Electricity Distribution Price Control Review

Update

October 2003

Summary

This paper provides an update on the progress of the price control review of the electricity distribution companies. It builds on the first consultation paper on the review, which was published in July 2003.

This update focuses on selected issues where work has progressed substantially or where it would be useful to receive additional feedback at this stage. The second consultation paper on the review, to be published in December 2003, will cover a wider range of issues across the price control review.

Substantial progress has been made since July on a number of areas. The companies have submitted detailed information on their historical financial positions and on costs related to distributed generation. This is now being analysed. Ofgem has published the results from the first phase of its consumer survey, a scoping study on benchmarking techniques and the questionnaire for collection of business plan forecasts from the distribution companies.

The key points on which this paper concentrates are:

- clarification of further thinking on the general incentive framework, including how the rolling retention mechanisms might work and the incentives on distribution losses;
- developments in understanding of quality of supply and network resilience issues, including the implications of the consumer survey and the approach to detailed analysis of network performance data;
- confirmation of the approach to incentives on DNOs with respect to distributed generation, including an initial summary of the potential cost implications as seen by the DNOs;
- a summary of the DNOs' financial performance in 2002/03 and explanation of further work being undertaken on the cost review; and
- Ofgem's initial response to comments on the pensions guidelines that were set out in June 2003.

Comments on this document are requested by 19 November 2003. A public workshop will be held in London on 7 November 2003 to discuss selected issues related to the price control review and a registration form is included at the end of this document.

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1. Introduction

1.1. The existing price controls on the Distribution Network Operators (DNOs) are due to be reset with effect from 1 April 2005. The work to review these price controls has been underway for several months and the scope and nature of the work was explained in the first consultation paper of the review, published in July 2003.[1] This paper provides an update on progress on selected issues.

1.2. Ofgem set out the objectives for the price control review in the July 2003 initial consultation. Respondents to the consultation broadly agreed with the objectives for the price control review although a number have questioned whether the objectives fully reflect Ofgem's environmental obligations under various statutory provisions.

1.3. Several respondents argued that Ofgem and DNOs need to recognise and refer to their statutory duties towards the environment under the Electricity Act, the Environment Act and the Countryside and Rights of Way Act, and in particular in relation to National Parks and Areas of Outstanding Natural Beauty (AONBs). It was argued that emphasis on achieving cost efficiency above other goals will not necessarily provide environmental benefits and that ensuring that DNOs' networks protect and enhance the natural environment should be seen as a fundamental aspect of quality of service which should be reflected in charges to customers.

1.4. Ofgem's principal objective as set out in the Electricity Act 1989 as amended by the Utilities Act 2000 is to protect the interests of consumers (present and future), wherever appropriate by promoting effective competition. The Electricity Act also sets out other important duties for Ofgem[2], including:

- securing a diverse and viable long-term energy supply;

[1] Electricity Distribution Price Control Review – Initial Consultation, Ofgem, July 2003, 68/03
[2] See sections 3(A) – 3(C) of the Electricity Act 1989 as amended by the Utilities Act 2000

- ensuring that licence holders are able to finance their statutory and licensed obligations; and

- having regard to the effect on the environment of activities connected with the generation, transmission, distribution or supply of electricity.

1.5. Ofgem has also other environmental duties as set out in various other Acts[3]. Ofgem will have regard to all of its duties when carrying out its functions.

Project update

1.6. Since the publication of the July 2003 document there have been a number of developments in the project including that:

- DNOs have submitted responses to the Distributed Generation Business Plan Questionnaire (DGBPQ) which includes historical information and projections of the level of costs incurred in connecting distributed generation to their networks and the drivers of those costs;

- DNOs have submitted responses to the Historic Business Plan Questionnaire (HBPQ) which includes information on companies' costs. The HBPQ covers the period 1998/99 to 2002/03 but mainly focuses on the period 2000/01 to 2002/03;

- Ofgem has published the Forecast Business Plan Questionnaire (FBPQ) which the DNOs must submit to Ofgem in stages between December 2003 and January 2004. This generally covers information on companies' costs for the period 2003/04 to 2009/10[4];

- Ofgem has published the results of the first phase of its consumer research which was carried out by Accent Marketing and Research (Accent). This provides initial results on the priorities that consumers

[3] For example, the Environment Act 1995 and the Countryside and Rights of Way Act 2000
[4] See www.ofgem.gov.uk

place on the services provided by DNOs and their willingness to pay for improvements[5];

- Ofgem has published a report produced by Cambridge Economic Policy Associates (CEPA) which identifies the key factors for Ofgem to consider when using benchmarking to assess the efficiency of DNOs in this price control review[6]. CEPA has also been commissioned to produce a report on Total Factor Productivity (TFP) which will look at the scope for making efficiency savings in the electricity distribution sector compared to other utility sectors and the general economy. Ofgem expects to publish this report towards the end of the year;

- Ofgem has appointed consultants to assist in reviewing the capital expenditure processes and plans of the DNOs (PB Power) and to assist in reviewing financial information and operating costs of the DNOs (Ernst & Young); and

- Ofgem has sent the DNOs an initial draft of its financial model which will be used to assess the financial impact of the price control. Ofgem intends to publish a draft of the financial model at the end of October 2003.

Purpose and structure of this document

1.7. This update document sets out Ofgem's further thinking, in the light of responses to the July 2003 document, on a number of important areas of the price control review. It also sets out the timetable and consultation process (Chapter 2). The structure of the document is as follows:

[5] Expectations of Electricity DNOs and WTP for improvements in service, Stage 1 Quantitative Research Findings, Final Report, September 2003, 110/03
[6] Background study on the use of benchmarking to assess efficiency for the 2005 Distribution Price Control, September 2003, 112/03

- **the form and structure of the price control (Chapter 3)** – this Chapter sets out Ofgem's further thinking on the scope, form and structure of the price control;

- **quality of service and other outputs (Chapter 4)** – this Chapter sets out Ofgem's further thinking on the regulation of outputs that companies may be required to deliver over the next price control period. This includes the work that is being undertaken in relation to network security and resilience. It also discusses the results of the first phase of consumer research that has been undertaken by Accent on behalf of Ofgem;

- **distributed generation (Chapter 5)** – this Chapter sets out Ofgem's further thinking on incentives on DNOs in relation to distributed generation. It also summarises the information that DNOs submitted in the DGBPQ and sets out the work that Ofgem intends to undertake on Registered Power Zones and Innovation Funding;

- **assessing costs (Chapter 6)** – this Chapter summarises the information that DNOs submitted in the HBPQ. It also explains how Ofgem is using consultants to assist its review of companies' costs and discusses CEPA's report on the use of benchmarking to assess efficiency;

- **financial issues (Chapter 7)** – this Chapter sets out Ofgem's further thinking on the treatment of DNOs pension costs;

- **initial Regulatory Impact Assessment (RIA) on distributed generation (Appendix 1)** – this Appendix sets out an initial RIA for distributed generation, identifying the issues that will need to be considered in developing the RIA in more detail;

- **Historic BPQ information (Appendix 2)** – this Appendix contains additional summary information from the Historic BPQ including on DNOs' performance under the existing price controls; and

- **Registration of interest for November workshop (Appendix 3)**.

1.8. Alongside publication of this paper, summaries of responses to the four consultation papers with a response date of 22 August 2003[7] will be made available on Ofgem's website.

Responding to this document

1.9. Ofgem would like to hear the views of all those with an interest in the development of revised price controls for the DNOs, including consumers and their representatives, investors and city analysts, distributed generators, environmental groups, suppliers and the DNOs themselves. Ofgem would also welcome comments on the results of the consumer survey undertaken by Accent and on CEPA's report on benchmarking, both of which were published on 30 September 2003 and are available on Ofgem's website.

1.10. Responses to this document should be received by 19 November 2003. They should be sent to:

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1.11. Unless marked as confidential all responses will be published by placing them in Ofgem's library or on the website. It would be helpful if responses could be submitted both electronically and in writing. Any questions on this document should, in first instance, be directed to Paul O'Donovan, who can be contacted on 020 79017414 or by email at Paul.ODonovan@ofgem.gov.uk

[7] Developing Network Monopoly Price Controls – Initial conclusions, June 2003, 54/03; Electricity Distribution Price Control Review - Initial consultation, July 2003, 68/03; Electricity Distribution Price Control Review – metering issues: Initial consultation, July 2003, 67/03; Innovation and Registered Power Zones – discussion paper, July 2003

2. Timetable and consultation process

Introduction

2.1. This Chapter sets out a slightly updated timetable for the price control review. There have been relatively few changes since the version published in the July document and the outline of future documents remains unaltered and is not reproduced here.

2.2. Of the output milestones set out in the July paper for the period July to September, three were clear milestones for Ofgem and these were achieved on time (or, in one case, with a two day delay). Similarly, there were three milestones for the DNOs and all were achieved on time by the majority of DNOs (with delays, where they occurred, generally being of a matter of a few days).

2.3. To facilitate the consultation process, Ofgem will be holding a public workshop on selected key issues of the review on 7 November 2003. This will include separate breakout sessions on issues relating to distributed generation (including registered power zones and innovation funding) and on financial issues, including the draft financial model which will be published by the end of October 2003.

Table 2.1: Updated timetable for the price control review

Date	Output Milestone
October 2003	**Update Paper Published** Publish first draft version of financial model (late October) Structure of Charges decision paper (late October) Visits to DNOs to discuss approach to investment forecasts and clarify historic BPQ submissions (during October and November)

Date	Output Milestone
November 2003	Public workshop on review progress, focusing on selected issues (distributed generation, quality of supply, financial model etc) on 7 November Visits to DNOs to discuss investment planning and clarification of HBPQ Responses due from interested parties to October update document by 19 November Publish consultants' report on total factor productivity
December 2003	**2nd Consultation Paper Published (approx. 18 December)** Publish 2002/03 distribution quality of supply report Responses received from DNOs to forecast BPQ base case
2004	
January 2004	Responses received from DNOs to forecast BPQ scenarios
February 2004	Responses received from interested parties to December consultation paper (early February) Visits to DNOs to discuss historical performance and efficiency, capex projections and clarification of HBPQ (January and February). Bilateral meetings with DNOs and other interested parties Undertake second phase consumer survey (February and March)
March 2004	**Policy Paper published (target week commencing 22 March)** Feedback/clarifications to DNOs on responses to FBPQ
April 2004	Public workshop on March policy document Visits to DNOs to discuss cost projections Publish revised version of financial model
May 2004	Responses received to March policy document (early May) Finalise cost projections for initial proposals Publish results from second phase consumer research

Date	Output Milestone
June 2004	**Initial Proposals Paper published (including revenue allowances – P0/Xs)**
July 2004	Public workshop on initial proposals Bilateral meetings with DNOs and other interested parties Structure of Charges update paper
August 2004	Review and incorporate 2003/04 out-turns Responses received to June initial proposals
September 2004	**Update Paper published**
October 2004	Bilateral meetings with DNOs and other interested parties Responses received from interested parties to update document
November 2004	**Final Proposals Paper published (including P0/Xs/review of IIP and proposed Licence modifications)**
December 2004	Companies indicate whether they are willing to accept the new price controls
2005	
February 2005	Statutory notice on licence modifications
April 2005	**1 April** New price controls implemented
Early Summer 2005	Publish report on the price control review process for consultation
Autumn 2005	Publish final report on the price control review process

3. Form, structure and scope of the price controls

Introduction

3.1. The July 2003 document explained that RPI-X price controls and related regulatory arrangements, such as quality of service incentive schemes, have been used by Ofgem to meet its statutory objectives and duties – including its principal objective to protect the interests of consumers, where appropriate by promoting effective competition. This Chapter sets out Ofgem's further thinking on some of these issues, particularly on how fixed retention periods for efficiency savings could work in practice. Ofgem is working on a number of other policy issues, including the form of the revenue driver, the scope of the price control and the overall incentive framework and its further thoughts in these areas will be published in December 2003.

Form and structure of the price control

3.2. The July document explained that the framework of incentive regulation, including the use of RPI-X price controls, is designed to help ensure that both the regulator and the companies can meet their relevant statutory objectives and duties. The July document also set out the main features of the existing price control and explained that the broad structure of the price control remains appropriate although the detail of each area needs to be considered.

Summary of responses

3.3. Respondents supported the continued use of RPI-X price controls although concerns were expressed regarding the balance and strength of incentives. A concern was also raised that RPI-X price controls should not discourage necessary investment in the networks.

3.4. Most respondents agreed that the broad structure of the existing price controls remains appropriate – although issues were raised regarding various aspects of the present arrangements. One DNO argued that the structure of the price control is becoming increasingly complex and that the associated reporting burden is growing. DNOs argued that costs that are outside their control should be passed through. One respondent argued that companies can influence, at least to some extent, the level of business rates and transmission charges paid to National Grid Transco (NGT) and that limited incentives should be introduced in these areas.

Ofgem's further thoughts

3.5. It is clear that RPI-X price controls have worked well to date in incentivising companies to operate and invest in networks on an efficient basis. Operating costs of the DNOs have fallen by more than 30 per cent in real terms since privatisation. The National Audit Office (NAO)[8] concluded that RPI-X regulation has been successful in delivering investment while also driving improvements in efficiency which have been passed on to consumers. The frequency of power cuts has reduced by 11 per cent and their duration by 30 per cent over this period[9].

3.6. Ofgem will continue to use RPI-X price controls although it recognises that improvements could be made to the existing framework in some areas – as discussed in the July document.

Pass-through costs

3.7. Under the existing price controls, NGC exit charges are excluded from the definition of price controlled revenue and DNOs are able to pass through these costs. In establishing the overall operating cost allowance, Ofgem included an estimate of business rates. If the actual business rates are materially different

[8] National Audit Office (April 2002), Pipes and Wires
[9] 2001/02 Electricity distribution Quality of Supply Report, June 2003, 51/03

from the projected business rates, Ofgem has indicated that it would adjust price control revenue.

3.8. All DNOs argued that NGC exit charges and rates should continue to be treated as pass-through items. One respondent has argued that DNOs do have some degree of control over these costs and argued that some limited incentives should be introduced in these areas to provide incentives towards efficiency. Ofgem will need to consider the treatment of business rates and NGC exit charges. If DNOs are able to influence the level of these charges it maybe appropriate to incentivise, albeit on a limited basis, to manage them more efficiently.

3.9. In setting the existing price control, Ofgem forecast the level of licence fees that companies would incur over the period of the price control. Given that companies have no influence over the level of these charges and due to the fact that they can vary from year to year, Ofgem has brought their treatment in line with that for other network monopoly companies[10]. On this basis, Ofgem licence fees are treated as a pass-through item, such that DNOs will be able to recover the actual level of costs incurred on an annual basis.

Fixed retention period for efficiency savings for this price control period

3.10. The July document explained that DNOs would be allowed to retain the benefits of:

- capex savings for a fixed period of 5 years regardless of when the saving is made. This applies to capex savings (other than in respect of meters) made during this price control period, i.e. from 1 April 2000 to 31 March 2005; and

[10] Licence fees have been made a cost pass through item retrospectively, i.e. this applies from the start of the current price control period.

- incremental opex savings beyond the levels assumed in setting the existing price controls for a fixed period of 5 years regardless of when the saving is made. This will apply to all incremental opex savings made during this price control period after April 1 2003 and until March 31 2005.

3.11. It also explained that the capex retention commitment was conditional on companies meeting their security and quality of supply obligations and indicated that Ofgem would take a general view of companies' compliance with security and quality of supply obligations in determining whether to allow the retention of capex efficiencies.

Summary of responses

3.12. Respondents broadly welcomed Ofgem's commitment to allow DNOs to retain efficiency savings for a fixed period of time regardless of how they had been achieved. A number of DNOs suggested that Ofgem should set out further details of how the rolling adjustments would work in practice.

3.13. There was broad support for using a more general test of whether DNOs had met their quality and security of supply obligations although one DNO argued that the means of assessment should be robust. One respondent suggested a list of issues that it considered the assessment should take into account, including customer complaints, fault rates and the age of the network.

Ofgem's further thoughts

3.14. It is not appropriate for the commitment to retain efficiency for a fixed period of time to apply to opex savings achieved *before* 1 April 2003. Additional incentives applying retrospectively cannot affect past behaviour, so in this case would generally increase prices without offering benefits to consumers.

3.15. Ofgem will take a general view as to whether DNOs have met their quality and security of supply obligations, focussing on performance against obligations and as far as possible based on output measures rather than inputs.

3.16. The rest of this section sets out in more detail how Ofgem proposes to apply the the rolling adjustments for both opex and capex in this review.

Rolling opex adjustment

3.17. Ofwat introduced a rolling adjustment for opex efficiency savings at the last price control review in 1999. In its March 2003 report on balancing incentives, Frontier Economics reviewed the rolling mechanisms used by Ofwat. It concluded that these were broadly appropriate although a number of issues needed further consideration.

3.18. The example set out in Table 3.1 sets out how the opex incentive allowance for efficiency savings would be calculated for a full price control period. It should be noted that Ofgem is proposing to implement this rolling retention mechanism from 2003/04 onwards. Thus the DNOs will not be allowed to carry forward efficiency gains from the years pre-2003/04

Table 3.1: Example of opex incentive allowance for efficiency savings

	Price control period A				
	2000/01	**2001/02**	**2002/03**	**2003/04**	**2004/05**
Allowed opex	97	96	95	94	Taken into account in Price control period C, hence zero for Price Control Period B
Actual opex	94	88	84	79	
Total efficiency gain in each year	3	8	11	15	
Incremental efficiency gain	3	5	3	4	
	Price control period B				
	2005/06	**2006/07**	**2007/08**	**2008/09**	**2009/10**
Total incentive allowance if applied from 1/4/00	5+3+4 =12	3+4=7	4	0	0
DNO allowance for Price Control period B	4	4	4	0	0

3.19. Table 3.1 is included for illustrative purposes only. It shows what the total incentive allowance would have been if the rolling retention mechanism had

been implemented from 1/4/2000 onwards. The first rows in the table show the allowed and actual opex for a five year price control period A from 2000/01 to 2004/05[11] and how a 5 year rolling opex adjustment for these efficiency savings would have operated in the next price control period from 2005/06 to 2009/10.

3.20. Under the opex rolling retention mechanism the company would be allowed to retain the benefits of any efficiency savings for 5 years from (and including) the year in which the saving was originally made. On this basis, the efficiency of 3 made in 2000/01 does not contribute to the total incentive allowance made to the company in 2005/06, as it would have already been retained for 5 years (i.e. 2000/1 to 2004/05). This means that the incentive allowance for 2005/06 would be the incremental gains made in 2001/02, 2002/03 and 2003/04.

3.21. The last row, shows the DNO allowance for the next price control period, given that the opex rolling retention mechanism only becomes active from 2003/04 onwards.

3.22. These incentive allowances would be made as an addition to the level of allowed revenue that companies would be able to collect from consumers. If there is any incremental efficiency gain in the final year of a price control period this would have to be taken into account in the first year of the next plus one price control period (i.e. price control period C) as data on outperformance would not be available at the time when the new price controls were set.

3.23. Where companies fail to meet the allowed level of opex (i.e. they overspend or underperform), the overspend will be offset against any underspend for the 5 year period. However, for the period 2005-10, it is proposed that the opex incentive allowance will be constrained not to be negative in any year (on the basis that the capex allowance is not so constrained – as discussed below).

[11] With the last year of the price control period to be taken into account in the next plus one price control period, i.e. in this case price control period C.

Rolling capex adjustment

3.24. Ofgem has indicated that companies will be allowed to retain both the depreciation and return benefits of any capex efficiency savings (other than in respect of meters) made during the current price control period for 5 years from the year in which the saving was made. The July document indicated that a group of the DNOs had met with Ofgem to discuss how this would work in practice.

3.25. The rolling adjustment for capex efficiency savings uses the same principles as those applied to the Regulatory Asset Value (RAV), in terms of depreciation and cost of capital. The effect of the rolling adjustment for capex efficiency savings is to provide the DNOs additional revenue equal to the depreciation and cost of capital allowances they would have received if they had incurred the expenditure in the year concerned and it had been included in the RAV for 5 years. This additional income for capex efficiency savings made during this price control period will be reflected in setting the next price control which will apply from 1 April 2005.

3.26. If any DNO has overspent on capex during the current price control period, the reasons for the overspend will be discussed with the DNO concerned. Ofgem does not, at this stage, rule out the application of the rolling adjustment mechanism to capex overspend as well as underspend.

3.27. The June document explained that Ofgem is looking at ways of introducing more flexibility into the price control arrangements so that the allowed level of capex is not necessarily seen as the maximum level of expenditure that a company could incur. If additional flexibility is introduced it will be important to set out how this will operate alongside the rolling capex adjustment.

Distribution losses

3.28. As electricity is transferred through the distribution network, energy is lost as heat and noise. Approximately 6.2 per cent of electricity was lost in this way in 2002/03.[12] The current price controls include an incentive on DNOs to reduce losses, with a reward or penalty of approximately 3p/kWh multiplied by the difference between the level of recorded losses and a benchmark based on the average level over the past 10 years.

3.29. In late 2002, Ofgem began a review of the incentives on DNOs to reduce losses on the distribution network. This review included an initial consultation in January 2003, a workshop for interested parties in April and an initial proposals document in June. The primary reason for the review was to assess the effectiveness and appropriateness of the current losses incentive arrangements for DNOs. From anecdotal evidence, it appeared that DNOs gave insufficient weighting to the cost of losses when making investment decisions. Several DNOs have noted that measurement of losses are a particular problem that undermines the incentive arrangements, partly because small differences in consumption, as estimated through the settlement process, could have a significant impact on measured losses. However, this situation is improving and does not, in Ofgem's view, present an insurmountable obstacle to an effective output incentive.

3.30. The initial proposals document explained that the losses incentive would be reset as part of the distribution price control review and that Ofgem was minded to change the mechanism to bring it into line with proposed arrangements for other costs. Proposed changes included:

- moving to a benchmark at a level that is fixed for the five years of the price control (rather than updated every year as a ten-year moving average);

[12] Some indeterminate portion of losses arises from non-technical sources, such as measurement errors or illegal abstraction.

- using the same rolling retention mechanism as proposed for operating costs to ensure DNOs get an appropriate share of the benefits from loss reduction;

- removing the adjustment for distributed generation from the incentive calculation;

- clarifying the basis on which additional capital expenditure (for example, on low-loss transformers) would enter the regulatory asset value (RAV); and

- to review the valuation of losses prior to Initial Proposals on the price control review, based on the (where practicable, forward-looking) marginal cost of technical losses.

Summary of responses

3.31. There was support for an output incentive, but concerns remain about levels of data accuracy. It was felt that there is a need for Ofgem to provide more detailed explanations of the operation of a fixed benchmark scheme and the impact on retention rates. There was support for more clarity regarding inclusion of expenditure in the RAV. One respondent suggested that the incentive could work though the capital expenditure allowance rather than directly impacting allowed revenue.

3.32. Several DNOs supported a move away from the current distributed generation adjustment mechanism, but others favoured its retention. Some DNOs were particularly concerned that some generators may (for example, by locating in remote locations requiring long dedicated circuits) increase losses, and wanted some adjustment in these cases. Similar issues may arise with demand customers. It became apparent from responses to further information requests by Ofgem that the current adjustment is not calculated on the same basis by all companies.

Further thoughts

3.33. Having considered the responses to the initial proposals, Ofgem remains of the view that an output-based incentive mechanism is appropriate and that the form should be based on that proposed for operating costs.[13] The fixed benchmark for each DNO will be set for a five year period at a level based on the latest 10 year average, subject to any adjustments for changes to measurement (discussed further below). Further explanation as to how the mechanism would work has been set out above.

3.34. Efforts to reduce measurement errors are ongoing. However, both from the work on the losses incentive review and from separate work on price control compliance, Ofgem is concerned that the problems with the adjustments to the level of losses used in the incentive calculation may not be limited to the distributed generation adjustment. Ofgem therefore proposes to review over the coming months the data and methodologies used by DNOs to calculate recorded losses. The results of the review will inform proposals either to remove the adjustments or to clarify and/or amend the way in which they are calculated.

3.35. In the specific case of distributed generation adjustments, Ofgem recognises the possibility that distributed generation may increase losses and that the impact of the losses incentive (without distributed generation adjustment) may offset the effect of the DNO incentives with respect to distributed generation (as discussed in Chapter 5). This is partly a question of the relevant parameters of the incentives and as these are developed, Ofgem will consider whether the offsetting effects are likely to be material in practice. If there does appear to be a problem in practice, it may be possible to address this through some form of adjustment that is only applied in particular cases.

3.36. Ofgem expects to finalise proposals on these calculation issues and on the benchmark by the March 2004 policy paper for the price control review. Work on the valuation of the incentive (i.e. the reward or penalty per kWh of losses)

[13] This is subject to further clarification of the proposal to implement the incentive through the capital

will be taken forward on the lines explained in the losses Initial Proposals paper in June 2003, in time for conclusions to be drawn for the price control Initial Proposals paper in June 2004.

3.37. For the longer term, Ofgem considers that it may be appropriate to undertake further work on the drivers of network losses, potentially on a disaggregated or reference network basis, so that for the period beyond 2010, losses benchmarks can be set on a more robust basis.

Views invited

3.38. Views are invited on any of the issues in this Chapter and particularly on:

- the application of the rolling adjustments for opex and capex; and
- the losses incentive.

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expenditure allowance if this is shown to have substantial benefits.

4. Quality of service and other outputs

Introduction

4.1. The July document outlined the existing framework of output measures and incentives that are in place for the DNOs, the key issues that need to be considered in reviewing the framework and the key areas of work that Ofgem is undertaking. This Chapter sets out Ofgem's further thoughts in a number of areas including:

- work on disaggregating and comparing quality of supply performance across companies and how this has been used to set quality of supply scenarios for the forecast Business Plan Questionnaire;
- how frontier performance could be rewarded;
- an outline of the key findings from the first phase of the consumer research undertaken by Accent on behalf of Ofgem and how these should be taken into account in work going forward; and
- an outline of the work that Ofgem is undertaking in relation to network resilience and exceptional events including analysis of trends in fault data and the amount of time it takes to restore supply to consumers for different types of weather event.

4.2. The July paper also explained that experience following the October 2002 storms demonstrated significant weaknesses in the current arrangement for payments under Guaranteed Standards when customers are off supply for long periods due to severe weather. Ofgem has been discussing potential improvements to these arrangements with DNOs and with energywatch and is hopeful that an announcement can be made shortly.

4.3. In July 2003, Ofgem published a consultation paper on improvements to the measurement of the DNOs' speed of telephone response.[14] Ofgem expects to publish a decision letter shortly, and will then consider separately potential incentive arrangements in this area to apply from 2005.

Quality of service

4.4. Ofgem's work on quality of service over the past few years has focused on the number and duration of interruptions to supply, the response provided to customers who call their DNO during outages, enforcement of standards of performance and improving the robustness of performance information.

4.5. As part of the price control review, Ofgem is assessing whether additional outputs need to be covered (which in large part will be informed by the consumer survey), how targets are reset for existing incentives (by considering information on performance, costs and consumers' willingness to pay), how incentives can be improved (for example, for network resilience), and the effectiveness of the standards of performance arrangements.

Consumer survey

4.6. The results of the first phase of the consumer survey were published on Ofgem's website on 30 September 2003[15]. The survey was undertaken by Accent, with the fieldwork predominantly undertaken during July 2003.

4.7. The consumer research has been split into two phases – the first phase has been designed to gain a better understanding of consumers' experience, their priorities and expectations. The second phase of the survey will focus on gaining a better understanding of consumers' willingness to pay for improvements in quality of service.

4.8. The key findings from the first phase of the consumer research are:

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[14] IIP: Proposed amendments to the RIGs for the speed of telephone response, Ofgem 76/03, July 2003
[15] Expectations of Electricity DNOs and WTP for Improvements in service – Stage 1 Quantitative Research Findings, Accent, September 2003, 110/03

- when consumers are not prompted with possible improvements, about 80% are broadly satisfied with the service that they receive from DNOs;
- consumers expect interruptions to supply when there is severe weather/other exceptional circumstances but they are less accepting of interruptions for other reasons;
- there is a general view that the time periods prior to compensation payments being triggered are too long (and too many interruptions in the case of the multiple interruption GS) although this is without explicit consideration of the costs of tightening the standards;
- most domestic consumers are broadly happy with existing compensation levels although business/larger consumers think they should be increased significantly;
- in general about 10% of consumers are aware of Guaranteed and Overall Standards of Performance (GOSPs) – consideration may need to be given to ways of improving consumers' awareness of GOSPs;
- communication in the event of an interruption to supply is seen as a priority particularly for vulnerable consumers, e.g. priority communication line – Ofgem intends to consult on whether it would be appropriate to strengthen/expand the existing incentives in this area. DNOs are already incentivised under the IIP with regards to the quality of telephone response provided to consumers who contact them and speak to a telephone operator – but Ofgem is looking at ways of improving this such as including consumers who receive automated messages rather than speaking to an operator; and
- other areas of interest for consumers included undergrounding of overhead lines for visual amenity reasons. A minority of consumers expressed some willingness to pay for such improvements, although a robust assessment of the value will not be possible until phase 2 of the survey work.

Further work

4.9. The results of the survey suggest that the existing scope of the quality of service incentive scheme is broadly appropriate. However, there are several areas highlighted by the survey results where further work is required. In particular, Ofgem will review whether additional focus is required on information provision (including coordinating the distribution price review work with a more general review being undertaken by Ofgem of the priority service register) and whether current arrangements need to be strengthened significantly for business consumers.

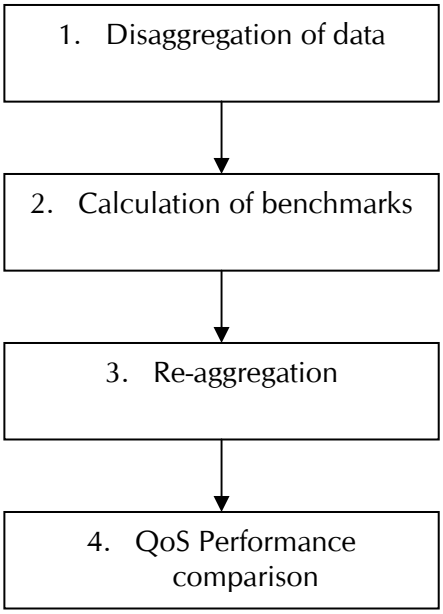
4.10. Questions have been added to the forecast business plan to seek views from DNOs on the costs of various incremental improvements (such as reductions in the number and duration of interruptions, tightening of timescales for guaranteed standards of performance and replacement of overhead line with underground cable in particular areas). The responses to these questions will help to scale the analysis to be undertaken in phase 2 of the consumer survey, fieldwork for which is expected to take place in February and March 2004.

Comparing quality of supply performance

4.11. Quality of supply performance in terms of customer interruptions (CIs) and customer minutes lost (CMLs) varies significantly between the DNOs. A significant part of this variation is due to differences in the characteristics of their service territories (inherent characteristics) or to the way in which their networks have been designed over previous decades (inherited characteristics). In order to set appropriate targets going forward, it is useful to look at similar parts of networks and to compare performance at a more disaggregated level.

4.12. This section describes the disaggregation process and the methodology Ofgem has adopted to calculate potential benchmark performance levels for each DNO. The disaggregation process is four-stage process, this is illustrated in Figure 4.1.

Figure 4.1 Four-stage disaggregation processes



4.13. The first step in disaggregation is to consider the four voltage levels within a distribution network (Low Voltage - LV, High Voltage – HV, Extra High Voltage - EHV and 132 kV[16]) separately. The disaggregation process and benchmark calculations are specific to each voltage level and are summarised below.

Low voltage

4.14. As DNOs have limited ability to influence the number of customer interruptions at LV, the initial benchmarks are based on their current levels of performance. However, the benchmarks for CML are based on the assumption that poorer performing companies will move 75 per cent of the way to the national average duration of interruptions (CML per CI) by 2020.

4.15. Ofgem intends to carry out further analysis at LV as part of the price control review to inform the process of target setting.

[16] A LV system is a system that operates at a nominal voltage level of 1kV or less. A HV system refers to voltage levels above 1k V up to and including 22 kV and EHV refers to voltages greater than 22 kV but below 132 kV.

High voltage

4.16. The HV network has been disaggregated into a number of circuit groups with similar characteristics. The bands are defined so that the differences in key characterics such as the percentage of overhead line, length and the number of connected customers are minimised and that no group is dominated by a single DNO.

4.17. For each circuit group key physical and performance statistics have been calculated such as:

- average circuit length;
- average customer density (number of customers per circuit);
- average faults per km;
- average number of customers interrupted per fault; and
- average and first quartile CML per CI.

4.18. Ofgem has calculated benchmark levels of performance for each circuit group. The CI benchmark is based on the company's own value for average circuit length, but the national average for fault rates and customers interrupted per fault relative to customer density.

4.19. The CML benchmark is based on the same approach but using the first quartile level of performance for the CML per CI.[17]

Extra High Voltage and 132 kV

4.20. For EHV and 132 kV circuits there are relatively few incidents each year, which tends to result in volatile performance. In order to address the volatility, the

[17] Actual 2002/3 HV performance and the HV benchmarks have been adjusted upwards by 2.6 per cent to account for the October storm period which was excluded from the performance data. In addition an adjustment made to Aquila's performance for missing data.

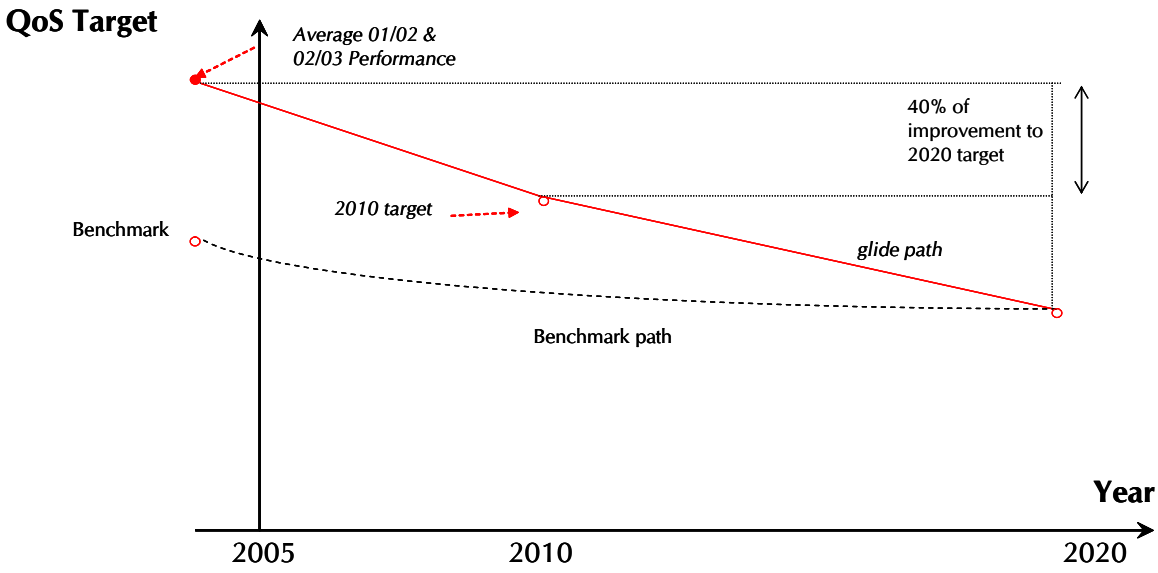
benchmarks are based on each DNOs' average performance over the last ten years.

Aggregation and Comparison

4.21. The benchmarks at each voltage level (or band) for each company can be summed to give an aggregate benchmark for that company. DNO performance can then be shown as actual performance relative to the benchmark. As the benchmarks are calculated based on groups of similar circuits and taking into account DNOs' own customer numbers per circuit and average circuit length, effectively making allowances for inherited and inherent network characteristics, this method of disaggregation provides a more robust method for comparing quality of supply performance across all the DNOs.

Use of benchmarks

4.22. Initial indicative results based on a single year's data have been calculated. In establishing a quality of supply improvement scenario for DNOs to consider in submitting their business plans, Ofgem has assumed that DNOs will achieve the necessary improvements to meet the 2020 benchmark level of performance for unplanned CIs and CMLs. The 2010 targets for the business plan are based on the assumption that DNOs will achieve 40% of the gap closure by 2010. This is illustrated in the diagram below.



4.23. Where the average level of performance for 2001/2 and 2002/3 is already below the 2020 benchmark Ofgem has set the target levels of performance for both 2010 and 2020 equal to the 2020 benchmark.

4.24. The performance data underlying the benchmarks are now being audited as part of the ongoing enforcement of the IIP licence conditions. Once this has been completed, 2002/03 performance figures and the initial benchmark calculations will be published.

Rewarding frontier performance

4.25. The July consultation paper set out two options for rewarding frontier performers: through access to the IIP reward mechanism during the current price control period, and through lower rates of improvement from 2005 onwards.

Responses

4.26. Respondents offered a variety of views in relation to assessment of frontier performance. Two considered that this should be based on the rate of improvement since the audited figures in 2001/02, whilst one considered that this would be problematic. One DNO questioned what was meant by 'frontier performance', whereas another thought that this assessment should be based on value-for-money rather than specific output criteria. Two DNOs advocated that frontier companies should be rewarded by being set less onerous performance improvement targets from 2005 onwards.

Further thoughts

4.27. Ofgem proposes that companies that are frontier performers in terms of having the best CI or CML performance relative to the level of their benchmark (calculated broadly as described above, subject to consultation responses) for the years for which data is available will be rewarded based on their rate of improvement to 2004/05 in line with the IIP reward mechanism, whether or not they meet their 2004/05 targets.

4.28. The methodology used to set targets for the business plan questionnaire automatically gives lower rates of improvement for frontier companies. As this approach is developed for the purpose of setting actual targets for the next price control period, further consideration will be given to whether this provides sufficient reward.

Network resilience

4.29. It is important that DNOs have appropriate incentives with respect to network resilience as well as quality of service. Network resilience is a multi-dimensional concept that is best defined in terms of the:

- ability of a network to withstand an exceptional event, such as severe weather (i.e. the number of customers affected for given weather conditions); and
- ability of a company to respond to an exceptional event, (i.e. the time taken to restore supplies).

4.30. The results from Ofgem's consumer survey also show that communication with consumers is a key issue in the event of supply being interrupted.

4.31. It is important to consider whether:

- the existing incentives with respect to network resilience are adequate; and
- if not, whether improved resilience should be incentivised and if, so, how.

4.32. In taking this work forward, Ofgem will consider any new evidence and recommendations from the Network Resilience Working Group, which includes representatives from the DTI, Ofgem, the DNOs and energywatch.

4.33. There are a number of possible steps that companies can take to reduce the impact of severe weather and/or improve network resilience including:

- reducing fault rates;
- managing the impact of any event on consumers, e.g. installing more protection equipment on the network; and
- reducing the amount of time taken to restore consumers' supplies.

4.34. Assessing whether incentives for network resilience need to be improved requires a better understanding of how it should be measured which in turn requires a better understanding of the relationship between:

- severe weather (and other exceptional events);
- network performance, e.g. fault rates;
- investment in the networks;
- companies' operational response to events;
- the impact on consumers; and
- DNOs communication with consumers.

4.35. Any incentives on DNOs in respect of network resilience should allow the company to choose the most efficient approach rather than requiring a specific response such as specifying target levels for fault rates. It is also worth noting that the report produced by British Power International (BPI) on the October 2002 storms indicated that companies could improve their storm performance within the boundary of existing levels of charges.

4.36. Ofgem has already engaged Mott MacDonald and BPI (MM-BPI) to help gain a better understanding of trends in the frequency and severity of exceptional events and companies' performance during such events. To date, this work has primarily focused on analysing data such as network faults, customer interruptions and comparisons of the time taken to restore supplies. Ofgem intends to carry out more detailed analysis of the relationships between weather data, the impact on the network and the time taken to restore supplies. This will

inform the decision about whether network resilience can be robustly measured and whether it is appropriate to introduce additional incentive arrangements in this area.

Views invited

4.37. Views are invited on any of the issues in this Chapter and particularly on:

- the results from the first phase of the consumer survey;
- measurement and incentives in respect of network resilience;
- the approach to disaggregating and comparing quality of supply performance;
- the scope of the output incentive scheme for the next price control period; and
- changes to the standards of performance arrangements.

5. Distributed generation

Introduction

5.1. The July 2003 document explained that the government has put in place specific targets for the amount of energy to be supplied by renewable generation and the capacity of combined heat and power (CHP) to be installed by 2010. The document outlined possible ways in which the regulatory framework could be developed to accommodate a significant increase in the amount of generation connected directly to the distribution networks.

5.2. This Chapter sets out Ofgem's further thinking in this area and summarises the information that DNOs have submitted in the distributed generation Business Plan Questionnaire (DG-BPQ). It also sets out how Ofgem intends to take work forward on Registered Power Zones and Innovation Funding, which were the subject of a related consultation, published at the same time as the July 2003 document.[18]

DNO information on distributed generation

5.3. Ofgem issued the DG-BPQ in June 2003 to collect information from the DNOs on their business activities relating to distributed generation – including information on the costs they have incurred or expect to incur from connecting distributed generation to their networks. DNOs submitted the completed DG-BPQs in September. This section provides a high level summary of some of the information which the DNOs provided. Ofgem will publish further information in subsequent consultation documents.

5.4. A significant amount of work needs to be undertaken over the course of the coming months in reviewing this information to input to the development of the incentive framework for distributed generation. Ofgem has appointed Mott MacDonald and British Power International (MM-BPI) to assist it in this review.

5.5. It should be noted that the information set out in this Chapter is as submitted by the DNOs and has not been assessed by Ofgem or its consultants; no adjustments have been made to the information submitted; and it has not been subject to an audit. Ofgem will be carrying out a detailed check of the DG-BPQ data, seeking clarification from the DNOs, and, if necessary, updating the summary in future consultation documents.

5.6. The summary of the DG-BPQ focuses on three defined time periods:

- historical - 1 April 2000 to 31 March 2003;
- interim - 1 April 2003 to 31 March 2005; and
- future - 1 April 2005 to 31 March 2010.

5.7. For each of these time periods information is provided on:

- the total DG capacity connected;
- the direct costs incurred for sole-use assets;
- the direct costs of shared assets; and
- the strategic costs that were incurred or forecast.

5.8. There is also a summary of the key cost drivers that have been identified both by the DNOs in their DG-BPQ submission as well as by work under the Technical Steering Group of the joint DTI/Ofgem Distributed Generation Coordinating Group[19], as having an impact on the costs associated with connecting distributed generation to the networks.

5.9. The direct cost of work on assets was defined in the DG-BPQ as all directly attributable costs (in accordance with the requirements of FRS 15 – Tangible

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[18] Innovation and Registered Power Zones – discussion paper, July 2003
[19] http://www.distributed-generation.gov.uk/tsghome.php

Assets) incurred for installation or reinforcement of distribution assets. This would include acquisition costs, site preparation and clearance costs, installation costs and professional fees. The cost of sole-use and shared assets are, in each case, directly incurred by the DG project, with the distinction between the two categories defined in the same way as in considering the structure of distribution charges. For shared assets in the historical and interim period, the sharing factors given by the DNOs have been applied to derive the proportion of the costs that was deemed to be required by the DG only. Strategic and overall costs are those general costs incurred by the DNOs to support the increase in the overall amount of DG, rather than costs triggered by specific DG projects. These may include costs associated with general infrastructure, research and development, planning and design, and operational and control room.

5.10. It should be noted that in addition to direct costs, there are other cost elements associated with work on sole-use or shared assets, namely operational and maintenance costs, overheads and the return on capital employed. Though collected in the DG-BPQ, these are not included in the summary table since, unlike the direct costs, their estimation was subject to a wider range of different practices across the DNOs as well as over time by individual DNOs.

5.11. The summary table shows that the majority of DNOs expect a step change increase both in terms of the volume of distributed generation connected to the network and the associated costs. For example, the total capacity of distributed generation that DNOs expect to connect in the existing price control period (i.e. historical and interim) is around 3,100MW, whereas the forecast for the next price control period ranges between 10,000MW and 11,000MW. This represents a three-fold increase in the amount of additional distributed generation being connected to the network and compares to external estimates of 8,500 MW of renewable capacity (including both transmission and distribution connected generation) and 5,500 MW of CHP needed to meet the Government's targets in these area.

5.12. The total cost that DNOs expect to incur for shared assets is expected to increase from around £30m in the current price control period to a range between

£200m and £350m in total for the five year period 2005-2010. The range of the forecasts of both the amount of distributed generation that DNOs expect to connect and the costs that they expect to incur shows that there is significant uncertainty regarding the impact of distributed generation. However, to put these costs into context, DNO net capital expenditure currently amounts to over £1,000m per year.

Table 5.1 Summary of DG-BPQ Information

	Historical 1 April 2000 - 31 March 2003				Interim 1 April 2003 - 31 March 2005				Future 1 April 2005 - 31 March 2010			
DNO	DG capacity connected (MW)	Direct cost for sole use assets (£m)	Direct cost for shared assets (£m)	Strategic costs (£m)	DG capacity connected (MW)	Direct cost for sole use assets (£m)	Direct cost for shared assets (£m)	Strategic costs (£m)	DG capacity connected (MW)	Direct cost for sole use assets (£m)	Direct cost for shared assets (£m)	Strategic costs (£m)
Aquila	93.5	0.9	3.9	0.0	19.5	0.5	0.0	0.0	69.7 - 309	1.5 - 8.2	13.7 - 27.5	0.1
EME	67.3	1.2	0.0	0.6	22.6	0.6	0.0	0.9	865.0	15.9 - 38.6	10.7 - 49.6	3 - 3
EPN	502.2	1.4	16.7	2.6	43.5	1.7	0.0	2.8	807.8	35.9	35.0	14.4
LPN	101.5	0.0	0.0	0.2	4.9	0.0	0.0	0.7	335.4	5.7	9.2	7.8
SPN	541.5	5.3	2.9	2.5	15.0	0.8	0.1	2.3	472.0	21.0	12.0	8.3
WPDSW	46.7	0.8	0.0	0.1	37.5	2.4	0.0	0.1	175 - 315.8	2.9 - 19.1	2.6 - 22.1	1.8
WPDSWa	70.9	1.7	0.0	0.1	134.7	5.1	0.0	0.1	261.4 - 455	1.5 - 21.1	3.9 - 31.9	2.3
NEDL	52.7	0.5	0.7	0.0	5.6	0.1	0.0	0.2	1152.9	74.2	9.5	6.7
YEDL	211.4	8.1	0.6	0.2	6.0	1.0	0.0	0.2	1097.4	62.9	11.3	6.7
SSESthn	51.1	2.3	0.0	0.0	128.5	6.7	0.9	0.0	248.0	8 - 10	7 - 9	0.0
SSEHydro	80.5	2.9	0.1	0.0	293.1	7.1	1.5	2.2	866.7	33 - 40	54 - 65	7.4
SPDistr	76.8	2.5	0.2	0.2	84.1	2.6	1.6	0.1	1437.0	153.5	5.2	87.4
SPManweb	111.8	4.2	1.7	0.2	173.1	7.7	0.9	0.1	987.0	26.5	0.0	85.6
UU	122.7	1.7	1.7	0.6	59.3	6.7	0.0	1.2	987 - 1530	27.6 - 55.5	25.6 - 64.9	6.9
Total	2131	34	28	7	1027	43	5	11	9762 - 10879	470 - 572	200 - 352	238

5.13. Table 5.2 provides a summary of the key cost drivers that have been identified as having an impact on the costs associated with connecting and providing network access to DG.

Table 5.2: Key cost drivers for distributed generation

Key cost driver	Impact
Connection	New assets need to be installed to make the physical connection between the generator and the distribution network. The level of costs varies, depending on the capacity of the generator, the distance between the generator and the distribution network, and the type of connection.
Fault level	The introduction of DG may increase the fault current level beyond the capability of the existing protection switchgear. This has been identified as the most significant driver of the costs relating to shared assets. Costs of solving the problem depend on the approaches adopted which may include: • up-rating the affected switchgear; or • reducing the fault level at affected locations, e.g. by replacing transformers with higher impedance, using additional reactance, or splitting/reconfiguring the network.
Voltage limits	The introduction of DG can lead to rises in local voltage levels that exceed statutory limits. The reversal of current flow (i.e. from importing to exporting) through a transformer with tap changing facility can also adversely affect the controllability of the local voltage levels. For certain DG projects, this replaces fault level as the dominant driver of the costs relating to shared assets. The costs associated with maintaining the system voltage levels again depend on the solutions adopted, including: • replacing tap-changers or the transformers; • using voltage control equipments such as automatic voltage regulators; or • active management involving the DG.
Thermal capacity	Additional power exported from generators can cause the thermal capacity of transformers and/or conductors to be exceeded. This can be a major driver of the costs on shared assets, especially where there is a high level of DG penetration. The solution for relieving the thermal constraints include: • increasing system thermal capacity by reinforcing or replacing the existing assets with higher thermal capacity, or installing new distribution equipment; • active management involving the DG.
System stability	In some cases the incorporation of DG could introduce instability into the distribution system. Whilst this can often be avoided by careful system planning and design of protection equipment to avoid major reinforcement for the DNOs, it could become more of an issue as the number of DG projects increases.
Strategic costs	In addition to costs triggered by specific DG projects, DNOs also report the need to carry out strategic network reinforcement or incur overall operational costs, for example: • in anticipation of the demand for generator connection; • as result of general increase of DG level; and • for moving towards more active management of the distribution system.

5.14. Ofgem will be undertaking work over the course of the coming months to gain a better understanding of these cost drivers and how they may vary both across DNOs and over time.

Incentive framework for distributed generation

5.15. The July document set out an incentive framework for distributed generation. The broad characteristics of the framework were that:

- the costs incurred by the DNOs to provide network access to DG are given a partial pass-through treatment; and
- then the DNOs are given a further supplementary £/MW revenue driver (or incentive rate) based on the amount of DG capacity that is provided with access to the network.

5.16. This 'hybrid' mechanism combines pass-through with an output based incentive which together will help protect DNOs against risk whilst giving them a positive incentive to invest efficiently in response to demand by offering the prospect of a 'premium' return. Respondents were asked for comments on the hybrid proposal and for alternative ideas.

Summary of responses

5.17. The majority of respondents broadly supported the hybrid incentive mechanism. No respondents presented an alternative framework. Two DNOs argued that significant variability in the costs of providing access to the network would expose DNOs to an inappropriate level of risk unless the vast majority of costs are passed through. Some respondents argued that because of the variability in costs it will be necessary to set a number of different incentive rates for different voltage levels/generation technologies. Most respondents argued that it would be premature to introduce arrangements to incentivise DNOs to utilise distributed generation as the type of services they could procure from generators are unlikely to be significant at least until there is more significant penetration of distributed generation. One DNO argued for the introduction of incentives to provide distributed generators with ongoing access to the distribution networks.

Ofgem's further thoughts

5.18. Based on the responses to the July document, Ofgem intends to continue developing a hybrid incentive mechanism for distributed generation. There are a number of key questions that need to be resolved going forward:

- the need to define the balance between pass-through and incentivisation. To a large extent this will be driven by two factors:
  - the degree of variability in the costs of providing network access; and
  - whether this variability can be accommodated through the use of multiple incentive rates. This effectively means being able to identify and quantify the relevant cost drivers for providing network access. It is also important to keep the incentive framework as simple/transparent as possible – multiple incentive rates would add a degree of complication to the arrangements.

  If it is clear that the variability in costs cannot be accommodated it may be necessary to pass-through a greater proportion of the costs to limit the amount of risk that DNOs are exposed to – although this would also limit the opportunity to earn a premium return. The level of variability may differ across companies and as such it may be appropriate to have different risk-reward 'packages' for different DNOs although again this would have disadvantages in terms of complexity; and
- the best way of introducing arrangements to incentivise provision of network access on an 'ongoing' basis. Once a generator has connected to the network it is important that it has access on an ongoing basis. One way of doing this would be to include a fixed £/MW per hour rebate to generators for network unavailability in standard connection terms. Generators seeking lower cost connections would be permitted to waive entitlement to this rebate.

5.19. The majority of the work on distributed generation will focus on analysing the cost (and other) data that DNOs have submitted in the DG-BPQ. The December 2003 consultation document will set out a range of values for the incentive rates and the proportion of costs that will be passed through. Ofgem intends to

publish 'final proposals' on the DG incentive framework in March 2004 – including final values for the incentive rates and the proportion of pass-through. Having developed this approach for the connection of distributed generation, it is worth considering whether similar arrangements could be applied to demand customer connections. One advantage of this would be to reduce the need to focus on the allocation of reinforcement costs between generation and demand.

Registered Power Zones and Innovation Funding

5.20. The Open Letter of January 2003[20] introduced the concept of Registered Power Zones (RPZ). In July, the "Innovation and Registered Power Zones – Discussion Paper"[21] was published concurrently with the Initial consultation on the price control review. This section sets out Ofgem's further thoughts as to how work on RPZs and IFI could be taken forward in the light of respondents' views.

Summary of responses

5.21. A total of twenty-six responses were received which are available on the Ofgem website. The responses show strong support for the principles supporting the IFI and RPZ initiatives although a number of issues were raised regarding the detail of the arrangements and how they could be applied in practice.

5.22. The Discussion Paper listed seventeen questions and many respondents addressed these directly. A high level summary of the key messages from the responses is set out below, further details are set out in the summary available on Ofgem's website:

- there is broad acceptance that technical innovation in DNOs is at a low level for addressing the challenges of DG and that the current regulatory regime is unlikely to address this situation;

[20] Open Letter of January 2003 from Callum McCarthy to the Chief Executive Officers of the Distribution Network Operators.

[21] Published 16 July 2003.

- it is generally considered appropriate and timely to develop some form of incentivisation to encourage innovation, particularly to respond to the challenges associated with the connection of DG.

- there is broad support for the mechanisms proposed by Ofgem with no significantly different proposals offered;

- there is a strong feeling that the Ofgem proposals are, as currently described, too complex and potentially restrictive. It is felt by some that if the proposals are too cautious they are likely to fail;

- on balance, the respondents are not supportive of Ofgem becoming directly involved in the management of innovation or the control of IPR;

- Ofgem's proposed IFI funding level of 0.5% intensity is considered to be of the right order by several respondents. However, the DNOs think that the pass through element should be higher than that proposed by Ofgem;

- there were only limited comments on the level of the RPZ premium return and so conclusions are difficult to draw here. However, the principle of achieving consistency with the price control incentive is supported;

- there is a strong view that the number and/or capacity of RPZs should not be limited. Such limits could dampen enthusiasm for RPZs, particularly if they are the same for each DNO; and

- there is wide support for putting these incentives in place on an interim basis before the next price control if practicable.

Ofgem's further thinking and forward work

5.23. While it would be premature to review in detail the ideas set out in the Discussion Paper it is thought to be useful to provide some comment on the direction of Ofgem's thinking.

5.24. Ofgem considers the high level structure of the IFI and RPZ initiatives remain appropriate although it will seek ways of simplifying the arrangements consistent with its primary objective to protect the interests of consumers.

5.25. Under the IFI, there was a strong view from respondents, not just from DNOs, that for spending up to the 0.5% of the revenue cap, the proportion of costs passed through to customers should be higher. Secondly, it has been noted that there are some good reasons for a proportion of financial support of Category C activities and that it would be helpful to simplify the categorisation. It would also seem appropriate that the best way of ensuring good value for money from IFI expenditure is to require complete openness and thorough annual reporting, all of which should be placed in the public domain.

5.26. Ofgem's view remains that the primary rationale for RPZs is to encourage high quality innovation that leads to clear cost benefits. In this context it considers that quality is more important than quantity and as such any further proposals for RPZs will be based on this principle. Ofgem is conscious of the administrative burden that the RPZ initiative could bring and it will consider ways of simplifying the registration process where appropriate.

Next Steps

5.27. By the time of the price control workshop on 7 November, Ofgem will have given full consideration to the consultation responses and will set out at the workshop, for discussion, revised arrangements. Following this workshop, Ofgem will decide whether to proceed with these initiatives and if so, what form they should take. It is intended to publish our initial conclusions on IFI and RPZs in the next price control consultation document which will be published in December 2003.

Views invited

5.28. Views are invited on any of the issues in this Chapter and particularly on:

- the summary information on the volume and costs of distributed generation;
- the incentive framework for distributed generation and in particular:
  - the proportion of costs that should be passed through;

- the best of way of incentivising DNOs to provide network access to distributed generators on an ongoing basis; and
- whether similar arrangements could be applied to demand customers;

- interest in IFI Category C activities and the potential benefits of providing funding for them; and
- from DNOs, examples of the opportunities they anticipate for RPZs. This will enable us to test our proposals against a more realistic set of examples and will assist us in refining our thinking. These proposals could be conceptual or related to an actual part of a DNO system and will be treated in confidence if requested.

5.29. Respondents are also invited to present estimates of the costs and benefits of the proposals as presented in the RIA (Appendix 1).

6. Assessing costs

Introduction

6.1. The July 2003 document explained the way in which Ofgem intends to approach this area of work at this review, including the range of analysis that will be undertaken. The document also outlined the information that Ofgem intends to collect from DNOs to help assess their efficiency and future level of costs. It also discussed the approach taken at the last price control review.

6.2. This Chapter provides an update on Ofgem's thinking in these areas and also:

- summarises the information that DNOs have submitted as part of the Historic Business Plan Questionnaire (HBPQ);
- outlines the key developments in Ofgem's work on cost assessment since the publication of the July document; and
- provides an update on the work that is being undertaken on assessing the future costs of companies, including an outline of the main information requested in the Forecast Business Plan Questionnaire (FBPQ) which has been sent to companies for completion in December 2003 and January 2004 and the study of Total Factor Productivity (TFP).

Developments since July

Historic Business Plan Questionnaire

6.3. Ofgem received HBPQ responses from all the DNOs in mid September 2003 and also received draft unaudited regulatory accounts for 2002/03 in the Summer. It is important to note that the data in the regulatory performance and other information sections of the tables on page 45 and in Appendix 2 has not been audited.

6.4. Ofgem has started to assess the comparability of the submissions and Ofgem's initial view of the HBPQ and 2002/03 regulatory accounts submissions is that several companies may not have completed the returns in the manner requested.

A number of important schedules will therefore need to be restated by the DNOs. This may place additional pressure on the timetable.

6.5. Data provided by the DNOs shows that, on a DPCR3 basis during the period 2000/01 – 2002/03, they have earned returns of between 5%pa and 14%pa (regulatory EBIT/RAV). In the year ended 31 March 2003 the range was 8% to 12%. Prior to publication of this document, a number of DNOs have raised concerns that publication of the returns for individual companies calculated on this basis could invite misleading comparisons, both as between companies and with the regulatory allowances under DPCR3 controls. This reflects a number of inconsistencies in the data provided by companies, which is unaudited. Ofgem is committed to conducting an open and transparent price control review, and intends to publish the returns after allowing further time for consideration of the concerns raised. Interested parties seeking to compile their own estimates of individual company returns from data contained in this document should exercise caution.

6.6. Ofgem is presently reviewing and analysing the information in order to understand DNO performance and efficiency initiatives for the three years 2000/01-2002/03. This document does not comment on the financial performance of DNOs and draws no conclusions on relative efficiencies as the data provided by the DNOs has not yet been normalised.

DNO Summary of performance 2002/03 [1]

		Aquila	EME	EPN	LPN	SPN	UUE	NEDL	YEDL	WPD S Wales	WPD S West	SP Manweb	SP Distribution	Hydro	Southern
Financial Performance															
Turnover	£m	307	305	363	268	214	310	194	256	174	214	202	344	181	366
Cost of Sales	£m	(32)	(26)	(18)	(17)	(22)	(51)	(13)	(20)	(15)	(17)	(23)	(61)	(12)	(28)
Gross Profit	**£m**	**275**	**279**	**345**	**251**	**192**	**260**	**182**	**237**	**159**	**198**	**179**	**283**	**168**	**338**
Operating costs	£m	(127)	(137)	(148)	(126)	(114)	(103)	(78)	(109)	(74)	(79)	(81)	(99)	(77)	(152)
Operating profit	**£m**	**148**	**142**	**198**	**125**	**78**	**156**	**103**	**128**	**85**	**119**	**97**	**184**	**91**	**185**
Other Income	£m	-	-	-	-	-	(1)	-	0	2	2	2	2	1	0
PBIT	**£m**	**148**	**142**	**198**	**125**	**78**	**156**	**103**	**128**	**87**	**121**	**99**	**186**	**92**	**186**
Interest	£m	(34)	(20)	(64)	(34)	(39)	(36)	(20)	(39)	(24)	(32)	7	(28)	(21)	(48)
PBT	**£m**	**114**	**122**	**134**	**90**	**40**	**120**	**84**	**90**	**63**	**89**	**106**	**159**	**71**	**138**
Tax	£m	(21)	(47)	(32)	2	4	(5)	(22)	(19)	(24)	(35)	(22)	(51)	(29)	(43)
PAT	**£m**	**93**	**76**	**102**	**92**	**44**	**115**	**61**	**71**	**39**	**54**	**84**	**108**	**42**	**95**
Dividends	£m	-	(35)	(29)	(75)	-	(56)	(40)	(40)	(13)	(84)	-	(159)	(25)	(43)
Retained profit	**£m**	**93**	**41**	**73**	**17**	**44**	**59**	**21**	**31**	**27**	**(30)**	**84**	**(52)**	**17**	**52**
Net Assets	£m	208	229	381	398	183	524	255	251	246	173	711	114	125	146
Net Debt [2]	£m	(585)	(544)	(808)	(528)	(437)	(589)	(265)	(562)	(311)	(480)	(74)	(573)	(510)	(980)
Net cash inflow from operations	£m	178	180	252	201	131	185	120	170	95	191	86	250	125	243
Regulatory Performance															
Standard Controllable Costs															
Actual	£m	63	71	80	65	64	73	43	55	38	36	40	36	43	73
Allowance	£m	83	86	88	79	62	80	62	74	51	61	60	85	51	78
Variance	£m	20	15	8	14	(3)	7	19	19	13	26	20	49	8	5
% of Allowance	%	24%	17%	9%	18%	(4%)	9%	30%	26%	26%	42%	33%	58%	16%	7%
Gearing (Net Debt / RAV) [2]	%	60%	55%	69%	56%	74%	73%	47%	66%	54%	68%	10%	42%	67%	70%
Regulatory Asset Value (Company's estimate in nominal prices)	£m	968	986	1,164	937	588	808	567	845	576	709	734	1,377	766	1,400
Other information															
Customers	('000s)	2,307	2,437	3,387	2,120	2,146	2,282	1,528	2,156	1,066	1,446	1,448	1,938	676	2,726
Units distributed	(GWhs)	27,274	28,949	36,262	27,008	21,154	25,444	16,974	24,268	12,643	15,444	16,756	22,332	8,491	32,832
System length	(Kms)	60,250	66,896	92,123	30,725	49,522	58,310	39,877	58,744	33,547	48,065	45,474	65,597	44,919	74,960

(1) This data is reproduced as submitted by DNOs to Ofgem in their HBPQ submissions and draft, unaudited Regulatory Accounts for 2002/03.
The regulatory performance and other information is also unaudited. The data was provided prior to the finalisation of Regulatory Accounting Guidelines, is yet to be audited and has not been assessed for comparability by Ofgem.
Ofgem are aware of potential inconsistencies in the data and may make adjustments before undertaking any inter-company comparison.
Therefore readers should be aware of these issues and if they do try to make comparisons between the relative actual performances of different companies or compare actual performance against the price control allowances they should be cautious.

(2) Gearing includes third party and intercompany debt at the licence holder level but excludes other debt guaranteed by the licence holder.
Net Debt has been calculated by Ofgem from information in the HBPQ and draft unaudited Regulatory Accounts.

Forecast Business Plan Questionnaire

6.7. The FBPQ was sent to the DNOs on 2 October 2003 and the receipt of responses is scheduled to be staggered from 19 December 2003 to 31 January 2004. The FBPQ includes requests for the following:

- forecast of operating costs, capital expenditure and other financial and operational information for the next price control period;
- appropriate information on a number of scenarios and "sensitivities" including an optional scenario (or scenarios) defined by the DNO;
- input data for bottom up modelling purposes; and
- commentary on selected areas to help inform discussions and Ofgem's decisions during the price control review e.g. quality of supply, significant efficiency initiatives etc.

6.8. As with the HBPQ a consultative approach was taken in preparing the information request, including holding working group discussions with the DNOs and draft FBPQs being circulated to the DNOs for comment. DNOs have contributed both to the specification of the information requested in the FBPQ and the timetable.

CEPA's background study on benchmarking

6.9. The July document explained that Ofgem had appointed Cambridge Economics Policy Associates (CEPA) to produce a report on the use of benchmarking techniques to assess efficiency in this price control review.

6.10. The report was published on 30 September 2003 and can be found on Ofgem's website. The report reflects the views of CEPA and should not be regarded as Ofgem policy. Views on any of the issues raised in CEPA's report should be included as part of the responses to this document.

6.11. The key findings of CEPA's report are:

- a number of benchmarking techniques should be considered, in particular regression analysis – corrected ordinary least squares (COLS) and a linear programming technique - data envelopment analysis (DEA);
- the use of international data and panel data (time series data) would improve the robustness and quality of the benchmarking analysis;
- analysis of total costs may identify important factors that analysis of operating costs or capital expenditure by themselves may miss. However, an appropriate definition of the capital expenditure element may be difficult to establish;
- the impact of mergers will require careful consideration. Analysis could be performed on the eight company groups and/or certain assumptions could be applied to the analysis of the 14 DNOs e.g. constant returns to scale;
- the analysis of operating costs in the 1999 price control review was generally robust, particularly as the COLS analysis was supplemented with expert industry judgement. However, there were some concerns over the transparency of Ofgem's methodology; and
- CEPA's analysis suggested that there were no other significant cost drivers in relation to operating costs other than the scale variables used in the 1999 review. Furthermore, CEPA suggested dropping customer numbers as a scale variable as it was highly correlated with units distributed.

Ofgem's approach to assessing costs

6.12. In the July document Ofgem set out the following proposed approach to assessing DNO costs for the period 2005-10:

- **Review of actual costs** based on information from the HBPQ and regulatory accounts, for the years 2000/01 to 2003/04;

- **"Bottom up" modelling** analysis of DNO activities broken down into individual drivers and associated unit costs. Bottom up modelling would be used to assess repairs and maintenance costs, load and non load related capital expenditure and fault costs;

- **"Top down" analysis** of overall cost categories including the benchmarking of DNOs against each other on operating costs, total costs, fault costs and non load related capex and key activities identified in the DNO regulatory accounting guidelines. In addition there will also be a study of total factor productivity (TFP); and

- **Review of DNOs' own forecasts of costs** submitted in the FBPQ in accordance with Ofgem's defined "base case" and alternative scenarios as well as the DNOs own scenarios. This is for the years 2003/04 to 2009/10.

Summary of responses

6.13. The responses showed general support for the approach to cost assessment set out in the July document. In particular respondents welcomed the use of a variety of techniques and analyses. The DNOs stressed the importance of transparency, in particular understanding how the various analyses were to be used in the overall assessment. Many of the DNOs welcomed Ofgem's intention to place greater weight, where appropriate, on their projections of future costs.

6.14. A number of respondents stated that key outputs such as quality of service should be incorporated into the assessment of DNOs' efficiency. Such an approach would ensure that the overall assessment was sustainable.

6.15. Some of the DNOs made reference to the assessment of operating costs in the last price control review, they questioned the validity of using the second most efficient firm as the benchmark or "frontier" and they preferred the use of an average cost benchmark which would be unlikely to contain any anomalies. Some respondents felt more consideration should be given to the firms deemed to be top performers and their incentives to improve efficiency in the future.

6.16. Respondents noted that Ofgem would have to treat the underlying data carefully to ensure that DNOs were compared on a consistent basis. A number of respondents supported the inclusion of total controllable costs in the cost assessment as a cross check on the separate assessment of operating costs and capital expenditure.

6.17. Most respondents supported Ofgem's approach to the assessment of fault costs on a total cost basis.

6.18. Of those who commented on the TFP study many believed it was likely to include factors considered in other elements of the cost assessment. Some questioned potential areas of the TFP study, particularly the "catch up" from privatisation and performance in comparison to the rest of the economy.

6.19. Two DNOs discussed the impact of mergers on the cost assessment, and both thought that analysing the eight company groups in addition to the 14 DNO's would be useful. There were also questions regarding Ofgem's policy on savings in fixed costs of merged firms as applied at the last price control review.

6.20. Some respondents discussed the use of information from the asset risk management (ARM) survey, most of those who commented suggested it should be used to support the Ofgem's assessment of the DNOs' forecasts of network investment.

Ofgem's further thoughts

6.21. In order to produce a robust assessment of efficiency and projection of future costs Ofgem will use a variety of approaches and techniques rather than rely one particular technique. These different approaches will not be combined in an arbitrary or pre-determined manner as this is likely to produce an unrealistic view of a DNO's efficiency and costs. Instead it is important to ensure that the overall assessment is based on consistent arguments and evidence. It will also be important to ensure that the combination of the various cost assessments does not double count or omit certain costs. Ofgem must also ensure that the overall cost assessment is consistent with the objectives and required incentives of the distribution price control.

6.22. It may be necessary to apply a degree of pragmatism in the final assessment. Nevertheless it will be important that the analysis is transparent and Ofgem can demonstrate how the resultant assessments of efficiency and future cost assumptions have been used to determine the DNOs' allowed revenue for 2005-10.

6.23. Ofgem has previously acknowledged the potential problems in using the frontier firm as a benchmark and will take care to ensure the choice of any cost benchmark is as robust as possible and not overly dependent on any one single firm or unduly affected by outliers. The choice of the frontier is an issue specific to regression analysis. In determining the overall assessment of efficiency Ofgem will consider the results of the regression analysis in the context of the results of other benchmarking techniques and other elements of the cost assessment. Similarly Ofgem will give careful consideration as to how the results of the TFP study are interpreted and used in the overall cost assessment.

6.24. Ofgem recognises the impact mergers will have on cost assessment in this price control review. Analysis will be carried out on company groups as well as individual DNOs. This was supported by respondents. As stated in the July document Ofgem intends to apply the merger policy (regarding efficiency savings) as it stood for each merger as far as practical.

Summary of ongoing work

6.25. This section sets out work on the main areas of cost assessment in the period to December 2003. Key dates for the cost assessment work for the duration of the price control review are set out in Chapter 2.

Review of the HBPQs

6.26. Ofgem is presently reviewing the detailed information contained in the HBPQs. Ofgem's review aims to identify:

- the adjustments necessary to achieve comparability between the DNOs;

- the base level of recurring operating costs (excluding atypical and one off items) on a normalised basis for each DNO. This will be used in the benchmarking analysis of operating costs;
- significant efficiency initiatives that have been implemented during the present price control period;
- an understanding of capital expenditure incurred in the period covered by the HBPQ; and
- under/over performance on costs compared to the DPCR3 cost allowances.

6.27. Ofgem is aware that there are a number of issues to be considered in relation to achieving comparability between DNOs and addressing these issues will be a priority for Ofgem. As mentioned above Ofgem will comment on the progress of this review in the December consultation document.

Bottom up modelling

6.28. As part of its approach to bottom up modelling in this price control review Ofgem has discussed the methodology and data input requirements with the DNOs and the relevant information has been requested in the HBPQ and the FBPQ.

Top down analysis

Benchmarking

6.29. Following the publication of CEPA's report Ofgem is continuing to develop its approach to benchmarking in DPCR 4 and is having further regular discussions with the DNOs. Key issues for consideration include:

Input data

- definition of costs to be benchmarked (including measures of total cost);
- adjustments required to achieve comparability between the DNOs;
- adjustments required for company/area specific factors; and

- increasing the amount of data in the analysis by using panel data and/or international data.

Benchmarking techniques and methodology

- benchmarking techniques Ofgem will use;
- cost drivers that should be included and how should they be selected;
- assumptions to be made in regression analysis e.g. functional form, the intercept, choice of intercept for the cost benchmark/frontier etc;
- the combination of inputs and outputs for use in DEA; and
- assumptions on returns to scale and economies of scale.

Other issues

- use of benchmarking in the overall cost assessment and it's combination with the other strands of the cost assessment work, in particular the bottom up modelling and TFP analysis;
- treatment of merged firms for the purposes of benchmarking; and
- incorporation of quality and other key outputs into the benchmarking analysis.

6.30. Ofgem will discuss its approach to benchmarking in detail in the December consultation document.

TFP study

6.31. The purpose of this analysis is to determine the expected growth in productivity by considering all factors of production e.g. capital, labour, raw materials etc. This will provide a good indication of the scope of future efficiency savings that the DNOs as a sector could achieve in the next price control.

6.32. The study will consider data from relevant UK and international firms and industries and other economic indicators and assess what trends in TFP growth can be sustained in the UK distribution sector. Analysis of historical trends will

be supported by surveys of expected TFP growth from industry analysts and selected companies from relevant sectors. The analysis from the various areas of study will be used to determine a range of expected growth in productivity for the DNOs in relation to operating costs and total costs (i.e. operating costs plus capital expenditure).

6.33. Ofgem has appointed CEPA to undertake the TFP study on its behalf. Ofgem expects to publish CEPA's report on the TFP study in November and to discuss the results of the study in the December consultation document.

Views invited

6.34. Views are invited on any issues in this Chapter and in particular on:

- the issues involved in normalising DNOs costs;
- Ofgem's approach to benchmarking including the issues set out in paragraph 6.27 and those raised in CEPA's report;
- the effect of mergers on the cost assessment work; and
- the use of total factor productivity estimates.

7. Financial issues

7.1. The June and July 2003 documents set out Ofgem's broad approach to financial issues including:

- obligations with respect to the financing of companies;
- the cost of capital;
- assessing the regulatory asset value (RAV) and the approach to deprecation; and
- the treatment of pension fund costs.

7.2. This Chapter sets out Ofgem's further thoughts on the treatment of pension costs. The other areas of work are being progressed and Ofgem intends to set out its further thoughts on these areas in December 2003.

7.3. Ofgem has recently sent the DNOs a draft version of the financial model that will be used to assess the financial impact of the price control. Ofgem intends to publish a version of this at the end of October 2003.

Treatment of pension costs

7.4. The June 2003 document set out in detail Ofgem's guidelines proposed for the treatment of pension costs in setting network price controls and the rationale behind its thinking. This section sets out Ofgem's further thoughts in the light of respondents' views.

Summary of responses

General

7.5. Most respondents welcomed the proposal to provide a clear framework for the treatment of pension costs in setting price controls. There was also general support for the view that price controls should fund the future costs of providing a competitive package of pay and benefits including pensions. Trade union

respondents welcomed Ofgem's recognition of the need for companies to be able to recruit and retain appropriately qualified staff.

7.6. Several respondents argued that it was inappropriate to consider pension costs retrospectively as retrospection is a generally unsound basis of regulation and previous price control settlements should be allowed to stand even where in hindsight it might be apparent that errors had been made. They argued that to do otherwise would introduce an unacceptable degree of uncertainty.

7.7. Among the network monopolies who responded, most argued that pension costs should simply be a pass-through item, unless they result from imprudent management action. They also indicated that Ofgem must set out in detail how the principles are to be applied, and clarify what in its view represents 'current best practice' in the estimation of pension costs.

7.8. Most respondents argued that full regard must be given to the Protected Persons Regulations[22] (which entrench the pension rights of persons who were members of the industry schemes at privatisation). It was pointed out that the effect of the Regulations is to make the benefit entitlements of protected persons a legal obligation of the relevant Successor Company (within the meaning of EA 89) and its successors in law, regardless of where qualifying service was performed.

7.9. The network monopolies raised arguments relating to the principles on under-funding, regulated-unregulated split and benefit enhancement arising from re-organisation and /or redundancy.

Underfunding

7.10. Companies argued that it is unclear whether any allowance was made in past price controls for pension costs. Companies argued that opex allowances at the 1999 review were set on the basis of the base-year costs of the frontier companies, at least one of which had a complete contributions holiday in that year. Accordingly, it would not be appropriate to assume customers had paid implicit amounts equal to companies' accounting charges.

[22] The Electricity (Protected Persons (England and Wales) Pension Regulations S.I 1990/346, The Electricity (Protected Persons) (Scotland) Pension Regulations S.I 1990/510 (S.68)

Regulated-unregulated split

7.11. Most DNOs argued that, at least in respect of the period prior to the separate licensing of distribution and supply activities, all Public Electricity Supplier (PES) employment was related to the discharge of statutory duties (i.e. the duties to supply and to develop and maintain an efficient, co-ordinated and economical system for the distribution of electricity). Accordingly, all pension costs attributable to this employment (or, at least, all costs attributable to employees who retired prior to October 2000 and those who continued to be employed in the distribution business since then) should be recoverable under the distribution price control, regardless of whether the company still carries on a supply business.

7.12. The companies argued that the cost of providing pensions to former employees of businesses no longer carried on by them will still have to be borne by the company which retains the legal obligation to provide the pension and by its present and future employees. Companies argued they will therefore have to recover future costs out of the revenues of the businesses they still carry on, even if this is only the regulated network business, and that accordingly all pension costs should be allowed for in price controls.

7.13. Companies argue that PES separation was forcibly imposed, not voluntarily undertaken, and was effected by Transfer Schemes approved by the Secretary of State. Companies argued that it was not possible to allocate pension liabilities by way of the transfer schemes, and that it would in any event not have been appropriate to burden the supply successor with historic liabilities that its competitors did not face.

7.14. NGT argued that neither Ofgem nor the MMC required allocation of pension liabilities at the time of the Centrica demerger. NGT also argued that the two subsequent price controls (Ofgas/MMC (1997), Ofgem (2001)) did not envisage any regulatory partitioning and arguably, on both occasions, the 'Centrica' element of surplus was used for the benefit of consumers. In NGT's view, it is therefore not reasonable to have regulatory partitioning going forward and in its

view the only basis for applying Guideline 6[23] to the Centrica de-merger would be that the parties had behaved unreasonably at the time.

Benefit enhancement

7.15. Several DNOs stated that the principle is unacceptable. All DNOs argued that the rules of the ESPS[24] prescribe specified benefit enhancements in the case of members whose employment is terminated before normal retirement date as a result of reorganisation or redundancy. As a result it is argued that the resulting early retirement deficiency costs are a legal obligation of the employer. It was also suggested that it is appropriate to defer deficiency payments where the Trustees are satisfied that the scheme has sufficient assets to meet its liabilities (as increased by the enhancement).

Ofgem's further thoughts

Retrospection

7.16. As a general rule it is not appropriate to make retrospective adjustment to price controls. It should be recognised, however, that strict application of this rule to pension costs would mean that there would be no future allowance for any past service costs, only for future service. This would mean that all or most of any deficit would have to be borne by shareholders. Ofgem's proposed principles are designed to provide an equitable basis for sharing the increase in future costs resulting from the present deficits between customers and shareholders, and to provide clarity for the future. In view of the lack of clarity as to how pension costs have been treated at previous price control reviews, it is necessary now to establish a clear starting position, and it is inevitable that there will need to be some retrospection.

[23] Guideline 6: Liabilities in respect of the provision of pension benefits that do not relate to the regulated business should not be taken into account in assessing the efficient level of costs for which allowance is made in the price control (Electricity Distribution Price Control Review - Initial Consultation, July 2003, 68/03).

[24] Electricity Supply Pension Scheme

Protected Persons Regulations

7.17. Ofgem is fully aware of these regulations and of the obligations they impose and full account was taken of them in formulating the initial pension guidelines.

7.18. The pension guidelines are concerned only with the question of how far companies' pension costs should be taken into account in setting price controls. The June document made clear that Ofgem's principles would not in any way affect the legal rights and duties of employers or members. Ofgem sees no reason to amend the principles on these grounds.

Underfunding

7.19. Ofgem acknowledges the points that have been made and they will be addressed in bringing forward a detailed methodology statement in December 2003.

Regulated – unregulated split

7.20. Ofgem recognises that PESs had a statutory duty to supply and as such the costs (including employment costs) attributable to this activity were taken into account in setting supply price controls in the 1990s. The basis on which costs were allocated between supply and distribution changed at the 1999 reviews.

7.21. Ofgem acknowledges that the basis on which PES costs were allocated between the separate businesses, prior to the last price control review, may have resulted in an inappropriate recognition of costs. The June document indicated that due to the surpluses prevailing at that time, pension charges were low so the effect of misallocation was not significant. On this basis there does not appear to be a strong case for clawing back costs inappropriately charged to the network businesses under previous price controls. Ofgem still holds this view.

7.22. Companies that have retained their supply businesses still have the opportunity to recover past service costs relating to that business from future supply revenues. The extent to which they will be able to do so will depend on the state of competition and their other costs. In this respect, they will be in no different position from other suppliers, many of whom also have substantial

legacy pension liabilities (including the majority of those with the largest market shares). Ofgem also needs to ensure that distribution businesses are not subsidising supply businesses.

7.23. Companies that have disposed of their supply businesses will have had to take into consideration the value of retained pension liabilities when agreeing the terms of disposal, including the risk that these might increase in the future for reasons outside their control. Companies were free to retain the whole of the proceeds of sale, no part of which has been clawed back for customers. If the value of the pension liabilities had decreased, companies would have retained the full benefit. In these circumstances it would be unreasonable, and inconsistent with Ofgem's duty to protect the consumer, to treat an increase in such liabilities differently.

7.24. Ofgem recognises the practical difficulties of reconstructing an appropriate basis of allocation and it intends to bring forward detailed proposals as part of the methodology statement in December. This will include the proposed treatment of pension costs associated with the metering business for these purposes.

Enhanced Benefits

7.25. Ofgem acknowledges the arguments companies have made that the rules of the ESPS determine the level of benefit enhancement resulting from redundancy (whether voluntary or compulsory) and that companies do not therefore have discretion to avoid the costs of benefit enhancement when redundancies occur. It is also recognised that, because the majority of redundancies were voluntary, employers faced an adverse selection problem, with redundancy being more attractive to those in a position to take early retirement, so that as a practical matter companies were not in a strong position to control the total costs of benefit enhancement.

7.26. However, Ofgem does not accept that these arguments necessarily lead to the conclusion that such costs should therefore be allowed in setting future price controls. The fundamental basis of incentive regulation is that companies should face an incentive to increase their efficiency. In doing so, they stand to benefit through outperforming the assumptions made by the regulator and earning a return in excess of the allowed cost of capital. Revenue allowances have been

set on this basis. Once revenue caps have been settled, it is for companies to decide how far and how fast to reduce their costs, so as to maximise the value of the benefits they retain while maintaining operating capability at acceptable levels. In doing so, they are expected to take into account the non-recurring costs associated with achieving recurring savings. If customers were to bear the non-recurring costs, companies would bear negligible risk, and should be entitled only to a commensurately small share of the benefits.

7.27. In reaching decisions about the scale and pace of past headcount reductions, it is reasonable to expect that companies took into account the early retirement deficiency costs which would result. Ofgem does not accept that companies were entitled to assume that, in those cases where they were able to reach agreement with pension trustees to waive additional contributions, the liability had been permanently avoided. It would rather have been appropriate to consider the risk that additional contributions might need to be made at a future date, and take this into account in their decisions. Had companies concluded that this risk would threaten the value of the recurring savings from which they would benefit, such that the rewards were insufficient, it would have been open to them proceed more cautiously. It would also have been open to them to seek an explicit understanding with the regulator regarding the treatment of redundancy costs the purposes of price control reviews.

7.28. It is not incumbent on the regulator to ensure that companies make good decisions. Some decisions taken in the past will not appear in hindsight to have been as well judged as they appeared at the time. Some will turn out to be better than was expected. Companies would not expect to surrender to customers the benefit of achieving a given level of savings at a lower cost than they had assumed in reaching their decision to proceed. By the same token, customers should not be expected to surrender any of the benefits they have obtained when the costs turn out to have been greater than assumed.

7.29. Ofgem does not therefore intend to amend this principle and expects to apply it at all future network price control reviews. Nevertheless, Ofgem acknowledges that the position might not have appeared at previous reviews to be as clear as it is here described. Ofgem will therefore need to be satisfied that, in applying it in respect of redundancies occurring prior to March 2003, a proportionate

approach is taken. Ofgem aims to bring forward detailed proposals as part of the methodology statement.

7.30. In discussion with Ofgem, a number of companies have raised the question of the period over which pension scheme deficits should be recovered through increases in contributions, and whether Ofgem intends to set price controls on the basis of its own assumption in this respect or be guided by the decisions reached by companies in consultation with scheme trustees and their respective advisers. This is obviously a sensitive issue, in view of the natural tension between employer and trustee, especially in the case of companies with weaker credit ratings. Ofgem intends to hold discussions with scheme actuaries and trustees, and to take independent actuarial advice, before coming to a conclusion. Nevertheless, having regard to the inherently low business risk faced by network monopolies and the supportive nature of the regulatory regime (especially the Authority's duty to have regard to the need for licensees to be able to finance their authorised activities under the financial ringfence), Ofgem would need to be convinced that there is a compelling argument in any case for recovery of deficit costs attributable to network monopolies over a period shorter than the average remaining service life of the active membership. For stronger companies, a longer period may be appropriate.

Views invited

7.31. Views are invited on the revised guidelines.

Appendix 1: Initial RIA for distributed generation

Introduction

This Appendix sets out an initial high level RIA for the treatment of DG in the distribution price control. This is an initial RIA, more detail on proposals and options will follow in later documents.

Ofgem has committed to undertaking a RIA, including environmental impact assessments, for all new significant policies or changes in policy. Ofgem considers that policy decisions are significant if they are likely to lead to significant costs and/or benefits for consumers; if they are likely to result in significant transfers between consumer 'groups'; and if they represent a significant change in Ofgem's approach to carrying out its functions. It was explained in the July document that where appropriate Ofgem would produce a RIA for new policies introduced as the price control review progresses.

The estimates of costs and benefits will depend critically on quantification provided by respondents to the consultations – respondents are encouraged to provide quantitative assessments in their comments where possible.

Objectives and key issues

The objective of developing the regulatory framework relating to DG is to provide appropriate incentives to the DNOs to connect and utilise DG in an economic, efficient and co-ordinated way, which should help to facilitate the achievement of the government's targets for renewable and CHP generation, while continuing to protect consumers' interests.

DG development forms a significant part of the government's environmental objectives in the energy sector given that a large proportion of the renewable generation, supported by the Government through the Renewable Obligation, is expected to connect to distribution networks. Access to networks has been identified as an important factor influencing the pace and scope of such

development. The price control needs to ensure that the DNOs have appropriate incentives to connect DG efficiently.

The accommodation of DG could have significant impact on the DNOs although the pace and location of its development cannot be predicted with certainty. It is important therefore that the regulatory framework is capable of accommodating a range of outcomes.

In line with Ofgem's principle objective to protect the interests of the consumers, it will also be necessary to consider the impact on price, quality and security of electricity supply.

Options

Due to the complicated nature of the issues involved, the options considered for the regulatory framework relating to DG will be discussed in detail in the main body of the relevant consultation documents. The consultation documents will also set out the main advantages and disadvantages of the policy initiatives being considered, for example against the principles already set out in the January 2003 open letter to the DNO chief executives regarding DG.

Here an overview of the options considered is given below.

- "Do nothing" – No special treatment is given to the costs relating to DG. Under the assumption that the generation connection charges will become shallower in the next price control period, this option relies on the current price control mechanism of setting revenue allowance based on forecast expenditure required; and

- "DG Incentive" – Incentives are set up in various areas of DNOs' activities in relation to DG: access to network including reinforcement, operating the network. The options considered included:

    - pass-through of costs associated with DG

    - a £/MW or £/MWh incentive rate

- a hybrid mechanism combining a pass-through element and incentive elements
- an incentive based on network availability for network operation

Additional mechanisms including the use of Registered Power Zones and incentives to encourage effective innovation are also considered as part of the total regulatory framework relating to DG.

Costs and benefits

The main cost elements are expected to be those associated with reinforcing and transforming the distribution networks to facilitate the connection of DG to the networks. In assessing the costs arising from the DG-related price control arrangements, Ofgem will consider:

- The impact on DG development from the price control arrangements. For example the different cost signals for DG that would arise from the regulatory framework, and how these affect the uptake of DG with different sizes and technologies, and/or at different location;
- The impact on the DNOs resulting from DG development including the efficient costs required, and the financial impact on the DNOs under the incentive mechanisms; and
- The costs on the consumers in terms of change in the price, quality, and security of electricity supply.

The benefits of setting the appropriate incentives for the DNOs in relation to DG will arise through facilitating progress towards the government's energy policy targets. This will bring environmental benefits from increased renewable generation and will ensure that customers get the best value for the given level of subsidy provided by the renewables obligation. Although all the benefits are important for making the decision on the regulatory framework, it may not be possible to carry out a full quantitative evaluation of all the benefits.

Distributional effects

When considering the distributional effect of the DG related regulatory framework, it is expected that costs should be borne by those that incur them. However, depending on the varying scope of DG development across different regions, and depending on the result of the distribution charging review, Ofgem might need to consider the distributional effects between existing, new and future generators and between consumers in the same region as well as in different regions.

Risks and unintended consequences

Uncertainty in the DG development and the consequential cost impact on the DNOs is the main issue that could raise potential risks to the success of the policy in meeting its objectives.

In order to test the robustness of the analysis to assumptions or external factors, Ofgem will examine in detail the information submitted by the DNOs in their Business Plan Questionnaires, especially the scope of uncertainty in the future DG development and associated costs to be incurred by the DNOs. In addition to understanding the main factors influencing such uncertainty, Ofgem will also assess the effect of such uncertainty on DG, DNOs and the consumers under the policy options considered.

Competition

The proposed DG incentives do not relate to particular types of generation technologies and hence are not expected to have major impact on competition amongst new DG. Ofgem will also examine and limit any scope for distortion in competition between existing and new DG, as well as between DG and generation connected directly to the transmission network.

Review and compliance

Ofgem will set up appropriate monitoring system to review the effectiveness of the adopted regulatory framework in the next price control.

Conclusion

This initial RIA sets out the analysis required for the identification of the appropriate price control arrangements relating to DG. As the policy development progresses, the RIA will evolve to an explanation of the option finally taken.

Appendix 2: Information from historic Business Plan Questionnaire

Summary of performance [1]

Aquila Networks nominal prices			2000/01	2001/02	2002/03
Financial Performance					
Turnover	£m		299	311	307
Cost of Sales	£m		(28)	(29)	(32)
Gross Profit	**£m**		**271**	**282**	**275**
Operating costs	£m		(160)	(144)	(127)
Operating profit	**£m**		**111**	**138**	**148**
Other Income	£m	[2]			-
PBIT	**£m**				**148**
Interest	£m				(34)
PBT	**£m**				**114**
Tax	£m				(21)
PAT	**£m**				**93**
Dividends	£m				-
Retained profit	**£m**				**93**
Net Assets	£m				208
Net (Debt)/Cash	£m	[3]			(585)
Net cash inflow from operating activities	£m		28	164	178
Regulatory Performance					
Standard Controllable Costs					
Actual	£m		90	71	63
Allowance	£m	[4]	90	84	83
Variance	£m		0	14	20
Variance as %	%		0%	16%	24%
Gearing (Net Debt / RAV)	%	[3]			60%
RAV as at 31 March (Company's estimate in nominal prices)	£m		906	934	968
Other information					
Customers	('000s)		2,343	2,263	2,307
Units distributed	(GWhs)		26,872	27,236	27,274
Circuit length	(Kms)		60,188	60,492	60,250

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(2) The companies were required to separate their distribution business from the other parts of the company from 1 October 2001. Generally, the financial year 2002/03 is the first full year accounts were prepared for the DNOs as a separate legal entity.

(3) Gearing includes third party and intercompany debt at the licence holder level but excludes other debt guaranteed by the licence holder. Net Debt has been calculated by Ofgem from information in the HBPQ and draft unaudited Regulatory Accounts.

(4) The Regulatory Accounts for 2000/01 did not include disclosure of DPCR3 allowances. The allowance for this year has been calculated from the Dec 1999 DPCR3 final proposals document.

Summary of performance [1]

East Midlands Electricity nominal prices			2000/01	2001/02	2002/03
Financial Performance					
Turnover	£m		287	291	305
Cost of Sales	£m		(26)	(28)	(26)
Gross Profit	**£m**		**261**	**263**	**279**
Operating costs	£m		(206)	(139)	(137)
Operating profit	**£m**		**55**	**124**	**142**
Other Income	£m	[2]			-
PBIT	**£m**				**142**
Interest	£m				(20)
PBT	**£m**				**122**
Tax	£m				(47)
PAT	**£m**				**76**
Dividends	£m				(35)
Retained profit	**£m**				**41**
Net Assets	£m				229
Net (Debt)/Cash	£m	[3]			(544)
Net cash inflow from operating activities	£m		104	153	180
Regulatory Performance					
Standard Controllable Costs					
Actual	£m		88	79	71
Allowance	£m	[4]	89	85	86
Variance	£m		1	6	15
Variance as %	%		2%	7%	17%
Gearing (Net Debt / RAV)	%	[3]			55%
RAV as at 31 March (Company's estimate in nominal prices)	£m		991	981	986
Other information					
Customers	('000s)		2,416	2,422	2,437
Units distributed	(GWhs)		27,724	28,187	28,949
Circuit length	(Kms)		65,884	66,430	66,896

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Summary of performance [1]

EDF Energy (Eastern Power Networks) nominal prices			2000/01	2001/02	2002/03
Financial Performance					
Turnover	£m		337	332	363
Cost of Sales	£m		(33)	(22)	(18)
Gross Profit	**£m**		**305**	**310**	**345**
Operating costs	£m		(106)	(104)	(148)
Operating profit	**£m**		**199**	**206**	**198**
Other Income	£m	[2]			-
PBIT	**£m**				**198**
Interest	£m				(64)
PBT	**£m**				**134**
Tax	£m				(32)
PAT	**£m**				**102**
Dividends	£m				(29)
Retained profit	**£m**				**73**
Net Assets	£m				381
Net (Debt)/Cash	£m	[3]			(808)
Net cash inflow from operating activities	£m		229	214	252
Regulatory Performance					
Standard Controllable Costs					
Actual	£m		58	46	80
Allowance	£m	[4]	88	88	88
Variance	£m		30	42	8
Variance as %	%		34%	48%	9%
Gearing (Net Debt / RAV)	%	[3]			69%
RAV as at 31 March (Company's estimate in nominal prices)	£m		1,112	1,128	1,164
Other information					
Customers	('000s)		3,350	3,382	3,387
Units distributed	(GWhs)		34,094	34,775	36,262
Circuit length	(Kms)		90,763	91,293	92,123

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Summary of performance [1]

EDF Energy (London Power Networks) nominal prices			2000/01	2001/02	2002/03
Financial Performance					
Turnover	£m		269	269	268
Cost of Sales	£m		(22)	(21)	(17)
Gross Profit	**£m**		**247**	**248**	**251**
Operating costs	£m		(125)	(125)	(126)
Operating profit	**£m**		**123**	**123**	**125**
Other Income	£m	[2]			-
PBIT	**£m**				**125**
Interest	£m				(34)
PBT	**£m**				**90**
Tax	£m				2
PAT	**£m**				**92**
Dividends	£m				(75)
Retained profit	**£m**				**17**
Net Assets	£m				398
Net (Debt)/Cash	£m	[3]			(528)
Net cash inflow from operating activities	£m		117	150	201
Regulatory Performance					
Standard Controllable Costs					
Actual	£m		64	62	65
Allowance	£m	[4]	81	78	79
Variance	£m		17	17	14
Variance as %	%		21%	21%	18%
Gearing (Net Debt / RAV)	%	[3]			56%
RAV as at 31 March (Company's estimate in nominal prices)	£m		919	911	937
Other information					
Customers	('000s)		2,072	2,089	2,120
Units distributed	(GWhs)		25,256	26,111	27,008
Circuit length	(Kms)		30,262	30,449	30,725

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Summary of performance [1]

EDF Energy (Seeboard Power Networks) nominal prices			2000/01	2001/02	2002/03
Financial Performance					
Turnover	£m		208	217	214
Cost of Sales	£m		(22)	(24)	(22)
Gross Profit	**£m**		**186**	**194**	**192**
Operating costs	£m		(102)	(102)	(114)
Operating profit	**£m**		**84**	**91**	**78**
Other Income	£m	[2]			-
PBIT	**£m**				**78**
Interest	£m				(39)
PBT	**£m**				**40**
Tax	£m				4
PAT	**£m**				**44**
Dividends	£m				-
Retained profit	**£m**				**44**
Net Assets	£m				183
Net (Debt)/Cash	£m	[3]			(437)
Net cash inflow from operating activities	£m		145	115	131
Regulatory Performance					
Standard Controllable Costs					
Actual	£m		59	61	64
Allowance	£m	[4]	69	62	62
Variance	£m		10	1	(3)
Variance as %	%		15%	1%	(4%)
Gearing (Net Debt / RAV)	%	[3]			74%
RAV as at 31 March (Company's estimate in nominal prices)	£m		518	554	588
Other information					
Customers	('000s)		2,097	2,112	2,146
Units distributed	(GWhs)		20,729	20,745	21,154
Circuit length	(Kms)		49,033	49,225	49,522

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Summary of performance [1]

United Utilities Electricity nominal prices			2000/01	2001/02	2002/03
Financial Performance					
Turnover	£m		267	289	310
Cost of Sales	£m		(29)	(37)	(51)
Gross Profit	**£m**		**237**	**252**	**260**
Operating costs	£m		(122)	(107)	(103)
Operating profit	**£m**		**115**	**145**	**156**
Other Income	£m	[2]			(1)
PBIT	**£m**				**156**
Interest	£m				(36)
PBT	**£m**				**120**
Tax	£m				(5)
PAT	**£m**				**115**
Dividends	£m				(56)
Retained profit	**£m**				**59**
Net Assets	£m				524
Net (Debt)/Cash	£m	[3]			(589)
Net cash inflow from operating activities	£m		138	162	185
Regulatory Performance					
Standard Controllable Costs					
Actual	£m		88	85	73
Allowance	£m	[4]	86	80	80
Variance	£m		(2)	(5)	7
Variance as %	%		(2%)	(7%)	9%
Gearing (Net Debt / RAV)	%	[3]			73%
RAV as at 31 March (Company's estimate in nominal prices)	£m		752	762	808
Other information					
Customers	('000s)		2,252	2,270	2,282
Units distributed	(GWhs)		24,476	25,652	25,444
Circuit length	(Kms)		57,829	57,977	58,310

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Summary of performance [1]

Northern Electric Distribution Ltd	nominal prices		2000/01	2001/02	2002/03
Financial Performance					
Turnover	£m		190	205	194
Cost of Sales	£m		(18)	(20)	(13)
Gross Profit	**£m**		**172**	**186**	**182**
Operating costs	£m		(91)	(94)	(78)
Operating profit	**£m**		**81**	**92**	**103**
Other Income	£m	[2]			-
PBIT	**£m**				**103**
Interest	£m				(20)
PBT	**£m**				**84**
Tax	£m				(22)
PAT	**£m**				**61**
Dividends	£m				(40)
Retained profit	**£m**				**21**
Net Assets	£m				255
Net (Debt)/Cash	£m	[3]			(265)
Net cash inflow from operating activities	£m		122	131	120
Regulatory Performance					
Standard Controllable Costs					
Actual	£m		44	45	43
Allowance	£m	[4]	65	57	62
Variance	£m		22	12	19
Variance as %	%		33%	21%	30%
Gearing (Net Debt / RAV)	%	[3]			47%
RAV as at 31 March (Company's estimate in nominal prices)	£m		528	549	567
Other information					
Customers	('000s)		1,511	1,512	1,528
Units distributed	(GWhs)		16,647	16,800	16,974
Circuit length	(Kms)		44,753	39,610	39,877

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Summary of performance [1]

Yorkshire Electric Distribution Ltd nominal prices			2000/01	2001/02	2002/03
Financial Performance					
Turnover	£m		260	263	256
Cost of Sales	£m		(28)	(20)	(20)
Gross Profit	**£m**		**232**	**243**	**237**
Operating costs	£m		(121)	(125)	(109)
Operating profit	**£m**		**111**	**117**	**128**
Other Income	£m	[2]			0
PBIT	**£m**				**128**
Interest	£m				(39)
PBT	**£m**				**90**
Tax	£m				(19)
PAT	**£m**				**71**
Dividends	£m				(40)
Retained profit	**£m**				**31**
Net Assets	£m				251
Net (Debt)/Cash	£m	[3]			(562)
Net cash inflow from operating activities	£m		137	174	170
Regulatory Performance					
Standard Controllable Costs					
Actual	£m		66	66	55
Allowance	£m	[4]	79	73	74
Variance	£m		12	7	19
Variance as %	%		16%	9%	26%
Gearing (Net Debt / RAV)	%	[3]			66%
RAV as at 31 March (Company's estimate in nominal prices)	£m		849	834	845
Other information					
Customers	('000s)		2,067	2,143	2,156
Units distributed	(GWhs)		23,698	24,073	24,268
Circuit length	(Kms)		54,488	54,767	58,744

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Summary of performance [1]

Western Power Distribution (South Wales) nominal prices			2000/01	2001/02	2002/03
Financial Performance					
Turnover	£m		169	165	174
Cost of Sales	£m		(14)	(14)	(15)
Gross Profit	**£m**		**155**	**151**	**159**
Operating costs	£m		(102)	(77)	(74)
Operating profit	**£m**		**53**	**74**	**85**
Other Income	£m	[2]			2
PBIT	**£m**				**87**
Interest	£m				(24)
PBT	**£m**				**63**
Tax	£m				(24)
PAT	**£m**				**39**
Dividends	£m				(13)
Retained profit	**£m**				**27**
Net Assets	£m				246
Net (Debt)/Cash	£m	[3]			(311)
Net cash inflow from operating activities	£m		97	85	95
Regulatory Performance					
Standard Controllable Costs					
Actual	£m		69	48	38
Allowance	£m	[4]	54	52	51
Variance	£m		(15)	5	13
Variance as %	%		(28%)	9%	26%
Gearing (Net Debt / RAV)	%	[3]			54%
RAV as at 31 March (Company's estimate in nominal prices)	£m		544	557	576
Other information					
Customers	('000s)		999	1,041	1,066
Units distributed	(GWhs)		12,457	12,518	12,643
Circuit length	(Kms)		33,022	33,055	33,547

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Summary of performance [1]

Western Power Distribution (South West)	nominal prices		2000/01	2001/02	2002/03
Financial Performance					
Turnover	£m		221	220	214
Cost of Sales	£m		(18)	(18)	(17)
Gross Profit	**£m**		**203**	**202**	**198**
Operating costs	£m		(91)	(77)	(79)
Operating profit	**£m**		**113**	**126**	**119**
Other Income	£m	[2]			2
PBIT	**£m**				**121**
Interest	£m				(32)
PBT	**£m**				**89**
Tax	£m				(35)
PAT	**£m**				**54**
Dividends	£m				(84)
Retained profit	**£m**				**(30)**
Net Assets	£m				173
Net (Debt)/Cash	£m	[3]			(480)
Net cash inflow from operating activities	£m		44	280	191
Regulatory Performance					
Standard Controllable Costs					
Actual	£m		54	39	36
Allowance	£m	[4]	64	61	61
Variance	£m		10	22	26
Variance as %	%		16%	37%	42%
Gearing (Net Debt / RAV)	%	[3]			68%
RAV as at 31 March (Company's estimate in nominal prices)	£m		673	686	709
Other information					
Customers	('000s)		1,361	1,357	1,446
Units distributed	(GWhs)		14,967	15,115	15,444
Circuit length	(Kms)		49,226	48,949	48,065

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Summary of performance [1]

SP Manweb nominal prices			2000/01	2001/02	2002/03
Financial Performance					
Turnover	£m		205	194	202
Cost of Sales	£m		(34)	(24)	(23)
Gross Profit	**£m**		**171**	**169**	**179**
Operating costs	£m		(102)	(84)	(81)
Operating profit	**£m**		**70**	**86**	**97**
Other Income	£m	[2]			2
PBIT	**£m**				**99**
Interest	£m				7
PBT	**£m**				**106**
Tax	£m				(22)
PAT	**£m**				**84**
Dividends	£m				-
Retained profit	**£m**				**84**
Net Assets	£m				711
Net (Debt)/Cash	£m	[3]			(74)
Net cash inflow from operating activities	£m		97	133	86
Regulatory Performance					
Standard Controllable Costs					
Actual	£m		63	55	40
Allowance	£m	[4]	61	59	60
Variance	£m		(1)	4	20
Variance as %	%		(2%)	7%	33%
Gearing (Net Debt / RAV)	%	[3]			10%
RAV as at 31 March (Company's estimate in nominal prices)	£m		650	677	734
Other information					
Customers	('000s)		1,434	1,453	1,448
Units distributed	(GWhs)		17,286	16,942	16,756
Circuit length	(Kms)		44,140	44,360	45,474

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Summary of performance [1]

SP Distribution nominal prices			2000/01	2001/02	2002/03
Financial Performance					
Turnover	£m		354	338	344
Cost of Sales	£m		(70)	(59)	(61)
Gross Profit	**£m**		**284**	**279**	**283**
Operating costs	£m		(129)	(100)	(99)
Operating profit	**£m**		**155**	**179**	**184**
Other Income	£m	[2]			2
PBIT	**£m**				**186**
Interest	£m				(28)
PBT	**£m**				**159**
Tax	£m				(51)
PAT	**£m**				**108**
Dividends	£m				(159)
Retained profit	**£m**				**(52)**
Net Assets	£m				114
Net (Debt)/Cash	£m	[3]			(573)
Net cash inflow from operating activities	£m		221	209	250
Regulatory Performance					
Standard Controllable Costs					
Actual	£m		61	48	36
Allowance	£m	[4]	87	85	85
Variance	£m		26	36	49
Variance as %	%		30%	43%	58%
Gearing (Net Debt / RAV)	%	[3]			42%
RAV as at 31 March (Company's estimate in nominal prices)	£m		1,329	1,334	1,377
Other information					
Customers	('000s)		1,906	1,934	1,938
Units distributed	(GWhs)		22,694	22,562	22,332
Circuit length	(Kms)		65,353	65,597	65,597

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Summary of performance [1]

Scottish Hydro-Electric Power Distribution nominal prices			2000/01	2001/02	2002/03
Financial Performance					
Turnover	£m		165	180	181
Cost of Sales	£m		(2)	(12)	(12)
Gross Profit	**£m**		**163**	**169**	**168**
Operating costs	£m		(79)	(73)	(77)
Operating profit	**£m**		**84**	**96**	**91**
Other Income	£m	[2]			1
PBIT	**£m**				**92**
Interest	£m				(21)
PBT	**£m**				**71**
Tax	£m				(29)
PAT	**£m**				**42**
Dividends	£m				(25)
Retained profit	**£m**				**17**
Net Assets	£m				125
Net (Debt)/Cash	£m	[3]			(510)
Net cash inflow from operating activities	£m		105	122	125
Regulatory Performance					
Standard Controllable Costs					
Actual	£m		[5]	40	43
Allowance	£m	[4]	52	51	51
Variance	£m		-	11	8
Variance as %	%		-	22%	16%
Gearing (Net Debt / RAV)	%	[3]			67%
RAV as at 31 March (Company's estimate in nominal prices)	£m		752	762	766
Other information					
Customers	('000s)		659	673	676
Units distributed	(GWhs)		8,374	8,387	8,491
Circuit length	(Kms)		44,285	44,649	44,919

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(5) Standard Controllable costs were not reported in the Regulatory Accounts for 2000/01 by this company.

Summary of performance [1]

Southern Electric Power Distribution nominal prices			2000/01	2001/02	2002/03
Financial Performance					
Turnover	£m		360	357	366
Cost of Sales	£m		(31)	(31)	(28)
Gross Profit	**£m**		**329**	**326**	**338**
Operating costs	£m		(141)	(141)	(152)
Operating profit	**£m**		**188**	**185**	**185**
Other Income	£m	[2]			0
PBIT	**£m**				**186**
Interest	£m				(48)
PBT	**£m**				**138**
Tax	£m				(43)
PAT	**£m**				**95**
Dividends	£m				(43)
Retained profit	**£m**				**52**
Net Assets	£m				146
Net (Debt)/Cash	£m	[3]			(980)
Net cash inflow from operating activities	£m		259	238	243
Regulatory Performance					
Standard Controllable Costs					
Actual	£m		[5]	66	73
Allowance	£m	[4]	78	78	78
Variance	£m		-	12	5
Variance as %	%		-	15%	7%
Gearing (Net Debt / RAV)	%	[3]			70%
RAV as at 31 March (Company's estimate in nominal prices)	£m		1,382	1,396	1,400
Other information					
Customers	('000s)		2,695	2,706	2,726
Units distributed	(GWhs)		31,734	32,390	32,832
Circuit length	(Kms)		73,379	74,166	74,960

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Appendix 3 Registration of interest for public workshop

Ofgem is holding a public workshop on key issues arising from the price control review on 7 November in London. Key topics to be covered include:

- distributed generation, registered power zones and innovation funding;
- quality of supply;
- metering; and
- cost assessment and financial issues.

Ofgem intends that the workshop will combine presentations and breakout sessions where issues can be discussed in more detail.

Please complete and return this form by 24 October 2003 to:

Paul O'Donovan
Ofgem
9 Millbank
London, SW1P 3GE

After the closing date, further details about the workshop, including booking forms, will be sent to all those who have registered an interest in attending. If you have any queries, please contact Paul O'Donovan on 020 7901 7414 or at Paul.ODonovan@ofgem.gov.uk

Registration of interest for public workshop

Company/Organisation			
Company/Organisation **Address**			
Name of attendee		**Phone number**	
E-mail address			
Please indicate preference for breakout session:			
Distributed Generation/ Registered Power Zones/ Innovation funding		Metering	
Quality of Supply		Cost assessment and financial issues	