of its intervention over the level of transportation charges, and in the setting of the tariff formula and criteria for quality of service, together with the contribution which it has made to the debate on the highly technical issues of operating the transportation and storage network. The regulatory system established by

the Gas Act is, in our view, fundamentally sound and the difficulties in the regulatory exchanges over the last two years are probably exceptional.

2.223. We believe that the adoption of our recommendations would itself improve the regulatory environment; as discussed above, separation of ownership would improve the information available to OFGAS and remove the present conflict of interest which gives rise to much of the suspicion of shippers, and possibly OFGAS, about the motives of BG underlying its proposals for operation of transportation and storage. It is likely for the same reason that, while we would expect OFGAS to remain vigilant on behalf of consumers, the nature of OFGAS's work over forthcoming years would change. It would become increasingly involved in highly technical issues of regulation of the transportation and storage system that may merit a somewhat different approach from the confrontational stance sometimes adopted between the parties in the past, and a closer co-ordination in exchange of information between them than has previously occurred. The complexity of the issues might also merit the employment by OFGAS of more in-house technical expertise, rather than relying mainly on consultants' advice on such issues.

2.224. We were asked by BG and others to consider a number of detailed changes to the regulatory system set up by the Gas Act, including the introduction of an appeal procedure in respect of determinations by the Director and to provide greater procedural safeguards for the benefit of BG. The terms of reference which are capable of being provided by both the Fair Trading Act and the Gas Act for these inquiries do not lend themselves to an assessment of the way regulatory affairs are conducted. Any findings which we were to make relating to the industry would inevitably be considered as having relevance to other regulated industries. Such issues raise considerations of such importance that, if they are to be considered, we believe they should be dealt with in the context of suitably broad terms of reference which would allow a relevant body to consider them as they applied to all regulators and not simply a single example.

2.225. We do, however, believe that there is one important alteration that is required in respect of the powers of the Director. We believe that the opportunity should be taken in any revision of the Gas Act for extending his powers so as to provide him with full concurrent jurisdiction with the DGFT in the contract market, over which the Director currently has no powers to make references to the MMC. The Director's powers over transportation and storage must inevitably involve him in issues which affect both the tariff and contract market, and indeed the distinction between these two markets may, over time, cease to be of any relevance. The current division of responsibility with the DGFT would, therefore, seem anomalous. Such a change would simply bring the powers of the Director into line with those of the regulators of the telecommunications, electricity and water industries. Neither the OFT nor BG had any objection in principle to such an extension of the Director's powers, though BG preferred to see it associated with other improvements in its procedures as mentioned above.

2.226. The remedies which we have recommended include establishing a neutral transportation system, and the new responsibilities which would as a result fall upon OFGAS would, in our view, encourage the emergence of a new working relationship, which may obviate the need for more formal changes in procedure that could reduce the effectiveness of the present regulatory system. We believe that it is important that OFGAS should ensure that there is an appropriate forum in which users of the transportation and storage facilities can be involved in discussion of matters of common interest, both with OFGAS itself and direct with BG's transportation and storage business. As the market develops, and if BG is to be restructured as we have recommended, it would also be necessary to apportion the costs of OFGAS, currently substantially met by BG, equitably between the transportation and storage activities of BG, its former trading activities, and other users of the system.

## **Summary of conclusions and recommendations**

2.227. We have concluded that:

- (a) BG's conduct in undertaking its integrated business as both a trader in the supply of gas and as the owner of the transportation system over which its competitors must operate, and its failure to conduct these businesses in such a way as to secure effective separation between them, constitute facts which may be expected to operate against the public interest, with effects adverse to the public interest of

inhibiting choice, restricting innovation and leading to a higher level of prices of gas to non-tariff customers, and to other users of over 2,500 therms of gas a year, than would otherwise be the case (paragraphs 2.66, 2.94 and 2.142).

- (b) BG's application of the tariff formula constitutes a fact which may be expected to operate against the public interest, in that the application of the tariff formula may be expected to affect adversely the supply of capital to the industry, particularly for the financing of new investment (paragraph 2.212).
- (c) Apart from (b) there are no facts which operate or may be expected to operate against the public interest as regards the tariff market of 2,500 therms and below (paragraph 2.120).

2.228. We have recommended that:

- (a) BG be required to divest its trading business by 31 March 1997 (paragraph 2.177).
- (b) While the trading business and the transportation business remain in common ownership, BG be required to organize the transportation business as a wholly separate unit, or subsidiary (paragraph 2.184(a)).
- (c) The conduct of BG's transportation and storage activities be subject to regulation in various respects as detailed in paragraphs 2.183 and 2.184.
- (d) The tariff formula be modified as from 1 April 1994 to apply to supply to users of 2,500 therms a year of gas or below; and that it be further amended to allow charges to such users to increase by no more than the increase in the RPI less four percentage points (paragraph 2.215).

2.229. We have also made a number of proposals on other aspects of current regulatory controls over BG:

- (a) At least until the separation of ownership of the businesses is complete, BG's non-tariff activities should continue to be subject to a limitation on its market share, but the current market share targets should be amended to require BG to reduce its share of the total market (excluding gas supplied for use for power generation, feedstock, or in natural gas vehicles) over 2,500 therms to 55 per cent. Following divestment there would, we believe, be scope for a more substantial review of these constraints on BG, with a view to the eventual elimination of the market share targets (paragraphs 2.81 and 2.95).
- (b) Until divestment, the existing undertakings to price gas supplied to non-tariff customers on the basis of published price schedules should be retained; but after divestment, consideration could be given to replace these undertakings by a general requirement not to discriminate unduly in pricing (paragraph 2.82).
- (c) BG should retain its obligation to supply above 2,500 therms (paragraph 2.96).
- (d) There should be a further reduction in the threshold of the monopoly, to 1,500 therms a year, at the end of the period of the existing tariff formula to widen the range of customers subject to competition. We would expect removal of the monopoly some three to five years after the divestment of BG's trading activities. The removal of the monopoly should also be subject to the imposition of duties similar to many of those currently of the public gas supplier on those gas suppliers licensed to compete for supply to domestic users: this would also require legislative change (paragraph 2.121).
- (e) The release scheme should continue on its present basis, with a further review by the OFT or OFGAS in 1995 of whether there should be any extension of the release scheme (paragraph 2.125).

- (f) The Director should in our view agree to adjust the tariff formula further to allow an appropriate proportion of the net costs of the restructuring we have recommended to be passed on to tariff users, and take account of such costs in setting a regulatory formula for transportation and storage (paragraph 2.218).
- (g) The powers of OFGAS should be extended to give it full regulatory responsibilities, concurrent with the DGFT, for the contract market (paragraph 2.225).

### ***The future for the industry***

2.230. Throughout these inquiries, we have noted the emphasis placed by many witnesses and also by BG itself on the need for stability and certainty in the regulation of this important industry. We believe that it would be for the benefit of the industry, and for the public interest generally, if the recommendations finally adopted are carried out according to a firm timetable stated in the reasonably near future, so that all involved may be able to take these necessary steps and make their plans within a time-scale which allows adequately for the changes involved. It is important for the reasons stated in this paragraph that a time-scale for these various developments should be established and then adhered to. The timetable which we have already referred to above involves changes taking place at three periods of time:

- (a) in the short term, ie by 31 December 1993, the modification of BG's market share limitation; by not later than 31 March 1994, the establishment of Transportation and Storage as a separate unit of BG, subject to amendment of the existing Authorisation; as from 1 April 1994, the revision of the current tariff formula; and by September 1994, the introduction of an RPI-X system of regulation for transportation and storage charges;
- (b) in the medium term, ie not later than 31 March 1997, the end of the present quinquennium, by when we recommend divestment of BG Trading (following necessary changes in the Gas Act) and reduction of the monopoly threshold to 1,500 therms; and
- (c) in the long term, some three to five years from 31 March 1997, by which time we would expect that the monopoly threshold will have been removed.

D G GOYDER (*Chairman*)

I S BARTER

M E BEESLEY

R O DAVIES

D P THOMSON

G WHITTINGTON

S N BURBRIDGE (*Secretary*)

30 July 1993