APPENDIX 1

DEVELOPING NETWORK MONOPOLY PRICE CONTROLS UPDATE

DOCUMENT – FEBRUARY 2003

The response from Northern Electric Distribution Ltd
and Yorkshire Electricity Distribution plc
to the specific issues raised in the Update document.

Contents of Appendix 1

1. FORMAT OF OUR RESPONSE

4. Appendix 1 to the NEDL and YEDL response to Ofgem's Developing network monopoly price controls: Update document (February 2003) is set as follows:

Summary, Chapters 1 and 2:	We have provided overview comments on the views presented in these chapters.
Chapters 3, 4, 5 and 6:	We have responded to the key issues summarised at the end of each chapter (and the relevant appendices).
Chapter 7:	We have responded to the issues raised within chapter seven.

5. The bold numbered paragraphs indicate comments which have been drawn out in the main response from Northern Electric Distribution Ltd and Yorkshire Electricity Distribution plc.

6. Appendix 2 covers the issues raised in the Frontier Economics reports on '*Regulatory mechanisms for dealing with uncertainty'* and '*Balancing Incentives'*.

2. SUMMARY / CHAPTER 1. RATIONALE / CHAPTER 2. INTRODUCTION

7. We believe that further improvements to network monopoly price controls are required and are possible. We welcome Ofgem's proposed approach to identify potential improvements and agree that, where appropriate, any improvements should be introduced so that:

   - the interests of consumers, both present and future, continue to be protected. This includes ensuring that they are protected from the abuse of monopoly power, receive an appropriate level of service and that a secure supply of electricity is maintained;

   - regulated companies have appropriate incentives to meet the demands of their consumers in an economic, efficient and co-ordinated manner and are able to finance their licensed activities and statutory obligations;

   - the regulatory framework can take account of the government's security of supply, and social and environmental objectives; and

   - the level of transparency and understanding in the regulatory process is increased, including where appropriate, improving the level of consistency across different sectors of the industry.

8. The focus of previous price control reviews has been mainly about reducing prices to customers. The last price control review raised the focus on outcomes by the introduction of the Information and Incentives Project (IIP). It is clear that the focus this time should be on quality of supply, network security and sustainability.

9. We believe that the 'RPI-X' form of control should continue to determine the bulk of the revenue received by companies with additional elements introduced to address the required focus on outputs and to deal appropriately with uncertainty.

10. We welcome the early start to the review process and believe that the Ofgem working groups and industry workshops have provided a valuable forum for debate. This openness is essential to deliver the aim of increasing the level of transparency in the regulatory framework.

3. CHAPTER 3 - CONSISTENCY OF PRICE CONTROLS

(Response to issues in paragraphs 3.11 and 3.12)

Impact of Grid Supply Point (GSP) programmes on Distribution Network Operator (DNO) capex requirements

11. The consultation document observes that it would be more efficient to replace DNO-National Grid Company (NGC) shared GSP assets at the same time. We agree that the need for co-ordination of programmes should be considered as part of the price control review. We have recently agreed joint construction contracts with NGC and believe that the capital expenditure requirements for the next price control should include such work within the programme.

Consistency with the electricity transmission framework

12. Consistency in the regulation of transmission and distribution networks may in some circumstances be desirable, for instance with respect to developments in System Operator incentives for distributed generation. However, consistency should not be an aim in itself. It must be proven to deliver benefits to customers. Distribution and transmission networks are very different. Distribution networks have two orders of magnitude more substations and four orders of magnitude more exit points. There could therefore be several orders of magnitude more complexity if transmission arrangements are applied to distribution networks. The key, therefore, is to identify the problem and then consider the potential solutions, one of which may be to adopt certain aspects of the transmission framework, if appropriate.

13. We agree that the connection and transportation charging regimes for distribution and transmission should not unduly distort a developer's decision as to where to seek connection. This does not, however, mean that the two regimes need be identical.

14. The differences between the current regimes are less about what costs are chargeable than the time over which those costs are recovered. NGC's 'generation-only spur' approach, coupled with its full recovery of 'modification' costs, means that its charges are at least as deep as those of any DNO.

15. NGC's recovery of charges over forty years may have a significant impact on the choice of connecting network. For distributors to adopt such an approach would have a significant impact on their cashflow, which would have to be recognised in the price control.

16. We support the principles behind an access rights regime for transportation, specifically that:

- users are offered a choice of the level of service;
- companies have a degree of discretion as to how to offer that service; and
- investment is made when efficient to do so, as demonstrated both by customers' commitment of funds towards the value of the service and the company's own decision to commit funds.

17. However, we believe that many of these ends can be achieved without an explicit access rights regime. We have argued that it is essential to understand the price/performance balance funded under the proposed price control. If, for example, the 'basic' service funded under the core price control were that of connection to a P2/5-compliant network, with no compensation for disruption other than the Guaranteed Standards of Performance, distributors could offer developers the option of enhanced security at a fair (and, ultimately, determinable) price.

18. We also note the difficulties experienced in establishing an electricity transmission access rights regime. Unlike the National Transmission System (NTS), there are a relatively large number of nodes, at many of which there is relatively little competition for capacity. We recognise the pragmatic decision made to establish access rights by demand zone, creating a sufficient market while not resolving all constraints.

19. In distribution, most constraints are likely to arise at primary substations. For even a small distributor, this implies over 200 potential constraints. If we reduce the number of zones, we must aggregate primaries together. If we take the twelve zones of the NGC model as a benchmark, we would find around two GSPs, three Bulk Supply Points (BSPs) and eighteen primary substations in each group.

20. At such a level of aggregation, individual constraints become meaningless. The supply/demand balance in each group is unlikely to vary significantly from that for the distribution network as a whole, with the potential exception of the major economic centres (e.g. Newcastle or Leeds).

21. We also believe that the complexity of any potential universal distribution ancillary services market outweighs any benefits it might bring.

4. CHAPTER 4 - ASSESSING COSTS AND INCENTIVES FOR COST EFFICIENCY

ASSESSING EFFICIENCY / BENCHMARKING

(Response to issues summarised in paragraph 4.6)

Use of benchmarking and distortion of incentives between operating and capital expenditure

22. **We support Ofgem's view that a mechanistic use of regression analysis should not be used to determine allowed income at this review and believe that allowed income should be grounded in the reality of each company's observed costs. This will require a greater focus at the review on understanding both historic and forecast costs and an increased onus on companies to demonstrate the reasonableness of these.**

23. **In principle total cost approaches ought to be superior to separate analysis of operating and capital costs. However, the development of a model that appropriately captures the capital cost element and that introduces quality into the equation is probably some way off.**

24. **We have significant concerns regarding reliance upon benchmarking and yardstick approaches in price control reviews. The problems surrounding comparability, including model specification and cost allocation, and the introduction of quality into the assessment are well-known and remain to be resolved before benchmarking or yardstick methods can be used to determine the efficient costs of each company.**

25. Other comparability problems include the treatment of merged companies and inherent and inherited differences between companies. Consideration of outsourcing arrangements is another complication and it will be important to ensure that these are appropriately normalised so that analysis drives improved efficiency and not structural changes, which may actually add cost. As quality outputs are introduced it will also be important to recognise value-for-money rather than just lowest cost.

26. The Ofgem working group dealing with quality of supply comparisons, while doing good work to understand potential reasons for differences in performance between companies, has not developed a model that could be used to determine value-for-money. The best that such a model could be expected to do, at this price control review, is to point to questions about value for money and to identify potential areas for improvement. Value-for-money performance incentives can be provided by extending IIP through setting new Customer Minutes Lost (CML) and Customer Interruption (CI) targets around which penalties and rewards would apply. These targets could be set on a more informed basis now that Ofgem has a more reliable data set.

27. **A further problem, which has attracted less attention to date but which was widely acknowledged at the workshop, is that the regulator needs to be satisfied that the companies whose costs are determining the yardstick or benchmark have adopted a reasonable position with respect to risk. Otherwise yardstick or benchmark methods can have the unintended effect of driving companies towards the position taken by the least risk-averse company. The Asset Risk Management (ARM) and Medium Term**

Performance (MTP) work has not sought to determine the appropriate risk profile for network companies to adopt and we do not believe that Ofgem wishes to make such judgements in place of the companies. If such judgements are to be left to companies, Ofgem should take care to ensure that a willingness on the part of some companies to take on risk above that which is implicit in the allowed cost of capital does not lead to a systematic, but unintended, pressure on all companies to take on greater risk. This is especially important given the asymmetry of customers' likely preferences as between lower costs and security of supply.

28. **One way to avoid this problem would be to determine each company's allowed costs by reference to the rolling average of its costs in the previous ten years. This would resolve periodicity problems and would ensure that incentives to efficiency were strong but grounded in the reality of each business. The danger of a company targeting higher returns and taking on additional risk by being overly aggressive in its cost cutting would be confined to that company (as would the consequences of failure) and would not infect the determination of other, more responsible, companies' allowed costs. If this approach was thought to give companies insufficiently stretching targets (given the cost reductions achieved since privatisation) the costs of the early years of the first ten years of the yardstick could be prescribed by Ofgem as part of the review and could be informed by responsible use of comparative analysis. Comparative analysis could also be used periodically to indicate any companies whose performance has diverged significantly from that of the sector. This might indicate that further investigation or action might be needed with respect to such companies.**

29. **If, nevertheless, Ofgem remains convinced that yardstick or benchmarking methods have a part to play then, as Frontier Economics suggested at the workshop, confidence can be restored to some extent by the use of average, rather than lowest, cost models.**

30. Ofgem propose to use a range of methods to assess efficiency. A clearer distinction should be made between methods that aim to establish a level of efficiency, versus methods that examine and project trends in efficiency. The former are subject to a wide margin of error in practice, and do not directly yield information relevant to deciding an assumed rate of efficiency improvement as an input to setting allowed revenues.

Capital Efficiency

31. The consultation raises the question on whether there will be a need to review companies' capex efficiency in more detail given Ofgem's commitment to strengthen capital efficiency incentives.

32. The capital allowances made at the last price control review (DPCR3) were derived from high level forecasts, rather than detailed plans, which reflected the judgements of Ofgem, advised by PB Power. Since then NEDL and YEDL have:

- continued to review their investment requirements in the light of their statutory duties and taking into account the assumptions made by Ofgem;

- reassessed their risk profiles; and
- evolved forecasts into plans to deliver business requirements at lower cost.

33. In the absence of a detailed specification of the projects included in the DPCR3 capex allowances, the process for a detailed assessment of capital efficiency would be complicated. However, we would contend that such an approach is not required. The key issue is to assess whether the business has delivered the outcomes in terms of quality of supply and network integrity. Such an approach would be supported by three Ofgem initiatives which demonstrate that resources are being efficiently utilised to achieve short-term performance and long-term network integrity:
    - the medium term performance (MTP) returns show that improvements in headline figures do not mask deterioration in underlying performance;
    - the asset risk management (ARM) survey shows that processes are in place to secure the long-term health of the asset base; and
    - the Information and Incentives Project (IIP) shows whether companies are meeting short-term targets. However, a penalty under the IIP scheme does not indicate capital inefficiency – in fact it could indicate the opposite if the incremental cost of improvement would be greater than the penalty.

34. The approach we propose would be consistent with Frontier Economics' understanding of the Ofwat approach, set out in 4.4.2 of their *Balancing incentives* document, that provided outputs and quality are satisfactory than any underspend would be considered as an efficiency saving and would lead to an incentive payment.

35. Further comments on assessing capital efficiency are contained later in this document under the headings *'Commitment to rolling RAV'* and *'Treatment of deferred expenditure'* which appear in our response to Chapter 5.

Assessment of Capital Expenditure

36. The pursuit of efficiency gains remains a vital aspect of the framework and the review process should encourage a continuing pursuit of increased capital efficiency.

37. **The treatment of capital investment requirements within the price control review framework should aim to promote some clear and simple virtues. We propose that four main principles should be reflected, namely:**

    - **Reinforce responsibility –** It should be the task of the licensees, who bear the obligations (and are subject to the penalties if the obligations are not met), to make the initial assessment of their investment needs. Ofgem's role should be to assess whether the licensees plans are robust and reflect the costs that might reasonably be incurred by an efficient and prudent operator.
    - **Ensure sustainability** - Investment is the key to long-term security and therefore sustainability. More than any other aspect of a price control review, the assessment of investment impacts on the long-term viability of the businesses.

- **Increase efficiency** – The process should retain efficiency incentives by discouraging unnecessary expenditure, rewarding efficient and responsible stewardship, and ensuring that necessary investment attracts an appropriate rate of return.
- **Build credibility** - Transparency is the key to credibility. Ofgem and the companies each have a strong interest in the process being seen to be credible by Ofgem, the companies and their stakeholders.

38. We believe that confirming these principles is a vital starting point for the process, as it will help to define the success criteria for the framework that is developed for the treatment of capital expenditure in the forthcoming price control review (DPCR4).

39. Companies must have clear ownership of the forecasts. This implies that Ofgem needs to focus on the generic template for submission rather than on modelling capital expenditure requirements itself.

40. Ofgem may wish to supplement its process by the use of consultants' assessments. We would suggest that Ofgem's initial focus should be on the quality of the planning on which each company's investment planning questionnaire is based. Where Ofgem is satisfied with this there should be no need to second quess the answer. Only where Ofgem is not satisfied that the quality of the planning that underlies the investment plan should it be necessary for Ofgem to substitute its own judgement.

41. The 'sustainability' objective is likely to demand both a wider and a longer-term view than has been achieved previously. A critical success factor will be the extent to which the process is compatible with effective management of underlying risk. This is difficult to measure in terms of outcomes but, nevertheless, is a major driver of the overall capital investment requirements. Failure to capture this meaningfully will continue to leave uncertainties and/or inconsistencies in the capital forecasts and outturns.

42. **With this in mind Ofgem should focus on seeking out investment plans from companies that address a range of outcomes. These outcomes would be expressed quantitatively and would capture the benefits for customers that would result from the investment plan (or range of plans). These plans would specify the outputs (i.e. the assets needed) that the plan envisages being delivered to secure these outcomes. Companies should be required to declare the investment in monetary terms that they expect to make to deliver the outputs that will secure these outcomes.**

43. **It is important that efficiency gains in both concept engineering and in engineering execution (i.e. both outcome - and output-related efficiency) should be encouraged and it will be necessary for Ofgem to promote a more open discussion with companies at the outset about where the companies will be looking for efficiency gains in the delivery of the defined outcomes. A more open and thorough debate that recognised the possibilities of future efficiencies at this stage of the review process would help to remove some of the problems of forecasting credibility that have been associated with capital investment at previous reviews.**

Efficiency Targets

44. **Ofgem mention, under *analysis of market data*, economy-wide productivity trends as one possible benchmark for assessing the future level of costs. In this connection it is important to note that the Competition Commission and Ofwat have each acknowledged that the RPI component of the RPI-X price control already captures the productivity gains of the economy as a whole and thus the scope for efficiency targets factored into a price control review should be limited to those that may be expected from the company that are in excess of the productivity gains that may be expected from the economy as a whole. We would welcome Ofgem's confirmation that it shares this understanding.**

45. **There is considerable economic literature which corroborates the point that, in times of low inflation, it is more difficult for firms to outperform the RPI index.[1] We are currently in a period of sustained low inflation and this is likely to be true of the next price control period. This factor should be taken into account when assessing future cost levels, resulting in a less aggressive profile of efficiency targets.**

Projecting Future Costs

46. Companies are closer to their assets than Ofgem and, as a result of the investment that the companies have made in advanced asset management systems and techniques, companies have now a better understanding of risk than was the case five years ago. Nevertheless, we believe that Ofgem has sufficient knowledge and confidence to assess critically the forecasts that companies will submit for DPCR4.

47. Companies know what is required to deliver performance in terms of efficient and safe operation, environmental and legal compliance, adequate capacity and appropriate levels of availability, reliability and security. It should therefore be the role of companies to submit their capital and operating cost forecasts to Ofgem, based on this understanding, and to be able to justify these forecasts under detailed external scrutiny.

48. To assist this process, the role of Ofgem should be to define a clear framework for presentation that allows comparisons to be made and to provide an objective challenge and assessment of the reasonableness of companies' plans.

49. With regard to operating costs, we have always felt there to be shortcomings in comparative approaches used in the past. The levels of controllable costs are now quite small but errors in the allowance can have significant impact on operations. We therefore believe that companies' projections will be a more reliable starting point for consideration than a comparison or standardisation, which may be distorted. Ofgem should expect companies to justify the operating cost requirements on a bottom-up basis, taking outcomes into account, and should be able to verify the forecasts they have made for 2003/04 when the actual costs become available before the next price control is set.

50. With regard to capital forecasts, we recognise that the forecasting tools require review and should be benchmarked. We believe that the ARM work will prove the robustness of the

[1] This is principally to do with inelasticities in the labour markets and is one reason why central banks do not aim at a zero inflation target. Inflation at modest levels assists the economy in securing labour productivity gains.

process and we welcome independent review of the numbers and the efficiency assumptions that they contain.

EFFICIENCY INCENTIVES

(Response to issues summarised in paragraph 4.20)

Incentives for outperformance

51. **The continuing development of incentives for outperformance is an important element in the evolution of the price control framework to deliver long term benefits to customers. We believe that it is vital to retain and strengthen incentives for outperformance in both operating and capital expenditure and that companies achieving higher rates of return as a result should be regarded as a success of regulation, provided that quality of supply and network integrity are maintained. The introduction of rolling incentives will address periodicity issues and provide stronger incentives to pursue the diminishing efficiency opportunities that remain.**

Power of incentives

52. **It is important that regulation should both protect the interests of customers and provide companies with incentives towards efficiency. Economic theory indicates that the optimal share of efficiency savings between customers and companies is 50/50 where there is a linear relationship between cost reduction and incentives (the retained share).**[2]

53. **In the past when efficiency savings have been easier to identify and to secure it would not have been necessary or prudent for Ofgem to move to this optimal level. However, efficiency savings are now becoming harder to identify and to deliver and, thus, increasing the company share towards the optimal level is justified and is unlikely to lead to companies making profits that are difficult to justify or that will cast doubt on the effectiveness of the regulatory regime. This leads to the conclusion that a rolling period of more than five years is appropriate (since retention for five years delivers only a 29 per cent share for the company of operating cost efficiencies and an 11 per cent share for capital expenditure efficiencies). Additionally, innovators in competitive markets would generally retain a far greater share than is retained under five year price caps.**

54. **We believe that the power of incentives in relation to operating and capital costs needs to be reviewed because, currently, the capital efficiency incentives remain much weaker than the operating cost incentives. Clearly, the management of long-lived distribution assets involves a number of significant trade-offs between capital and operating expense. Therefore we consider it important that incentives in these two expenditure categories should be in balance to ensure that, over the long-term, companies are provided with an appropriate, and balanced, set of incentives to ensure that outcomes are maintained at the desired level and at the long-run optimal cost. If this balance is not reached then there is a danger that initiatives that bring**

[2] It should be noted that even at this optimal level companies will not retain a 50 per cent share since the company share is pre-tax.

benefit in the long-term will be disregarded in favour of less valuable improvements (in overall terms).

55. **The power of the incentive scheme will be driven by a number of factors: the length of the retention period, the proportion of the savings retained, the different treatment of operating and capital expenditure and the way in which efficiency is assessed. There is no reason why the retention period should be limited to the price control period or correspond between operating and capital costs.**

56. We believe that longer retention periods should be combined with mechanisms for dealing with uncertainty, especially for risk beyond the control of the DNO.

Distortion of incentives between opex and capex

57. The rolling capex and the proposed rolling opex incentives provide a mechanism to provide more balanced incentives between opex and capex. Adjusting the retention shares of the capex rolling efficiency incentive and the proposed opex rolling incentive would balance the incentives to ensure that companies make the most efficient investment decisions in terms of total costs.

58. Balancing the incentives between opex and capex would indicate retention periods of 10 years for opex savings and 14 years for recurring capex savings in order to give a 50:50 percentage share of the benefits between companies and customers.

59. As far as incentives for quality and security of supply are concerned, the rewards/penalties surrounding a particular target level of quality can be maintained by IIP. But more importantly, the incentive to look after the system in a more fundamental way is provided by the statutory duties of a DNO that are enforceable by Ofgem and, ultimately, are backed by the threat of financial penalties. These are powerful incentives.

Rolling Opex

60. **We welcome the introduction of a rolling opex incentive mechanism from 2003/04. As discussed above, the power of the incentive scheme will be dependent on the approach to assessing costs (whether this is based on a yardstick or benchmark approach or by reference to a rolling average of each company's costs over a specified period) and the retention period.**

61. We believe that this incentive will provide the stronger incentives required to pursue diminishing efficiency opportunities and will also address periodicity. We recognise that there is a balance to be struck between company retention and the benefits returned to customers. However, the calculation of this balance needs to recognise that enhanced incentives are required to deliver the difficult savings and hence deliver to customers a slice of a bigger cake. We believe that a 50:50 share of benefits is appropriate and that this would require a retention period of about 10 years.

Commitment to rolling RAV (Appendix 3 paragraphs 3.5 to 3.11)

62. **The Final Proposals for the last price control review (DPCR3) made a 'commitment' to introduce a rolling regulatory asset value (RAV) mechanism to reduce the perverse**

incentives under the previous methodology. The commitment made by Ofgem at that price control review was to adjust asset values in the next price control review by actual, rather than projected, spending on a rolling basis after the lapse of a five year period. This commitment was conditional on 'PESs meeting their *obligations* with respect to security and quality of supply' (emphasis added).

63. **The IIP targets are not obligations in any sense. They are simply targets and failure to meet those targets carries its own financial penalties. There is no obligation on the part of the licensee to meet them. By contrast there are numerous obligations set out in the statute, in regulations made under the statute and in the licence. We would also observe that it would be perverse to penalise companies in respect of genuine capital efficiencies that may have absolutely nothing to do with whether or not the companies meet their IIP targets.**

64. **The credibility of incentives depends crucially upon regulators honouring commitments given at price control reviews and the importance of this particular commitment is such that it should not now be varied by introducing a new condition that companies meet their IIP targets.**

65. We would also state that not all capital expenditure is associated with meeting IIP targets by any means. For instance in YEDL / NEDL, over 70 per cent of our discretionary investment is made in areas where short term quality of supply is not the prime driver (e.g. asset replacement, fault level management, legal, safety, and environmental requirements). It would therefore be perverse to penalise companies in respect of capital efficiencies that may have absolutely nothing to do with whether or not the companies meet their IIP targets. Companies understand the IIP targets to be incentivised by the IIP regime itself and should therefore not be subjected to supplementary penalties (i.e. removal of efficiency incentive benefits) if they fail to meet those targets.

Treatment of deferred capex (Appendix 3, paragraph 3.4)

66. Ofgem suggests that a particular subset of investment efficiencies (deferred investment) may be made the subject of special treatment. Appendix 3 states:

> 'it is also important to avoid providing DNOs with an incentive to inefficiently defer investment in one price control period which would lead to them forecasting an increase in the subsequent period to "catch up" on their investment programme, i.e. they request the same capex twice.'
>
> and:
>
> 'In setting the price control it will be important to gain an understanding of the main reasons for any differences between actual and allowed capex. Where it appears that the differences are significant and driven primarily by deferred investment Ofgem intends to take this into account in setting the allowed level of capital expenditure in the next price control review.'

67. **We believe that the form of the price control should be based on the principle of incentivising companies to seek out all efficiencies to deliver an optimum cost /**

performance balance where performance is measured by outputs including network performance, safety and risk management. These efficiencies include the ability to extend asset lives due to advances in risk management and increased knowledge of the condition of the asset base in addition to productivity efficiencies which are seen in the form of reduced unit costs.

68. Ofgem's Final Proposals, accepted by companies at DPCR3, did not amount to a contract to deliver given volumes of work. The capital allowances provided to companies represented Ofgem's view of the investment that would be needed to secure the delivery of outcomes in terms of performance, safety, and risk management. It was not a contract to replace a specified number of units of plant.

69. Making assets last longer is a genuine efficiency that delivers lower future prices to customers. Deferral, therefore, should be viewed as efficient provided that the investment decisions made deliver the required outcomes and do not store up problems for the future, in terms of performance or costs.

70. If Ofgem were to disallow the rolling RAV benefit to companies that make assets last longer, or to disallow similar investment in the next review period, then the incentives to increase asset lives would be removed entirely or, at any rate, diminished. Deferring investment carries certain risks for the company. Changing the balance between the risk and rewards will certainly make it less likely that companies will defer investment. The result will be that companies will be less likely to explore (and, therefore, later to reveal) the opportunities that exist for making assets last longer. This would not be to the long-term benefit of customers.

71. **Deferred expenditure should therefore be accepted by Ofgem as a genuine and important means of achieving capital efficiency for the delivery of long term value to customers provided that a company has behaved responsibly and has met its statutory and licence obligations. The longer asset lives implied by the deferred expenditure may be expected to be reflected in the assessment of expenditure for the forthcoming period, not only for the company in question, but, if the efficiency could be applied in other companies, for the sector as a whole. By this mechanism Ofgem is able to maintain efficiency incentives and to pass the revealed benefits on to customers. Penalising the efficiency benefits of deferred expenditure, or distinguishing it in any way from other investment efficiencies, is likely to incentivise inefficient investment decisions and to cut off the flow of information about truly efficient cost levels on which incentive-based regulation depends to secure gains for customers. Ofgem has a number of tools at its disposal to satisfy itself that companies are delivering appropriate outcomes including MTP and ARM.**

72. **This point is reinforced by consideration of the undesirable attributes of the alternative. If Ofgem were to remove some, or all, of the benefits that accrue to companies from improving their understanding of their future requirements, or innovating in terms of how they operate and service their assets, or radically changing the way that they deliver functionality, then the companies would have a very clear incentive to stick rigidly to whatever construction plan was submitted to the regulator at the time of the price control review. There is a well-established rule of thumb in asset management that the value that is generated in the concept phase is of the order of five times that which is available in the procurement and operating phase**

of the life of an asset. An inflexible approach that fails properly to reward concept engineering efficiency gains would signal the end of incentives for this crucial element of efficient capital investment. We consider that our proposal for clear investment plans, with appropriate accountability from the licensee to the regulator would provide controls and would also encourage proper, cost-effective asset provision in the long-term.

Calculating the incentive payment for capex efficiencies *(Appendix 3, paragraph 3.2)*

73. Our comments on updating the RAV for capex efficiencies are located in our response to Chapter 6, Financial Issues.

Non-operational capex

74. As Ofgem are aware, companies have taken different approaches in procuring non-operational expenditure. For example, some companies buy their own vehicles whilst others lease them. It will be important in any efficiency analysis that these treatments are normalised, expensing recurrent expenditure of this nature is one way of achieving this.

75. If the proposal for introducing a non-operational RAV by capitalising this expenditure is aimed at incentivising investment in IT systems, consideration should be given to those companies who have already spent significant amounts on IT systems which have not been allowed a rate of return. This may be achieved by either allowing an opening RAV or allowing a retrospective return.

76. If there is to be a non-operational RAV we would anticipate that the depreciation period should be relatively short, perhaps five years, and the benefits of underspending aligned with the savings from operating costs.

5. CHAPTER 5 - DEVELOPING THE OVERALL INCENTIVE AND PRICE CONTROL FRAMEWORK

(Response to issues summarised in paragraph 5.15)

Development of the incentive and price control framework (i.e. the four steps – in para 5.6).

77. We support the approach that Ofgem proposes for the development of the incentive and price control framework and take issue with only the order of the steps described in the *Update* document. We firmly believe that the first step should be to 'define the outcomes required to be delivered by the DNO' and then the second step should be to 'identify where incentives need to be provided' to ensure efficient delivery of the required outcomes.

78. We agree with the third and fourth steps as proposed. As the consultation notes, many incentives will be implicit in the price control, and we suggest that there should be relatively few explicit revenue-varying mechanisms.

The price control framework for DNOs

79. Where possible and appropriate, the costs associated with running and operating the network on an ongoing basis and delivering the 'steady state' outcomes should continue to be remunerated through the RPI-X formula. This should continue to pass through certain costs over which the DNO has no control. The current form of control has a proven track record in encouraging opex *and* capex efficiency (albeit that the incentives on the latter are more muted) and requires changes only to improve its incentive properties, to deal appropriately with uncertainty and to encourage companies to facilitate distributed generation. These changes to improve the incentive properties include the rolling capex and rolling opex mechanisms and a more cautious and responsible use of comparators.

Customer willingness to pay survey (Appendix 4)

80. Before designing a customer survey it is important to be clear about why we need to know about customers' willingness to pay? If it is to decide what improvements should be factored in for the vast majority of customers on the system, then that suggests one set of questions. However, if it is about determining what improvements should be factored in to improve the service to the tiny minority who suffer a poor quality of supply, then that suggests another set of questions which are as much about cross subsidy as they are about willingness to pay.

81. The real questions are more likely to be about people's willingness to pay for *other* people's quality of supply improvements because the reality is that whatever comes out of the process, the concentration of effort and expenditure is likely to focus on the worst-served customers. No one has seriously suggested that the quality of supply enjoyed by the generality of customers needs to be higher.

82. The survey will need to identify the kind of quality enjoyed at present by the person being surveyed and ask them how much they would be willing to pay for an incremental improvement to this. It also needs to ask customers how much more they would be willing to pay for someone else to receive an incremental reduction in the number / duration of interruptions per annum. Only then will Ofgem be able to obtain a data set that is truly informative about the issues.

83. Knowledge of willingness to pay would be theoretically useful in calibrating incentive mechanisms if it were possible to obtain details of customers marginal willingness to pay, but we doubt the practicality of gaining meaningful data from *any* survey. It is doubtful that the conclusions of the study would be robust or that Ofgem would be willing to use expressed preferences to drive the major components of a price control review.

84. A more significant influence on the output requirements of DNOs is the policy of Government, particularly with respect to sustainability and the impact that this could have on investment for distributed generation and losses. We would expect Ofgem to translate these requirements into outcomes with appropriate cost allowances and incentives, where required.

85. We will provide further comments in this area in our response to the open letter on the terms of reference for DPCR consumer survey, which Ofgem have requested for 26 April 2003.

Quality and Security of Supply Issues. (Appendix 5)

Guaranteed and overall standards

86. The guaranteed standards scheme should continue in the form for which it was originally designed, i.e. a compensation for customers who have received poor service, rather than being a direct financial driver of behaviour or investment. Companies should therefore be allowed the efficient costs of meeting an appropriate level of performance and/or paying the fines in the base control.

87. All but one of the guaranteed standards (i.e. the multiple interruption guaranteed standard) have been set at a level which companies should be able to meet other than in exceptional circumstances. Payments are made to customers when a company fails to meet an obligation that it really ought to have met. This being so, it is appropriate that there should be exemptions from the obligations that apply when there are exceptional circumstances. The removal of the GS exemption for force majeure would impose material, unpredictable and uncontrollable risk on DNOs.

88. If exemptions are removed, to eliminate the post-event determinations, then it would be necessary to build into allowed income the additional cost of meeting the unqualified obligations. The risks involved in providing a blanket incentive – by removing the exemption and allowing an "expected" average annual cost seem very high. This does not seem to be a sensible way to proceed and we note that Frontier Economics also concluded that 'simply removing exemptions (and treating additional costs as part of general price control costs) is not an appropriate answer'.

89. Frontier Economics go on to suggest that one option to deal with the increase in payments under a regime without exemptions could be to establish a mechanism that passes through uncontrollable payments made under severe weather conditions. This may be a more appropriate solution in theory. However, it may be difficult to identify whether payments are uncontrollable or controllable and could require a detailed audit of incidents to establish what the pass through allowances should be. There would also be a period of uncertainty between the company making the payment and the cost pass through determination by Ofgem.

90. Another option suggested by Frontier Economics would be to set guidelines on what constitutes controllable and uncontrollable time spent disconnected and to allow exemptions from the 18 hour period by introducing a differential regime that applies a longer period than 18 hours under severe weather conditions. The introduction of a differential regime could still, however, result in the same problems as the current exemption regime, in terms of the potential for customers to challenge the decision to apply the longer period.

91. It therefore seems to be the case that unqualified obligations would have bigger drawbacks than obligations with exemptions and determination, by Ofgem, of disputes. A rules based approach may be a step forward in determining when exemptions should apply and would assist discussions with customers under the current regime for exemptions. We believe that this would reduce the problems of *ex ante* determinations.

Information and Incentives (IIP)

92. **The Information and Incentive Project (IIP) scheme should continue to reflect marginal penalties and rewards around the trajectory to an outcome that is desirable and consistent with the assumptions on which the price control is set. It should be symmetrical and we believe that the financial amount currently at risk is about right. Any move towards a relative scheme should be dependent on adequate normalisation, which we believe is some way off, and should apply only to target setting. Target setting is an area that will need to be reviewed following the completion of the rebasing exercises and should be based on actual performance over the remaining years of the existing IIP scheme. It will also be necessary to take account of the costs of any targeted improvements.**

93. The number and duration of interruptions are the right measures to include in IIP for quality of supply performance. A lot of time and money has been invested by Ofgem and companies in achieving consistency across companies for these measures.

94. The IIP incentive scheme also includes measures for quality of service in terms of the speed and quality of the telephone response that people receive when they contact us when off supply. The former has been a more difficult area in which to achieve consistency across companies and we still await further information from Ofgem regarding the speed of response measure. We support such a measure but, just as was the case with CI/CML, it is vital that consistency is achieved. We also support the customer satisfaction survey as an incentivised measure but believe that the scheme should be reviewed before considering its application for DPCR4. It is important that no penalties apply as performance improves and companies converge to a position where all can be considered to be good and the difference in performance is marginal. Adjustments were made to the scheme mechanics prior to implementation designed to address this issue. It is important to revisit this area before the scheme continues into DPCR4.

95. We consider that the IIP, together with the guaranteed and overall standards of performance, provide sufficient incentive for the delivery of appropriate security and availability and that no more measures need to be added to the IIP in the next price control review. We also consider the +/- 2 per cent revenue cap is an appropriate level to incentivise performance around the targets.

96. An issue identified during this price control review is the need to address the quality of supply experienced by the worst served customers. This area is expensive to resolve and improvements will not impact greatly on the headline CI and CML figures. Nevertheless, it is an important area and, because of the relatively small numbers affected, we believe that the guaranteed standard route is the appropriate mechanism to deal with performance in this area. We hold the view that a certain level of failures is inevitable for an efficient business and welcome the Ofgem undertaking that the next price control will provide an allowance for an efficient failure level.

97. The consultation questions whether the overall standards should be included within the IIP. We believe that, because of the correlation between the guaranteed and overall standards and the IIP, inclusion within the IIP would not add value to the overall incentive powers. The financial penalties available under the Utilities Act provide sufficient remedy

to deal with companies that fail to conduct their businesses so as to comply with their obligations. No additional incentive is required.

IIP target setting

98. We agree that the target setting for DPCR4 must be consistent with customers' willingness to pay in that companies should not be incentivised to pursue uneconomic levels of quality. It should reward the better performers in the DPCR3 period in the manner set out in the DPCR3 Final Proposals, whilst being consistent across companies; it should be realistic and achievable and should be consistent with the cost assumptions underlying the price control.

99. We believe that the only appropriate way to set targets is to assess a reasonable price/quality mix for each company, separately taking into account their unique circumstances. The target for interruptions would therefore reflect the current level of performance and the costs that might be incurred (or avoided) in deviating from that level. The disaggregation work carried out by the Ofgem/DNO working group on comparing quality of supply performance may help to identify the areas where improvements represent best value for money and to provide an estimate of the costs. The customer survey will inform the assessment of whether the target should be to improve or to maintain performance. It will be impossible to set targets fairly by using an all-encompassing cost/quality yardstick. The data and comparability problems will be immense and we do not believe that the disaggregation exercise will allow this to be done soundly. Targets must be consistent with funding, so step changes should be funded from within the main price control and the IIP should continue to operate at the margin. Benchmarking would be an inappropriate route for target setting because it will not capture the key differences between companies and Ofgem should instead focus upon companies' better understanding of their particular circumstances.

100. It would be useful to establish targets that look further out than the price control review provided the setting of the targets is grounded in the reality of each company. If set sensibly, there is good reason to set targets that reflect the long-term nature of the assets involved. It should be possible to set a glidepath of targets looking as far as we wish into the future, and establish an IIP incentive regime around that path.

101. The way that such targets could be introduced might be to introduce a licence condition which set out the targets and which had a twenty-year life. If the targets got out of line with reality then it would be possible to agree a licence modification. The costs of meeting the targets could be reconsidered at each price control review. Under this approach, the target for quality would be set in the long term while the efficient costs of meeting that target would be re-appraised at each price review.

IIP exceptional events / supplementary incentives

102. We support the exceptional circumstance mechanism under the IIP. The predetermined criteria for recognising such events will validate company claims for IIP exemption and could also support claims from exemption from GS2 standard failures, as mentioned above. As far as incentives to respond effectively to emergencies are concerned it is difficult to see how this could be introduced in such a way as to be a balanced set of incentives. In circumstances where large numbers of people are off supply for long

periods there will inevitably be discontent no matter how well the company is performing in restoring supplies. A balanced incentive would penalise poor restoration performance and reward good performance. But whether the performance truly merits reward will depend on the difficulties the company faces. A company that performs well in difficult circumstances – as Ofgem acknowledge, for example, that NEDL did in the Belford case – would deserve a reward. We are not sure that public understanding would be sufficiently well-developed to accept companies receiving rewards in circumstances where some customers were experiencing long periods without electricity. We, therefore, conclude Ofgem should rely on the existing powerful incentives to restore supply – i.e. adverse public opinion; Guaranteed and Overall Standards of Performance (GOSPs) and, in the ultimate, financial penalties.

6. CHAPTER 6 - FINANCIAL ISSUES

(Response to issues summarised in section 6.29)

Financing obligations and duties on Ofgem and licence holders

103. We welcome Ofgem's intention of targeting credit ratings that lie comfortably within investment grade based on the current thinking of the credit rating agencies. As Ofwat has recently noted, the credit rating agencies are tightening up on the criteria that must be satisfied by regulated utilities if they are to retain investment grade status.

Cost of capital

104. **We welcome Ofgem's early debate on cost of capital issues and the work undertaken by Smithers and Co on behalf of the UK regulators. The Smithers report provides an understanding of why regulators, faced with the same point estimates may arrive at different cost of capital values based on whether the regulator is most concerned about prices or investment. We would suggest that at the first three price control reviews Ofgem's concern has been primarily about prices and the time is now right to move the focus towards investment and quality and security of supply. Indeed, depending on the levels of investment associated with quality and security of supply and distributed generation, new finance may well be required in the next price review period. In these circumstances it is important to set the cost of capital towards the upper range of the point estimates. The Civil Aviation Authority (CAA), in the review of airport price controls, emphasised this point in February 2002 by stating that 'with investment being a priority, it is preferable to set the cost of capital too high rather than too low given the downside risk'. The point has also been endorsed by the Competition Commission.**

105. **The Electricity Association has sponsored some research on cost of capital by OXERA. The report will be submitted by the Electricity Association as part of their submission to the consultation.**

106. The executive summary of this report is reproduced below:-

> *'In October 2002, the Electricity Association commissioned an independent report from OXERA on the weighted average cost of capital (WACC) for distribution network operators (DNOs) ahead of DPCR04. This report provides an initial assessment of the WACC and will be subject to an update later in the year to take into account stock-market movements and any other changes that may emerge from further clarification of the regulatory framework under which DNOs will operate.*
>
> *The report examines recent market evidence, regulatory precedents and the most authoritative academic evidence, with a view to producing an independent assessment of the forward-looking real, pre-tax and post-tax WACC for DNOs. It should be borne in mind that, in doing so, consideration needs to be given to how to deal with significant uncertainty in relation to parameter estimates as well as a rise in recent stock-market volatility.*

An empirical estimate of the real WACC for DNOs is presented below.

Cost of capital estimates (%) for the DNOs

	Low	High	Central scenario
Risk-free rate	*2.25*	*2.75*	*2.5*
Equity risk premium	*3.5*	*4.5*	*4*
Equity beta (value)	*1*	*1*	*1*
Post-tax cost of equity	***5.75***	***7.25***	***6.5***
Debt premium	*2*	*2*	*2*
Pre-tax cost of debt	***4.25***	***4.75***	***4.5***
Taxation adjustment (value)	*1.429*	*1.429*	*1.429*
Gearing	*50*	*50*	*50*
Pre-tax debt, post-tax WACC	*5*	*6*	*5.5*
Pre-tax debt, pre-tax equity WACC	***6.23***	***7.56***	***6.89***

In most components of the WACC, the evidence examined in this report and summarised in the table above is broadly in line with recent regulatory determinations, most notably the recent reports by Ofwat, Ofgem, and recent reports by the Competition Commission (CC) on water, airports and mobile network operators.

For example, the report argues for estimates on the risk-free rate, equity beta and gearing that are in line with Ofgem's 1999 determination for the public electricity suppliers and more recent determinations in gas networks.

There are nevertheless two key areas, namely the equity risk premium (ERP) and the debt premium, where the report argues for different parameter estimates relative to the Ofgem's decision at the 1999 DPCR. The rationale for such differences is as follows.

Regarding the ERP, it is worth stating that Ofgem and Ofwat have traditionally adopted a forward-looking approach, whereas the CC also places some emphasis on, higher, historical estimates of the ERP. Leaving aside the issue of whether historical or forward-looking approaches should be adopted, the report reviews, in particular, the most recent estimates of the forward-looking ERP.

The report argues that, to the extent that Ofgem may have correctly estimated the ERP at the last periodic review—around 3.5% in 1999—there is now sufficiently strong evidence that the forward-looking ERP should be set at a higher level. For example, perhaps the two most authoritative academic studies on the forward-looking ERP, by Fama and French (2002) and Dimson, Marsh and Staunton (2002), claim that the expected ERP is 3.5% and 3.9%, respectively. It should be noted, however, that such studies refer to datasets from 1900 to 2000, not incorporating the last few years of stock-market movements. More recent evidence suggests higher stock-market volatility and a higher forward-looking ERP.

The range for the ERP recommended in this report is broadly in line with the range produced by a recent research report for the Joint Regulators' Group. Although that research report has adopted a different methodological approach to the one set out here in this report, the implicit range for the ERP provided in the Joint Regulators' report is 3% (if geometric averages of past equity returns are assumed) to 4–5% (if arithmetic averages of past equity returns are assumed).

With respect to the debt premium of DNOs, it is argued in this report that the appropriate premium is at least 200 basis points, excluding any adjustment for embedded debt and issuing fees. This is slightly higher than the 170–185 basis points allowed by Ofgem at the last periodic review (including adjustment for embedded debt). The main reason for this increase is the deterioration in the credit ratings of DNOs since the last review. Most DNOs have credit ratings of A– to BBB–. This evidence should be seen in light of the fact that, averaged across 2002, the premium on single 'A'-rated debt in the economy above 10-year gilts was 1.24%. During the same period, the premium on BBB-rated debt above 10-year gilts was 2.13%. The evidence on the debt premium assumes a capital structure similar to the current gearing of DNOs. Any higher gearing assumed for the industry at the forthcoming price review should be associated with assumed credit ratings lower than at present and a higher debt premia.

The report also discusses our research results in relation to alternatives to the CAPM. Although no overwhelming evidence has been shown to exist for a wholesale move away from the CAPM, it would seem advisable that Ofgem does not disregard alternative models when the CAPM seems to be underestimating the reward that equity investors in the DNOs would demand. Alternative models, such as that proposed by Fama and French and the DGM, offer a valuable check on CAPM cost of equity estimates. In particular, the report shows that the Fama–French model produces a higher cost of equity for US utilities than the CAPM and that estimates of the ERP put forward elsewhere in this report are corroborated by the DGM.

Based on the evidence presented in this report, the real, post-tax WACC of the DNOs lies in the range 5-6%, with a mid-point of 5.5%. The real, pre-tax WACC of the DNOs lies in the range 6.23–7.56%, with a midpoint of just under 7%. This range and point estimate are exclusive of a set of additional and important considerations.

- ***Implications of recent tax changes**—the report assumes a tax wedge of 1.429. However, evidence reported in this report suggests that recent tax changes will lead to effective tax rates significantly above the statutory rate of 30% over the next control period. Most DNOs will have effective tax rates around 37–38% for the duration of the next regulatory period, implying a tax wedge of around 1.61, instead of the standard 1.429. This will have significant cash-flow implications for the DNOs. It is recommended that Ofgem take this into consideration and examine company-specific evidence.*

- ***Embedded debt**—the report does not include any adjustment for embedded debt. Instead, it recommends that company-specific evidence be examined by Ofgem in determining the cost of debt for DNOs.*

- ***Inflation risk premia**—the report assumes no inflation risk premia. This may well be the right assumption at present, as examination of the data suggests, but these issues should be revisited further into the review to take into account any new market information available.*

– ***Output regulation and distributed generation***—*these are two significant changes in the regulatory framework that the DNOs face going forward. However, the report does not quantify the extent to which any increase in expected volatility of returns of DNOs is raised further as a result of such changes in the regulatory framework.*

Given the uncertainty in parameter estimates, the recent level of stock-market volatility and the above factors, figures towards the bottom end of the range may undermine future investment incentives, which would arguably have more serious welfare implications than if the cost of capital is set too high. ***The forward-looking real, pre-tax WACC (post-tax) of DNOs is therefore likely to be at least 7% (5.5%)****. These estimates should be reviewed later into the price-review process in order to take into account more recent market developments.'*

107. **We are generally supportive of the report and believe that a base weighted average cost of capital (WACC) towards the top end of the range is appropriate. In addition, we would comment on the following specific points:-**

Gearing

108. **We concur with OXERA and Ofgem that the level of gearing should provide companies with sufficient flexibility to respond to demands placed upon them and support the view that the level of gearing assumed in the cost of capital calculation for all companies should be set at 50 per cent in line with the assumption at the last review.**

109. Whilst the OXERA paper suggested that higher gearing can reduce the cost of capital on water companies, it also indicated that in doing so it was transferring risks to banks and customers. We would concur with OXERA and Ofgem that in order to retain flexibility the assumption on the level of gearing should be set to 50 per cent, so that companies can respond to demands placed upon them. Indeed, as the OXERA report shows this is the benchmark for most international utilities.

Taxation

110. **The price control should be based on the principle of enabling companies to fund their efficiently incurred tax liabilities. We believe that the introduction of Tax Bulletin 53 (with respect to non-load-related expenditure) and changes suggested under the Reform of Corporation Tax (with respect to depreciation) will mean that this principle is best met through a company specific post-tax approach.**

111. The tax liabilities of DNOs represent a cost to the companies, just like operating costs, and the settlement must enable companies to fund their tax liabilities. In the past, this has been fulfilled through an uplift in the cost of capital calculation. However, there is no reason why this should not be part of a separate allowance.

112. The proposed introduction of Tax Bulletin 53 (non load related expenditure) and changes suggested under the Reform of Corporation Tax (capital allowances) will mean a move to a tax position in excess of 30 per cent. Given the effective tax rates for the companies will be above the standard rate of tax it is, therefore, now appropriate to move to a company specific post tax approach to ensure companies have sufficient cash to cover actual tax liabilities. The alternative would be for some non-standard rate to be applied to all

companies and it would be difficult to establish such a benchmark without perversely affecting incentives.

113. A move to a post tax basis would not affect the incentive upon companies to manage their tax liabilities efficiently. Indeed it will become clearer how companies have performed against their allowance, and experience from the water industry supports this view.

114. Finally, we would add that adopting the current pre-tax basis serves as an incentive for companies to adopt more highly geared structures. A post-tax approach would be consistent with Ofwat (and international) practice and be in line with the recommendations of the Better Regulation Task Force.

Incurred fixed cost of debt

115. **We note Ofgem's comments and welcome the opportunity to discuss our financing policies. We believe that all the debt that is held in the UK group of companies that includes NEDL and YEDL was economically incurred in moving to an efficient financial structure. The decisions made represented a prudent view and achieved a balanced portfolio of fixed and variable debt over the life of the assets. Accordingly, we consider that an appropriate company specific adjustment to reflect this should be made in the cost of capital calculations.**

116. The cost of our debt, therefore, reflects the market at time of issue rather than inefficiency. Early redemption of NEDL and YEDL external debt would prove uneconomic due to the required application of the Spens formula in calculating the redemption amounts. Redemption would therefore occur at above market value.

Valuation of the RAV and the approach to depreciation

Updating the RAV for capex efficiencies

117. **We believe that the rolling RAV mechanism should meet the commitment given at DPCR3 and should provide incentives with respect to capital expenditure that are appropriately balanced with incentives on operating expenditure. These principles would be achieved by replicating the pre-DPCR3 capital expenditure incentive (i.e. the retention of both the rate of return and the depreciation benefits) but extending the retention period appropriately to achieve this balance.**

118. The DPCR3 Final Proposals described the mechanism as the adjustment of asset values in the next price control review by actual, rather than projected, spending on a rolling basis after the lapse of a five-year period. These adjustments can be made through the RAV.

119. The methodology used by Ofgem needs to ensure that the return and the depreciation benefits relating to efficiencies are properly reflected throughout the retention period. Further comments on this issue are included in Appendix 2 under Ofgem's request for views on dealing with periodicity.

120. The *Update* consultation does not go into detail about the mechanics for this rolling incentive and so, in order to understand how it should work, we have developed a modification proposal for the Ofgem cashflow model and would welcome the opportunity to discuss this and to confirm the approach.

The approach to asset disposals

121. If the RAV is to be adjusted for disposals, then the appropriate definition to use is that of 'relevant assets' as these are the assets on which the delivery of service depends, and upon which the regulatory regime focuses, and since by the time of the next price review the RAV will only consist of the depreciated additions of operational capex since privatisation.

122. The power of incentives to achieve efficiency through disposals should be equal to other incentives to achieve operating and capital cost savings. Therefore, the benefits from disposals should be retained for the same period allowed under the rolling incentive rules.

The treatment of non-operational capital expenditure in the RAV

123. See response to chapter 4.

Vesting Asset Depreciation

124. We agree that Ofgem should extend a similar approach to that applied to some companies at the last price control to deal with the sharp fall in pre-vesting asset depreciation. This will mitigate the potential adverse impact on the financial position of companies in the short term of the sharp fall in the allowed level of depreciation (and therefore allowed revenue) once flotation assets have been fully depreciated and smooth prices to customers.

Financial modelling

125. We agree that DNOs should maintain financial ratios consistent with credit ratings that lie comfortably within the investment grade category. We welcome Ofgem's proposal to consult on the development of its thinking on the most appropriate financial indicators (and levels) and that the financial model will be published and will be fully transparent.

Alternative approach to the treatment of depreciation of network renewal expenditure (Repex)

126. The consultation correctly identifies that if DNOs are required to finance a significant increase in investment over the next price control period, Ofgem will need to consider the impact this will have on the financial position of the companies. One option could be to allow a proportion of investment to be allowed as operating costs (repex) rather than being included in the RAV. This will no doubt be fully considered as part of the price control process. There could also be a case for changes to the connection charging regime; if, for instance, connection charges became too shallow, companies would see an uneconomic escalation in overall connection asset demands – in both load and generation. Companies may therefore face large increases in demand for capital and the appropriate way to meet this may involve a repex approach if financial ratios are to remain healthy.

7. CHAPTER 7 - THE NEXT DNO PRICE CONTROL REVIEW

Objectives (7.2 - 7.13)

127. We agree the objectives that Ofgem initially set out for this review, namely to:

- provide appropriate incentives to DNOs to manage and operate their networks in an economic, efficient and co-ordinated manner;
- provide clear and consistent incentives to DNOs to help ensure they provide an appropriate quality of service to consumers – including incentives for timely and efficient investment in the network;
- seek to ensure that the DNOs can finance their licensed activities commensurate with an efficient level of expenditure;
- provide fair and transparent arrangements for distributed generation;
- provide appropriate incentives to help to ensure that longer term security of supply is maintained;
- reflect Ofgem's responsibilities in regard to the environment and social issues;
- ensure that competition is promoted in the provision of supply, connection and metering services and in generation.

128. Ofgem's Developing network monopoly price controls – Initial consultation (August 2002) also indicated that the following process related objectives were appropriate:

- where possible Ofgem should try to resolve key policy issues at an early stage so that regulated companies have more certainty about the price control; and
- Ofgem should ensure that the consultation process is open and transparent and that all interested parties have an opportunity to contribute to the review process.

129. We recognise that Ofgem do not consider seeking to minimise the burden and cost of the price control review to be an overriding objective but we welcome the early start that has been made and recognise that Ofgem will seek to reduce the burden wherever practicable.

130. We welcome Ofgem's intention to produce impact assessments for significant new policies initiated by Ofgem. We agree that the review process should be as transparent as possible to enable companies to understand how Ofgem arrive at their decisions and to set out how decisions relate to the above objectives.

Regulatory Risk (7.20)

131. **We do not accept that distribution network operators (DNOs) have a risk profile that is markedly, or even at all, lower than that of the market as a whole. The lower risk characteristics that arise from the monopoly nature of some of the activities of a DNO are offset by the unique risks that apply only to price-regulated companies. The output prices of DNOs are largely fixed for the duration of the control. In this respect there is a level of risk that is higher than in competitive markets where**

industry wide shocks (e.g. oil prices) can be reflected quickly in changes in output prices. An approach which more closely reflected the characteristics of competitive markets would make greater use of automatic pass through provisions in relation to exogenous cost shocks. The alternative is to reflect this risk through an increase in the cost of capital.

132. **Additionally, strong reliance on yardstick and benchmark approaches would increase overall risk for companies and increase the cost of capital since it is false to assume that equity or debt holders can diversify against this risk.**

Mechanisms for Dealing with Uncertainty (7.17 - 7.24)

133. **We support the principle of the development of an overall framework to assist in determining the best regulatory response to uncertainty. The Frontier Economics work, which sets out a high level framework of decision trees to determine the best regulatory response to uncertainty, is a useful contribution to this debate.**

134. **However, there are currently no formal mechanisms whereby companies can be remunerated at, or before, the next price control review for costs of additional obligations (or changes to existing obligations) not known or identifiable at the time of the previous price review. Such 'cost shocks' could be passed through without weakening incentives to reduce costs, provided some observable measure for the costs in question is available. We believe that Ofgem should consult on the potential for more formal mechanisms to be codified and then incorporated into an appropriate licence modification.**

135. More detailed comments are provided in our Appendix 2 comments on the Frontier Economics report, *'Regulatory Mechanisms for Dealing with Uncertainty'*.

Distributed Generation (DG) (7.25 – 7.28)

136. **We have responded to Callum McCarthy and Cemil Altin in relation to the open letter to Chief Executives on distributed generation (DG) and since then we have met with Richard Ramsay and John Scott and presented a paper (jointly written with OXERA) on incentives for DG. We would welcome further discussion with Ofgem on the proposals put forward in this paper, and we remain keen to contribute to the continuing debate on DG . We believe the two key elements of an appropriate incentive scheme are:**

- ***a higher rate of return on investment in 'used and useful' network assets to facilitate DG.*** **The problem some have identified with this solution is that of labelling the investment. A solution to this would be a requirement to pre-register work with Ofgem in order to earn the chance of a higher return. Pre-registration could also ensure that a higher return is not available unless a company also subjects itself to the risk of a lower return. This downside risk could be limited to the rate of return on other network assets provided the investment was used and useful for load; and**

- ***a MWh revenue driver based on network capacity availability.*** **In principle DNOs should be incentivised to facilitate DG output. We believe that the best measure of the DNO's performance is the MWh that the network is capable of transporting from DG rather than the total MWh generated by DG which will be affected by many other extraneous factors that impact on the generator but are beyond the control of the DNO.**

137. Problems arising from the current incentives with respect to investment in assets necessary to facilitate DG are summarised below:

- DNOs are generally incentivised to undertake only efficient investment in their networks;
- DNOs therefore invest only when they believe it to be necessary;
- investment will therefore always be targeted where it brings the DNO the greatest rewards in reducing risk of system failure, safety benefits, or quality of supply;
- investment to facilitate distributed generation brings no such benefits and, therefore, without special treatment will not be made;
- the level of investment needed is hard to predict because no one knows how much distributed generation will really emerge;
- funding anticipated distributed generation investment in the normal way might lead to Ofgem making large allowances for investment that might never be made (because it was not actually needed and the incentive to avoid unnecessary investment would still operate);
- the alternative is that Ofgem might make inadequate allowances that underestimate the role of development, imposing strains on cashflows;
- incentivising companies to undertake distributed generation investment by giving such investment a higher rate of return would work only if the return was sufficiently high; and
- incentivising companies to invest by allowing a high rate of return would, if the return was high enough, lead to the opposite problem – i.e. too much investment that was not needed but was made because it was attracted by the high rate of return.

138. The proposition that we have put forward would address this situation. Investment in network assets to facilitate distributed generation would attract a higher rate of return if the investment was used and useful, and the standard rate of return if it turned out to be un-used.

139. If companies want to earn the chance of a higher return they should have to pre-register with Ofgem the work that they are about to carry out. Once a generator comes along and uses the assets then those (pre-registered) assets will attract the higher return. But, as long as they are not used or useful, they will not attract the higher return. It might not be necessary for them to attract a lower than standard return, because investing at the allowed cost of capital in assets that bring the DNO no benefit is unlikely to occur.

Other Issues (7.29)

Pensions

140. We note that Ofgem recognise the need to make allowances to cover costs that companies incur to fund their pension schemes and also Ofgem's intention to compare the pension benefits provided by DNOs to those available in the competitive environment and to ensure that the pension costs are efficiently incurred.

141. **In determining the efficient level of pension costs, and comparing this to the competitive environment, due regard will have to be taken of the 80 per cent of our employees who are members of the Electricity Supply Pension Scheme (ESPS) some 90 per cent of whom are 'protected persons' under the terms of the Electricity Act 1989. The Northern Electric scheme was effectively closed to new members in 1997 and only the existing ESPS members of YEDL and Yorkshire Electricity Distribution Services Ltd (YEDSL) were able to join the Northern Electric scheme on the acquisition of these companies in 2001. Other staff are members of defined contribution schemes or other private pension plans.**

142. **Within these constraints, the group seeks to minimise the overall pension costs of the business, as it does all costs of employment. The constraints of ESPS mean that the companies have less flexibility on pension matters for staff covered by those arrangements.**

143. **The Northern Electric ESPS scheme is a separate trustee-administered fund which adopts a prudent investment strategy designed to minimise pension contributions over the long term assuming normal market conditions.**

144. **The scheme is expected to face a deficit at its next actuarial valuation. This probable deficit does not arise from any imprudent act on the part of the companies with respect to the use of surpluses. It arises from the decline in the equity market and reducing bond yields. As well as providing benefits to members, previous surpluses have also been used to help to fund the costs of previous staff restructuring. Customers have thereby been able to benefit from the resultant savings in operating and capital costs without having to fund the costs of achieving those savings. In addressing the expected deficit position we will follow appropriate actuarial advice and the course of action will be agreed with the trustees. The resultant costs should be allowed in setting the next price control.**

145. Pension contributions are a significant overhead to salary costs and CE Electric UK Funding Company (CEUKF) seeks to minimise group pension costs within the constraints that apply as a result of the history of the electricity industry and the obligations imposed at privatisation.

146. CEUKF operates three main schemes:

	% of CEUKF staff
▪ The Northern Electric Money Purchase Scheme (NEMPS) was made available to new employees from the closure of the ESPS scheme to new entrants in 1997.	2 %
▪ The Yorkshire Electricity Pension Plan (YEPP) is a money purchase scheme similar to NEMPS which was established in 1995 when the Yorkshire section of ESPS was closed to new entrants.	6 %
▪ The Northern Electric Group (NEG) is one of the separate sections of the Electricity Supply Pension Scheme (ESPS). The NEG was generally closed to new entrants in 1997.	81 %

147. These three schemes cover some 89 per cent of staff employed in the group's activities, the remainder of staff contribute to other private pension plans.

148. It has to be recognised that the high proportion of ESPS members, and their predominantly protected status (see below), limits the steps that CEUKF can take to reduce the pension contributions applicable to those employees.

Northern Electric Money Purchase Scheme (NEMPS) and Yorkshire Electricity Pension Plan (YEPP)

149. Staff commencing employment on or after 23 July 1997 (in the case of the Northern Electric Group) and 31 March 1995 (in the case of the Yorkshire Electricity Group) have generally been eligible to join only NEMPS or YEPP as appropriate. Both companies recognised the commercial need to provide new staff with more commercial terms and conditions which related not only to salary and bonus payments but also to the pension provision made for those staff.

150. Under the terms of these schemes CEUKF pays a fixed percentage of salary into the individual's pension plan and there is no further liability.

151. The general low turnover of staff, against a background of staff reductions over previous years, means that the proportion of staff employed on these terms is still less than 10 per cent of all staff employed.

Northern Electric Group (NEG) - General

152. The ESPS defined benefit scheme for directors and employees provides pension and other related benefits based on final pensionable pay. The assets of the scheme are held in a separate trustee-administered fund. There are six trustees elected by the members, three trustees who are appointed by the 'principal employer' (Northern Electric plc) and one independent trustee (Law Debenture Trust Corporation plc). The trustees also draw on their own legal, actuarial and investment advice.

153. Around 90 per cent of the ESPS members hold protected status under the terms of the 1989 Electricity Act, the requirements of which are reflected in the pension scheme rules. The Electricity Act imposed significant constraints on the ability of companies to introduce efficiencies into this aspect of their business costs. In particular, companies may not worsen the terms enjoyed by protected persons at privatisation nor may they close the schemes (except to new entrants).

154. Upon the acquisition of the distribution business of the Yorkshire Electricity Group by CEUKF in September 2001, the employees of YEDL and YEDSL who were already members of ESPS transferred into the NEG on 31 December 2001. As part of that transaction the pensioners and deferred members of the Yorkshire section of the scheme did not transfer to the NEG but were retained by Innogy.

155. We do not believe the benefits that these employees enjoy as part of the NEG are dissimilar to the benefits offered in similar schemes in the market place for that sector established at the same time.

Northern Electric Group (NEG) – Surplus / Deficit

156. We note Ofgem's intention to consider a number of factors in relation to companies forecasting a deficit in their pension schemes. Whilst we recognise the need for these factors to be considered, it should be borne in mind that the deficits have arisen from the fall in the equities market. DNOs, similar to other companies in the market place, face the current situation not from imprudent use of surplus but from the decline in the equities market which has reduced asset values at the same time as the falling bond yields have increased liabilities.

157. The last full actuarial valuation of the NEG was carried out by Hewitt, Bacon & Woodrow (HBW), consulting actuaries, as at 31 March 2001 in accordance with the normal triennial valuation process.

158. In setting the uses of the 2001 surplus CEUKF continued its prudent policy of retaining a pool of unused surplus. Specifically it also created a market uncertainty reserve of £20m (over 20 per cent) of the surplus as a recognition of the volatility in the equity markets at the end of 2001.

159. In accordance with the precedents set at previous valuations the remaining surplus was allocated between CEUKF and members in the ratio of 2:1.

160. The surplus allocated to CEUKF was partially utilised to cover pension deficiencies associated with staff reductions implemented to achieve manpower savings following the last price control review. Such costs have not previously been allowed in price controls, although customers have benefited from lower ongoing operating costs.

161. The trustees adopt a prudent investment strategy which will, over the next few years, see a realignment of the investment portfolio more towards, but not exclusively to, bonds. This reflects the changing mix of members and a recognition that equities do provide, under normal long term market conditions, a means of minimising the overall level of company contributions.

162. CEUKF is discussing the current funding position with HBW and the trustees. CEUKF will follow the actuarial advice given as a result of the current deficit position. In submitting our business plan we will draw on the actuarial advice as to the future funding rates needed based on the expected funding positions at the next triennial valuations in 2004 and 2007. These will also take account of changes in the assumptions, e.g. as to increasing longevity, which influence funding levels. The same actuarial advice will be used to determine the appropriate accounting charges. CEUKF expects that the costs, determined by the actuary, should be allowed in setting the next price control. If Ofgem has any requirements that must be met (for example, an independent valuation of the assets and liabilities of the scheme) before funding will be allowed it would be helpful to know what these requirements are in good time.

163. Pension commitments have been accounted for in accordance with Statement of Standard Accounting Practice 24.

164. We look forward to further dialogue on this matter. We expect to receive requests from Ofgem for further details of the management of the pension schemes and our obligations to fund the scheme over the next price control period.

The treatment of correction factors

165. We support the approach discussed in the consultation document.

Metering

166. We agree that metering issues will be an important consideration as part of the price control review.

Rebates for distribution use of system charges

167. We have recently responded to Ofgem's letter to all DNOs in relation to information about rebates and understand that Ofgem will consult on this issue in the near future.

New obligations

168. We agree that a process needs to be put in place to ensure that where additional obligations have arisen and have imposed costs that are significant and/or have an asymmetric impact on companies, that the efficiently incurred costs should be taken into account in setting the price control.

169. The base case of the Business Plan Questionnaire (BPQ) forecasts need not include potential additional obligations if these are not certain. However, these costs should be separately identified and mechanisms put in place to deal with them should they arise as proposed in our comments in Appendix 2 on *the need for more formal mechanisms to deal with uncertainty*.

Information for the price control review (7.30 to 7.38)

170. We welcome the process that Ofgem has initiated to consult on the scope and the form of the BPQ information requirements for the next distribution price control. We have the following initial views:

- the methodology and outputs of the review process need to be agreed and understood before the BPQ is prepared by Ofgem and then Ofgem need only request information necessary to inform these outputs;

- the request for data in the BPQ must be linked to financial model requirements which in turn must be developed in consultation with rating agencies and the BPQ working group. We welcome the commitment by Ofgem to use a transparent financial model and the commitment to share information with DNOs;

- any information included in the BPQ should be kept to the minimum required to provide an adequate understanding of the distribution business. If any additional information is required Ofgem should make clear the reasons why the information is required and specify carefully the content. This will enable companies to provide the information consistently and in a timely manner. Any data should be captured at a level that allows comparison with other DNOs. New requirements for information should be based on specific requirements arising from issues being considered at the DPCR review (e.g. the impact of embedded generation);

- we believe the introduction of the new form of regulatory accounts, business separation and the introduction of IIP should reduce the requirement for financial information that does not relate to the distribution business;

- in particular any requirement to restate 1998/99 and 1999/00 financial information could be onerous and there would be a significant cost involved in restating information onto a basis that differs from the basis on which core data has been captured. The accuracy of any retrospective adjustments and the benefit gained from the information should be assessed prior to committing DNOs to restate financial information for these years.

171. We believe the restating of information to the 1998 BPQ format is not necessary at a detailed level and that, generally, the format adopted in the regulatory accounts should be used.

172. We welcome the involvement of DNOs in the formative stage of the process and inclusion of DNOs' comments in the information gathering process.

173. We welcome the approach to split information requests into separate parts and in particular would stress the need to identify clearly any data necessary to make judgements about the valuation and separation of metering.

174. With respect to the aim of increasing the transparency of the process, we note that Ofgem is considering whether to require companies to publish their business plans, whether it is appropriate to require the Board of the licence holder to endorse the strategy and

information set out in a company's submission and whether any aspects of a company's submission should be subject to some form of audit. We would not be opposed, in principle, to such an approach. We believe that during this review more emphasis should be placed on company specific data – including forecasts - than has been the case in previous reviews. However, we recognise that this places an onus upon companies to justify their forecasts. We therefore would support proposals that increase transparency and hence increase Ofgem's confidence in the companies' forecasts.

Draft Timetable for the DNO Price Control Review (7.40 – 7.42 + March 13 letter)

175. **We welcome the draft timetable for the DNO price control review set out by Ofgem which, once finalised, will provide all parties with clarity over the review timetable and a firm foundation for resource planning. We support the high level comments provided by the Electricity Association Price Control Group on possible ways to improve the timetable by recognising the interactions between the policy issues, the data gathering work and the work on setting the control (developing detailed Po and X proposals).**