

# 13 Views of BG

## Contents

	<i>Page</i>
Introduction.....	258
Proposed price control, 1997 to 2002.....	259
The price control formula.....	260
The form of the price control.....	260
Storage.....	261
Cost pass-through.....	261
Notional revenues and disapplication.....	262
Transportation revenues.....	263
Capital expenditure monitoring.....	263
Unbundling.....	264
Allowed revenue, 1997 to 2002.....	265
Cost of capital.....	266
Asset base and depreciation.....	267
Operating expenditure.....	270
Capital investment.....	275
Conclusion.....	280

## Introduction

13.1. BG provided extensive material in the form of written and oral evidence, much of which is covered in Chapters 3 to 10.

13.2. BG told us that the inquiry came during a period of great change and uncertainty in the gas industry and for BG in particular. This included changes in the regulatory control of the gas industry (described in Chapter 3) and changes in the operation of the gas market (described in Chapter 4). BG was itself seeking to put in place a new structure to meet the challenges of the liberalized gas market, following a period in which it had already undergone a major restructuring to reduce costs significantly, to meet new regulatory requirements and to support and prepare for domestic competition. The restructuring programme which commenced in 1994 was originally estimated to cost £1.65 billion, and was forecast to reduce manpower by 25,000 by the end of 1998. In the event, BG said that more than 35,000 jobs had been shed by the end of 1996 and additional provisions of £424 million had been made. The integrated gas business had been restructured into five separate business units, of which Transco was one. More recently, on 17 February 1997, the supply, retail and service businesses had been demerged into Centrica, and British Gas had been renamed BG plc, containing Transco, E&P, International Downstream and other activities (described in Chapter 6). According to BG, throughout the extensive change and restructuring programme, Transco had maintained its world-beating record on safety and reliability, and this remained an absolute priority for the future.

13.3. Looking to the future, BG said that the Director General had proposed that Transco should face the further organizational and commercial challenge of 'unbundling' a number of activities, including storage, meter reading and meter installation, and new connections. BG said that it was concerned about the scale, speed, timing and lack of detail surrounding the Director General's proposals. It was also concerned about the financial effects of unbundling and the need to ensure due allowance for stranded assets, the costs of

separation and continuing costs. It said that there should be an appropriate commercial and regulatory framework in place for any unbundling.

13.4. BG said that, given the major restructuring already undertaken by Transco, the challenge of underpinning the introduction of domestic competition, the unbundling proposals, and the 1993 MMC report which gave the Director General considerable guidance for the future, it had hoped to reach an agreement with the Director General over the price control for Transco. However, it submitted that the scale and severity of the Director General's August 1996 proposals, which overturned the principles set out in the 1993 MMC report, if implemented, would reduce Transco's allowable revenues to the extent that the proper discharge of its obligations would be at risk.

13.5. According to BG, the Director General's August 1996 proposals would reduce Transco's allowed revenues by £622 million from a forecast 1996/97 level of £3,180 million (in 1994 prices) to £2,558 million in 2001/02. On the basis of BG's operating and investment expenditure forecasts, and the Director General's allowed revenues, BG said that post-tax cash flows available for Transco for interest and dividend would fall by an average of more than £400 million a year from the 1995 level. The dividend yield would imply a market capitalization of Transco which was far lower than the 'regulatory asset value' of £12 billion which the Director General claimed her proposals would establish. According to BG, the Director General's August 1996 proposals would provide inadequate incentives for new investment, compromise Transco's ability to continue to deliver a safe and reliable service, and jeopardize the establishment of systems necessary to underpin the introduction of domestic competition, with a damaging impact on customers, shareholders and employees, and on gas consumers and the general public.

## **Proposed price control, 1997 to 2002**

13.6. BG submitted that the changes in regulatory policy and the legal framework since 1993 had increased the uncertainties facing its management, increased BG's costs and hampered its ability to maintain high levels of service. They had also adversely affected the returns to BG's shareholders. The passage of the Gas Act 1995 had provided a stable legal basis for the company's future activities but this had to be accompanied by a stable regulatory framework if BG was to play its role in the introduction of full domestic competition by the end of 1998. All other objectives, including unbundling, were of secondary importance. Regulatory shocks, such as the Director General's proposals to depart from the settlement recommended by the MMC in 1993 and adopted by her in 1994, destabilized the company and the industry. In contrast, if the regulatory framework was stable, Transco ought to be able to enjoy a cost of capital which was appropriate for a utility.

13.7. BG considered that the 1993 MMC report had laid down a clear framework for setting the Transco price formula which struck a fair balance between shareholders and customers and said that the Director General had failed to demonstrate why that framework should now be departed from. Moreover, she had failed to appreciate the implications for the market's perception of the risks facing BG arising from her departure from previous settled regulatory decisions. If the MMC confirmed the Director General's decision to overturn the 1993 MMC report, then rational investors would anticipate future regulatory shocks leading to them demanding an even higher rate of return in compensation.

13.8. The principles underpinning incentive regulation should be maintained, BG submitted, and the price control should be based on realistic forecasts of capital and operating expenditure and a consistent treatment of assets. Otherwise, instead of rewarding unexpected gains in efficiency by a higher rate of return *ex post* with the benefits passed to shippers in the future, if operating and capital expenditure projections were set at unattainable levels, BG would be unable to meet those targets and achieve a rate of return below that set by the regulator. Investors would therefore require greater reward in the form of a higher cost of capital to compensate them. BG said that the extent and speed of the Director General's cost-cutting requirements were unattainable, especially in the light of the very significant increases in efficiency which had already been achieved.

13.9. In BG's view incentive regulation distinguished the role of the regulator, to set reasonable efficiency targets and protect customers, from the role of management to seek greater operating economies and efficiencies in capital expenditure consistent with its statutory and licence obligations. BG was subject to the statutory and licence obligations to develop and maintain an efficient and economical pipeline system and

to connect premises. How it discharged those obligations, the appropriateness of its capital and operating expenditure, or the manner in which it achieved unforeseen economies in both capital and operating expenditure, were the responsibility of BG's Board and management. However, in BG's opinion the Director General was seeking significant managerial powers over BG's business, for example to review purchasing decisions one or two years after they had been taken and to make judgments, on an annual basis, on the 'appropriateness' of capital expenditure decisions taken by BG's management. BG submitted that the Director General's approach was inconsistent with incentive regulation, and what was proposed would have to be superimposed upon an existing regime which already involved significant day-to-day intervention and reporting requirements.

13.10. BG said that the periodic nature of price reviews and the Director General's practice of removing productivity gains at the end of a formula period inevitably rewarded cost reductions achieved early in the review more highly than cost reductions effected later in the formula period. For example, it said that the costs of Transco's extensive restructuring programme (of some £746 million), which took place between 1994 and 1996, would not be recovered, nor would it generate an adequate return because the resulting efficiencies would constitute the base line for the next formula period unless a specific allowance was made for the fact that the investment had earned an inadequate return.

### **The price control formula**

13.11. Further information on the price control formula may be found in Chapter 5. As far as the public interest considerations of the formula were concerned, BG said that there were aspects in relation to the effect of volume adjustments and the abstraction of storage revenues which required attention, and it considered that continuation of the notional revenues provision could be expected to operate against the public interest. BG considered, however, that continuation of the current formula would not lead to levels of charges or returns in the next quinquennium which could be expected to operate against the public interest.

### ***The form of the price control***

13.12. BG said that the RPI-X approach was the best means of regulating Transco and it supported a control of five years, subject to earlier adjustment, if necessary in the light of the effects of unbundling. It believed the new control should be clearly defined, provide incentives to connect new gas consumers to the network consistent with BG's statutory obligations, and reduce unpredictability in terms of prices and allowed revenues. It considered that the basic structure of the control proposed by the Director General (splitting the market between large and other users and fixing half of Transco's allowed revenues, invariant to volume changes) could be amended to meet these criteria more effectively. The Director General's definition of large users was unclear and rested on her own discretion, which was undesirable. Instead, BG considered that a definition set at a volume threshold of 50 million therms a year (with appropriate safeguards to prevent the artificial aggregation of loads) was the most appropriate break-point between large and other users. A schedule of such users (including those anticipated in the next five years) should be appended to the formula condition, with the only additions being newly-connected sites in excess of the threshold on an agreed basis.

13.13. In BG's view the Director General's proposed form of control would reduce, by half, the importance within the formula period of the actual volume of gas transported, since half of Transco's allowed revenue would be fixed. Although, as BG acknowledged, this would reduce both price and revenue instability, it submitted that it would also reduce the incentive to connect new customers to the system since the incremental allowed revenue from connecting domestic consumers would, on average, be significantly less than the incremental connection costs involved within the formula period. BG therefore proposed replacing the fixed element with an element relating to the number of consumers connected to Transco's system which it said would also better reflect the increasing costs of administering supply points within the competitive market.

## ***Storage***

13.14. Responding to the Director General's proposals on storage, BG said that Transco's storage business faced competition from a range of alternatives open to shippers, such as beach swing, interruptible gas and the purchase of spot gas. In its view, the overall market share of the storage business was around 30 per cent in deliverability of gas for the peak day, and about 8 per cent of the total volume of peak gas availability. If BG tried to increase its charges for unconstrained storage, shippers could shift their demand to readily available alternatives. In addition, to the extent that the provision of storage became profitable, independent storage providers would enter the market. Therefore BG argued that to place a revenue control on storage, while competing sources of peak gas were not constrained, was unnecessary and would cause an unjustified distortion.

13.15. BG also said that the application of the notional revenues provision to storage was bound to fail, since it would be impossible to determine whether a shipper had chosen not to book storage in favour of an alternative substitute service and it would adversely affect BG's profitability, since costs would not fall as fast as the agreed allowed revenue.

13.16. Finally, BG said that storage assets were developed at a time when BG operated an integrated gas supply and transportation business, had statutory duties to develop a co-ordinated system of gas supply and extensive supply obligations and before substitutes for storage existed. As a result, with the advent of competition, itself brought about by changes in the regulatory framework, BG was unlikely to earn a satisfactory return on its storage facilities. BG therefore proposed that in unbundling storage, the associated stranded assets should be identified and shareholders offered compensation for them. BG calculated the value of the stranded assets at £380 million (£305 million after inclusion of holding losses) by reference to its estimate of the reduction in the NPV of cash flows of BG's storage business as a result of the unbundling proposals.

13.17. BG said that it was willing to agree to an appropriately drafted prohibition of undue preference or undue discrimination in storage. Such a prohibition would:

- (a) recognize the differences in circumstances affecting different forms of storage at individual sites and therefore apply to undue discrimination or undue preference between customers at individual sites, not as between sites;
- (b) apply for a limited period of three years; and
- (c) not inhibit legitimate responses to competition from whatever source.

BG considered that it could be regarded as having market power only in the supply of constrained LNG supply and there was therefore a good case for subjecting only this activity to control. BG said, therefore, that if the MMC felt it appropriate to recommend price or revenue regulation of its storage activity, this should take the form of a revenue cap of around £60 million for 1997/98 on the supply of LNG.

## ***Cost pass-through***

13.18. BG said that by abstracting certain (limited) expenditure from the RPI-X incentive regime and applying a 'pass-through' regime, subject to an economic purchasing obligation the Director General was seeking to introduce a superstructure of micro-controls into the licence. BG opposed the proposal, as weakening the incentives of the regime, generating disproportionate bureaucracy compared to the costs at issue and creating uncertainty about the regulatory treatment of different types of cost. BG said that it preferred to rely upon the incentive properties of RPI-X, the other provisions of the existing licence and the Network Code which was based on an industry-wide consensus. It submitted that the Director General had not provided any good evidence to suggest that the status quo operated or could be expected to operate contrary to the public interest.

13.19. In BG's opinion, there was considerable uncertainty as to how the retrospective assessment of economic purchasing would work in practice. It submitted that, even in specific cases, the Director General had refused to commit herself on whether a satisfactory tendering procedure would be sufficient to meet the requirement, or whether some other criteria were needed. BG was concerned by the Director General's

proposal that the retrospective assessment should extend to the merits of the procurement decision, including whether and to what extent the procurement was required at all, thus involving herself in a reappraisal of the operating decisions. It was incorrect therefore to say, as she had asserted, that her proposals went no further than the EC procurement rules. BG was also concerned that the proposed economic purchasing test was intended to apply to costs which were not to be subject to pass-through, such as Transco's acquisitions and disposals of gas.<sup>1</sup> Given that the Network Code was the basis of a market-based flexibility mechanism, with specified merit order requirements, and on the assumption that the neutrality mechanism would continue to apply outside the formula, BG argued that this approach would be inappropriate and inconsistent with the industry's approach so far.

13.20. BG said that the same arguments applied to the Director General's treatment of competition-related costs where she proposed to isolate only one element of Transco's costs incurred in facilitating full competition in gas supply (those for supply point administration). BG said that the Director General's proposals included arbitrary thresholds disallowing the first 20 per cent of any excess above the level of her projected costs, and allowing only 90 per cent of any costs incurred over that 'deadband'. They also involved a peculiar assessment process involving an external assessor (who could not be BG's auditor) whose views were not, in any event, binding on the Director General, at whose sole discretion the final decision lay. BG concluded that the proposed provisions would therefore add unnecessary complexity, uncertainty and impracticability to Special Condition 9C.

### ***Notional revenues and disapplication***

13.21. BG said that it was very concerned about the artificiality of the notional revenue provision in the current formula. This would allow any loss in market share, whether from unbundling or otherwise, to drive down BG's revenue faster than it could reduce its costs, so reducing profitability below that considered appropriate when the control was set. BG said that the provision had further undesirable properties. If BG's fixed and common costs for a particular service were spread over a reducing customer base and BG had the legal ability to increase the prices for that service; by so doing, its market share would suffer further attrition to the point where ultimately BG would have no alternative but to seek to withdraw the service in question. On the other hand, if it did not raise its prices for the service, its profitability would fall by virtue of the difference between average revenue and marginal cost. Although it considered that the disapplication regime was relevant in this context, it was not enough to protect BG's interests since a reference could only begin some months after the unbundling initiative, and would not, therefore, result in prior consideration of the issues. BG concluded that with the notional revenues provision, the licence contained a mechanism which would cause unbundling to undermine BG's financial position, and that its continuation could therefore be expected to operate contrary to the public interest.

13.22. BG said that a further objection to the provision was its potential application to new transportation-related services. In theory, if BG offered services which were unanticipated now but were ordinarily required by shippers in, for example, 1999 and which could be developed in competition with other service providers, BG would be deemed to earn the revenue associated with 100 per cent market share, and it would have to reduce the revenue from 'core' transportation services even though the costs and revenues of such services might be unanticipated now. This would blunt BG's incentive to innovate and compete in service provision. In light of these factors, BG submitted that the provision could be expected to operate against the public interest and should be deleted.

13.23. More generally, in relation to disapplication, BG said that the Director General's proposed revisions were flawed: first, in their scope, because disapplication would relate only to the value of X and not to other integral aspects of the price formula condition, and the MMC would therefore be disabled from considering other aspects of the condition unless the Director General requested them to do so; and secondly, because they built considerable delay into the disapplication process, so that it could take around two and a half years for a new control to be introduced following a disapplication request. BG therefore considered that the current provisions should continue, since they would also facilitate review by the MMC should unbundling affect BG's financial position.

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<sup>1</sup>Subsequently the Director General said that this was not the intention.

## ***Transportation revenues***

13.24. BG considered that the formula should continue to exclude revenues from services other than those described by the Director General as 'core'. This would ensure that BG had the right incentives to innovate and to develop services to meet individual shipper demands. It would also ensure that the formula did not operate in a way which undermined BG's financial position by failing to allow it to recover the costs of new obligations imposed on BG in relation to new services.

13.25. BG considered that it was desirable to have a provision identifying which services were included in and which excluded from the formula otherwise than by any subsequent regulatory consent, and suggested that a clear way of doing so would be by cross-reference to the Network Code at the threshold date. Subsequent changes in the way the Network Code regulated existing services would not cause regulated revenue to fall outside the formula. Subsequent changes which led to new services would lead to unregulated revenue, at least until the formula was next reset. BG considered that this approach would have the additional advantage that it would encourage due appraisal of the financial consequences of changes to the Network Code by their proponents.

13.26. BG suggested that either the existing provision be amended to exclude revenues which derived from transportation services which the generality of shippers did not, on 1 April 1997, need to acquire from a PGT in order to put gas into, take gas out of or have gas conveyed through its pipeline system pursuant to the terms of the Network Code; or that the existing formulation be retained, but provide a better definition of services ordinarily required shippers. BG suggested that this might provide that the Director General could regard a service as ordinarily required by shippers if:

- (a) it was offered by BG pursuant to its Network Code on 1 April 1997; or
- (b) it was a service which could not be supplied by anyone except BG in its capacity as a PGT; and
- (c) it was required by the generality of shippers who, without it, could not put gas into, or take gas out of, or have gas conveyed through, its pipeline system; and
- (d) its supply did not require the licensee to incur costs it would not otherwise incur.

## ***Capital expenditure monitoring***

13.27. Turning to the Director General's proposed capital expenditure monitoring provision contained in the proposed licence condition 9D, BG submitted that this illustrated the Director General's desire to enter into constant and intrusive oversight as regards BG management decisions. It said that an effective regulator should not make running judgments within a formula period on the 'appropriateness' of investment decisions, which was a matter for the company's Board of Directors and management. In BG's view, the key effect of the proposal would be to change the burden of proof. Hitherto, the setting of the formula took into account projections of capital expenditure in the formula period. If, in the course of the formula period, the planned capital expenditure was avoided due to improved efficiency BG would continue to receive the return on that planned investment until the end of the formula period, but would not subsequently receive any benefit of improved efficiency. If, at the time of the formula review, the Director General took the view that capital expenditure was improperly or imprudently incurred, it would be open to her to disallow that expenditure and remove it from the asset base. Under the new proposals the burden would be on BG to satisfy the Director General that each investment should be incorporated into the asset base and the reporting requirement (and ancillary 'appropriateness' adjustment) was the means by which the change would be achieved.

13.28. While BG felt it was appropriate that the Director General should have an accurate record of all expenditures, including capital expenditure, it said that its licence already provided for many instances where, on her request or by pre-existing obligation, BG had to provide information on a wide variety of matters, not confined to capital expenditure. It therefore submitted that no further specific regime was required: the existing regime permitted the Director General to obtain any information she required on capital expenditure, notably under Standard Condition 16. No effects adverse to the public interest arose from the status quo which required a degree of specificity about the information to be provided that would avoid the development of undue bureaucracy. In any event, BG considered that the assessment of

'efficiency' in capital expenditure was complex. It said that any framework for its analysis required a reasoned approach and the need to proceed on a consensual basis. No licence modification was required, given BG's willingness to develop such a mechanism. Only if those efforts proved unsuccessful should the MMC have cause to examine the matter in detail and make appropriate recommendations.

### ***Unbundling***

13.29. BG believed retention of the notional revenues provision was inappropriate for dealing with the formula consequences of unbundling. More generally, in the light of BG's concerns about the Director General's lack of clarity and the need for further consideration of her unbundling proposals and their interaction with introducing domestic competition, it made the following points:

- (a) Unbundling and the rapid promotion of competition in ancillary services would adversely affect the ability of Transco to focus on the efficient delivery of its core services and on its role in underpinning the orderly and successful introduction of domestic competition.
- (b) The promotion of domestic gas supply competition should be the highest priority for the period to the end of 1998 at least, consistent with the hierarchy of the Director General's duties under section 4 of the Gas Act.
- (c) The legitimate interests of BG and its shareholders should be recognized in any unbundling initiative. These required due consideration and recognition of, and allowance for, 'stranded' assets, transition costs and diseconomies of scale and scope, with these costs being fully recovered from shippers.
- (d) Due consideration of the costs and benefits of each initiative should be given before its implementation. Only where the benefits clearly outweighed the costs should any initiative be promoted.
- (e) The appropriate regulatory treatment and consequences of each initiative should be considered on its own merits prior to its promotion, based on the premise that the regulatory framework should be the minimum necessary to enable commercially viable unbundled activities to develop.
- (f) The consequences of any initiative for Transco's costs and regulated revenues, and consequently for the financial position of Transco, should be considered separately in relation to each initiative on its own facts and prior to its promotion.
- (g) In the absence of timely agreement on such matters with the Director General, BG should be able to refer the matter to the MMC.

13.30. BG said that if there was still a concern about how the loss of market share in unbundled activities should be dealt with, the appropriate approach would be:

- (a) in relation to new connection and meter installation, the inclusion of a consumer driver in the form of control, as it had suggested; and
- (b) in relation to meter reading, either to set the formula on the assumption that income from the provision of non-daily meter-reading services (other than 'must reads') should be outside the formula (which would also spur the development of competing meter-reading services and facilitate BG's withdrawal from non-mandatory meter reading), or to include a meter-reading term in the formula to ensure that BG was able to recover its avoidable costs of providing meter-reading services and of rebates payable by it to shippers which did not take up those services. In each case the unavoidable costs of processing meter-reading data would form a part of the main price control.

### ***Other aspects of the proposals***

13.31. BG objected to a number of the detailed provisions proposed by the Director General:

- (a) The proposed change in the definition of the RPI would be likely to operate to BG's disadvantage; it was, in any event, inappropriate as it would introduce a 'lag' between the rates of increase in costs and revenues.
- (b) The proposed exclusion from the definition of Transportation Revenues of 'rebates' was superfluous and might go further than was necessary to confirm the status quo, that liability payments were not taken into account and could also impede innovation in the pricing and provision of more innovative services.

13.32. In relation to the liabilities regime, BG said that the MMC should recommend that allowed revenues be set and the formula condition be drafted so as to ensure that there was sufficient allowance for the operating and investment expenditure necessary to achieve at least the planned performance levels. Where BG had to make compensation payments on an individual basis where the required performance level in question had been met overall, these should be funded by the formula and the costs borne by the generality of shippers rather than by BG's shareholders.

13.33. In relation to the adjustment factor, K, BG said that the new formula condition should enable BG to recover all of the unrecovered allowed revenue arising from the current formula. It said that this revenue was attributable to the current, rather than future, price control period. BG drew our attention to the fact that the Director General had previously agreed that the new formula would be set on that basis. BG also pointed out that both the draft licence condition in the Director General's August 1996 proposals and that appended to the Director General's reference did not secure this result because it referred to a period ending 31 March 1996. The Director General subsequently accepted the error and substituted 1997 for 1996. BG pointed out that this still did not unambiguously address the issue, since the level of K applied in that year was the accumulation of K prior to that year's commencement. What was needed was to incorporate the definition of K used in the current formula for the first year of the new control.

### **Allowed revenue, 1997 to 2002**

13.34. BG submitted that the level of charges within the current formula could not be expected to operate against the public interest. First, BG said that it would actually charge on the basis set out in the 1997 Transco plan. On the assumptions set out in that plan, profitability would be within the range of BG's cost of capital and no excess would arise. In any case, if the current formula continued unamended, BG would come under pressure to retain or extend the existing liabilities under the Network Code and would expect its profitability to be affected by the operation of notional revenues as activities were unbundled. If BG priced to the maximum permitted revenues under the current formula, continuation of Special Condition 9C could in theory result in additional revenues on average of £128 million a year—an increment of less than 1 per cent added to the return on net assets, and therefore unlikely to operate against the public interest.

13.35. Notwithstanding this, BG submitted its proposed allowed revenue for Transco based on its case on operating and capital expenditure, asset base, depreciation and a cost of capital of 8 per cent shown in Table 13.1. The outcome of this analysis was then profiled using a level of  $P_0$  at 1 April 1997 of 13.1p and a level of X of 2.25 per cent so as to give an equivalent revenue NPV over the formula period. BG subsequently put its modelling of its proposals for the transportation business only, with storage operating outside the regulated area.

TABLE 13.1 **BG's proposed allowed revenues**

*£ million, 1996 prices*

	<i>1997/98</i>	<i>1998/99</i>	<i>1999/2000</i>	<i>2000/01</i>	<i>2001/02</i>
Operating costs*	1,585	1,532	1,492	1,492	1,453
Return on assets	947	963	1,017	1,023	1,026
Depreciation	868	870	861	850	839
`Black spot' meter write-off	20	22	22	22	21
Total allowable expenses	3,420	3,387	3,392	3,387	3,339
Profiled allowed revenue	3,440	3,418	3,388	3,352	3,313
Investment (gross)	940	950	867	869	854
Net assets	16,771	16,609	16,924	16,669	16,393

Source: BG.

\*Includes land decontamination and excludes depreciation, after deducting the release of customer contributions.

### ***Cost of capital***

13.36. BG said that it had based its calculation of Transco's cost of capital on the CAPM, which was one of the methodologies used following the basis of the calculation applied in the 1993 MMC report, updating it to take account of recent MMC reports including the 1996 BAA report, and the particular commercial and regulatory risks faced by Transco. On this basis, it estimated a cost of capital in the range of 7.4 to 9.1 per cent and believed that within this range 8 per cent was the appropriate level for Transco if the formula was set on a basis consistent with prior regulation.

13.37. BG explained why, in its view, Transco's cost of capital had risen above the level of 6.5 to 7.5 per cent determined by the MMC in 1993. First, changes in the basic rate of tax had led to an increase of 0.4 per cent in the amount necessary to translate shareholders' post-tax returns into pre-tax equivalents. Secondly, the most recent range for the equity risk premium, provided by the MMC in the 1996 BAA report, had risen to 4 to 5 per cent. Thirdly, the deterioration in BG's credit rating since 1993 had raised Transco's debt premium. Finally, BG argued that Transco faced increased business and regulatory risks, which were inextricably linked, and had raised its equity beta from 0.86 (as accepted by the MMC in 1993) to a range of 0.86 to 0.96.

13.38. Looking at business risks, BG said that during the current period Transco had experienced change on a major scale at rapid pace, including the separation of Transco and British Gas Trading, the development of commercial arrangements and systems to enable competition in gas supply and the introduction of domestic competition in 1998. Change would continue as domestic competition was rolled out and the market developed. BG said that this imposed huge risks of failure, or, at the least, of significant and unpredictable cost overruns. In practice, Transco had had to `underwrite' the introduction of the new commercial regime. For example, the level of unbilled energy was exceeding expectations and Transco had had to shoulder the liability for the £84 million imbalance and new market reconciliation issues associated with the introduction of the Network Code in 1996. The new commercial arrangements themselves were more complicated and complex, with significant risk and difficulties from implementation and operation. In the first year of the Network Code there had been 130 amendments. In the new regime investment had to be undertaken on the basis of less predictable supply patterns and less certain demand projections. According to BG this risk was exacerbated by the Director General's attitude toward long-term transportation contracts and mechanisms for reducing risks such as advanced reservation of capacity agreements, despite the willingness of shippers freely to enter into such agreements.

13.39. As far as regulatory risk was concerned, BG highlighted the compressed timetable for separation of its business and opening up of the supply market to competition, as well as the failure of the Director General in 1994 to take account of the MMC's recommendations that the current formula should include a weather-related adjustment and that appropriate costs of restructuring should be allowed. BG said that the Director General had also treated as new assets attracting a commercial rate of return only those assets acquired after 1 October 1994 in setting the transportation and storage price control in 1994, rather than assets acquired after 1 January 1992 as recommended by the MMC in 1993. In future, BG argued, the Director General was proposing to unbundle at least 20 per cent of Transco's assets without a clearly defined

framework and the Director General had indicated her intention to pursue further, unspecified unbundling initiatives. It was inevitable that even if an equitable framework was devised, unbundling would adversely affect BG's market share in these activities leading to lower profitability. It said that the lack of clarity over the future regulation, and therefore longer-term commercial viability, of such activities exacerbated its concerns and highlighted the regulatory risks it faced. The Director General's proposed economic purchasing requirements might result in Transco being unable to recover prudently incurred costs. Finally, regulatory interventions by the Director General which were likely to occur over the next five years in areas such as pricing, investment, the terms of the Network Code and service liabilities were likely to increase the risks facing Transco.

13.40. Looking at the risks facing Transco relative to other utilities, BG said that:

- (a) in the water industry and for BAA, the allowed rate of return was greater than the cost of capital because of the phasing out of excess returns in the previous period over the period of the price control;
- (b) the prospect of high growth in BAA and BT increased the potential and scope for outperforming the formula;
- (c) the risk from substitution was higher for gas than for the water or electricity sectors, and its investment projections were less certain than these sectors; and
- (d) Transco was exposed to increasing commercial risks from its small customer base.

### ***Asset base and depreciation***

#### ***Asset base***

13.41. In BG's opinion, Transco's CCA asset base (of £17 billion in 1994 prices) formed the starting point for the determination of allowed revenues as it was the asset base, multiplied by the appropriate rate of return, which produced the calculation for the appropriate return on shareholders' capital. It said that CCA asset valuation had been used by BG since 1976 and endorsed by the MMC, and it was a robust approach which ensured that accounts could be used for identifying the extent of replacement obligations-consistent with BG's statutory obligations-for setting economic prices, as well as for measuring accounting returns. Accordingly, it was forward looking rather than being only a measure of past investment. Under CCA, assets were valued at their present economic level, derived by calculating the cost of replacing the asset with current materials and methods, adjusted to reflect the expected life of the existing asset known as the MEAV. The concept was widely used and understood within utilities as giving an accurate value for assets they currently held.

13.42. BG told us that it carried out annual reviews of asset valuation and the resulting calculations and unit costs were validated against other quantitative data, as well as engineering developments. It reviewed the methodologies used in asset valuation and the determination of asset lives every four or five years, the last internal review being at the end of 1994. In response to claims that Transco's accounts misstated the value of its assets through overvaluation and inappropriate 'gold plating', BG had initiated extensive studies. Reviews included those of A D Little on behalf of OFGAS, in 1991, subsequently accepted by the MMC in 1993; a review in 1994 by BG, Brown & Root, Mott McDonald, NERA and Price Waterhouse; a technical audit of Transco's assets by the consultants Stone and Webster in 1995; and a joint review, commissioned by shippers and Transco, of Transco's cost and asset base carried out by Arthur Andersen assisted by Mott McDonald. In each case the findings substantially supported Transco's valuation methodologies and the values derived and used in the accounts, and confirmed the lives over which the assets were depreciated.

13.43. BG based its consideration of the regulatory treatment of BG's assets on the conclusions of the 1993 MMC report. This had considered how, given that BG had been privatized at a value less than the replacement cost of its assets, to calculate the return that BG should be able to earn. BG said that the MMC had recognized that if a return on capital equivalent to the cost of capital was set on all of the assets valued on a replacement basis, this would have resulted in an unexpectedly high return to shareholders. On the other hand, if the return on new capital was set at a level below the cost of capital, BG would not have attracted new capital and it would not have had adequate incentives to invest. The MMC therefore chose to

draw a distinction between assets of the company on the books at the end of 1991 (existing assets) and assets acquired after 1 January 1992 (new assets). Existing assets would earn an abated return of 60 per cent of the cost of capital, equal to the relationship of the market value to the asset value at that time (the MAR). New assets would receive a return equivalent to BG's full cost of capital. In this way, existing assets were rewarded in line with shareholders' expectations at privatization and in keeping with regulatory reviews before the 1993 MMC report. New assets would receive a reward sufficient to attract and remunerate investment, but no more.

13.44. BG said that an important feature of this solution was that it was sustainable. Over time, as the proportion of existing assets in the total asset base on which the abated return was earned fell (as existing assets were depreciated and new investment added), gas transportation prices tended towards the 'economic price' level where they would reflect the costs of consumption of the assets employed in gas transportation.

### *Depreciation*

13.45. In BG's view, the appropriate treatment of depreciation was to continue to calculate it on the basis of 100 per cent of the CCA value of all Transco's assets, both existing and new. It said that this was consistent with:

- (a) the way in which BG was privatized. It was set out in the prospectus and clearly understood that investors could expect a cash flow which included full CCA depreciation on all assets;
- (b) its subsequent regulation, which had maintained the treatment of BG's existing assets in a manner consistent with the way it was privatized. This included the 1988 MMC report, the 1992 tariff formula, the 1993 MMC report and the Director General's previous price control;
- (c) its legal obligations. BG was obliged under the Gas Act to develop and maintain the gas transportation system. Full depreciation allowed BG to meet this statutory requirement without either offering a windfall gain to shareholders or departing from the expectations created in 1986;
- (d) its own accounting approach, which had been approved by the Director General and was consistent with Standard Condition 2 (as amended) of the licence; and
- (e) the principles of economic pricing. Inclusion of full CCA depreciation created the correct price signals, with all users paying for actual consumption of the assets.

### *The Director General's approach*

13.46. BG submitted that the Director General proposed to rewrite the conclusions of the 1993 MMC report and to reverse her own adoption of that approach in 1994. She was seeking to replace, as a basis for price control calculations, the value of assets within the company's accounts by a newly created regulatory asset base (with an opening regulatory value of £11.7 billion in 1994 prices), which bore no relationship to the replacement cost of Transco's assets (£17 billion in 1994 prices). The regulatory asset base would be indexed by the RPI and it was on this indexed regulatory asset base that both the allowed return and depreciation would be based. Most importantly, BG said that the Director General's proposals allowed only 60 per cent of the depreciation on pre-1992 assets, reducing the allowance for depreciation by £260 million in 1997/98 (in 1994 prices) and by almost £1.2 billion in aggregate over the price control period.

13.47. BG addressed the Director General's arguments against the current regulatory approach to asset valuation and depreciation. She had said that the current approach created enormous internal inconsistencies in the treatment of regulatory returns if depreciation on existing assets were not abated in line with the abatement of the rate of return on the same assets. However, BG submitted that shareholders had clearly paid for their shares on the basis of 100 per cent depreciation (that is, the return of that capital over time as it was consumed). The fact that there was a discount to the current cost valuation reflected the expectation that the rate of return would be lower than the market rate. BG's obligations to maintain and develop the system were completely unaffected by the privatization discount.

13.48. The Director General had also argued that full depreciation had over-rewarded shareholders as compared with consumers. Taking her regulatory value, she had said that a 100 per cent depreciation charge would result in an excess return on pre-1992 assets of 11 per cent. BG said that this had never been substantiated and was at odds with BG's own returns, which showed a much lower return. She had also ignored BG's obligations to maintain its assets and to ensure relevant connections to the system were made, subject to it being economical to do so. However, BG argued that even on the Director General's own basis, the return had been about 5.2 per cent because she had overlooked certain matters which had depressed the return:

- (a) Since 31 December 1991 'new' assets earning a commercial return had come into being, altering the mix of the capital base, thus altering the average rate of return (although in setting the formula in 1994 the Director General had only treated assets acquired after 1 October 1994 as 'new').
- (b) The Director General had not incorporated volume adjustment within the formula or given appropriate allowance for the costs of restructuring both recommended by the 1993 MMC report.
- (c) Most significantly, she had ignored the effect of holding losses. BG used OCM as the basis for its accounts, because this reflected its statutory obligations to transport gas on a continuous basis for the duration of its licence, and to connect to all who were so qualified. Under this approach the appropriate way to assess a financial return was to take into account the changes in the value of the underlying assets and to reflect any losses in capital value in the shareholder's return. Shareholders had experienced a capital loss of more than 2 per cent a year over the last period, which should have been deducted from their return to arrive at a net figure. This cost was borne by shareholders and was written off the value of Transco's assets on the balance sheet, but without passing through the profit and loss account. Since the Director General appeared to take no account of these losses, the rate of return she had asserted was, even on her own basis, overstated by the extent of that loss.

13.49. In addition, BG submitted that the real compound total annual return (capital gain plus reinvested dividends) to BG shareholders from privatization in 1986 to 31 October 1996 was 5.8 per cent a year, compared with a return of 9.6 per cent a year from investment in the FTSE All-Share Index, which did not suggest that shareholders had enjoyed excess returns. It argued further that, measured on the basis envisaged by the MMC in 1993, Transco had significantly under-performed. The 1993 MMC report had envisaged a return of 4 to 4.5 per cent, rising to 6.5 to 7.5 per cent over time as the proportion of pre-1992 assets diminished. Transco's actual return on net assets had been below this range (at 3.5 per cent in 1994, 3 per cent in 1995 and 4.1 per cent in 1996), largely as a result of the Director General's rejection of the MMC's recommendations.

13.50. BG refuted the Director General's assertion that full depreciation had over-provided for replacement expenditure by some £3 billion. BG said that, while the level of depreciation might have exceeded the level of capital expenditure in some individual years, since privatization capital expenditure had exceeded full depreciation by around £150 million and would materially exceed depreciation over the next 20 years.

13.51. BG argued strongly against the Director General's approach to asset valuation and depreciation. It submitted that the Director General's proposals went far beyond the framework of a forward-looking price review and amounted to a review of shareholder value, as the Director General sought retrospectively to overturn a depreciation policy which had governed BG since privatization and which had been endorsed by the past Director General, the MMC and the current Director General in 1994. The Director General's rewriting of the MMC's conclusions undermined regulatory stability. BG further argued that this would lead rational investors to expect similar regulatory shocks in the future. They would therefore demand an even higher rate of return to compensate them for the prospect that the value of their investments might be reduced. This, in turn, would lead to increased costs in the future. The Director General's claims that her approach was in the mainstream of regulatory practice were incorrect, since each regulated industry had its own circumstances and regulatory framework: in particular there was no regulatory consensus on depreciation and there was no unique solution to the issues surrounding a market value at privatization which had been at a discount to the replacement cost of the assets of the company. The key issue for the MMC and the Director General was, according to BG, to determine, as a practical rather than theoretical exercise, whether BG had, or would have, sufficient finance for its activities.

13.52. In addition, BG argued that the Director General's proposals were unsustainable. They would result in a short-term cut in prices, below the economic level, followed by increases as the regulatory value

was increased by the RPI (so present consumers would benefit at the expense of future consumers). Over time, the regulatory value would exceed the CCA NBV. Since, in BG's view, it was not credible that Transco would be allowed to price on the basis of an asset value significantly above replacement cost, it was therefore unsustainable. This was particularly important given the central role that transportation played in the gas industry, since it would lead to further distortions between gas and other fuels, and between Transco and other gas transporters, and in the investment decisions of producers, shippers and users.

13.53. BG also argued that it was wrong in principle to base valuation by reference to shareholder value. Shareholders had been promised the right to take a full depreciation charge, both to ensure that BG had sufficient funds to meet its obligations including maintenance of the system and to add to the attraction of the sale. Had shareholders known at that time that the future cash flow would be adjusted *ex post* by reference to the ratio of the cost of their investment to the replacement cost of the underlying assets their valuation would be reduced-so the argument was circular.

### *Ring-fencing*

13.54. BG responded to those third parties which had expressed concerns about the company structure of BG and the potential for revenues allowed for the transportation business to be invested elsewhere, such as the E&P business, as follows:

- (a) The licence already contained stringent provisions to ensure the autonomy of Transco.
- (b) Had Parliament or the Government thought there was any merit in the calls for further ring-fencing, or the vesting of Transco in a subsidiary, they would have secured this in the new regime in 1995. In the event they had rejected that approach, as had the MMC in 1993.
- (c) 90 per cent of Transco's cost base was incurred directly by Transco, with only 10 per cent recharged from other businesses.
- (d) No excess had arisen and none would arise from its revenues under BG's proposals.
- (e) There was no case for locking away revenues earned under the formula, since BG expected to invest an amount at least equivalent to the level of depreciation over the forthcoming period and to return no more than an appropriate reward to shareholders.
- (f) There had been no evidence of diversion of funds to date and BG had publicly said that E&P would be self-financing, so no issue of diversion of Transco's profits arose.
- (g) Its case was very different from water or electricity, where there had been a number of modifications to licences following companies' absorption into larger diversified groups, since these were regulated on a 'yardstick' basis requiring regulatory access to comparative information in those sectors. In contrast the demerger had significantly reduced the extent of diversification within the BG group.

### ***Operating expenditure***

13.55. BG submitted that Transco needed to achieve allowed revenues which contained adequate provision for its operating expenses, to enable it to provide the appropriate levels of service in the proper discharge of its statutory duties. Under RPI-X regulation, allowed operating expenses should be set on the basis of reasonable assumptions of forward-looking efficiency. If the business then out-performed these reasonable expectations, shareholders benefited through a higher return in the price control period, with the out-performance passing to customers in subsequent price reviews.

13.56. Many of the privatized utilities had achieved high initial productivity gains as they reorganized and restructured themselves as private sector companies. However, once the easiest efficiency savings had been achieved, subsequent improvements were much more difficult, and in BG's view a regulator should recognize that high levels of efficiency improvements could not be replicated indefinitely. However, BG argued that the Director General's proposals appeared to be based upon the belief that there were significant inefficiencies remaining within Transco, and that Transco could reduce costs even more quickly than in its

period of extensive restructuring, at the same time as meeting the challenges of liberalization and domestic competition.

13.57. BG said that substantial one-off productivity improvements had been achieved in transportation and storage since the 1993 MMC report and, in particular, since the fundamental restructuring which had accompanied the creation of Transco (described in Chapter 6). Direct manpower had fallen by 35 per cent, from 25,700 at the start of 1994 to 16,782 by the end of 1996, and total manpower (employees, agency staff and contractors) had fallen by 22 per cent, from 28,700 in 1994 to 22,379 by the end of 1996. Base operating expenses (total costs less the fixed cost of rates and the new expenditure required to support market liberalization) had fallen by £283 million between 1992 and 1996, 6 per cent a year. Over the same period productivity had increased by 40 per cent (measured on base cost/TWh), 26 per cent (cost to supply points) and 23 per cent (costs per km of pipes). Transco had made substantial use of bench-marking data and studies of best practice as a means of identifying areas for performance improvement and subsequently for driving down costs. This showed that, in comparative terms, Transco's productivity performance had been considerable.

13.58. BG told us that the 1996 Transco plan was submitted to the Director General in August 1995 and updated in December 1995, when Transco was being established as a separate business. BG said that it had provided the Director General with a sensitivity analysis on these forecasts on the basis that the developing competitive market, the proposed legislative framework and the time-scales for the introduction of domestic competition presented the business with substantial regulatory and commercial uncertainties. In addition, at the time of the forecasts, Transco had not taken over responsibility for meter work or the emergency service operations from BG Service. It was only after this occurred during late 1995 that the impact of operating these activities became apparent within Transco. BG subsequently worked with the accountants KPMG and engineering consultants Stone & Webster to produce critiques of the assumptions used in the 1996 Transco plan and provided the Director General with these analyses.

13.59. In summer 1996, as part of BG's planning process and in the light of the Director General's proposals on operating expenditure, it began a review of its forecasts for Transco. BG said that this process was given an added impetus by the unsustainably low operating expenditure proposals published by the Director General. BG said that the approach to assessing operating costs was exceptionally rigorous, involving the 'bottom-up' assessment of the resource requirements of each of the 14 key operating processes within the business, with individual manpower and productivity assessments produced and reviewed for each process. The resulting plan, the 1997 Transco plan, was subject to review by both Transco's management team and BG's Executive. BG's Board also required a rigorous approach as part of the demerger process in order to meet the Stock Exchange requirement that BG would have sufficient working capital for its requirements.

13.60. BG said that the main reasons for the difference between the 1996 and 1997 Transco plans were:

- (a) increased productivity based on greater experience of the management of Transco as a fully-formed, separate business and the consequent establishment of more challenging targets, following a detailed review;
- (b) clarification of aspects of the legal and regulatory regime following the passage of the Gas Act 1995. These included: the definition of the regime for calculating calorific values; the clarification of the regime for compensation payments required for disruptions caused by streetworks; reduced provisions for uncollectable income following the establishment of a credit risk framework under the Network Code; and the putting in place of contractual arrangements for the gas acquired by Transco for its own use; and
- (c) higher base costs in some areas, primarily relating to the maintenance of emergency service levels, following experience in the winter of 1995/96, the additional meter-reading requirements to support the growing competitive market and a higher than anticipated meter installation workload. These costs were not fully reflected in the 1995 forecasts as the activities were in the process of being transferred to Transco from the other business units of BG.

13.61. BG said that the 1997 Transco plan was based on a series of high-level assumptions concerning external influences (including a date for the start of the third phase of domestic competition and the roll out of national competition in 1998), market developments, including assumptions about supply and demand, and the outcome of the formula review. The plan did not include any impact from a windfall tax. In future,

BG said that Transco would continue to use bench-marking studies as a catalyst for cost reductions and a number of initiatives, such as engineering for value and work/asset management had been built into the 1997 Transco plan. Transco was continuing to develop its remuneration (or reward) strategy in line with industry best practice. The absolute reductions in operating costs planned for the next price control period, and the lower levels of new investment now forecast, needed to be set against its continuing commitment to improve safety; the range of services, including the emergency service, provided directly to gas consumers, the provision of higher standards of service to Transco's customers, and the significant extra costs associated with the introduction of full domestic competition.

13.62. In calculating its operating expenses, shown in Table 13.2, BG said that Transco had incorporated demanding reductions in cost levels between 1996 and the end of the five-year price control period, 2001/02. Its base operating expenses were forecast to fall from £1,092 million in 1996 to £950 million in 2001/02 (a reduction of 3 per cent a year). Even with the significant additional costs required to underpin the introduction of market liberalization, BG said that total controllable expenses were still forecast to fall by £174 million over the period (3 per cent a year) and total operating costs (excluding depreciation) by £136 million over the period (2 per cent a year), on a regulatory basis.

TABLE 13.2 **BG's operating expenditure projections\***

	<i>£ million, 1996 prices</i>					
	<i>1997/98</i>	<i>1998/99</i>	<i>1999/2000</i>	<i>2000/01</i>	<i>2001/02</i>	<i>Average</i>
1997 Transco plan	1,585	1,532	1,492	1,492	1,453	1,511
DG August 1996	1,390	1,359	1,282	1,230	1,190	1,290
Difference	(195)	(173)	(210)	(262)	(263)	(221)

Source: BG.

\*Includes land decontamination.

13.63. BG said that these cost savings would largely be achieved from reductions in total manpower, the costs of which account for approximately 40 per cent of controllable costs. Direct employee numbers would fall from 16,782 in 1996 to [ \* ] by the end of 2002, despite an increase of just over [ \* ] by 1998 (falling to over [ \* ] at the end of the period) to support market liberalization. Total manpower would fall from 22,379 in 1996 to [ \* ] by the end of 2002, despite an increase of up to [ \* ] by 1998 (falling to over [ \* ] at the end of the period) to support market liberalization. Transco had allowed an increase of [ \* ] per cent a year in the total pay bill, a real growth in average pay of [ \* ] per cent a year, compared with a UK-wide average of 1.7 per cent. Notwithstanding these considerable productivity improvements, BG said that the Director General had assumed that even higher levels were possible.

13.64. In BG's view, the Director General's proposals (shown in Table 13.2) had proposed unattainable cost reductions, based on a simplistic and flawed analysis by Coopers & Lybrand. The cumulative impact of the Director General's proposals would be to reduce Transco's allowed revenues by £1,103 million over and above the reductions in costs already proposed by Transco. This would require reductions of 4.1 per cent a year in controllable costs, and 3.7 per cent a year in total operating costs. In the context of the challenges facing Transco in the next price control period, BG said that the Director General's proposals were simply unrealistic.

13.65. During the course of the inquiry, the MMC asked the Director General for her comments on the 1997 Transco plan. In response the Director General commissioned further reports from Coopers & Lybrand and W S Atkins (described in Chapters 7 and 8). BG said that these were superficial as the Director General and her consultants had sought little further information from Transco. Nevertheless, based on these reports, the Director General had proposed further substantial reductions in operating costs which in BG's view compounded the impracticality of her approach. Under these proposals, BG said that it would have to make an immediate reduction in operating expenditure from the 1996 actual out-turn of £1,599 million to £1,316 million for 1997/98; a real reduction of 18 per cent in under one year. BG compared the Director General's March 1997 operating expenditure projections with its own revised projections submitted to us in March 1997, shown in Table 13.3.

\*Figures omitted. See note on page iv.

TABLE 13.3 Revised operating expenditure projections

	<i>£ million, 1996 prices</i>				
	<i>1997/98</i>	<i>1998/99</i>	<i>1999/2000</i>	<i>2000/01</i>	<i>2001/02</i>
Updated 1997 Transco plan	1,564	1,446	1,400	1,400	1,380
DG March 1997	1,316	1,272	1,178	1,104	1,039
Difference	(248)	(174)	(222)	(296)	(341)

*Source:* BG.

13.66. In BG's view neither the Director General nor Coopers & Lybrand had built on the robust approach of the 1997 Transco plan which was based on actual operating cost data for 1995 and 1996. Instead, BG submitted that Coopers & Lybrand had made unreasonable assumptions, inappropriate calculations and material errors. In particular, BG criticized Coopers & Lybrand's continued approach of estimating 'synthesized' pay rates for Transco employees, when full year actual data was available for 1995 and 1996.

13.67. More generally, BG expressed its disappointment that the Director General had not, prior to making the reference, allowed BG to see, or comment upon, the analyses by Coopers & Lybrand and W S Atkins. BG had not therefore had the opportunity to comment on, or respond to, those reports, to correct their errors, or to build into its own plans any useful insights they might contain. In the event, when, in the course of the inquiry, the MMC gave BG the reports, BG found them to be materially flawed.

13.68. The following paragraphs describe some specific issues relating to BG's operating expenditure forecasts. BG's views on further issues of detail are covered in Chapter 7 and its appendices.

#### *Land decontamination*

13.69. BG said that it had approximately 1,000 sites which were contaminated, often through the manufacture of gas from coal, an activity which ceased in the 1960s. Under the principle that the polluter pays, BG was responsible for the statutory decontamination of the sites to bring them up to legally acceptable standards and BG argued that Transco was the natural successor to the businesses which undertook the manufacturing activity.

13.70. Transco operated 70 per cent of these sites, with the site value included in Transco's balance sheet. The remaining sites were under the management of BG Properties, which was set up in 1994 with the full agreement of the Director General. BG submitted that the Director General had supported BG's proposal to establish a separate property division on the grounds that it would give Transco incentives to minimize its occupancy of sites, so reducing its costs (and allowed revenues) as it would no longer receive a return on the assets and incur costs, other than those for statutory decontamination as specifically agreed with the Director General. The sites were transferred to the property division at their decontaminated value, recognizing Transco's residual obligation for statutory decontamination. It said that the 1994 to 1997 price control formula was set on the explicit understanding that statutory decontamination costs in relation to the sites would be funded from transportation revenues. Unless adequate financial provision was made in Transco's allowed revenues, these liabilities would affect BG's ability, as licence holder, to finance the activities it was authorized and required to carry on as a PGT.

13.71. BG said that over the past five years it had invested heavily in research and associated costs to understand the scope of the liabilities and costs of tackling decontamination efficiently. It had made provisions for decontamination costs in its accounts in 1992 to 1995 and at 31 December 1996 the outstanding provision amounted to £404 million. It had forecast decontamination costs of £287 million to be spent in the price control period, which, in BG's view, represented an allowable cost under the price control formula. The Director General, on the other hand, took the view that, unlike the 1992 and 1994 price controls, in which decontamination costs were allowable, they should not be allowed in the next period.

### *Native gas in Rough*

13.72. BG told us that the Rough storage field had been configured with 2.2 billion therms of gas still in the reservoir which was recoverable, but was required to be in place to maintain pressure and allow the field to operate and provide the required deliverability; the gas would be recoverable if the field was closed. The production licence was held by E&P, with which Transco had discussed appropriate compensation for the cost of the gas held in the reservoir. The basis of the calculation was complex, but was broadly based on 11 years' production in the well being marketed either now or in 11 years' time, requiring assumptions as to future gas prices net of costs of extracting the gas. BG estimated that this came to an annual figure of between £10 million and £20 million—essentially the opportunity cost of not producing the native gas. The arrangements were entirely consistent with the need for there to be arms' length dealing between the different businesses of BG and the avoidance of cross-subsidies both of and by the regulated business.

### *Rates*

13.73. BG had forecast an increase in rates from its next review date of 2000 since it anticipated that, at that time, Transco would have to move from a system which was calculated by reference to changes in the length of high-pressure pipeline in the system (formula rates) to a conventional (and expensive) business rating system. During the course of the inquiry, BG told us that the formula rates charge would decrease to reflect changes that occurred since the start of the inquiry due to the effects of the Gas Act 1995 and BG's property rationalization which, together with other changes, would come into effect on 1 April 1997. Notwithstanding this change BG said that it still anticipated an increase in rates in 2000 from this lower base.

### *Bad debts and unrecoverable revenues*

13.74. BG said that unrecoverable revenue fell into three categories:

- (a) billed debt, which it was not cost-effective to collect (for which BG projected £11 million in 1996 declining to £3 million in 2002);
- (b) unbilled debt, which comprised gas imbalances and transportation charges which Transco could not bill successfully to shippers (BG incurred £84 million in 1996). This arose because the industry's data and measurement systems were unable to meet the Network Code's commercial specifications and Transco could not establish definitively which shipper was responsible for the gas in question. It was undertaking a major exercise called 'invoice quality review' to resolve the problems before full domestic competition was introduced; and
- (c) portfolio risk, which focused primarily on the risk of insolvency or bankruptcy of shippers, having regard for the commercial regime and the exposure of Transco. For the period 1997 to 2002 BG's forecast for unbilled debt and portfolio risk together was 1 per cent of revenues.

BG noted that the Director General, based on Coopers & Lybrand analysis, had originally capped unrecoverable billed revenues and portfolio risk at £30 million from 1997 onwards, but in March 1997 had proposed a further reduction to £5 million. BG considered this to be grossly inadequate.

### *Meter reading*

13.75. BG said that it had no contractual or statutory obligation to provide non-daily meter-reading services after 31 March 1997. However, since no shipper except British Gas Trading had made alternative arrangements, it had offered to enter into contractual arrangements outside the Network Code to provide this service for a further six months. After this period, it said that it was appropriate to withdraw from providing a regulated meter-reading service and proposed the Network Code liability package be reviewed so that there were no liabilities in respect of non-daily meter reading beyond 1 October 1997.

13.76. During the course of the inquiry, British Gas Trading served notice that it would undertake its own non-daily meter readings for domestic consumers both within the monopoly supply area and in the competitive pilot areas from 1 April 1997, and for all other competitive supply points later this year. BG said

that this affected both the scope and costs of Transco's meter-reading requirements within the price control period, since Transco would lose 97 per cent of current meter readings with the withdrawal of British Gas Trading.

13.77. Before this, Transco had entered into five separate meter-reading contracts with AccuRead and Northern Metering Services to fulfil its obligations to read non-daily read meters. In aggregate, it had forecast that these agreements would cost £80 million a year on the assumption that Transco would procure the reading of all meters. The loss of the monopoly area contract would result in a reduction in Transco's costs of £54.2 million a year. However, under the terms of the gas transportation charges, Transco was required to provide a £4.71 a year rebate for each meter read which was unbundled, which for 17.5 million meters would total £82.4 million, which as a result of the notional revenues provision in Special Condition 9C would represent an overall loss of £28.2 million a year over and above the avoided costs if applied from 1 April 1997. Likewise, in the pilot areas, Transco's costs would reduce by £5.6 million, but revenues would decrease by £8.5 million due to rebates (or an overall loss of revenue of £2.9 million a year). It provided revised projections for meter-reading costs of £193.7 million over the period, reducing from £70.0 million in 1997 to £27.6 million in 2002.

13.78. In the event in March 1997 a shipper proposed a modification to the Network Code, supported by OFGAS, to extend for one year BG's obligations to provide non-daily meter-reading services. BG accepted that it should offer such services on a regulated basis inside the Network Code until the end of September 1997 and, subsequently, outside the Network Code until the end of March 1998. There will be an extension of a further six months thereafter if a review by BG and the Director General concludes that there are still significant barriers to the establishment of a competitive market. BG said that it should not face a continuing obligation to provide non-daily meter-reading services for the whole market whilst it remained subject to substantial liability payments, and that, for example, it would not be practical for Transco to maintain the capability to resume a meter-reading service for British Gas Trading should it elect to return to Transco's service. BG submitted that, whilst Transco remained subject to the liability package, shippers were unlikely to move to other service providers who would not be able to match the payments available from BG if liabilities were incurred. In its view the liability package acted as an overwhelming deterrent to any shipper seeking meter-reading services from a potential competitor to BG and thus acted as a barrier to entry.

### ***Capital investment***

13.79. BG said that its capital expenditure forecasts presented to the Director General in the 1996 Transco plan were based upon the best market information available at the time. It told us that as part of BG's planning cycle the forecasts were subsequently revised in the 1997 Transco plan in the light of responses to the 1996 ten-year statement, which identified producers' intentions to deliver a much higher proportion of gas to southern terminals and changes to the number of meters to be replaced (the 1997 Transco plan).

13.80. BG said that Transco's investment was largely derived from its statutory obligations, its responsibilities for system safety and reliability and market demand and the inherent supply demand position. Investment required by statute accounted for approximately 70 per cent of total investment. The statutory obligations were closely aligned with, and were related to, the requirements of Transco's customers for a safe and reliable gas supply, growth in demand for gas and changing beach inputs requiring investment. Transco's forecast investment expenditure was therefore based on extensive consultation with its customers and the market. In BG's view, the 1997 Transco plan projections (shown in Table 13.4) were, subject to the assumptions on which they were made, the best forecasts available and a robust base for the price control. Given its statutory obligations and the requirement to satisfy growing demand for gas transportation, the plan was a challenging target with significant risk of increased expenditure requirement. The investment forecasts included efficiency improvements of 2.5 per cent a year, which the consultants Stone and Webster thought would be stretching for Transco.

TABLE 13.4 **BG 1997 Transco plan projections**

*£ million, 1996 prices*

<i>Category</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>
NTS	144	200	133	120	150	146
LTS	57	45	35	34	31	31
Distribution	109	108	105	102	98	95
Meters	226	253	243	237	206	153
Other	<u>124</u>	<u>76</u>	<u>45</u>	<u>59</u>	<u>69</u>	<u>56</u>
Total new investment	660	683	561	551	555	481
Net replacement	225	252	273	283	286	280
Total investment	<u>886</u>	<u>934</u>	<u>834</u>	<u>834</u>	<u>841</u>	<u>761</u>

*Source:* BG.

13.81. W S Atkins had recommended that Transco's capital expenditure should be reduced by 30 per cent to £3,775 million (1997 to 2001), based on the level of underspend in 1994. BG said that in reviewing W S Atkins' first report, which it had not been able to do before the inquiry was under way, it had found a number of material errors and misunderstandings, and felt that the report did not provide a robust basis for determining the price control. In particular, BG was concerned about the following aspects of the analysis and report by W S Atkins:

- (a) the report demonstrated a lack of understanding of the UK gas industry and the factors which influenced its development and requirements for the future, particularly in respect of domestic competition;
- (b) W S Atkins had failed to make the linkage between Transco's investment drivers and its forecasted workloads. The most obvious example of this was NTS investment, where W S Atkins had failed to use integrated modelling, which meant that its projected workload and expenditure could not deliver the agreed supply and demand forecasts within design criteria;
- (c) W S Atkins had used the out-turn of a single, atypical year, 1994, as a basis for future projections, failing to take proper account of historical data supplied by Transco; and
- (d) systematic underspends had been identified by Transco, removed from forecasts and notified to the Director General as part of the formula review process. W S Atkins had recognized that 50 per cent of the 1994 underspend was attributable to a lower than forecast peak demand, primarily as a result of lower than forecast power-station volumes.

13.82. BG said that its concerns were compounded by the revised investment expenditure proposals submitted by the Director General in March 1997 which increased the gap between BG and the Director General to over £2 billion over the period of the price control, shown in Table 13.5.

TABLE 13.5 **Capital expenditure projections\***

*£ million, 1996 prices*

*Years ending 31 March*

	<i>1997/98</i>	<i>1998/99</i>	<i>1999/2000</i>	<i>2000/01</i>	<i>2001/02</i>
1997 Transco plan	940	950	867	869	854
DG March 1997	604	556	442	387	398
Difference	(336)	(394)	(425)	(482)	(456)

*Source:* BG.

\*Gross of customer contributions.

13.83. The Director General's March 1997 proposals were based on comments by W S Atkins on BG's 1997 Transco plan. BG said that its concerns over the methodology of W S Atkins in its first report were reinforced by this second report. BG was concerned that where W S Atkins considered there was a lack of

data which prevented informed judgment, instead of seeking further information from the MMC or the Director General it had simply disallowed such investment. In BG's view this approach to disallow expenditure was inconsistent with incentive based RPI-X regulation which should incorporate realistic mid-point forecasts. It was not the case that there was a mechanism whereby additional investment could be 'added in' to the price control over its life when it is proved to be necessary. BG stated that the major differences between its 1997 Transco plan and the Director General's March 1997 proposals related to:

- (a) safety-related expenditure: BG said it was concerned that the Director General had now decided to disallow £965 million of expenditure, which was necessary to achieve a reduction in the incidence of gas in buildings, in line with the objective of improving safety levels; and
- (b) meters: BG said that it could not understand the basis of the reductions in the numbers of ETMs (2.3 million to 383,000 across the formula period) and replacement 'black spot' and 'black square' meters (500,000 to 100,000 a year) proposed by the Director General. In BG's view the latter proposals were inconsistent with the discussions which it had had with the OFGAS technical directorate.

13.84. BG submitted although the differences between the Director General's proposals and BG's forecast had only a relatively small impact on allowed revenues within the price control period, the magnitude of the difference in investment, £2,093 million in aggregate, had a material impact on cash flow. BG said that the combination of inadequate allowance in formula revenues for Transco's forecast investment requirements, the Director General's approach to depreciation and the inadequate cost of capital proposed by the Director General would have a significant effect on the appetite of BG shareholders for continued investment in Transco's pipeline infrastructure. BG was concerned that the Director General appeared to be using expenditure as a 'balancing item' to enable her to argue that, taken with her other proposals, the business had adequate cash; rather than as a key driver of the price control, against which the adequacy of cash flow should then be assessed. In addition, BG said that the proposals would effectively give the Director General executive authority to sanction Transco's capital investment programme.

13.85. The following paragraphs describe some specific issues relating to BG's capital expenditure projections. BG's views on other detailed aspects are covered in Chapter 8 and its appendices.

#### *NTS investment*

13.86. BG said that its investment plan for the NTS amounted to £894 million for the period 1997 to 2002 (at 1996 prices). This was based on supply pattern assumptions derived from detailed consultations with gas producers and shippers. The forecasts had reduced by £460 million due to the delivery of significantly more gas at the southern terminals. Expenditure was derived from modelling techniques which translated the supply demand position into an integrated investment scheme and hence projected workloads. Although there was no significant difference between BG and W S Atkins on future supply and demand data, BG was very concerned about the way this had been translated into workload and expenditure requirements by W S Atkins. Initially, W S Atkins had estimated £818 million for the period 1997 to 2001 but had since reduced this to £498 million over the same time-scale. W S Atkins had justified its expenditure reductions primarily on the basis of reduced workloads and on the incorrect assumption that previous forecasts had been over-estimated. However, BG pointed out that the cause of the over-estimates, contingencies, had been removed from its forecasts and this factor reported to the Director General earlier in the formula review process. It said that the reductions made by W S Atkins in respect of operating and flow margins and NO<sub>x</sub> emissions expenditure were also flawed, in that the former were required for system security and the latter to meet statutory requirements.

## *Mains replacement*

13.87. BG's projections on mains replacement were based on a proposed programme which would gradually improve the current confidence level of 42 per cent of not exceeding three incidents a year to achieve a 95 per cent confidence level by 2006. It said that the HSE had been closely involved in the development of the strategy and that it had been discussed with OFGAS and W S Atkins prior to the publication of the Director General's May 1996 proposals. BG was surprised by the Director General's decision to revise her proposals downwards from those included in her August 1996 proposals at a late stage in the inquiry. The Director General's March 1997 proposals, which represented a 56 per cent reduction in allowed replacement expenditure, would have serious consequences for safety, reliability and Transco's operating costs. Under her proposals, BG said that Transco's confidence level would decline to a 95 per cent confidence level of 11 incidents by 2006, with only a 27 per cent confidence level of not more than three incidents a year. They would also have knock-on effects of an extra £25 million a year on operating costs by 2001/02, because of increased emergency work and leakage. BG said that the HSE's stated policy was to ensure that the new arrangements in the industry 'must be as safe as current arrangements and should, as far as possible, provide a basis for improving standards in line with knowledge and technology of the day'. BG considered that its proposed programme met these criteria. The HSE had appointed consultants to review BG's strategy.

13.88. BG believed that the HSE's review would endorse BG's position. BG pointed out that its proposals would lead to an improvement, measured by reference to the points system, from 1,200 to only 1,110 in the 1997 to 2002 formula period, which was the slowest rate of improvement since the 1970s. BG's forecast costs were mid-point estimates the HSE had indicated that its review was as likely to require more replacement as less. It felt that given:

- (a) the HSE's role was to determine appropriate safety levels;
- (b) the Director General had already consulted over the programme before she published her initial proposals and after; and
- (c) the scope of the MMC inquiry clearly embraced appropriate levels of capital and operating expenditure for the next five years and the legal duties of the MMC and Director General under sections 4, 4A(1) and (2) of the Gas Act were clear;

the MMC should endorse the 1997 Transco plan. To fail to do so would delay the implementation of the policy and undermine confidence in the regulatory process. Should the review of Transco's replacement strategy, which was being undertaken by the HSE, result in adjustments to workload, these would be actioned as soon as reasonably practicable. BG suggested that any financial variances should be dealt with as part of any overall capital correction at the time of the next formula review.

13.89. BG was also concerned about the condition of the ductile iron mains population. There had been two recent ductile iron mains-related incidents. Tests on ductile iron mains in 1996 had indicated that in all the cases surveyed more than 50 per cent of the pipe wall had corroded on at least some of the main. Enough was known about ductile iron mains to identify the population requiring replacement to ensure Transco's safety target was achieved. BG told us that if no ductile iron mains were replaced on a programmed basis, the rate of deterioration would result in two incidents a year (at 95 per cent confidence levels) from ductile iron mains alone by 2006.

## Meters

13.90. BG said that the key drivers of meter investment were the replacement of meters reading outside their statutory tolerances and the installation of ETM and base (modular) prepayment meters. Meters had to be installed and maintained in line with legislative requirements. The Gas (Meters) Regulations 1983 required that meters must read within a tolerance of plus or minus 2 per cent. The regulations also required that new meter designs for use in the UK must be approved by OFGAS. Therefore, Transco had to install and maintain meters to the required standard and meters were badged to indicate this. BG projected expenditure of £340 million on the replacement of 3.9 million meters which had been identified as reading outside the statutory tolerances (so-called black square and black spot meters). This assumed full replacement of defective meters as the most efficient way forward. BG had considered two alternatives to full replacement, but these options had been rejected since:

- (a) refurbishment (including replacement of the diaphragm) would cost approximately £25 per meter, and was rejected because it was unclear whether the meter would read accurately for a prolonged period, it would only have a 12-month warranty (compared with ten years for a new meter), and since replacement would start with the oldest meters, refurbishment could lead to new diaphragms in meters where all other moving parts were over 15 years old; and
- (b) recalibration would require meters to be removed, tested, adjusted, cleaned and badged. However, meters would deteriorate further with age and would quickly drift outside tolerance and require replacing again. In response to the Director General's proposal for *in situ* recalibration, BG pointed out that the technology for this sort of work did not currently exist.

13.91. BG acknowledged that meters purchased after 1987 were still under warranty. However, it said that to exercise its rights under the warranty, the onus of proof lay with Transco which would have to test the meter to verify that it was reading outside the statutory tolerance at a cost of £84 per meter. If the meter proved to be at fault, Transco could have it repaired, tested and resealed by the manufacturer under the terms of the warranty, thereby paying £84 for each meter repaired, notwithstanding the uncertainties surrounding refurbished meters. Since this cost was higher than replacement with a new credit meter, BG had not used this option for its forecasts.

13.92. BG also projected installation of 2.648 million ETMs and base prepayment meters between 1996 and 2002 (at a cost of £423 million), in contrast with the reduction initially proposed by W S Atkins of 50 per cent of that number and of 83 per cent in their second report. BG justified its forecast for a rise in ETMs and base meters from the present level of 850,000 to 2,460,000 in 2002 saying that there had been a significant rise in the use of ETMs in 1995 and 1996 associated with changes in the gas industry. BG's licence required Transco to install the type of meter required by a shipper if it had one reasonably available. Since charging for ETMs was not cost-reflective (the Director General having prevented Transco from introducing more cost-reflective charges), suppliers had gained the benefits of ETMs, principally through improved debt management, without incurring the costs involved in installation and maintenance. During the inquiry, BG told us that the 1997 Transco plan understated the increase in ETMs for 1997 since British Gas Trading had requested more ETMs than forecast, resulting in a prepayment population of over 1.3 million by the end of 1997. BG pointed out that the proportion of prepayment meters in the electricity industry (currently 15 per cent) was greater than that implicit for the gas industry in its projections (12 per cent by 2002). In addition, it said that gas suppliers were required by licence to offer consumers prepayment meters (or equivalent facilities) before seeking to disconnect for bad debt.

### *Interconnector*

13.93. BG projected expenditure on reinforcement of the network associated with the Interconnector of £315 million. It said that this forecast was dependent on producer and shipper forecasts of volumes transported and could alter should these change significantly. It was likely that, given the proximity of Bacton to the Interconnector, significant volumes of gas would be diverted to the Interconnector rather than fed from Bacton to the south of the country. This would lead to an increased requirement to supply the south of the country from Transco's northern terminals. The proposed Elgin Franklin pipeline to Bacton had capacity to supply only 60 per cent of the forecast Interconnector volumes, and the remaining 40 per cent would need to come from existing terminal deliveries. There was, however, a distinct possibility that the Transco system would be bypassed at Bacton with direct input from the offshore pipeline to the Interconnector. BG added that even with the Bacton bypass it would need to invest £315 million, since this gas would not be available to meet demand in the south of the country. With no Interconnector volumes being transported through Transco's system, average transportation charges to existing UK customers would be higher. BG had proposed in a consultation document that the volumes to be transported through the Transco system to the Interconnector and the costs of associated reinforcement should be incorporated within the main formula reflecting the integrated nature of Transco's system.

### *Information systems*

13.94. BG forecast expenditure of £143 million for IS including £57 million in 1997. This was more in one year than W S Atkins had allowed for the whole period (£45 million) based on what appeared to be a cursory IS review carried out at the end of the W S Atkins study. BG said that it could not deliver the efficiencies incorporated in the 1997 Transco plan or meet the requirements for full domestic competition with such a reduced level of information system expenditure. In preparing its forecasts, BG had commissioned independent consultancy reports on UK-Link (which underpinned the Network Code and domestic competition). These reports identified the UK-Link hardware and software requirements for scaling and upgrades to enable the system to handle the transition complexities and huge volumes of data interchange involved, and these were reflected in BG's IS expenditure forecasts. BG now thought it more likely that it would overspend given the pressure to introduce domestic competition on an unprecedented scale and over tight time-scales. The Government's move to lay an Order before Parliament would facilitate an even earlier 'roll-out' of domestic competition.

## **Conclusion**

13.95. On the basis of its own modelling BG concluded that the Director General's proposals would starve the business of both cash and profits, adversely affecting its dividend paying capacity and materially weakening its capacity to borrow by reducing its interest cover. While the Director General might believe that the economic effect of her proposals was to value Transco at £12.3 billion (£11.7 billion at 1994 prices), the reality was significantly different. It said that the combination of inadequate cash flows, sharply reduced dividend-paying capacity, and the fact that most of the NPV of her proposals lay in the residual value of the assets in 2002 (if the regulator of the day did not then change the basis of valuation once more) would cause investors to consider that the market value of Transco, based on the Director General's proposals, was at a very significant discount to £12.3 billion. In addition it said that her unrealistic operating cost projections and her failure to include the costs of statutory decontamination further reduce the viability of Transco.

13.96. BG analysed the Director General's proposals on the basis of her assumptions on abated depreciation, operating cost projections and cost of capital, making no allowance for what it considered to be inevitable decontamination costs or the costs of unbundling activities. In this analysis the only assumptions not based wholly on the Director General's own proposals were the value of working capital and capital expenditure assumptions, where the Director General's position was not clear and had been subject to late and unexplained changes.

13.97. On the basis of BG's analysis of the Director General's model, taking the Director General's 'regulatory value' of £12.3 billion on an abated CCA value, BG calculated that if dividends were paid out on the demanding basis of a cover of [\*] HCA profits, they would be cut to [\*]p in 1997/98 and then fall by

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\*Details omitted. See note on page iv.

[\*] per cent a year in real terms thereafter. In nominal terms the dividend would be [\*]p in 2001/02. Net debt would increase by [ \* ] to [ \* ], putting BG [ \* ] [ \* ] among UK companies in the scale of its borrowings, but with a market capitalization of [ \* ]. HCA interest cover would deteriorate from [\*] times to [\*] times over the period and at these levels borrowing from the capital markets would be very difficult. BG said that it could then be dependent on bank debt which might only be available subject to constraining covenants and conditions.

13.98. BG concluded from this analysis that the Director General's proposals, even if her unrealistic assumptions on operating cost were accepted as achievable, would put BG into a uniquely fragile financial position for a utility. It would not be able to fund an adequate dividend and its capacity to borrow would be constrained. BG had been advised that recourse to shareholders for additional equity would be extremely expensive at any time over the formula period.

13.99. BG submitted that as further proof that the Director General's proposals were unrealistic, it had compared her regulatory asset value of £12.3 billion, with Transco's share of the current BG market capitalization, estimated to be £7.4 billion. In its view this comparison reflected the fact that the capital markets were not prepared to accept that the Director General's proposals accurately incorporated the value she attributed to Transco and they were, effectively, discounting the future income flows at about 11 per cent. In BG's view, this was not attributable to City myopia or any fundamental lack of understanding of the Director General's proposals. On the contrary, it showed a clear understanding that the eventual theoretical return implied by the Director General's proposals depended upon a number of future contingencies, in particular the continuing endorsement by the regulator and her successors, and by any future MMC, of the basis of the current proposals over the next 15 or more years. None of these necessary endorsements could be guaranteed by either the MMC in their report or the Director General in her forthcoming determination. It said that the Director General's case was based on faith in the actions of future regulators and she could not be said to be 'securing' BG's funding if all she was doing was placing responsibility on future regulators.

13.100. BG said that the MMC had themselves recognized the difficulties of seeking to bind their successors, most recently in the 1996 BAA report. The problems in the case of Transco were more complicated because the continuing endorsements required by such an approach would necessarily involve the endorsement of prices higher than would otherwise have obtained, that is, the present regime had continued unchanged. These prices would be based upon 'regulatory asset values' which would be well in excess of the value of assets calculated by reference to the modern equivalent asset valuation. In BG's view such an approach was so contrary to conventional notions of economic efficiency and inter-generational equity that it could not be expected to prevail in the future. The City understood this very well and had suitably discounted the outcome.

13.101. If the regulatory asset value of £12.3 billion proposed by the Director General was correct, BG said that it should expect the stock market valuation to tend to equate to that value. The fact that the ratio of regulatory asset value to market capitalization was currently considerably less than one, very materially lower than other utilities, and that there was little prospect of it increasing substantially, meant that there was no satisfactory incentive to invest in the company. Each new pound invested in the company would be valued by the stock market at considerably less value, this indicated that the true cost of capital was considerably higher than that assumed.

13.102. It made little difference, according to BG, if the MMC were to adopt a transition to an abated value for depreciation by, for example, recommending an extra 1 per cent of allowed return over the cost of capital for, say, two years. This would hardly affect interest cover, which would fall from [ \* ] to [ \* ] over the formula period on this basis, and would have no material effect on BG's capacity to borrow.

13.103. BG submitted that whether one looked at the financial outcome, regarding all of the Director General's principal assumptions as achievable, or by examining the relationship between the regulatory asset base and the market value, or by valuing Transco on the basis of a normal utility dividend yield, there were serious deficiencies and material internal inconsistencies in the Director General's proposals. If they were adopted, the MMC would not have secured that BG could finance its functions or have an incentive to develop the business. It considered that the Director General's proposals represented a 'quick fix' in which short-term benefits were transferred from shareholders to Transco's customers in return for the speculative

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\*Details omitted. See note on page iv.

possibility that transportation prices would rise sharply subsequently and that shareholders would be recompensed some time after the year 2010.

13.104. In summary, BG told us that the Director General's proposals for the period 1997 to 2002:

- (a) would provide inadequate cash and profits for Transco, and would sharply reduce its dividend-paying capacity and its capacity to borrow further;
- (b) would not support a 'market value' of Transco which even approached £12.3 billion, the regulatory value proposed by the Director General;
- (c) totally disregarded the effect of technical progress on CCA values in her calculation; and
- (d) had a perverse effect on pricing. The Director General's proposals would result in prices in excess of the 'glide path' to economic prices implied by the 1993 MMC report by 2002/03 and lead to prices in excess of the economic level by around 2010. Prices would continue to diverge from the economic level thereafter. The Director General's case was that a satisfactory return would be earned on assets over their life. BG said that for this to happen under her proposals future regulators would have to agree that prices and returns should exceed levels that would otherwise be considered economic or efficient at that time in order to deliver returns promised 20 years earlier. In BG's view it was not credible to assume that their future regulators would necessarily agree to outcomes that were not justified on economic grounds.

13.105. BG said that its proposals for allowed revenue (shown in Table 13.1) implied no reduction of 'P' beyond that which would occur if Special Condition 9C continued unamended and a level of X of -2.25 (which, with a revised form of control, was equivalent to an X of -6 on the current basis). The figures in Table 13.1 did not include recovery of K from the current formula period as this was income that related to the period from 1994 to 1997. At that time returns were lower than the 'regulatory range' allowable, and would have been paid out as a dividend in line with Transco's dividend policy of maintaining CCA cover of 1.

13.106. BG considered that its proposals, in contrast to those of the Director General, would continue the progression towards economic pricing and allow a sustainable reduction in prices while enabling Transco to secure the financing of its activities, meet its service targets and underpin domestic competition. Its proposals would lead to average ordinary dividend payments of £[ \* ] million a year over the formula period, after servicing the costs of debt and preference shares within Transco's regulatory capital structure.

13.107. BG submitted that in equity its shareholders should not suffer the regulatory attack implied by the nature of the Director General's proposals on the asset base and depreciation, which had reduced the market value of Transco to £7.4 billion. In addition it said that her unrealistic assumptions on operating cost would further reduce the rate of return earned by BG and thus the value of the business. The Director General's case was predicated on the basis that shareholders had benefited at the expense of customers. This had not been the case, and nor would it be in the future if BG's proposals were accepted. These struck a fair balance between shareholders and customers, and were wholly consistent with shareholders' reasonable expectations, not least those engendered by the 1993 MMC report.

G ODGERS (*Chairman*)

J S METCALFE

G F OWEN

G H STACY

P A BOYS (*Secretary*)

29 May 1997

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\*Figure omitted. See note on page iv.