

9 The views of the DGES

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Introduction

9.1. In his introductory comments to the MMC at the first hearing the DGES said that he regulates a large number and a very large variety of different companies. Setting price controls was an important task and the DGES had devoted much time to the proposals, including consultation with the companies. He said that there were many similarities between the English and Welsh companies and the two in Scotland; but there were also important differences as to customer mix, terrain, size, and their structure, in that the two Scottish companies were vertically integrated whereas the others were not.

9.2. The DGES said that he had to balance the need for consistency of approach to all these similar companies against the need to take account of their special features and the overall regulatory context. That required using judgment, but also models.

9.3. Within the regulatory context, the DGES had become aware during his work on price controls that to continue the then present price control in England and Wales would lead to excessive prices. There was an overriding need to bring prices down. For Scotland, there was not the same need for large initial reductions, but rather to reduce prices over time to reflect the possibility of further efficiency gains.

9.4. The privatization of the electricity supply industry had led to the following timetable for distribution and supply businesses:

- (a) as to distribution, price controls would be reviewed with effect from 1 April 1995 for each of the RECs and the two Scottish companies; and
- (b) as to supply, the 12 RECs' price controls were to be reviewed from 1 April 1994; and the two Scottish companies from 1 April 1995.

Consultation

Distribution

9.5. The DGES began his consultations on the distribution price control in October 1993 with the publication of his consultation paper 'Electricity Distribution: Price Control, Reliability and Customer Service.' The foreword said that distribution charges represented some 22 per cent of the final price of electricity, and that many customers had expressed concern about electricity prices and the resulting profits earned, particularly by the RECs. The DGES said that the review he was undertaking provided the opportunity to assess the situation and to set a framework of controls for the future.

9.6. The consultative document said that in setting the new price control it would be important to protect the interests of consumers while recognizing that companies need to generate sufficient revenue to cover the operating costs of an efficient company, to earn an appropriate return on the capital already invested in the business, and to finance required new investment. Customers should not pay more than is necessary to meet these needs.

9.7. The DGES commented that capital expenditure programmes affect standards of service and influence the amount of revenue needed to be raised by the price control. They would also affect, among other things, the value of assets employed. Because it was important to scrutinize capital expenditure schemes carefully, the DGES had engaged consultants to examine the companies' investment programmes during the existing price control and their plans for further investments until the year 2000/01. The DGES's review would check future investment programmes thoroughly to ensure that further capital expenditures were justified on the basis of a rigorous analysis taking into account compliance with statutory obligations and planning standards, the effects on quality of service, and the likely costs and benefits involved. The document stated that the amount of expenditure which companies should undertake, and so the appropriate price to be allowed under the price control, would depend on the assessment of how much should be spent to avoid interruptions.

9.8. The review would also look at companies' past and present records on operating costs; and at forecasts of future operating costs in order to ensure that price controls reflected the minimum level consistent with the operation of an efficient business. This aspect of the review would identify the functions central to the operation of the distribution business and what the DGES perceived as best practice. OFFER would check on the extent to which companies had sought to contract out their activities and, where possible, those activities would be costed against market prices. This and statistical and econometric analysis of cost functions would together be the basis for a study of comparative efficiency across all 14 distribution businesses in order to assess the scope for efficiency gains in individual companies. The indicated price control would reflect reasonable necessary costs and provide an incentive for greater efficiency in the future. The price control would also reflect the need that allowed revenues should provide for an adequate return on the capital invested in the industry. Since distribution was a low-risk investment, with little threat of bankruptcy and a high degree of certainty as to income, the return which shareholders required would be below that earned by the majority of UK companies.

Supply

9.9. In reviewing the supply price control in Scotland, the DGES issued in November 1993 a consultative paper entitled 'The Supply Price Control Review for ScottishPower and Scottish Hydro-Electric'. By that time the DGES had already concluded the review of supply price controls for the RECs. A matter of importance to the DGES in undertaking the review of the Scottish companies was that the revised supply price control should create the conditions for developing the greater competition that would be possible from April 1994, when all customers with a maximum demand of more than 100 kW would have the right to choose their own supplier.

9.10. In declaring the ground to be covered in the consultation paper OFFER said that the term 'supply of electricity' covered such activities as:

- arranging for the bulk purchase of electricity from generators and for its transmission and distribution;
- sending out bills and collecting payments;

- providing advice to customers (for example, on tariffs, on how to use energy efficiently, and on special services); and
- advertising, marketing, and providing information.

9.11. The importance of the supply element in the overall cost of electricity varied according to the consumer's maximum demand. For the non-franchise market the supply cost is about 1 per cent of the final price of electricity; in the franchise market it is about 6 per cent; and for the domestic consumer it represents about 9 per cent.

9.12. The DGES pointed out that although the supply business is not a major contributor to profits, that understated the importance of the supply price control review: the greater part of the revenue and profits of the generation business of the Scottish companies was determined by the allowance for generation purchase costs in the supply price control. In Scotland there were two supply price controls covering:

- (a) the up to 1 MW market; and
- (b) the up to 10 MW market (ie the greater part of the non-franchise market).

From April 1994 the franchise market was reduced from 1 MW to 100 kW. The price controls cover only those customers supplied by the companies in their own areas. They exclude customers with their own generating facilities, who receive supplies under 'top-up' and 'stand-by' arrangements.

9.13. Each supply price control sets a maximum average charge per unit, measured in kWh of electricity supplied. The charge is made up of:

- transmission and distribution charges, which are subject to separate price controls;
- supply costs, which are controlled by a revenue allowance per kWh supplied. Under the present control for HE this reduces in real terms each year by an RPI-X formula, with X set at 0.3 to April 1995;
- generation costs, for which there is a per kWh revenue allowance. HE's licence specifies that the allowance, set in 1990/91, rises in line with the RPI for each of the following three years, to 1993/94, after which it is progressively replaced by a value corresponding to the average electricity purchase costs of RECs in England and Wales (the GBY). In 1994/95 the ratio of the RPI-related sum (known as IP) to the GBY was 90:10; in 1995/96 it will be 75:25; in 1996/97 it will be 50:50; in 1997/98 it will be 25:75; and in 1998/99 and following years the allowed generation cost will be wholly related to the GBY; and
- a factor to correct for overcharging or undercharging against the price control in the previous year. These variations occur as errors in forecasts used by the companies as to inflation and the number of units they expect to sell.

9.14. In considering the possible nature of a supply price control, the DGES favoured the current approach of RPI-X, whilst noting that options included one of profit control (a 'rate of return' control), and non-discrimination conditions (which would prohibit discrimination between franchise and non-franchise customers).

9.15. The scope of the price control agreed with the RECs was restricted to the 100 kW market, ie the franchise limit from 1 April 1994. The RECs had given an undertaking to the DGES that the prices they would offer to customers whose maximum demand was just above 100 kW would continue to be comparable to those offered to franchise customers. The DGES's proposals had noted that existing tariffs spanned the 100 kW boundary, and his proposals to the RECs had stated that if they were to change the boundaries at which their tariffs operated, the DGES would carefully examine the changes. His consultation exercise over the supply price controls of the Scottish companies would cover the same considerations.

9.16. The DGES was clear that competition in the over 1 MW market in Scotland had been effective in controlling prices. Prices to 10 MW customers were at only 93 per cent of the permitted level. It was for consideration therefore whether to end price control in that sector.

9.17. In examining the RECs' supply price control the DGES had come to the view that the price control should have as its starting point comparable treatment for all the RECs, except to the extent that a systematic variation in costs might be identified associated with differences in underlying conditions beyond an individual company's control. The DGES had concluded that the main determinants of costs were the number of customers and number of kWh supplied, in the proportion of 3:1. That is to say, 75 per cent of costs were customer-related, and 25 per cent were related to kWh supplied. It also appeared to him that RECs with more customers have lower costs per customer.

9.18. This had led the DGES to introduce a supply price control in England and Wales with the following elements:

- (a) a fixed sum for each company, ranging from £10 million to £16 million;
- (b) an allowance per customer of £15.84; and
- (c) an allowance per kWh of 0.0924p (at 1991/92 prices).

Each element was to be affected by an annual factor of RPI-2, reflecting the scope perceived by the DGES for efficiency gains in the companies.

9.19. The DGES sought views on the applicability of this regime to the Scottish companies, and in particular sought views on what differences might exist to affect scope for efficiency gains between the RECs and the Scottish companies.

9.20. In seeking views on the allowed generation charge, the consultation paper stated that the amount had been set at vesting by deducting from the allowed unit revenues of the Scottish companies the elements attributable to transmission, distribution and supply. The allowed generation charge was not therefore derived from a calculation of generation costs at that time.

9.21. The paper noted that the RECs had little ability to influence the purchase cost of generation, and it was therefore appropriate to 'pass through' the purchase to customers. But the Scottish companies were vertically integrated, and were therefore in a position to inflate generation prices. Pass-through in their case was not feasible, and it was therefore necessary to incorporate an explicit control on generation purchase in the Scottish supply price control. As noted in paragraph 9.13, this initially took the form of a sum set at vesting day being uplifted in line with the RPI, followed by a transitional period in which a combination of RPI increases and REC purchase costs would affect the generation price control until in 1998/99 it would be based wholly on the purchase costs of the RECs.

9.22. The DGES said that alternatives to the GBY approach could include a fuel price index, or a continuation of the RPI-X approach.

9.23. The consultation paper said that the Scottish generation costs compared favourably with those in England and Wales. Non-franchise market prices were generally lower in Scotland than in England and Wales, and domestic customers in Scotland enjoyed the lowest tariffs in Great Britain. Prices paid by customers in England and Wales include the fossil fuel levy whilst the REC purchase costs that determine the GBY exclude the levy. The DGES suggested that a comparison of RECs' purchase costs in 1993 (less the fossil fuel levy) with the generation allowance in the 0 to 10 MW price control suggested that the GBY would be likely to reduce generation charges, in real terms, from the level then current.

9.24. In considering how the GBY related the Scottish allowed purchase cost of electricity to the RECs' actual electricity purchase costs, the consultation paper noted that the latter would cover all of their supplies (franchise and non-franchise) whereas the Scottish allowance was restricted to the price-controlled market segments. The RECs' purchase costs were therefore adjusted to reflect differences in load shapes between the RECs and the Scottish companies. Provided that the load shape of any segment of the Scottish market was known or could be estimated, it was possible for the GBY to be applied to that market.

9.25. An important factor affecting the cost of generation in Scotland was the NEA. The price paid to SNL for its output is governed by this long-term agreement with ScottishPower and HE. For the years 1994/95 to 1997/98, the price paid becomes progressively determined by reference to a yardstick very similar to the GBY in the supply price control. The NEA covers 39 per cent of the total electricity generated in Scotland, and its use of a price formula very similar to the GBY provides a hedge for the Scottish companies against the risk that their generating costs will deviate from the generation allowance in the supply price control. The NEA provides for the charge under that agreement to be reviewed if any one of a number of circumstances arises. One of these circumstances is if the generation cost allowance under the supply price control alters by more than 2 per cent of the price charged to customers in the 0 to 1 MW or 0 to 10 MW markets. It was possible that the outcome of the present supply price control review could trigger a review of prices under the NEA. However, the NEA does not require that the parties do more than review the price condition. It could not be assumed therefore that, if the GBY in the supply price controls were to be replaced or modified, prices under the NEA would automatically be adjusted in the same way. A change in the GBY, therefore, could have important implications for the cost of purchases of nuclear electricity by ScottishPower and HE and for the revenues of SNL.

9.26. The consultation paper referred to the DGES's view that a figure of 1 per cent on turnover should be the basis for allowed profit margin in the supply price control broadly consistent with a return on capital of 10 per cent on the assets employed in the business.

9.27. The DGES said that the valuation of assets was important, and that it would be appropriate to examine the value that investors have placed on the business rather than the value a company places on itself in its business accounts.

9.28. Other issues raised in the consultation paper included energy efficiency, standards of performance, methods of payment, and the use of RPI data which were historic rather than forecast. Whilst these are important issues they do not require detailed examination in this chapter.

The proposals

9.29. The DGES's proposals for the Scottish price controls were published in September 1994 in 'The Scottish Distribution and Supply Price Controls: Proposals'. ScottishPower accepted the proposals. HE rejected them and the DGES referred the matter to the MMC under section 12 of the Electricity Act 1989.

Distribution

9.30. The proposed *distribution* price control for HE was relatively simple in construction:

- (a) RPI data would be historic rather than forecast.
- (b) Charges associated with all prepayment and special meters would be treated as excluded revenue as in the RECs.
- (c) Competition would be introduced as to providing connections; and limits were introduced as to the extent that customers would have to pay for the costs of reinforcement of the distribution systems. But connection charges would continue to be excluded from the distribution price control.
- (d) The distribution price control would be separated into two components—one associated with metering and the other related to the rest of the distribution business. Any subsequent metering-related amendments would be confined to the metering component.
- (e) To stimulate energy efficiency the relating of revenue to units distributed would be altered, so that the weight of units distributed in the price control formula would be halved; and the other 50 per cent would be related to customer numbers.

(f) The RECs have a term in their price control related to losses of electricity suffered between transmission and supply. Such a control would now apply to HE.

(g) There would be an X factor of RPI-1, against RPI-2 for all the other PESs.

9.31. In making these proposals the DGES had analysed the Scottish companies' costs in a similar way as for the RECs. He had made extensive use of comparisons across all 14 companies. The DGES estimated the cash outlays that each company would need to make over the period of the forthcoming price control, assuming that it was managed efficiently, and that it maintained or improved its standards of service, but taking account of the particular circumstances under which it has to operate. In looking at differences between the companies the DGES made specific allowance for the fact that in Scotland 132 kV lines are part of the transmission businesses whereas in England and Wales they are part of the distribution system; and also for the fact that the Scottish companies treat certain costs as relevant to the supply business whereas RECs treat them as arising in distribution.

9.32. The DGES believed some of the cost differences between the companies were due to relative efficiency. He also believed it was more costly to operate in certain areas than others. In consequence, he made adjustments to operating costs to take account of this in subsequent calculations about future costs.

9.33. Having done this, the DGES felt that the more controllable costs could be reduced by 3 per cent per unit of output by all the companies over each of the five years of the price control period. Taking account of less controllable costs (such as rates, wayleaves and insurance), this would have the effect that the average reduction in operating cost per unit would be about 2 per cent a year.

9.34. The DGES said that these were realistic operating targets for well-managed companies in a post-privatization context. He believed they could be achieved without compromising standards of service. He said that the targets were significantly more demanding than envisaged in the Scottish companies' original business plans.

9.35. The DGES recognized that significant investment in the distribution network would continue to be required in future by all 14 companies. Nevertheless, not all the expenditure planned was held to be justifiable, and in determining the appropriate amount of distribution revenue required, he reduced overall the amount available for capital expenditure, the reduction varying from company to company, and ranging up to 25 per cent of their planned capital expenditure.

9.36. The DGES had also considered the cost of capital and asset valuations, the main issue being how this should be done. One of the difficulties in valuing HE's assets on the basis of what was paid for them by investors is that distribution assets are only a part of the whole for which investors paid at the time of flotation. The DGES took account of what investors paid for National Power and PowerGen in helping him put a valuation on HE's generation assets. From this he derived values for HE's transmission and distribution businesses.

9.37. The DGES said that evidence from a variety of sources indicated that the cost of capital for HE was about 7 per cent, in the middle of the 6.5 to 7.5 per cent range suggested by the MMC in their report on Gas and British Gas. At the time of flotation it was reported by analysts and others that the distribution price controls in Scotland were set on the basis of a 6 per cent return on a valuation of the distribution assets at the time. In order to reconcile these two figures, the DGES used a value lower than the current cost book value of the vesting assets of the distribution business in order to be consistent with the reported basis of the initial control. To this value the DGES added the cost of net new investment to arrive at a valuation of the assets at the beginning of the new price control period. The DGES had also made an adjustment to transfer some supply business costs to the distribution business, in line with how the RECs treated such costs.

9.38. On putting together the various figures he had arrived at as to operating costs, capital expenditure, the cost of capital and the valuation of assets, the DGES, for each of the 14 companies, sought to translate those sums into sources of revenue required to finance the businesses over the period of the price control review. The calculations indicated a need for substantial cuts in prices charged by RECs, but not for the Scottish companies. The latter's initial distribution price controls were tighter than those of the RECs in that:

- (a) they provided for RPI-0.3 for HE (0.5 for ScottishPower) whilst the RECs' controls varied between RPI-0 and RPI+ 2.5; and
- (b) they allowed the Scottish companies to raise prices in the first year of their control to a much lesser extent than could the RECs in the first year of their controls.

The effect of this was that distribution prices in Scotland were 10 per cent lower than the average in England and Wales relative to their position in April 1990.

9.39. The DGES noted that HE had argued that the level of distribution charge set at vesting failed to take account of certain costs of the distribution business, that the asset valuation was too low, HE's distribution charges were low relative to the RECs, and that some rebalancing of its charges should be undertaken. The DGES took the view that investors were aware of the price controls at the time of flotation and may be presumed to have valued the business and its assets accordingly. Nor did the company's profits appear to have been unacceptably low, either as to the distribution business or the company as a whole. The revision of the RECs' price control would mean that their prices would fall to the point where HE was at the median level of REC prices.

9.40. In considering the argument for rebalancing, the DGES referred to the hydro benefit provision, based on the perceived benefit to HE of cheap hydro-electricity. An explanatory note to the licence envisages that this hydro benefit will be at least sufficient to cross-subsidize HE's transmission and distribution businesses to the extent of £11 million and £29 million respectively at 1990/91 prices. The licence provides for this degree of cross-subsidy to continue annually, increased by the RPI. This provision in the licence reflected the Secretary of State for Scotland's concern that HE's costs for the transport of electricity might be higher than elsewhere because of its small and sparsely-distributed customer base, and the difficult terrain over which it has to operate. At the same time, the existence of substantial hydro generation gave HE a generation cost advantage over others, and it was appropriate to use that to hold down the level of transmission and distribution charges.

9.41. In his earlier proposals for the transmission price control, which HE had accepted, the DGES concluded that it was not necessary at that time to use hydro benefit to restrain transmission prices. The DGES said that in fixing the distribution price control, he *would* be minded to propose that hydro benefit should be used if that were necessary to offset what might otherwise be a significant increase in prices.

9.42. Having considered all of this, the DGES took the view that there should be no increase in the revenue arising from the distribution price control. He believed HE should be able to increase efficiency in its distribution business. Nevertheless he thought it appropriate to rebalance some of HE's charges and did so by proposing for its distribution business a factor of RPI-1, against RPI-2 elsewhere.

9.43. The DGES's proposals concluded by setting the opening value for the metering component (paragraph 9.30(d) refers).

Supply

9.44. In large part, the DGES held that the conclusions which he reached in respect of the RECs' supply price control were relevant to the new supply price control in Scotland. The price control for HE would:

- (a) retain a control on prices rather than profits;
- (b) limit the control to customers below 100 kW;
- (c) apply the control until 31 March 1998;
- (d) use RPI data which are historic rather than forecast;
- (e) include an allowance of £1 per annum per customer, linked to the achievement of specified levels of electricity saving;

- (f) include a fixed sum allowance of £5 million (against £10 million for the smallest REC);
- (g) include a sum of £15.84 per customer (as per the RECs' settlement); and
- (h) include a sum of £0.0924p per unit (as per the RECs' settlement.)

Items (f), (g) and (h) were at 1991/92 prices. The DGES proposed that the supply price control should be adjusted each year by a factor of RPI-2 to stimulate improvements in efficiency, as in the RECs' supply price control.

9.45. The DGES noted that the most important aspect of the new supply price control was the generation component, both as to the price to customers and the resources of HE. In coming to his proposals the DGES rehearsed the considerations expressed in his consultation paper before opting for continuation of the GBY approach (as distinct from, for example, an RPI-X approach). As to the restructuring agreement under which HE must take (or pay for) a proportion of SNL's output, the DGES said that it was generally accepted that the prices for this output contained a 'nuclear premium'. This would be phased out as prices moved to the England and Wales level; but the DGES said that in calculating this premium it was appropriate to deduct the benefit which HE derived from purchasing nuclear electricity in the form of 'green ticket' status for exports to England and Wales.

9.46. Using forecasts provided by ScottishPower and HE, the DGES calculated the amount by which HE's prices would fall as the GBY was progressively implemented. To facilitate this the DGES removed the load shape factor-as foreshadowed in his consultation paper-and estimated that HE's customers' generation charges would fall by about 14 per cent between 1994/95 and 1997/98.

9.47. The DGES decided to propose a control on these lines-phasing in of the GBY as planned, and removal of the load shape adjustment. In doing this the DGES was aware that both of the Scottish companies had argued for higher prices, increasing the IP and GBY terms by between 4 and 10 per cent to reflect the more 'peaking' load shape of the companies' 100 kW market as compared with the RECs' total purchases for all of their market. HE had also argued that:

- (a) the 100 kW market had greater system losses than the market as a whole; and
- (b) the 100 kW market in HE's area had greater system losses than the 100 kW market of the RECs.

The companies also argued that GBY adjustment should be done on a like-for-like basis, on the basis that since the GBY was to apply to the Scottish franchise market (ie under 100 kW) it should be calculated from the RECs' costs for *their* franchise market also, rather than for all their market. The DGES had not accepted that these arguments should lead to a different control from that which he proposed.

9.48. In reaching this view, the DGES said that his formulation had taken into account that there were strong arguments for lower prices than the present control (without the load shape adjustment) would imply. For example, it seemed reasonable that franchise customers in Scotland should not have to pay more than the prices paid for generation by franchise customers in England and Wales, after appropriate adjustments for certain costs associated with transitional arrangements with suppliers. On the one hand, Scottish customers should not have to pay for the 'coal premium' paid by the RECs, since the Scottish companies do not have corresponding contracts with British Coal. On the other hand, it is appropriate to make an allowance for the Scottish 'nuclear premium' described above. Having made these adjustments, the DGES said he had calculated that this approach would imply a path of prices similar to those in the present control (without the load shape adjustment), though with a greater initial reduction in prices. The balance of argument was that there was no case for the upward adjustments sought by the companies. He concluded that his price control would provide substantial price reductions to customers, whilst preserving the phased move towards England and Wales prices envisaged in the licence.

9.49. In concluding his proposals the DGES said that:

- (a) the tightening of distribution prices by applying a factor of RPI-1;
- (b) the control of RPI-2 for the supply price control; and

(c) his proposals for the generation component;

would maintain HE's business revenue at the present level, and reduce the generation charge by about 14 per cent over the period to 1997/98. Overall, HE's franchise customers would see real prices reduce by about 10 per cent; and a typical household in HE's area would see a reduction of £74 in real terms in its electricity bill over the next three years.

9.50. The DGES said that his proposals, taken together, struck a reasonable balance between the interests of customers and shareholders. They would enable HE to cover its operating costs, finance new investment and provide adequate returns to its shareholders, provided that the company continued to improve the efficiency of its operations. Customers would benefit from substantial price cuts and improvements in service from this and other measures contained in the proposals.

The DGES's submission

9.51. Following HE's rejection of the DGES's proposals, and the reference to the MMC, the DGES submitted his views to the MMC in November 1994. In explaining his position, the DGES said that he believed his statutory duties of protecting the interests of customers in respect of price and the continuity and quality of supply, and in particular of the requirement to secure that licensees are able to finance their licensed activities, were best achieved by strengthening incentives on companies to increase efficiency and reduce costs. Under a price control account would be taken when the control is set of the scope for cost reductions and improvements in service.

Supply component

9.52. As to the supply price component, the DGES explained his approach to the fixed sum element (see paragraph 9.44(f)). His analysis of the RECs' supply price control had suggested that the number of units supplied was not the greatest determinant of costs, but the number of customers supplied. Furthermore, whilst companies disagreed about the extent to which costs were fixed, econometric analysis by OFFER of supply business costs yielded a constant term of around £10 million. The DGES had decided that the new price control should reflect this situation and be, in simple terms, of the form that:

Total Allowed Revenue = £A fixed term, plus £B × number of customers, plus £C × kWh sold.

9.53. In setting the base level of the control, the DGES had made certain adjustments to the reported costs of the companies. These included standardizing an allowance of £1 per annum per customer of marketing expenditure; standardizing an allowance of £1 million per annum for information technology expenditure; envisaging a 1 per cent profit margin on turnover; and adding £1 per annum per customer for new energy efficiency obligations. The DGES also examined a claim that serving a particular customer base involved higher costs. An analysis gave substance to this, and characteristics which might add to supply costs were identified as being unemployment rates, the long-term unemployment rate, the numbers in receipt of housing benefit, the number categorized in socio-economic groups D and E, and disposable income per head. OFFER came to a figure of £15 per head for the extra costs of servicing such customers. These costs were reflected in the fixed terms for each company in the price control.

9.54. The fixed terms (£A) varied between companies. Eastern, East Midland, SEEBOARD, Southern, SWALEC and SWEB were allowed £10 million; Manweb, Midlands, Northern, NORWEB and Yorkshire were allowed £11 million; and London was allowed £16 million. The allowance (£B) was set for all at £15.84 per franchise customer; and the allowance (£C) at 0.0924p per kWh sold.

9.55. Each company was to have a factor of RPI-2 for each year of the control.

9.56. The RECs accepted these proposals before the DGES made proposals for the two Scottish companies. The Scottish companies and the RECs differed significantly in the type of costs which they allocated to particular businesses. To facilitate comparisons, the DGES transferred certain costs for, for example, marketing and information technology from HE's supply business to the distribution business. He

then calculated the revenue which would flow from the existing price controls, and compared that with the revenue which would flow were the RECs' proposed controls to be applied to HE. The DGES concluded that HE's current revenue per customer (£29.42 in 1993/94 at 1991/92 prices) would rise to about £30 if the existing control were to continue unmodified; and that it would rise to about £37 if the RECs' proposals were to be applied to HE. This contrasted with REC revenue ranging between £24 and £30.

9.57. The DGES questioned the appropriateness in HE's case of a fixed term (£A) of £10 million in a company whose customer base was only two-thirds the size of the smallest REC. He also noted that the econometric analysis which had led to the £10 million fixed term, and other elements of the REC supply control, were in any case derived from econometric analysis which had not included the costs of the Scottish companies. His view as to HE's costs was that there was a case for neither an increase nor a significant reduction in the supply price control. He concluded that this implied a fixed term of £5 million for HE.

Generation component

9.58. The DGES said that he accepted that the licence condition relating to the development of the GBY was a suitable basis for the regulation of generation prices in the price-controlled market in Scotland. The DGES's view was that it ensured that customers paid no more than the price which might be expected in a more competitive supply market.

9.59. The generation component in Scotland was considerably higher than RECs' reported and forecast purchase costs for customers in England and Wales; but prices charged to non-franchise customers in Scotland compared favourably with those in England and Wales. The DGES was concerned that the transition to GBY from an RPI-related IP should not result in Scottish franchise customers paying prices for generation which were appreciably higher than those in England and Wales.

9.60. In looking at the impact on prices of a continuation of the present licence provision as to generation costs, the DGES took into account the effect of the NEA, which requires that HE must take (or pay for) a given proportion of SNL's output. The price paid by HE under that contract is also to reduce over time to a yardstick. The DGES's method identified the extent to which HE had to pay SNL prices above a competitive market level.

9.61. The DGES considered arguments by HE about the construction of the GBY and the fact that it was based on a different market from that to which it would be applied in Scotland. The DGES also examined the existing control as to load shape adjustments.

9.62. The DGES concluded that the parallel transition in the NEA would offset considerably the adverse profit impact of the transition to the GBY. This, and adjustments made to estimates of generation prices in England and Wales as compared with Scotland, led the DGES to conclude that no changes were necessary in the formula for calculating the generation component of the supply price control other than removal of the load shape adjustment.

Distribution

9.63. The DGES's submission rehearsed the evidence available from his proposals for the distribution price control. In discussing the structure and form of the control the DGES said that the losses term in the RECs' new price controls had been varied because the existing term had given an inadequate incentive to companies to reduce the losses on their system. Under the new price control the formula provided for double the revenue which could be gained by companies from a reduction in losses, and the yardstick upon which the formula was based had been changed to a ten-year moving average of each company's losses. The HE proposals had contained a loss reduction incentive for the first time.

9.64. The price control did not cover all aspects of the distribution business. Some items of revenue were outside the scope of the price control. These 'excluded services' were:

- new connections;

- special metering;
- moving lines at the request of third parties (called non-trading rechargeables);
- top-up and stand-by charges; and
- charges for customers connected at EHV (greater than 22 kV).

The proposals for the new control retain these categories of excluded service revenue.

9.65. The price control would last until 1999/2000.

9.66. In analysing companies' costs of distribution the DGES had split the expenditure into three main components:

- capital investment;
- operating costs; and
- financing requirements.

9.67. The examination of capital expenditure had led to that being further subdivided into:

- capital expenditure for refurbishing and replacing the existing system (non-load-related capital expenditure); and
- capital expenditure necessary to meet increased demand (load-related capital expenditure).

9.68. The DGES said that HE's available data on asset bases and ages were in many respects less than for other companies whose data were used in his modelling of refurbishment needs and costs. That made it difficult to be confident of projections of future capital expenditure for replacement and refurbishment, which HE had submitted in its business plan. The DGES used other companies' data to construct for HE (and other companies with similarly deficient data) forecasts of future replacement and refurbishment which the DGES considered to be reasonably robust.

9.69. Load-related capital expenditure was assessed on the basis of the growth in output forecast by companies, and the extent to which population migration might cause extra demands for the distribution business. An examination of these data indicated capital expenditure of £58 per MWh for new demand averaged across all the companies.

9.70. In the light of the model calculations and other comparisons the DGES came to the view that, whilst a significant increase in load- and non-load-related expenditure was indicated, the analysis did not support an increase of the magnitude sought by HE, but suggested a reduction of 15 per cent to HE's business plan submission.

9.71. Operating expenditure formed the largest category of costs in the distribution business. These included the costs of maintaining and operating the distribution network as well as the overheads of the distribution business itself, and corporate costs. The DGES facilitated analysis, including comparisons between companies, by considering the costs on a cash flow basis by excluding depreciation. NGC exit charges and non-trading rechargeables, which are not covered by the price control, were also excluded. Other costs not directly under the control of management such as rates, insurance and wayleaves were also excluded. The DGES added a sum to represent a payment for the services of non-operational capital equipment. Further adjustments were made, including one to adjust for the costs of the 132 kV system, which is used for transmission in Scotland but for distribution elsewhere; and the allocation of costs between the supply and distribution business (see paragraph 9.31).

9.72. In analysing the data the DGES found that regression equations suggested that, under a wide range of specifications, HE's operating costs were significantly below the level predicted, and to a far greater extent than any other company. The DGES decided to treat these results with caution, because on many parameters,

including size of system, number of customers, and system and customer density, HE lay at one end of the range exhibited by the 14 distribution businesses; and the work of OFFER's consultants did not support the proposition that HE was the most efficient of the distribution businesses.

9.73. In the light of all of this HE's operating costs for 1992/93 were adjusted upwards by 7.5 per cent, the biggest upward adjustment for any company. This adjusted cost base was rolled forward in projections over the price control review period, with assumed efficiency gains of 1.5 per cent for the next two years and 3 per cent for the five years of the new control. This was based on, among other things, the record of the electricity industry itself both before and after vesting day, the advice of the DGES's consultants, and the experience of other industries.

9.74. All of this meant that the assumed operating costs over the new price control period were higher than the level assumed by HE in its business plan. The DGES said this suggested that application of modelling assumptions to HE would need to be tempered by closer examination of the distribution business and the company as a whole.

9.75. In seeking to estimate an appropriate cost of capital for HE, the DGES had regard to a number of factors which are discussed fully in Chapter 6. The DGES's calculations gave a post-tax weighted average figure of 5.2 per cent, consistent with OFWAT's estimate that for water companies at the lower end of the range 5 to 6 per cent was appropriate; and taking account of lower beta values, close to the figure in the MMC's Gas report.

9.76. The DGES said that the cost of capital cannot be known with certainty, and may change over time. Price control calculations for all 14 companies led him to focus on a pre-tax cost of capital figure of 7 per cent.

9.77. The DGES said that at flotation it was reported by analysts and others that the initial distribution price controls in Scotland were set on the basis of a 6 per cent return on a valuation of distribution assets at the time. As the DGES had taken the cost of capital of the distribution businesses of the Scottish companies to be 7 per cent, rather than 6 per cent, a value lower than the current cost book value of the vesting assets of the distribution businesses of both the Scottish companies was used in order to be consistent with the reported basis of the initial control.

9.78. The DGES's proposals had referred to the provisions in the licence which enable cross-subsidy of the distribution and transmission systems. The DGES said that HE had argued for significant increases in distribution charges whilst rejecting the idea that hydro benefit should be used to subsidize these increases. The company had disputed the basis on which hydro benefit had been calculated and said that there was insufficient profit from its hydro generation to provide the payment to the generation business.

9.79. The company had told the DGES that, instead, it was prepared to cap its prices for a year. The DGES rejected this proposition.

9.80. Taken on its own, the DGES's modelling implied a significant increase in distribution charges. The DGES calculated that hydro benefit was available to defray such an increase, and, if such an increase were appropriate, then the DGES would be minded to propose that hydro benefit be used to offset the increase. Because there was some ambiguity as to how hydro benefit should be calculated and applied, and the DGES saw disadvantages in explicitly implementing a cross-subsidy in a regime based on the promotion of competition and the associated removal of cross-subsidy, the DGES considered whether a significant increase in HE's distribution charges was really justified.

9.81. In considering the reasonableness of HE's proposals the DGES felt that it was difficult to justify increasing distribution prices on the basis of his own upward adjustment of HE's costs (see paragraph 9.73). He also believed there was a question as to the appropriateness of reallocating a higher proportion of the Scottish companies' costs from supply to distribution simply to match the allocation adopted by the RECs; and in considering HE's prices the DGES noted that his proposals for HE moved its position to the median point of the RECs (see paragraph 9.39). In 1995/96, under the proposals, its revenue per customer would be at the top of the range, and its revenue per unit in the middle. The DGES did not accept that the profits of the company as a whole needed to be increased when they had been at an adequate level since vesting and would continue to be so under his proposals. The DGES's judgment was that even with a slight decrease in

distribution charges over time, an increasing real dividend would still be possible without either pushing dividend cover to an unacceptably low level, or requiring an undue increase in borrowing.

Concluding remarks

9.82. The DGES's conclusion was that the published proposals struck a reasonable balance between the interests of customers and shareholders. He believed they would enable HE to cover its operating costs, finance new investment and provide adequate returns to investors provided HE continued to improve the efficiency of its operation.

9.83. The DGES said that the price control conditions in the licence contain a disapplication procedure which permits HE to seek to disapply the controls after 31 March 1995. That needs to be extended to permit a further period of price control. There were also several questions as to Schedule 7 which the MMC should address. The DGES's view was that continuation of the controls without change would be against the public interest.