



# **SP Transmission & Distribution**

## **Response to Ofgem Consultation Paper:**

### **Electricity Distribution Price Control Review Initial Proposals – June 2004**

**9<sup>th</sup> August 2004**

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## EXECUTIVE SUMMARY

This distribution price control review is different from previous reviews. We welcome Ofgem's recognition of this point in the development of its Initial Proposals, but have the following concerns with the overall package as set out by these proposals:

- the proposed cuts in our investment plans will not allow us to provide networks that are sustainable in the long-term;
- no capital expenditure has been allowed for supply quality improvement despite detailed proposals contained in our 'DNO Alternative' submission and Ofgem research indicating customers' willingness to pay;
- the increased business risk that would result from the proposed capital restrictions and the very challenging incentive regime has not been recognised; and
- the allowed cost of capital should be at least 5.1% fully post-tax, consistent with the figure that has recently been proposed by Ofwat for the water sector.

We believe that the following changes are necessary to address these concerns:

## NETWORK INVESTMENT REQUIREMENTS

*Allowances for capital expenditure should be increased to secure the long-term safety, reliability and sustainability of the electricity infrastructure in SP Manweb and in SP Distribution.*

- Our investment submission sets out the next stage of our plans to ensure that customers continue to receive safe and reliable electricity supplies, efficiently managed, resilient to severe weather events and sustainable in the long-term.
- Ofgem's proposed cuts in our plans would result in a decline in overall network performance together with an unacceptable deterioration in critical network assets.
- The proposed allowance for load related expenditure will be insufficient to allow us to meet our legal and licence obligations.
- The proposed allowance for non-load related expenditure should be increased to maintain current levels of network performance.

Our investment requirements are derived from robust Asset Risk Management processes, assessed by Ofgem as leading class, focused on the specific requirements of our licensed networks. Ofgem's current 'one size fits all' approach, with limited technical input from external consultants, is no substitute for these processes.

## COST OF CAPITAL

*The allowed cost of capital should be at least 5.1% fully post-tax, consistent with the figure recently proposed by Ofwat for the water sector, to enable companies to attract and retain equity funding.*

- Electricity network returns should be at least consistent with those of water.
- This view is supported by investors who have to choose between sectors.
- The cost of capital must take adequate account of the increased risk to returns from exposure to incentive regimes.



## **OPERATING EXPENDITURE ALLOWANCES**

*Opex allowances should be based on an efficiency improvement of up to 2% per annum from the average benchmark rather than from the upper quartile as currently proposed.*

- Ofgem's current proposal overstates the potential for future efficiency savings.
- An average benchmark is more appropriate than upper quartile because of issues with data consistency, volatility and comparability.

## **RAV ROLL-FORWARD**

*RAV roll-forward must ensure that all prudently incurred expenditure during the current price control period is fully funded.*

- RAV additions should be based on a normalised level of overhead allocation consistent with the accounting policies adopted by the frontier companies in 1997/98.
- Expenditure during the current price control period on post-fault asset replacement must be included in the RAV.
- Non-operational capex was not adequately funded in DPCR3. Efficiently incurred additional costs should be included in the RAV.

## **INTERRUPTIONS INCENTIVE SCHEME**

*SP Manweb's frontier CI performance should be recognised by the provision of an appropriate revenue allowance or by a less onerous target than currently proposed.*

- SP Manweb has a frontier performance of 70% of its benchmark for customer interruptions (CI).
- This level of performance has been delivered by significant expenditure and management effort. No recognition has been made of this achievement.
- The current proposals penalise SP Manweb relative to other companies. An onerous target has been set that provides very little scope for out-performance or reward but significant scope for penalty.

## **QUALITY OF SUPPLY FOR 'WORST SERVED' CUSTOMERS**

*An additional £32m of capital expenditure over the price control period is required to fund improvements in quality of supply for worst served customers and communities.*

- Ofgem's current focus on global network performance does not take sufficient account of the quality of supply experienced by worst served customers and communities.
- Discussions with customers and their representatives indicate a clear requirement and willingness to pay for improvement initiatives.
- We believe that it would be appropriate to fund this through an incentive scheme based on targeted performance improvement and have made specific proposals to Ofgem.

We look forward to continuing discussion with Ofgem on these issues, and on the many other important issues for this price review. The September update paper will clarify Ofgem's position. We remain committed to working with Ofgem and the rest of the industry to deliver a successful price review outcome that balances the interests of customers, shareholders and other stakeholders. We hope that our comments in this response document will prove helpful in meeting this objective.



**Table of Contents**

**SECTION 1: FORM, STRUCTURE AND SCOPE OF REVISED PRICE CONTROLS ..... 1**

1.1 SUMMARY OF POSITION .....1

1.2 REVENUE DRIVER.....1

1.3 PRICE INDEX .....2

1.4 UNITS DISTRIBUTED OUT OF AREA .....2

1.5 BUSINESS RATES.....2

1.6 REVENUE PROTECTION .....2

1.7 DEALING WITH UNCERTAINTY.....3

1.8 INCENTIVES FOR EFFICIENCY.....4

    Treatment of Necessary Expenditure in Excess of the Allowance .....4

1.9 ROLLING CAPEX INCENTIVE APPLYING TO CURRENT PRICE CONTROL.....6

1.10 LOSSES .....8

1.11 METERING.....8

    Meter Asset Provision (MAP).....9

    Meter Operation (MOp).....9

    One Way Door .....10

    Long Term Switch-Off.....10

1.12 DEVELOPING REGULATORY IMPACT ASSESSMENTS.....10

1.13 WHEELING CHARGES.....11

**SECTION 2: QUALITY OF SERVICE AND OTHER OUTPUTS .....12**

2.1 SUMMARY OF POSITION .....12

2.2 SP MANWEB CI PERFORMANCE .....13

    Performance and Target Relative to Industry .....13

    Appropriate Recognition of Frontier Performance .....14

    Historical CI Performance.....16

2.3 REVENUE EXPOSURE.....17

2.4 CUSTOMER COMPENSATION .....18

    Severe Weather Standard .....18

    Semi-Automatic Payments .....18

    Route for Payment to Customers .....18

    Compensation for Business Customers .....18

2.5 OVERALL STANDARDS OF PERFORMANCE.....19

2.6 STORM ARRANGEMENTS .....19

2.7 INTERRUPTIONS (IIP) INCENTIVE.....20

    Target Setting.....20

    Rewarding Best Practice Performance.....22

    Audits & Adjustments for Accuracy.....22

    Frontier Performance for this Price Control Period.....22

2.8 INCENTIVES FOR SPEED & QUALITY OF TELEPHONE RESPONSE.....23

2.9 ENVIRONMENTAL REPORTING.....24

2.10 DISCRETIONARY REWARD.....24



**Table of Contents (Continued)**

**SECTION 3: DISTRIBUTED GENERATION, THE INNOVATION FUNDING INCENTIVE AND REGISTERED POWER ZONES .....25**

3.1 SUMMARY OF POSITION .....25

3.2 RECOVERY OF INCENTIVE RATE.....25

3.3 UPDATED CONNECTION BOUNDARY.....26

3.4 HIGH COST PROJECTS.....26

3.5 NETWORK AVAILABILITY INCENTIVE.....27

3.6 TREATMENT OF TAX.....27

3.7 INNOVATION FUNDING INCENTIVE (IFI) .....28

    R&D Intensity Cap/Use It Or Lose It.....28

    IFI Internal Budget.....28

    Carry Forward .....28

    Good Practice Guide .....29

    Implementation Date .....29

3.8 REGISTERED POWER ZONES (RPZ).....29

3.9 REPORTING AND INFORMATION REQUIREMENTS (RIGS) AND DRAFT LICENCE MODIFICATIONS FOR THE DG INCENTIVE.....29

**SECTION 4: COST ASSESSMENT.....30**

4.1 SUMMARY OF POSITION .....30

4.2 OVERALL PROCESS .....31

4.3 OPERATING COSTS .....31

    Inclusion of Fault Costs in Regression Analysis .....32

    Normalisation.....32

    Overhead Allocation .....33

    Margins .....33

    Top-Down Benchmarking.....33

    Drivers of Fault Costs.....34

    Improving the Analysis .....34

    Double Counting Efficiencies .....35

    Total Opex Allowance.....35

4.4 HISTORICAL CAPEX AND RAV ROLL-FORWARD .....36

    Methodology .....36

    Non-Operational Capex.....37

    Overhead Allocation .....37

    Post-Fault Asset Replacement.....37

4.5 FUTURE CAPITAL EXPENDITURE.....38

    Process of Assessing Future Capex.....40

    Impact of the Reductions Proposed by Ofgem.....43

    Sliding Scale Mechanism.....45

**SECTION 5: FINANCIAL ISSUES.....47**

5.1 SUMMARY OF POSITION .....47

5.2 COST OF CAPITAL.....47

    Consistency with Water Sector .....48

    City Expectations .....49

    Dividend Growth Model (DGM).....50

    Impact of Incentive Regimes .....50

    Confirmation of Allowed Figure.....51

5.3 REGULATORY ASSET VALUE AND DEPRECIATION.....51

5.4 PENSIONS.....51

    Costs Associated with SP Manweb Pension Deficit.....51

    Early Retirement Deficiency Costs (ERDCs).....51

5.5 FINANCIAL INDICATORS .....52



**Table of Contents (Continued)**

<b>APPENDIX 1: ROLLING CAPEX MECHANISM INTRODUCED AT DPCR3</b> .....	<b>54</b>
PART 1: DETAILED ARGUMENTS .....	54
DPCR3 Documentation .....	54
Documents subsequent to DPCR3.....	55
PART 2: EXCERPTS FROM OFGEM DOCUMENTS .....	56
Current approach .....	59
<b>APPENDIX 2: OXERA PAPER ON COST OF CAPITAL</b> .....	<b>60</b>



## **SECTION 1: FORM, STRUCTURE AND SCOPE OF REVISED PRICE CONTROLS**

### ***1.1 SUMMARY OF POSITION***

Our current position on the various issues associated with this area of work is summarised below:

- we agree that RPI should be retained for the purposes of the price control;
- we continue to believe that formal mechanisms for dealing with uncertainty represent best regulatory practice and are in the interests of all stakeholders;
- the rolling capex incentive applying to the current price control period was introduced only to deal with expenditure savings and should not, as Ofgem has done in the calculation of DPCR4 revenue, be applied to expenditure in excess of the allowance;
- further detail is required on the losses incentive, in particular, in relation to the treatment of loss reducing capex; and
- further work is required on the proposals for a separate metering price control.

### ***1.2 REVENUE DRIVER***

1.2.1 Our response to Ofgem's March Policy paper stated that EHV charges are not unit driven and that the revenue driver for existing EHV connections should be set to zero to ensure that reductions in EHV units do not impact overall price-controlled revenue. We therefore agree with Ofgem's position that no volume driver will be attached to EHV revenues.

1.2.2 We note the revised weightings for the unit drivers that have been proposed by Ofgem. Further discussion is required on these proposals as we are unclear on the rationale for the proposed changes.



### **1.3 PRICE INDEX**

1.3.1 Our response to the March paper set out a number of reasons why it was not appropriate for the Consumer Price Index (CPI) to replace the Retail Price Index (RPI) for price control purposes. We therefore welcome confirmation that RPI will continue to be applied.

### **1.4 UNITS DISTRIBUTED OUT OF AREA**

1.4.1 We are in agreement with Ofgem's approach to the treatment of units distributed out of area i.e.:

- domestic customers will not be charged any more than they would be by the incumbent network operator; and
- the associated revenue should be treated as an excluded service.

### **1.5 BUSINESS RATES**

1.5.1 We are pleased that Ofgem has recognised that companies have actively engaged with the appropriate agencies in establishing revised rateable values (RVs). On this basis, while we welcome confirmation that Ofgem does not currently propose to disallow any rates costs, we look for early confirmation that no such costs will be disallowed.

### **1.6 REVENUE PROTECTION**

1.6.1 Our views on revenue protection were provided in detail in our response to Ofgem's discussion document of April 2004 on the theft of electricity and gas. Our view is that the costs and revenues associated with this should be excluded from the price control. The rationale for this is that the volume of activity is very much supplier driven and difficult to predict in order to set a price control allowance. Companies should therefore be free to match resources according to the demand placed on the service.





## 1.7 *DEALING WITH UNCERTAINTY*

1.7.1 We have consistently argued that formal mechanisms for dealing with uncertainty represent best regulatory practice and are in the best interests of all stakeholders. We reiterate the comments set out in previous consultation responses that, in order to remove the perception of regulatory risk associated with additional costs and new obligations, Ofgem must set out clear rules for dealing with cost increases between price reviews including:

- the circumstances under which the various mechanisms (such as error correction, interim adjustments, recovery during subsequent price controls) would be applied;
- the circumstances under which pass-through would be appropriate, and those under which efficiency tests would be applied; and
- the criteria that would be used to assess cost efficiency.

1.7.2 We continue to support proposals submitted by the ENA for dealing with uncertainty. These proposals provide mechanisms for dealing with issues that are foreseen, such as the implementation of the Traffic Management Act and for issues that are not foreseen. In summary, these proposals have the following objectives:

- to mitigate the additional risk borne by companies, and benefit customers by preventing this increased risk from feeding through into the observed cost of capital, and so into prices;
- to preserve, as far as possible, the incentive properties of the main control with respect to costs that are too uncertain to be remunerated under that control;
- to enable Ofgem to set a level of allowed costs for the main control that is not unnecessarily inflated to cover elements of uncertainty; and
- to eliminate the risk that Ofgem's 'comfort statements' could become the subject of dispute or legal challenge.



## **1.8 INCENTIVES FOR EFFICIENCY**

- 1.8.1 We remain strongly of the view that incentives to achieve efficiency savings need to be strengthened to ensure that customers continue to benefit from future efficiency gains. Future gains will require greater effort and innovation and many initiatives will require up-front expenditure to stimulate future cost savings. We have therefore consistently supported the introduction of rolling mechanisms to allow companies to retain efficiency savings for a period of five-years. In addition, we have consistently argued that incentives for capex and opex efficiencies should be equalised to avoid distorting efficiencies. This remains our position and we believe that incentives should be equalised by increasing the opex incentive rate to be consistent with the current capex incentive rate.
- 1.8.2 In its recent draft proposals for price limits, Ofwat has recognised that future efficiencies will be more difficult to achieve than in the past and has taken account of this by attempting to strike a balance between the ‘carrots’ and ‘sticks’. The ‘carrots’ take the form of encouragement and additional rewards for outperforming cost assumptions, while the ‘sticks’ take the form of assumptions on efficiency savings that are included in price limits.
- 1.8.3 We believe that Ofgem’s current proposals do not strike the appropriate balance. In particular, we believe that the assumptions underlying the opex allowances over-state the potential for future efficiency improvements. We would urge Ofgem to give further consideration to this aspect of the Initial Proposals

### **Treatment of Necessary Expenditure in Excess of the Allowance**

- 1.8.4 It is important to properly consider the treatment of necessary expenditure in excess of the allowance when contemplating the introduction of a rolling capex mechanism. This part of our response deals with how such expenditure should in principle be dealt with in future price controls. Issues arising from the capex rolling mechanism introduced at DPCR3 are dealt with separately in Section 1.9 and in Appendix 1 of this response document.



- 1.8.5 We agree with the statement made in paragraph 3.80 of Ofgem's December 2003 document that application of a rolling mechanism could provide a disincentive on a company to undertake investment that was not covered by the capex allowance. It is our strongly held view that such an incentive is not in the interests of customers.
- 1.8.6 In addition, we agree with the suggestion made in paragraph 3.81 of the same document, that such expenditure should be dealt with in a manner that ensures that a company is no better or no worse off than if the expenditure had been incorporated in the RAV straight away. This would be achieved by backdating the return on this expenditure when setting the next price control.
- 1.8.7 In our view, therefore, it is not appropriate for the proposed 'sliding scale' mechanism to be applied to expenditure in excess of the allowance because of the disincentive that this would provide for undertaking necessary expenditure. Such a mechanism should only be applied to capex efficiencies and only then when a robust benchmark is available. It should be noted that when the sliding scale mechanism was originally contemplated in Ofgem's paper of December 2003, it was intended to link rewards for capex efficiency to the size of the initial capex allowance. That is, it was not intended to apply to expenditure in excess of the allowance. If such a mechanism is to be introduced then its application should be consistent with this original intention.
- 1.8.8 As set out in Section 4 of this response document (Cost Assessment), we believe that the current PB Power benchmark is not sufficiently robust to be used in setting the incentive rates for the sliding scale mechanism. Unless the issues around the PB benchmark can be satisfactorily resolved then it will not be appropriate for such a mechanism to be introduced.



1.8.9 We continue to believe that the rolling opex mechanism should exclude exceptional and atypical items as their inclusion could distort the incentive. We do not accept the point made by Ofgem in the March policy paper that it would be necessary to define all such items in advance in order to exclude them from the incentive. Rather, it would be possible to accept the principle and deal with such items as and when they occur.

**1.9 *ROLLING CAPEX INCENTIVE APPLYING TO CURRENT PRICE CONTROL***

1.9.1 We note that, when calculating revenue for the Initial Proposals, Ofgem has applied the capex rolling mechanism to capital expenditure in the current price control period in excess of the allowance. This is an incorrect application of the mechanism agreed at DPCR3.

1.9.2 The rolling mechanism implemented at DPCR3 was intended only to apply to savings against the allowance. Ofgem documents during and subsequent to the last price review make frequent references to savings and to the retention of efficiencies but make no reference to the treatment of expenditure in excess of the allowance.

1.9.3 Following a recent meeting, we now understand that Ofgem has changed its position from DPCR3. It is not appropriate for Ofgem to wait until the final year of the price control to communicate such an important issue to companies. This is retrospective regulation that provides companies with no opportunity to respond to the 'incentive'.

1.9.4 Our expenditure decisions during the current price control were based on a rolling mechanism being in place for capex savings only. We chose to spend in line with the requirements of the network, as identified by our Asset Risk Management processes, rather than in line with the Ofgem allowance. In doing so we made a conscious decision to forego the 'rewards' for under-spends against the allowance. However, had we known that the rolling mechanism would be applied to expenditure in excess of the allowance, then



our behaviour would have been different. Given the scale of the associated revenue penalties then we would have spent in line with the Ofgem allowance.

- 1.9.5 If Ofgem had intended to apply the mechanism in the manner now proposed then this should have been made clear at the time and there should have been proper consultation around the associated issues. Given that this was not the case, then we do not believe that it is appropriate for Ofgem to seek to apply the rolling mechanism retrospectively as currently proposed.
- 1.9.6 Consultation documents from DPCR4, in particular the December 2003 document, do contain discussion around how such expenditure should be treated. These documents would appear to contradict Ofgem's latest position by confirming that such issues were not considered at DPCR3. In fact, table 3.1 of the December 2003 document introduced more uncertainty by describing the 'current approach' in a manner that suggests that there is currently no rolling mechanism in place.
- 1.9.7 In our opinion, if Ofgem had intended the rolling mechanism to be applied to expenditure in excess of the allowance in DPCR3 then this would have been stated in Section 3 of the December document. However, regardless of what the intention was at DPCR3, the fact that there is no mention of the application of the rolling mechanism to such expenditure supports our position that this is not appropriate.
- 1.9.8 The detailed arguments underpinning our position are set out in Appendix 1 of this response document. We believe that there is a strong case for necessary expenditure in excess of the allowance, such as we have incurred during the current price control, to be logged up for recovery via the next price control. Any logging up mechanism would require to preserve the net present value of the investment regardless of when recovery takes place, resulting in a positive revenue adjustment in the next price control.



1.9.9 However, given the uncertainty and differing interpretations around what was intended at DPCR3, we believe that a reasonable compromise is for companies to be required to fund the excess until the end of the current price control period rather than for the full five-year rolling period. This would be achieved by including the additional expenditure in the RAV from the beginning of the next price control period with no associated revenue adjustments, either positive or negative.

### **1.10 LOSSES**

1.10.1 We welcome the proposal to reduce the exposure of companies to increased losses resulting from Distributed Generation (DG) from the level proposed in the March policy paper. However, it remains our strongly held view that there should be no such exposure given the complete lack of control that companies have over the location of DG. We continue to believe that this potential exposure will undermine the DG connection incentive.

1.10.2 We note Ofgem's proposed valuation of losses and believe that this figure is too high as the calculation uses a distribution loss factor based on losses at peak demand. This is not appropriate, as the calculation should take account of the variation in losses over time.

1.10.3 We agree with Ofgem that the test for efficient spending to reduce losses should be similar to the 'traditional' efficiency test for capex. However it would be helpful to have further guidance on how this test will be applied to capex that, by definition, will be relatively high cost. In particular, it will be important to consider how loss reduction capex would be treated if 'headline' losses have not fallen.

### **1.11 METERING**

1.11.1 Our previous consultation responses have stated our view that separate metering price controls are unnecessary and are not in the interests of



customers. While our view is unchanged, we remain committed to working constructively with Ofgem to develop a suitable framework.

### **Meter Asset Provision (MAP)**

- 1.11.2 We support in principle the proposed structures of the MAP controls outlined by Ofgem. However, further detail is required on the basis of the Price Cap calculations before detailed comments can be provided.
- 1.11.3 We are generally supportive of the principles and overall approach provided that termination charges are allowed. Although not mentioned in the Initial Proposals, it is our understanding that Ofgem is opposed to the application of such charges. The price caps have been calculated using assets lives that assume no early removal and a low risk cost of capital. This approach is acceptable only providing that termination charges are allowed to mitigate the risk, and associated costs, of early removal. If termination charges are not to be allowed then a significantly higher cost of capital would be required in the metering price control to reflect a much higher risk.

### **Meter Operation (MOp)**

- 1.11.4 Our previous consultation responses have stated our support for a revenue cap. However we do not agree that the number of meter points is the appropriate revenue driver and continue to believe that the number of meter changes remains most appropriate.
- 1.11.5 We are concerned that no indicative proposals for MOp services have been provided by Ofgem given the volume of data that has been submitted. It is important that indicative proposals are provided as soon as possible.

### *Basic Services*

- 1.11.6 We support the principles outlined by Ofgem in relation to the provision of basic services and agree with the definition provided by Ofgem.



## **One Way Door**

1.11.7 We agree with Ofgem's proposal to modify the obligation for the provision of metering services so that it does not apply to suppliers in relation to metering points at which they have decided to take services from other metering service providers.

## **Long Term Switch-Off**

1.11.8 We agree with Ofgem's proposal to remove the licence obligations in respect of the provision of new metering assets and services. We support that obligations should continue in respect of existing meters, however, we seek clarification that where an existing meter is removed at a meter point there will be no obligation to replace it. In addition we believe that it is fundamental that there is sufficient competition in the metering market for these proposals to successfully achieve their aims.

## ***1.12 DEVELOPING REGULATORY IMPACT ASSESSMENTS***

1.12.1 Our high level comments in relation to Appendix 6 of the Initial Proposals, entitled "Developing Regulatory Impact Assessments" are set out below:

- the costs of under-investment should be taken into account given the cuts in investment plans proposed by Ofgem and the penalties imposed by the 'sliding scale' for expenditure in excess of the allowance;
- proper account does not appear to have been taken of the requirements of customers in terms of quality improvements and their willingness to pay for such improvements; and
- the increased risk to companies arising from the proposed capital restrictions and the very challenging incentive regime must be recognised.





### **1.13 WHEELING CHARGES**

- 1.13.1 Our response to the March policy document supported Ofgem's proposal to correct a significant anomaly in the current regulatory regime by allowing charges for energy 'wheeled' across the network of another distribution company to be treated as full pass-through. This is an issue for SP Manweb where wheeling charges of approximately £1m per annum are incurred.
- 1.13.2 It is not clear from the Initial Proposals document or from the associated financial model that revenue has been allowed to cover these costs. If no such revenue has been allowed then this should be corrected in the September update. In addition, it is important for transparency that the revenue associated with these costs is explicitly identified in a separate line in the financial model.
- 1.13.3 Wheeling charges have not been funded in the current price control. Our previous consultation responses have stated that these costs should be funded in the next price control. This remains our position and we urge Ofgem to include the associated revenue in its September update.



## SECTION 2: QUALITY OF SERVICE AND OTHER OUTPUTS

### 2.1 SUMMARY OF POSITION

Our current position on the various issues associated with this area of work is summarised below:

- the current proposals penalise SP Manweb for its frontier performance in terms of Customers Interrupted (CI) by setting an extremely onerous target that provides no scope for out-performance or reward;
- the frontier performance of SP Manweb in terms of Customers Interrupted (CI) should be recognised by the provision of an appropriate revenue allowance or by a less onerous target than currently proposed;
- the current level of CI performance in SP Manweb has been delivered through substantial expenditure and management effort on improvement initiatives over a number of years;
- additional capital expenditure of £97m, in line with our FBPQ Base Case requirements, is needed to enable us to maintain current levels of performance;
- further additional capital expenditure of £32m is required, as identified in our DNO alternative submission, to fund improvements in quality of supply for worst served customers and communities;
- insufficient capital and operating expenditure has been allowed to enable us to meet our quality of supply targets;
- the proposals do not appear to recognise the expectations of our customers in terms of improvements in quality of supply or their willingness to pay for such improvements; and
- we do not believe that there is any justification for the significant increase in the financial exposure of companies proposed by Ofgem given the background of cuts in our investment plans and challenging efficiency targets.



## 2.2 *SP MANWEB CI PERFORMANCE*

### **Performance and Target Relative to Industry**

- 2.2.1 SP Manweb is a frontier performer in terms of CI with current performance at 70% of its performance benchmark.<sup>1</sup> This level of performance has been delivered through significant management effort and expenditure over a number of years. In line with Ofgem's policy of setting targets according to the more onerous of current performance or benchmark performance, SP Manweb has been set an extremely onerous target relative to the rest of the industry.
- 2.2.2 This target, combined with zero allowance to fund improvements and proposed cuts in our Base Case investment plans, removes any opportunity for out-performance and results in a high probability of performance penalties. Table 2.1 overleaf shows the targets proposed by Ofgem for the industry relative to the respective performance benchmarks.
- 2.2.3 It can be seen from table 2.1 that the SP Manweb target is extremely onerous relative to the rest of the industry. Indeed it should be noted that SP Manweb has achieved this level of performance on only occasion and only then after an adjustment to remove 7.92 CI to reflect the impact of the storms of October 2002.
- 2.2.4 Under the current proposals, given the performance of SP Manweb relative to the industry, it can be seen from table 2.1 that it is possible for SP Manweb to out-perform the rest of the industry relative to its benchmark yet incur a penalty. This is clearly a perverse aspect of the current proposals.

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<sup>1</sup> Performance benchmarks were built up by Ofgem using disaggregated performance data and reflect equal performance for each DNO after making allowance for differing topographic factors.



Customers Interrupted	Benchmark	2010 Target	Target/Benchmark
SP Manweb	66	46	70%
EDF - LPN	46	36	78%
SSE - HE	119	102	86%
UU	64	57	89%
CE - NEDL	84	76	90%
SP Distribution	66	61	92%
WPD - S. West	94	88	94%
CE - YEDL	71	68	96%
CN - East Mid	81	81	100%
WPD - S. Wales	98	102	104%
CN - Midlands	103	106	103%
SSE - South.	84	89	106%
EDF - EPN	81	87	107%
EDF - SPN	75	83	111%
Average	-	-	95%

Table 2.1: Industry CI Performance

### Appropriate Recognition of Frontier Performance

2.2.5 In view of Ofgem's proposals to reward frontier performance, it is appropriate that the frontier CI performance of SP Manweb is recognised. This can be achieved by either:

- providing a revenue allowance commensurate with frontier performance;
- or
- setting a less onerous target incorporating an element of 'stretch' from the performance benchmark.



2.2.6 The provision of an appropriate revenue allowance for companies, such as SP Manweb, that accept a target that is more onerous than the upper quartile benchmark is consistent with the precedent that has been established in respect of the frontier CML performance of WPD. In line with the calculation applied to WPD in respect of CML, the revenue allowance for each year should be calculated as the difference between the upper quartile benchmark and the actual target, multiplied by the incentive rate. The upper quartile benchmark for each company, relative to the current Ofgem benchmark and to the proposed target, is shown in table 2.2 below. Under this approach only two companies, SP Manweb and SSE Hydro, would be eligible for a reward based on their current performance.

	<b>Ofgem Benchmark</b>	<b>U.Q. Benchmark</b>	<b>Initial Proposals Target</b>
<b>Manweb</b>	66.4	56.5	46.0
<b>Hydro</b>	119.2	105.6	102.0
<b>LPN</b>	46.3	35.9	36.0
<b>SWest</b>	94.1	85.7	88.0
<b>UU</b>	64.5	52.6	57.0
<b>YEDL</b>	70.8	61.7	68.0
<b>ScotP</b>	65.9	54.4	61.0
<b>NEDL</b>	84.0	68.1	76.0
<b>SWales</b>	98.3	89.6	102.0
<b>EME</b>	81.2	68.0	81.0
<b>Southern</b>	84.3	70.2	89.0
<b>EPN</b>	81.1	66.7	87.0
<b>SPN</b>	75.3	60.6	83.0
<b>Aquila</b>	102.6	81.2	106.0

**Table 2.2: CI Performance Relative to Upper Quartile Benchmark**

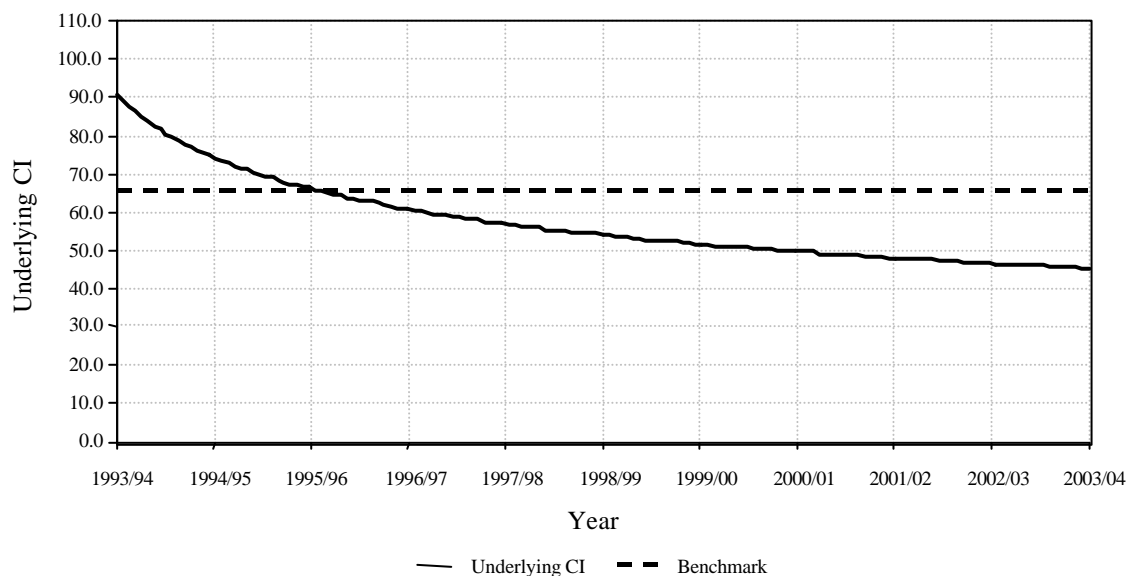
2.2.7 As far as a less onerous target is concerned, we consider that a target of 54.9 CI would be appropriate. This represents upper quartile in 2009/10 and is 83% of the Ofgem benchmark, considerably more onerous than the industry average target to benchmark figure of 95%.

**Historical CI Performance**

2.2.8 The performance of SP Manweb in terms of CI has improved significantly over a number of years as a result of substantial expenditure and management effort. Figure 2.1 below shows that performance improvements since 1993/94 have halved the underlying CIs. The view that the current level of CI performance has simply been inherited is therefore incorrect.

2.2.9 The initiatives that have delivered this level of performance include:

- the decision to retain the interconnected urban network following the acquisition of Manweb;
- leading the industry in the use of outage free working and the use of mobile generators;
- pioneering the use of enhanced overhead line protection; and
- early adoption, relative to the industry, of network remote control and automation.



**Figure 2.1: Underlying<sup>2</sup> CI Performance Trend - SP Manweb**

<sup>2</sup> Underlying CI excludes the impact of storms.



## 2.3 ***REVENUE EXPOSURE***

2.3.1 We agree with Ofgem that it is appropriate for the overall revenue exposure of companies to quality of service incentive mechanisms to be capped. However we believe that the proposed cap of 4% is excessive when considered against a background where:

- investment plans have, in general, been cut;
- challenging efficiency targets have been set; and
- revenue exposure in other areas such as losses and distributed generation has been increased.

2.3.2 If the level of exposure is to be increased then it is very important that targets are realistic and achievable, offering equal opportunity for rewards and penalties.

2.3.3 We note that Ofgem is proposing that the IIP incentive scheme should be symmetrical around the performance target. We fully support this principle but would comment that, in order to be truly symmetrical, an incentive regime must provide an equal probability of reward and penalty. Under the regime currently proposed by Ofgem, the probability of incurring a penalty is greater than the probability of receiving a reward due to the challenging targets and the exposure to the adverse impact of events that are completely outwith the control of companies such as those relating to weather.

2.3.4 This asymmetry should be addressed when setting the allowed cost of capital by taking account of the resultant negative 'skewing' of return and by the provision of capex and opex allowances consistent with the required performance level. On the issue of cost of capital, it is widely recognised that the Capital Asset Pricing Model (CAPM) under estimates the required rate of return because it ignores the negative skewing caused by incentive regimes. The allowed return should therefore be set towards the upper-end of the range, rather than simply at the mid-point, to allow for this under-estimate.



## 2.4 *CUSTOMER COMPENSATION*

### **Severe Weather Standard**

2.4.1 We support Ofgem's move to introduce a licence condition to separate the standards for supply restoration under 'normal' & 'severe' weather conditions providing that there is no overlap in application. We understand that payments to customers cannot be enforced via a licence condition unless explicitly authorised by the relevant statute, in this case the Electricity Act (as amended).

### **Semi-Automatic Payments**

2.4.1 We support the proposals for the introduction of semi-automatic GS2 payments during 'normal' weather conditions as long as an appropriate allowance is provided for the level of payments that would be made by an efficient company. The Initial Proposals do not provide any allowance for such costs. We estimate that an allowance of approximately £100k per annum in SP Distribution and £60k per annum in SP Manweb is required.

2.4.2 It is unrealistic to expect companies to identify and make individual contact with all of the customers impacted by severe weather events. We therefore propose that under such circumstances the automatic payment regime is replaced with a requirement to actively publicise the compensation regime applicable to a particular event.

### **Route for Payment to Customers**

2.4.3 We agree with Ofgem that companies should have the option of making payments directly to customers.

### **Compensation for Business Customers**

2.4.4 Our previous consultation responses have argued strongly that the GS regime should not introduce discrimination between business and domestic





customers. We therefore fully support Ofgem's decision to retain the existing arrangements applying to business customers.

## **2.5 OVERALL STANDARDS OF PERFORMANCE**

2.5.1 Our previous consultation responses have supported the proposal to replace Overall Standards of Performance with reporting requirements under the relevant Regulatory Instructions and Guidance (RIGs).

## **2.6 STORM ARRANGEMENTS**

2.6.1 We remain of the view that the four-tier storm classification regime proposed by Ofgem is unnecessarily complex. Nevertheless, we believe that the proposals can be made to work at a practical level. Our greatest concern remains that the 2% cap on revenue exposure is excessive for events that are largely outwith the control of companies. We believe that 0.5% is an appropriate figure given the background of cuts in investment plans and challenging efficiency targets but could accept a continuation of the current 1% cap as a compromise.

2.6.2 In addition to the issue of revenue exposure, we are concerned that the proposed threshold for 'very large events' of 50% of customers on mixed or overhead circuits is too high. We have experienced a number of major events in the last fifteen years and none of these have come close to reaching this proposed threshold. Based on our experience, we propose that this threshold be set at 25%.

2.6.3 The proposed annual allowances of £1.6m for SP Distribution and £1.2m for SP Manweb are insufficient to cover the expected costs of customer compensation and the cost of fault repairs. Our estimates indicate that these allowances need to be increased by around 50% to £2.4m and £1.8m respectively.



## 2.7 *INTERRUPTIONS (IIP) INCENTIVE*

2.7.1 Our previous consultation responses have emphasised the importance of ensuring that adequate funding is provided to deliver performance levels expected by customers. Discussions with our customers and their representatives indicate a strong expectation for improvements in quality of supply and a willingness to pay. As previously stated, we are disappointed that the Initial Proposals provide insufficient funding for us to meet these reasonable expectations.

2.7.2 Ofgem's customer survey confirms that customers are willing to pay significant amounts for a reduction in the frequency of power interruptions and an improvement in network resilience. Ofgem appears to have used this as a justification for increasing the amount of revenue exposed to the IIP incentive but has not, in our view, taken sufficient account of this point when setting expenditure allowances.

### **Target Setting**

2.7.3 Our specific concerns in relation to the CI target for SP Manweb are set out in Section 2.2 of this response document.

2.7.4 We believe that the data used to set the targets included in the Initial Proposals is out of date. For example, Ofgem's recent determination confirmed SP Manweb's performance in 2002/03 to be 42.55 CI and 56.39 CML rather than the 41 CI and 53 CML shown in tables 4.2 and 4.3 of Ofgem's document.

### *CML Targets*

2.7.5 The CML targets are calculated using actual CI multiplied by upper quartile CML per CI (the average interruption duration experienced by each customer impacted). This is not appropriate, as there is an inverse relationship between these two parameters.



- 2.7.6 That is, the average duration will be lowest when the number of customer interruptions are highest. This is because post-fault switching can typically restore significant numbers of customers relatively quickly when the number of customers interrupted is highest.
- 2.7.7 The result is extremely onerous CML targets, particularly for those companies that are leading in terms of CI performance. The solution is to set CML targets using the benchmark level of CI multiplied by the national average duration (CI per CML). This would result in more realistic targets. In addition it may be appropriate to include an improvement of 0.5% to 1% per annum from these targets.
- 2.7.8 If Ofgem choose to retain the proposed CML targets then the revenue allowances must be increased from those currently proposed. In line with the Quality of Supply Scenario submitted as part of our FBPOs, we believe that an approach comprising both operational improvements and extension of remote control facilities will be required. We estimate that following expenditure would be required over the period of the next price control if the targets remain unchanged:
- £9m in opex and £16m in capex in SP Distribution; and
  - £6m in opex and £10m in capex for SP Manweb.
- 2.7.9 Ofgem's approach to calculating a proposed allowance to enable companies to meet their CML targets appears to be based on information provided by one unidentified company. This is not appropriate, as Ofgem has not provided any justification as to why it has ignored the submissions made by other companies. Ofgem must give proper consideration to the specific requirements of each company when determining allowances.



### **Rewarding Best Practice Performance**

2.7.10 We recognise that WPD are leading the industry in terms of supply restoration activities and it is not unreasonable for these achievements to be rewarded. However, we believe that the total reward (amounting to around £25m over the period of DPCR4) is disproportionate to WPD's performance relative to that of other companies. We would expect Ofgem to further justify these proposals before they are finalised. In addition, as previously stated, a consistent approach should be applied in respect of CI performance of SP Manweb.

### **Audits & Adjustments for Accuracy**

2.7.11 We do not support the proposal to increase the required level of overall accuracy to 97%, nor do we support the proposal to adjust each company's performance to take into account any inaccuracy identified by the audit. A higher accuracy target is not consistent with the streamlined approach to audits that is currently being proposed by Ofgem. Higher accuracy would require sample estimates that have a higher confidence level leading to larger audit sample sizes and increased costs.

2.7.12 Similarly, the proposal to adjust reported performance to account for any inaccuracy identified by the audit would only be acceptable if the audit sample size were to be increased to achieve a confidence level in excess of 99%. This would further increase costs.

### **Frontier Performance for this Price Control Period**

2.7.13 The current IIP incentive requires achievement of both CI and CML targets in order for a company to be allowed to participate in the reward mechanism. It is a fundamental principle of incentive regulation that incentives should be clearly defined in advance in order to influence the behaviour of companies.



- 2.7.14 However, it has been accepted that the CI and CML targets for 2004/05 were not set on a robust basis and, consequently, provided some companies with more stretching targets than others. It is therefore appropriate that this perverse aspect of the incentive is removed.
- 2.7.15 While Ofgem has recognised this issue, the current proposals do not adequately address it. Under the current proposals, SP Manweb, currently a frontier performer on CI, would be prevented from participating in the CML reward mechanism, if it fails to meet its CI target. This is despite the fact that the SP Manweb CI target is the most onerous of any company when compared to its disaggregated benchmark.
- 2.7.16 In order to remove this perverse aspect of the current incentive, frontier CI performers should be allowed to participate in the CML reward mechanism and frontier CML performers should be allowed to participate in the CI mechanism. We urge Ofgem to give further consideration to this aspect of the Initial Proposals.

## **2.8 *INCENTIVES FOR SPEED & QUALITY OF TELEPHONE RESPONSE***

- 2.8.1 We can accept the proposal to make the telephone incentive a ‘backstop’ type scheme based upon ‘absolute performance’ but do not agree with the proposal to increase the risk exposure to –0.25% of revenue. We believe that the current incentive scheme has been successful in delivering both improvements in the scores achieved by individual companies and a convergence in the range of scores between companies. On this basis we see no reason for Ofgem to increase the risk exposure as this may divert resources from other areas where improvements are required.
- 2.8.2 We have previously commented that the survey can only be claimed to be a true reflection of customers’ views if customers who receive an automated message are included in the survey. We note Ofgem’s intention to broaden the scope of the current incentive to cover automated messages and would comment that this should take place as soon as possible.



2.8.3 However, any changes to the survey questions or the groups of customers surveyed can be expected to impact upon the absolute scores achieved by each company. If the proposed target performance of a score of 4.1, which Ofgem states reflects the current minimum average performance level, is to remain equally challenging following such changes, then the target will need to be modified accordingly.

2.8.4 We note Ofgem's proposals to develop a means of supplementing the existing incentive with an incentive relating to performance during exceptional events. We do not believe that this is necessary as media, shareholder and customer scrutiny during such events already places considerable pressure on companies to perform well.

## **2.9 ENVIRONMENTAL REPORTING**

2.9.1 We continue to believe that it is unnecessary for companies to report environmental performance to Ofgem as this will involve duplication of effort. We note that it is not Ofgem's intention to introduce financial incentives on these outputs for the next price control period. We would add that financial incentives will not be appropriate at any time as this could result in companies being exposed to double jeopardy given that financial penalties can be imposed by other regulatory bodies in this area.

## **2.10 DISCRETIONARY REWARD**

2.10.1 We support Ofgem's proposals in this area.



## **SECTION 3: DISTRIBUTED GENERATION, THE INNOVATION FUNDING INCENTIVE AND REGISTERED POWER ZONES**

### **3.1 SUMMARY OF POSITION**

Our current position on the various issues associated with this area of work is summarised below:

- we remain concerned that companies could be exposed to forecast levels of Distributed Generation (DG) not being achieved or sustained;
- we continue to believe that there are many instances where the most effective and efficient means of facilitating DG will be to carry out advanced deep reinforcement and are disappointed that Ofgem has provided no allowance for such work;
- we do not agree that only schemes in excess of £200/kW and £100,000 should be treated as ‘high cost’ schemes and believe that this will act as a barrier for construction of schemes in the range £50-£200/kW;
- we welcome some of the suggested changes to the proposed availability incentive but continue to have concerns around its detailed implementation; and
- we support Ofgem’s objectives for Innovation Funding Incentives (IFI) and Registered Power Zones (RPZs).

### **3.2 RECOVERY OF INCENTIVE RATE**

3.2.1 We remain concerned that the incentive rate in respect of a particular generator will only apply whilst that generator remains connected to the distribution network. This results in the distribution company being exposed to the risk of forecast levels of generation not being achieved or sustained. We continue to believe that this aspect of the mechanism could undermine the incentive.



3.2.2 Our response to the March consultation emphasised the importance of ensuring that generators are not able to 'game' the system by temporarily declaring their output at zero. Gaming can be avoided by requiring a generator to give up all rights to the connection in order to be deemed to be disconnected i.e. by terminating the connection agreement. We understand from informal discussions that this is Ofgem's intention but would welcome formal confirmation on this.

3.2.3 In addition, our response to the March policy paper stated our view that the incentive rate should apply for as long as a generator remains connected and not just until the asset is fully depreciated. This would avoid occurrence of the situation where a generator connecting in year 10 of an asset's life, has an obligation only to pay the incentive rate for 5 years. Again, we understand from informal discussions that this is Ofgem's intention but would welcome formal confirmation of this.

### **3.3 *UPDATED CONNECTION BOUNDARY***

3.3.1 We agree with Ofgem's proposal that any connection charges received in respect of non-sole use assets should be treated as a capital contribution towards allowed revenue.

### **3.4 *HIGH COST PROJECTS***

3.4.1 We note that Ofgem has now proposed that only those projects in excess of £200/kW and £100,000 should be treated as 'high cost'. Our position is unchanged from our response to the March policy paper and we continue to believe that this will act as a barrier to the construction of schemes in the range of £50-£200/kW. It is not in the interests of generators for Ofgem to limit their flexibility to agree specific charging arrangements for high cost schemes.





### 3.5 ***NETWORK AVAILABILITY INCENTIVE***

3.5.1 While we welcome the constructive dialogue that we have had with Ofgem on this issue we remain concerned about the application of a network availability incentive. In particular we continue to believe that insufficient account has been taken of issues around the standards to which distribution networks are designed and the tendency for generators to opt for the least cost connection. In summary our current position is as follows:

- the default duration within the incentive regime for network interruptions should be greater than zero; and
- the incentive rate should not be applicable to faults or planned interruptions on sole use connection assets where the generator has opted for a single circuit connection;

3.5.2 We agree with Ofgem that the incentive rate should reflect the network availability associated with normal design standards and that the arrangements should be flexible enough to accommodate varying degrees of connection firmness, as agreed between the distribution company and the generator. However, we believe that the use of a default interruption duration of zero will make it very difficult for the distribution company to reach agreement with generators on a figure greater than zero. The incentive mechanism should recognise that 100% availability is not appropriate for many connection arrangements by establishing baseline network interruption durations of greater than zero for various types of connection arrangement.

### 3.6 ***TREATMENT OF TAX***

3.6.1 We note that Ofgem is considering how tax will be treated for the purposes of the DG incentive. In our view the treatment of tax should be consistent the main price control and company specific allowances must therefore be applied.



### 3.7 *INNOVATION FUNDING INCENTIVE (IFI)*

3.7.1 Our previous consultation responses have supported Ofgem's objectives for IFI funding, as it is important that companies are enabled and encouraged to seek out new techniques and technologies. We believe that increased levels of R&D expenditure, driven by IFI incentives, will deliver benefits to customers that are not available via current regulatory incentives.

#### **R&D Intensity Cap/Use It Or Lose It**

3.7.2 As stated in previous consultation responses, we agree that the R&D intensity cap of 0.5%, on a 'use it or lose it' basis, is reasonable.

#### **IFI Internal Budget**

3.7.3 As indicated in our response to Ofgem's March policy paper, the focus should be on ensuring that customer benefits can be delivered via IFI rather than on whether or not they are delivered through internal or external spend. Our experience indicates that R&D projects require a significant input from internal resources and we believe that a cap on the level of internal spend will reduce the benefits that can be delivered. We welcome the scope for the cap to be increased to 20% but continue to believe that it is not appropriate for any cap to be applied. In our view, a reasonable approach would be for companies to include justification for the level of internal spend when submitting IFI internal budgets.

#### **Carry Forward**

3.7.4 We note Ofgem's proposals that up to 50% of the eligible IFI expenditure in any year can be carried forward to the next year. We are generally in agreement with this proposal.



## **Good Practice Guide**

3.7.5 Our previous consultation responses have stated our support for the introduction of a good practice guide.

## **Implementation Date**

3.7.6 We welcome the proposals from Ofgem that IFI projects could be initiated from 1st October this year. We have previously confirmed our intention to make use of this mechanism.

## **3.8 REGISTERED POWER ZONES (RPZ)**

3.8.1 As stated in previous consultation responses, we support Ofgem's stated objectives for RPZs.

3.8.2 We welcome the increased incentive rate and confirmation of a review of the RPZ arrangements in 2007. However, we continue to have concerns that there is no mechanism for funding a 'traditional' solution in the event of the RPZ solution proving unsuccessful.

## **3.9 REPORTING AND INFORMATION REQUIREMENTS (RIGS) AND DRAFT LICENCE MODIFICATIONS FOR THE DG INCENTIVE**

3.9.1 It is important to ensure that the draft licence modifications and the draft RIGs are developed together rather than being considered in isolation.

3.9.2 We are working closely with Ofgem and with the rest of the industry on these issues via the appropriate working groups. We believe that these working groups are the best means of progressing work in this area.



## SECTION 4: COST ASSESSMENT

### 4.1 SUMMARY OF POSITION

Our current position on the various issues associated with this area of work is summarised below:

- we are concerned that the inclusion of total fault costs together with controllable operating costs in the regression analysis could result in under-funding;
- we recognise the significant effort that has been devoted to the production of a high-level set of normalised costs but continue to believe that like for like comparison is very difficult and that, as a result, less weight should be given to the output of this analysis;
- in our view, an ongoing efficiency target of 2% per annum from the upper quartile position overstates the potential for future efficiency;
- an efficiency improvement target of 2% per annum from 2005 combined with the average benchmark is more appropriate, balancing the need to set stretching targets with the various issues relating to data consistency, volatility and comparability.
- no adjustments should be made to the RAVs of SP Distribution and SP Manweb in respect of overhead allocation as our current allocation policies are broadly in line with those applied by the DPCR3 frontier companies in 1997/98 and hence with the basis on which the allowances were set;
- we believe that the proposed capital expenditure allowances are insufficient to enable us to secure the long-term safety, reliability and sustainability of the electricity infrastructure;
- the application of a rolling mechanism, such as the sliding scale mechanism to expenditure in excess of the allowance provides a strong disincentive to undertake necessary investment; and
- such a mechanism should only be applied to capex efficiencies and only then when a robust benchmark is available.



## **4.2 OVERALL PROCESS**

4.2.1 We agree with Ofgem that the process of collecting and verifying data has been extremely onerous and resource intensive for all parties. From our perspective we have endeavoured to engage constructively with Ofgem at all stages in the process and welcome the constructive approach that has been adopted by Ofgem.

4.2.2 We are however of the view that insufficient emphasis has been placed on parts of the detailed submissions that we have made to Ofgem. This is particularly the case in the area of capital expenditure where we have become increasingly concerned that the process that has been followed for assessment of future requirements places insufficient emphasis on our business plans and the information provided during the associated Ofgem visits.

## **4.3 OPERATING COSTS**

4.3.1 Our main issues on the assessment of operating costs are as follows:

- while a number of issues remain, we recognise the need for a pragmatic approach;
- we are concerned that the inclusion of fault costs in the opex regression could result in under-funding;
- our most significant concern relates to the combination of the upper quartile benchmark with 2% per annum ongoing efficiency improvement which, in our view, over-states the potential for future efficiency gains; and
- an efficiency improvement target of 2% per annum from 2005 combined with the average benchmark is more appropriate, balancing the need to set stretching targets with the various issues relating to data consistency, volatility and comparability.



### **Inclusion of Fault Costs in Regression Analysis**

4.3.2 We have previously advised Ofgem of our concern relating to the inclusion of fault costs in the regression analysis with controllable operating costs. We have carried out extensive modelling that we believe demonstrates that top-down analysis of fault-costs cannot be satisfactorily achieved. This is due to both the complexity and range of factors that must be considered and the limitations of the data set, in terms of the lack of panel data and the relatively small number of observations.

4.3.3 In our view the inclusion of fault costs significantly undermines Ofgem's ability to apply an efficiency frontier approach to setting allowances, or even an upper quartile approach that references the frontier. To do so could result in under-funding of the essential business function of fault response and repair. This issue is dealt with in more detail in our comments on top-down benchmarking.

### **Normalisation**

4.3.4 We recognise and support the effort that has been undertaken by Ofgem to produce a set of normalised operating costs. We believe that the work that has been carried out so far is an improvement on the work carried out at previous reviews. In addition, we are pleased that a number of principles outlined by us on the issue of adjusting for overhead allocation appear to have been accepted by Ofgem.

4.3.5 However, we had hoped that through the process of developing and producing the Regulatory Accounting Guidelines, DPCR4 would have been characterised by a detailed bottom up analysis of all activity costs, volumes, engineering policies and specifications within repairs and maintenance activities and capital investment expenditure. This does not appear to have been possible for a variety of reasons.



4.3.6 As a result, there has had to be more of an emphasis on high level 'normalised' costs, making like for like comparison very difficult. As set out in our previous consultation responses, we believe that less weight should be given to the results of this analysis because of these difficulties.

### **Overhead Allocation**

4.3.7 As previously stated, we are pleased that a number of principles outlined by us in relation to adjustments for overhead allocation appear to have been accepted by Ofgem. This is an important issue for the review, and we welcome the transparent approach that has been adopted.

### **Margins**

4.3.8 We believe that an undue level of consideration has been given to certain areas within normalisation, in particular to inter-company margins. It is our view that top-down benchmarking will pick up any inefficiency as a result of margins and it is therefore not necessary to remove these before assessing efficiency.

### **Top-Down Benchmarking**

4.3.9 As stated previously, our most significant issue with the top-down benchmarking carried out by Ofgem relates to the inclusion of all fault repair and replacement costs. We do not accept Ofgem's position that this provides a more practical and robust means of comparison. Adding total fault expenditure to controllable opex does improve the correlation between these costs and the chosen composite scale variable (CSV). However, this should not be used as a justification for inclusion of total fault costs in the regression analysis. This improved correlation is as likely to be a consequence of widening the scope of the costs for consideration than any relationship between opex and fault expenditure. Our analysis indicates that removing capex fault costs from the regression provides an equally good correlation to that including total fault costs.



## Drivers of Fault Costs

4.3.10 There are a number of factors that will not be captured by the CSV that influence the volume and value of fault-related activity. These include:

- mix of rural and urban areas;
- mix of overhead and underground network (ignoring LPN the percentage of underground network varies between 30% and 80%);
- fault distribution by asset type;
- reliability (faults per 100 km) in the benchmark year; and
- historical replacement expenditure.

4.3.11 These factors will not be captured by the current regression analysis. This view is supported by our own analysis of the available information on total fault costs which shows an extremely low correlation (around 50%) between total fault costs, excluding margins, and the CSV. In addition, our analysis indicates that some companies may have categorised costs relating to fault replacement activities as planned replacement expenditure. Both of these issues would need to be resolved in order for a robust regression analysis of fault costs to be carried out.

## Improving the Analysis

4.3.12 We have carried out substantial analysis in an attempt to improve the CSV. However, we have come to the conclusion that this cannot be satisfactorily achieved. This is because of both the complexity and range of the factors that need to be taken account of and the limitations of the data set, in terms of the lack of panel data and relatively small number of observations.

4.3.13 Given the limitations in the analysis that we have identified, it is our view that the inclusion of fault costs significantly undermines Ofgem's ability to apply an upper quartile approach that references the frontier. We believe that the most robust analysis of fault costs will involve a detailed bottom-up analysis, taking account of unit repair costs across different asset types and





then setting company-specific allowances based on each company's network characteristics. However, given that this may not be possible at this late stage in the review process, an acceptable solution that does not compromise operational integrity, can be achieved if the average line of the regression is used as the benchmark for setting allowances.

### **Double Counting Efficiencies**

4.3.14 We note the various pieces of work that have been carried out in the cost assessment workstream such as Ofgem's top-down analysis, the Ernst and Young analysis of operational efficiency and CEPA's work on Total Factor Productivity. We are concerned that there is scope for 'double dipping' of efficiencies and for the setting of unattainable targets.

### **Total Opex Allowance**

4.3.15 In its recent draft proposals for price limits, Ofwat has recognised that efficiencies will be more difficult to achieve than in the past and has taken account of this by attempting to strike a balance between the 'carrots' and 'sticks'. The 'carrots' take the form of encouragement and additional rewards for outperforming cost assumptions, while the 'sticks' take the form of assumptions on efficiency savings that are included in price limits.

4.3.16 We believe that Ofgem's current proposals do not strike the appropriate balance. In particular, the combination of 2% ongoing efficiency with the upper quartile benchmark results in extremely challenging opex targets that over-state the potential for future efficiencies. We would urge Ofgem to give further consideration to this aspect the Initial Proposals

4.3.17 We have previously stated our concerns with the use of an upper quartile benchmark arising from issues around data consistency and comparability. In addition we have concerns with the basis for the 2% ongoing efficiency target because of significant problems with the CEPA study of Total Factor Productivity (TFP) carried out for Ofgem.



4.3.18 Balancing all of these issues with the need to set stretching efficiency targets, we believe that an acceptable solution would be an efficiency improvement target of 2% per annum from 2005 based on the average benchmark.

#### **4.4 HISTORICAL CAPEX AND RAV ROLL-FORWARD**

In summary our main issues are as follows:

- no adjustments should be made to the RAVs of SP Distribution and SP Manweb in respect of overhead allocation as our current allocation policies are broadly in line with those applied by the DPCR3 frontier companies in 1997/98;
- insufficient allowance was provided for non-operational expenditure at DPCR3 and any excess expenditure should be added to the RAV; and
- expenditure during the current price control period on post-fault asset replacement is capital expenditure that must be included in the RAV.

#### **Methodology**

4.4.1 We have been engaged in constructive discussions with Ofgem on the RAV roll-forward since October 2003. We note the initial nature of the RAV adjustments proposed by Ofgem and agree that further work is required in this area. We will continue to work closely with Ofgem on this issue to ensure that a satisfactory conclusion can be reached.

4.4.2 The overriding principle that must be applied is that the RAV roll-forward should align with the basis on which DPCR3 allowances were set i.e. on the basis of the policies adopted by the frontier companies in 1997/98. We would emphasise that the policies applied by non-frontier companies in 1997/98 are not relevant.



### **Non-Operational Capex**

4.4.3 As Ofgem has pointed out, a figure of £3m was allowed in operating costs for non-operational capex at DPCR3. On this basis Ofgem has excluded all non-operational capex from the RAV. However this allowance did not provide sufficient funding particularly in the area of IT. This under-funding in DPCR3 should be addressed by the inclusion in the RAV of necessary and efficient expenditure in excess of the allowance.

### **Overhead Allocation**

4.4.4 We note the comment in Ofgem's paper that since DPCR3 there has been a marked change in the extent to which some companies capitalise overheads. This is unsurprising as allowances were set in line with the policies applied by the frontier companies in 1997/98 and non-frontier companies had little option but to 'normalise' costs in line with this basis in order to 'catch up'.

4.4.5 We have proposed to Ofgem that a constant percentage uplift, based on the figures for the DPCR3 frontier companies should be used to test the RAV additions for all companies. Only overhead in excess of this 'yardstick' should be disallowed.

4.4.6 Our analysis of the available data indicates that the overhead allocation policies for SP Distribution and SP Manweb are broadly in line with those of the DPCR3 frontier companies in 1997/98. There should therefore be no adjustment to the RAV for our companies.

### **Post-Fault Asset Replacement**

4.4.7 We reiterate the position set out in our previous consultation responses that the costs of post-fault asset replacement during the current price control period must, like all other capital expenditure, be included in the RAV. We have made a number of detailed submissions to Ofgem on this issue and believe that we have conclusively proved our case.



#### 4.5 *FUTURE CAPITAL EXPENDITURE*

- 4.5.1 Our previous consultation responses have emphasised the need for increased levels of network investment. Although Ofgem has allowed increases from DPCR3 levels, and is proposing an additional allowance via the sliding scale mechanism of £79m over and above the level assessed by PB Power, the proposed allowances fall short of our requirements. In our view, the allowances across our two licences need to be increased by £193m over the price control period to meet the essential requirements set out in our Base Case and DNO Alternative submissions.
- 4.5.2 Our investment requirements are derived from robust Asset Risk Management processes, assessed by Ofgem as leading class, focused on the specific requirements of our licensed networks. Ofgem's current 'one size fits all' approach, with limited technical input from external consultants, is no substitute for these processes.
- 4.5.3 We are currently engaged in discussions with Ofgem and with PB Power on various issues related to future capital expenditure with a view to reconciling and resolving the differences between our forecast requirements and the PB Power benchmark assessment. It is particularly important that these differences are adequately resolved as the application of the 'sliding scale' rolling mechanism to expenditure in excess of the allowance will mean that we will not spend in excess of the allowance in DPCR4.



4.5.4 Detailed comments regarding the PB Power assessment are included in our recent response to the PB Power's June 2004 report. Our main issues are summarised as follows:

- our Base Case FBPQ submissions set out the minimum expenditure required to maintain the 'status quo' in terms of network performance and resilience and an unacceptable deterioration will occur if the expenditure cuts proposed by Ofgem are implemented;
- the process that has been followed to assess future investment requirements has placed insufficient emphasis on our asset strategy and business plans and on the detailed information provided during the Ofgem visits;
- the PB Power benchmark assessment is based on a short-term approach to investment requirements and, consequently, does not allow sufficient investment to secure the sustainability of the network in the medium to long-term;
- the proposed allowance for load-related expenditure, is insufficient to meet the requirements of our customers or to meet our legal and licence obligations, such as compliance with network security standards;
- the full impact of any shortfall from our Base Case requirements would be borne by the non-load related investment programme, resulting in deep cuts in our programmes for medium and high criticality assets and significant risks to safety and network integrity;
- no allowance has been provided for the expenditure identified in our DNO Alternative submission to improve the supply quality experienced by worst served customers and communities;
- the application of a rolling mechanism, such as the sliding scale mechanism, to expenditure in excess of the allowance provides a strong disincentive to undertake necessary investment;
- such a mechanism should only be applied to capex efficiencies and only then when a robust benchmark is available; and
- PB Power's approach to modelling and the associated benchmark is not sufficiently robust to be used as the baseline for the sliding scale mechanism.



## Process of Assessing Future Capex

- 4.5.5 The PB Power modelling was originally intended as a means of providing a high level check on the investment programmes submitted by companies. It is not sufficiently robust to be used by Ofgem as the primary basis for setting allowances.
- 4.5.6 During the HBPQ and FBPQ visits, we presented the detailed business case for our submissions and provided a detailed explanation of our Asset Strategy and the Asset Risk Management (ARM) processes that underpin our submissions. We have also provided comprehensive answers to the questions raised by Ofgem's and PB Power throughout the process.
- 4.5.7 However, as the process progressed, we became increasingly concerned that insufficient emphasis was being placed on our business plans and on the information provided during the visits. Of particular concern was the apparent lack of continuity in representation by Ofgem and PB Power technical staff. For example, different technical representatives from Ofgem attended each of the visits and the subsequent meetings arranged to discuss the output from PB Power's work.
- 4.5.8 We believe that this has led to several misunderstandings and, as a consequence, significant parts of our submission have not been allowed in the Initial Proposals. A particular example relates to the lack of understanding of the unique requirements of the interconnected urban network of SP Manweb. This has resulted in an under-funding of capital investment requirements through the use of unit costs that are appropriate to 'conventional' networks.

### *Modelling of Load Related Expenditure*

- 4.5.9 Our expenditure requirements are derived from a bottom up approach based on robust analysis, market information and on a detailed knowledge of our licensed areas. Our reinforcement forecasts are based on the output of



network reviews and on a risk-based prioritisation methodology giving a sound bottom up estimate of the expenditure required to meet our legal and licence obligations.

- 4.5.10 We note from table 6.8 that, as the PB Power model was unable to produce a credible output, our forecasts for load related expenditure have been reduced in line with Ofgem's view of likely DPCR3 outturn levels. As previously stated, we believe that this level of allowance is not sufficient to enable us to meet our legal and licence obligations and the requirements of our customers in DPCR4.

#### *Modelling Non-Load Related Expenditure*

- 4.5.11 Ofgem appears to have relied heavily on the modelling outputs from PB Power's analysis in developing its Initial Proposals for non-load related expenditure. The information provided in the PB Power report is not sufficiently detailed to allow us to fully understand the proposed reduction. There are also inconsistencies in the data between different sections of the report. This makes our task of identifying differences and providing an assessment of the risk impact on the network extremely difficult.



4.5.12 As set out in previous correspondence and discussions with Ofgem, our main concerns with the modelling of this expenditure are:

- we do not believe that a thorough validation of the underlying unit cost estimates has been undertaken;
- justifiable variations in unit costs between companies arising from, for example, the need to replace the different designs of switchgear that are necessary to support each company's individual network design philosophy, do not appear to have been taken into account;
- the PB Power model relies solely on age related replacement profiles whereas our modelling applies sophisticated risk assessment techniques focused on the specific requirements of our networks;
- allowed expenditure for operational control systems has been based on the industry average, ignoring the cyclical nature of such expenditure and effectively penalising our companies for having invested in SCADA at an earlier stage than others;
- no account appears to have been taken of the short life-cycle of substation ancillary equipment, such as batteries and protection systems, and the need to replace significant volumes of such equipment regardless of the age and condition of the main switchgear assets; and
- it is not clear how PB Power have reviewed 'non-age' related activities such as substation civil repairs and we do not believe that the Initial Proposals provide adequate allowance in this area.





## Impact of the Reductions Proposed by Ofgem

4.5.13 The allowances contained in the Initial Proposals are £193m less than what we believe is required to meet the essential requirements of our networks and our customers. A breakdown of this shortfall is provided below.

- **Allowed capex of £97m less than our Base Case requirements:**
  - our Base Case contained the minimum expenditure necessary to maintain network performance and resilience;
  - we consider this reduction to be inappropriate against a background of increased exposure to performance incentives and more onerous targets; and
  - the full impact of the proposed cuts would be borne in full by our non-load related investment programme resulting in a decline in overall network performance and an unacceptable deterioration in critical network assets.
  
- **No allowance provided for the £32m of expenditure proposed in our DNO Alternative to improve the supply quality of worst served customers and communities:**
  - Ofgem's focus on 'global' performance ignores the needs of worst served customers;
  - proposals for £32m of targeted expenditure were contained in our DNO Alternative submission;
  - we believe that this should be funded through an incentive scheme based on targeted performance improvement and have made specific proposals to Ofgem.
  
- **No allowance provided for the £40m of expenditure required to comply with our obligations under the Electricity Supply Quality and Continuity Regulations (ESQCR):**
  - full funding is required to ensure public safety and compliance with our legal obligations.



- **No allowance provided for the £24m of load-related expenditure required in SP Manweb for the mid-Wales reinforcement:**
  - this scheme is necessary to accommodate underlying demand growth and significant levels of distributed generation (DG); and
  - we understand that the advancement costs have been allowed in our DG costs and, consequently, the main scheme costs require to be funded in the Base Case via load-related expenditure.

4.5.14 As previously discussed, since we will have to spend in line with our plans for load-related expenditure in order to meet our legal and licence obligations, the full impact of any shortfall from our Base Case requirements would be borne by the non-load related investment programme. This would result in deep cuts in our investment programmes for medium and high criticality assets.

4.5.15 Examples of areas of our investment programme that would suffer deep cuts if we were to spend in line with the PB Power benchmark, include 11kV switchgear replacement in SP Manweb and 11kV underground cable replacement in both licensees. Reductions in both areas could result in deterioration in network performance and unnecessary customer interruptions. Moreover, the potential safety implications of significant reductions in our switchgear programme are particularly concerning. Failures in oil-filled switchgear are usually disruptive in nature resulting in fire and expulsion of oil.

4.5.16 The impact of any proposed cuts would be mitigated somewhat by our approach to Asset Risk Management. Any cuts would be prioritised to minimise the impact on medium and high criticality assets. Nevertheless, the extent of the cuts proposed is such that we would be unable to carry out the full programme of works that we believe is necessary on medium and high criticality assets. This would result in a detrimental impact on customers in terms of a decline in overall network performance together with an unacceptable deterioration in the condition of critical assets.



## Sliding Scale Mechanism

4.5.17 We note Ofgem's proposals for a sliding scale mechanism and our comments on the mechanism are summarised as follows:

- the application of a rolling mechanism, such as the sliding scale mechanism, to expenditure in excess of the allowance provides a strong disincentive to undertake necessary investment not covered by the allowance;
- if this incentive is applied in this manner then we will not spend in excess of the allowance;
- such a mechanism should only be applied to capex efficiencies and only then when a robust benchmark is available;
- we do not believe that the current PB Power benchmark is sufficiently robust for SP Distribution and SP Manweb;
- it will not be appropriate for such a mechanism to be introduced unless concerns around the benchmark can be satisfactorily resolved; and
- it appears that the incentive is unduly biased against those companies with higher capex requirements.

4.5.18 Paragraph 6.94 of the Initial Proposals documents refers to companies 'choosing' a higher or lower level of allowance. It must be noted that this mechanism has been proposed after companies have submitted their investment programmes and after Ofgem has presented its range on cost of capital. Companies therefore do not have any choice as to which sliding scale band is applied.



- 4.5.19 The PB Power benchmark cannot be used as a substitute for our robust Asset Risk Management processes and consequently should not be used, as Ofgem has done, as the primary basis for setting allowances. Reliance on the PB Power Benchmark has a significant detrimental on companies with requirements in excess of the benchmark by:
- providing an allowance less than the company believes is required and therefore increasing the likelihood of the company having to incur expenditure in excess of the allowance; and
  - by penalising such expenditure.
- 4.5.20 The capex allowance should not be seen as the maximum expenditure that can be incurred. As set out in Section 2 of this response document, the application of a rolling mechanism, such as the sliding scale mechanism, to expenditure in excess of the allowance provides a strong disincentive to undertake necessary investment not covered by the allowance. Such an incentive is not in the interests of customers.
- 4.5.21 The combination of lower marginal incentive rate and no additional revenue seems to unduly bias the incentive against companies deemed to be high spenders. The differential between the 'low' and 'high' incentive bands should be reduced by increasing the marginal incentive rate for those companies categorised as high spenders.

## **SECTION 5: FINANCIAL ISSUES**

### **5.1 SUMMARY OF POSITION**

Our current position on the various issues associated with this area of work is summarised below:

- there is strong evidence to support an allowed cost of capital of at least 5.1% fully post-tax, consistent with the figure recently proposed for the water sector;
- there is a clear City view that the cost of capital should not be less than that allowed in water because the risks in the electricity distribution sector are of a similar or higher level than in water;
- an early conclusion on cost of capital is required to enable companies to properly assess the cash flows of their businesses;
- funding should be provided for early retirement deficiency costs as the provision of enhanced pension benefits on early retirement has delivered real and enduring benefits to customers in terms of cost reductions;
- we welcome confirmation that the depreciation profiles of those companies facing the ‘cliff-edge’ at this price review will be smoothed in a similar manner to that applied to the companies that faced the issue at DPCR3; and
- a clear regulatory precedent has now been established for dealing with the cliff-edge in this manner when it occurs, and the Scottish companies must be treated in a similar manner with no smoothing of depreciation profiles prior to the next price control.

### **5.2 COST OF CAPITAL**

5.2.1 We note that Ofgem has used the mid-point of its current range of 4.2% to 5.0% in calculating the price control revenues for the Initial Proposals. As we have pointed out in previous consultation responses, we continue to believe that the mid-point is not appropriate and that the allowed figure should be at or beyond the top-end of Ofgem’s range.



5.2.2 The rationale behind this position is summarised below:

- a figure of 5.1% fully post-tax is consistent with the figure allowed in the water sector;
- there is a clear City expectation that Ofgem's allowed figure should not be less than that allowed in the water sector;
- alternative measures of the cost of equity, such as the Dividend Growth Model (DGM), suggest a figure at the top-end of the range; and
- the Capital Asset Pricing Model (CAPM) under estimates the required rate of return because it ignores the negative 'skewing' caused by incentive regimes.

### **Consistency with Water Sector**

5.2.3 Attached in Appendix 2 of this response document is a report from OXERA that discusses the impact of a number of aspects of the Initial Proposals on the cost of capital. Specifically, in Section 2.1 the report shows that DNOs are of a similar or higher level of risk than water companies. The main reasons for this are:

- DNOs are, on average, expected to invest in proportionally more CAPEX (relative to the RAV) than water companies during the next control period;
- revenues in electricity distribution have a higher exposure to volumes than in water (50% compared to 43%); and
- the levels of risk, in terms of revenue exposure, implicit in Ofgem's Initial Proposals is greater than in the water sector.

5.2.4 Analysis of Ofwat's recent draft proposals and comparison with Ofgem's Initial Proposals indicates that DNOs are, on average, expected to invest in proportionally more CAPEX (relative to the RAV) during the next control period (52% for DNOs compared to 44% in water). This is a substantial change from previous reviews, where environmental, quality and replacement expenditures for water companies substantially outweighed the investment burden on DNOs



- 5.2.5 Risk is also affected by the extent to which revenues are exposed to volumes. For DNOs, tariffs are set such that 50% of revenues are exposed to units distributed. In contrast, in the water sector, OXERA's analysis of June Returns data suggests that, for 2004/05, under 43% of volumes supplied are measured across all users. There is no reason to expect future water demand to be more variable than is the case for electricity so it can be concluded that DNOs are more exposed to volume risk than water companies.
- 5.2.6 Under Ofgem's Initial Proposals the revenue exposure to the various quality of service incentives will be increased to 4%. This is compared to an exposure of -1% in the water sector. In addition, new or revised incentives are being introduced in areas such as losses, distributed generation and capital expenditure further increasing the risk and revenue exposure of companies.
- 5.2.7 As set out elsewhere in this response document, these incentives are asymmetric in nature because of the onerous targets, exposure to weather related events and Ofgem's proposed cuts in investment plans. Both the levels of risk that Ofgem is expecting the DNOs to bear and the asymmetric nature suggest that Ofgem's cost of capital assumption should not be less than Ofwat's.

### **City Expectations**

- 5.2.8 It is clear from the city reaction to Ofgem's Initial Proposals that analysts expect an increase from the mid-point of the range to provide equity investors with sufficiently attractive returns over the long term. We also note from our own discussions with analysts and major shareholders that there is clear expectation that the allowed figure will not be less than that allowed in the water sector.



5.2.9 This view is supported by a survey of investors undertaken on behalf of Water UK (2004). This survey found that nearly 70% of respondents thought the water industry was on a par with or less risky than NGT and the DNOs. We would stress that the potential for investors to perceive that DNOs offer a materially worse risk-adjusted return than water companies places a significant risk on the ability of electricity to finance their businesses.

### **Dividend Growth Model (DGM)**

5.2.10 There is considerable regulatory precedent for using the DGM as a check on the results of the CAPM. The DGM suggests a figure at the top-end of Ofgem's range. For example, the paper submitted by NERA on behalf of EDF estimated the real post-tax cost of equity at over 10%.

### **Impact of Incentive Regimes**

5.2.11 It is well recognised that CAPM under estimates the required rate of return because it ignores the negative 'skewing' caused by incentive regimes. The allowed return should therefore be set at the upper-end of the range, rather than simply at the mid-point, to allow for this under-estimate. This is particularly important given the increased exposure under IIP and the introduction of new incentives for losses and distributed generation. This increased exposure could not have been factored into the cost of capital range included in the March Policy paper.

5.2.12 In addition, it should be noted that estimates of beta for CAPM based on historical analysis will understate the business risk for the DNOs given that there is fundamentally more business risk inherent in the DPCR4 efficiency, capital and incentive regime than there was in the DPCR3 regime.

5.2.13 Both of these points support our position that the cost of capital must be increased from the figure used in the Initial Proposals.





## **Confirmation of Allowed Figure**

5.2.14 We see no reason why it is necessary for Ofgem to wait until the final proposals in November before confirming the figure for the allowed cost of capital. We urge Ofgem to come to a conclusion on this issue in the September update paper, so that we can properly assess the cash flows of our businesses. Without the final figure for the Cost of Capital, it is impossible to see whether any adjustment should be made for companies with financial ratios below test levels.

## **5.3 REGULATORY ASSET VALUE AND DEPRECIATION**

5.3.1 We are pleased that Ofgem has confirmed its treatment of the ‘cliff-edge’ drop in revenue that arises as a result of pre-vesting assets becoming fully depreciated. We are in agreement with the intended approach.

5.3.2 A clear regulatory precedent has now been set for dealing with the cliff-edge when it occurs. Similar treatment must therefore be applied when the cliff-edge occurs for the Scottish companies at the next price control. It would be entirely inappropriate for the Scottish companies to be treated differently from all of the other companies, as suggested in paragraph 7.45 of the Ofgem document, by changing the profile for pre-vesting depreciation at this price control review.

## **5.4 PENSIONS**

### **Costs Associated with SP Manweb Pension Deficit**

5.4.1 We are pleased that Ofgem has recognised the costs of the Pension deficit for SP Manweb.

### **Early Retirement Deficiency Costs (ERDCs)**

5.4.2 We continue to believe that the legitimately incurred costs of ERDCs should be allowed. As stated in previous consultation responses, the provision of



enhanced benefits on early retirement has enabled considerable and enduring cost savings to be delivered to customers.

5.4.3 It remains our view that a balanced approach is required that recognises the benefits that have been delivered from the use of surpluses to fund severance programmes. As we have previously set out in consultation responses, at least 70% of cost savings are passed back to customers. It is only equitable that a similar approach is taken to the costs that have enabled these savings to be achieved.

5.4.4 We will continue to work with Ofgem with a view to securing a fair and pragmatic outcome on this issue and await clarification of the final approach in the September update.

## 5.5 *FINANCIAL INDICATORS*

5.5.1 We are pleased to note that Ofgem are considering the impact that their proposals will have on financial indicators. The work that NERA has carried out for the ENA Finance Group has identified the following ratios as being consistent with a single A credit rating for the UK DNOs:

	<u>NERA</u>	<u>Ofgem Proposals</u>
<i>FFO interest coverage</i>	<i>3.0x – 5.0x</i>	<i>not less than 3.0x</i>
<i>FFO / total debt</i>	<i>13% - 25%</i>	<i>not less than 9%</i>
<i>Total debt / RAV</i>	<i>40% - 60%</i>	<i>not higher than 65%</i>

5.5.2 Although we agree with the use of financial indicators by Ofgem, and with these three in particular, it is our view that the level of total debt implicit in the above ratios is too high and could adversely impact the objective of maintaining a single A credit rating. Specifically, we believe that total debt to RAV should be no higher than 60%.

5.5.3 If a company's ratios fall below these test levels, providing reasonable assumptions have been made and tested on the need for investment, then this



could be resolved either by additional accelerated depreciation for that one company or by increasing the allowed returns for all companies.



## **APPENDIX 1: ROLLING CAPEX MECHANISM INTRODUCED AT DPCR3**

This Appendix sets out our detailed arguments and evidence in support of the position that the DPCR3 rolling capex mechanism was intended only to apply to savings against the allowance rather than to necessary expenditure in excess of the allowance.

### ***PART 1: DETAILED ARGUMENTS***

Excerpts from the Draft and Final proposals for DPCR3 are included in Part 2 of this Appendix. Our position, based on discussions that took place during DPCR3 and on these documents, was that the proposal was to remove the periodicity around incentives for capex efficiency by allowing a 5-year retention period for efficiency savings.

Excerpts from various documents subsequent to DPCR3 are also included in Part 2 of this Appendix. It is our position that these documents provide no indication of any intention to apply a symmetrical mechanism. On the contrary, in our opinion, these statements confirm that the scheme is asymmetric in nature, applying only to capex savings.

### **DPCR3 Documentation**

Our main points are summarised as follows:

- the documents refer to the retention of capital expenditure savings with no mention of the treatment of expenditure in excess of the allowance or discussion of the associated issues; and
- while it can be argued that reference to adjusting for actual expenditure implies a symmetrical scheme, this is contradicted by reference to a similar approach to that proposed by Ofwat (the Ofwat scheme applies only to savings).



We accept that the DPCR3 documents are not entirely clear on this issue. However, clear reference is made to the retention of efficiency savings and to increasing incentives for efficiency. There is no mention of the treatment of expenditure in excess of the allowance.

On a point of process, if it had been Ofgem's intention to apply the mechanism to such expenditure then this should have been explicitly stated. In addition, the various issues and implications associated with such an incentive should have been discussed such as:

- the implications of potentially incentivising companies to defer necessary expenditure in excess of the allowance; and
- whether expenditure that is clearly in the interests of customers should be included in the RAV at the beginning of the next price control and 'logged up' to preserve the NPV of the investment.

Reference is made to adjusting the RAV for actual rather than projected expenditure after a period of 5 years has elapsed. We accept that, with hindsight, it can be argued that this implies a symmetric scheme with the rolling mechanism applying both to savings and to expenditure in excess of the allowance. However, paragraph 5.61 of the Draft Proposals refers to adopting a similar approach to that which Ofwat had proposed. Given that the Ofwat proposal was for an asymmetric scheme, applying only to capex savings, it was reasonable for companies to believe that this was also Ofgem's proposal.

### **Documents subsequent to DPCR3**

Excerpts from the Regulatory Accounts and from Ofgem's February 2003 paper on Network Monopoly Price Controls are included in Part 2 of this document. These statements clearly refer to the retention of efficiency savings and make no reference to the application of the rolling mechanism to expenditure in excess of the allowance. These provide no indication of the application of a symmetric mechanism. On the contrary, in our opinion, these statements confirm that the scheme is asymmetric in nature, applying only to capex savings.



In addition, excerpts from Ofgem's document of December 2003 are included. This document does contain discussion around the treatment of expenditure in excess of the allowance and would appear to contradict Ofgem's latest position by confirming that such issues were not considered at DPCR3. In fact, table 3.1 of the December 2003 document introduces more uncertainty by describing the 'current approach' in a manner that suggests that there is currently no rolling mechanism in place.

In our opinion, if Ofgem had intended the rolling mechanism to be applied to expenditure in excess of the allowance in DPCR3 then this would have been stated in Section 3 of the December document. However, regardless of what the intention was at DPCR3, the fact that there is no mention of the application of the rolling mechanism to such expenditure supports our position that this is not appropriate.

## **PART 2: EXCERPTS FROM OFGEM DOCUMENTS**

- **Capex rolling mechanism proposed in DPCR3 Draft Proposals of August 1999.**

5.60 The intention of the proposal to allow a fixed retention period for capital expenditure savings is to increase the incentives towards efficiency. It is clear that PESs have managed to achieve significant efficiency savings with respect to operating costs under the present arrangements. Allowing a fixed retention period for operating cost efficiencies would distort the balance of interests between customers and shareholders. On this basis it does not appear appropriate to adjust the existing incentive structure with respect to operating costs.

5.61 Adjusting asset values on a rolling basis is similar to the approach proposed by OFWAT in its 1998 paper on the framework for setting prices in the water industry. It is proposed to adopt a similar approach for the treatment of capital expenditure over the period of the next price control, updating the regulatory asset base for actual rather than projected spending after a period of 5 years has elapsed. This commitment is conditional on PESs meeting their obligations with respect to the security and quality of supply.



- **The Final Proposals of December 1999 confirming the introduction of the mechanism proposed in the draft proposals.**

“5.36 The expectation that at a price control review asset values will be rolled forward to the start of the review period using actual capital expenditure, rather than the projections of capital expenditure on which the existing control was based, will tend to reduce incentives on PESs to operate efficiently. This will take two forms: a general reduction in the incentives on PESs to make efficiencies in capital expenditure; and an incentive to defer spending to the end of the price control period.

5.37 The draft proposals explained that these perverse incentives could be reduced by making a commitment in this price control review to adjusting 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 is conditional on PESs meeting their obligations with respect to the security and quality of supply.”

- **A footnote in table 4 of the Regulatory Accounts clearly states that the rolling capex incentive applies to savings.**

Rolling five year RAV capital expenditure allowance

For future price control reviews consideration will be given to implementing a rolling five year capital expenditure allowance to reflect the full 5 year benefit of capital expenditure savings when determining RAV. This proposed adjustment will be reflected in the price control review period commencing 1 April 2005 and is contingent on achieving predefined security and quality of supply targets.

- **Statement in Appendix 3, paragraph 3.1 of Ofgem’s Network Monopoly Price Controls document of February 2003 referring to Ofgem’s commitment to allowing the retention of capex efficiencies for a fixed period.**



3.1 In setting the last DNO price control in 1999, Ofgem committed to allowing companies to retain the benefits of any capex efficiencies for a fixed period of time, regardless of when the saving was actually made. This commitment was conditional on the DNOs meeting their quality and security of supply obligations. In setting the next price control, which is due to be implemented from 1 April 2005, Ofgem also intends to allow DNOs to retain the benefits of any opex efficiencies for a fixed period of time. A number of issues need to be considered in developing how the detail of these arrangements will work for the DNOs and this Appendix sets out Ofgem's initial thoughts in these areas.

- **Statement in Appendix 3, paragraph 3.4 of Ofgem's Network Monopoly Price Controls document February 2003 document referring to the objective of providing companies with improved incentives to achieve capex savings.**

3.4 The objective of the commitment was to provide companies with improved incentives to achieve capex savings. It is also important to avoid providing companies with distorted incentives.

- **Statement in paragraph 3.81 of Ofgem's document of December 2003, highlighting the disincentive to incur expenditure in excess of the allowance from the application of a rolling mechanism and discussing how such expenditure could be treated.**

3.8.1 Another issue for consideration is when overspend should be included in the RAV. The capex efficiency incentive allows DNOs to retain the benefits of any savings for five years before they are passed back to consumers, i.e. they are reflected in the RAV. However, if capex overspends were treated in the same way (i.e. not included in the RAV for 5 years) this could provide a disincentive on a DNO to undertake investment that was not covered by the capex allowance. If there is a clear need for this additional investment, and Ofgem is confident that it is efficient, it may be possible to treat such an overspend in a different way to capex efficiencies, for example through backdating the return on this investment in setting the next price control. The





aim of this would be to ensure that the company would be no better or worse off compared with the expenditure being incorporated in the RAV straight away.

- **Excerpt from table 3.1 of Ofgem's document of December 2003 describing the current incentive framework in a manner that suggests that no rolling capex mechanism is in place.**

### **Current approach**

DNOs are allowed the projected capex, a return on RAV and regulatory depreciation based on the RAV and the depreciation assumptions.

At the next review, RAV and depreciation are re-calculated using actual investments over previous control period and the benefit of any capex savings are passed onto consumers.

Non-operational capex is treated as an operating cost item.

## **APPENDIX 2: OXERA PAPER ON COST OF CAPITAL**

**Scottish Power**

### **An Assessment of the Cost of Capital Allowance for DPCR4**

**OXERA**

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**August 2004**

#### **1. Introduction**

Ofgem's recent 'Initial Proposals' outlined its latest thinking on each of the elements of DPCR4.<sup>3</sup> This note for Scottish Power discusses the impact of a number of initial proposals on the cost of capital that the regulator is assuming for the next control period, and whether Ofgem is taking these impacts fully into account in proposing the midpoint of its cost of capital range.

Specifically, this note addresses the cost of capital impact of:

- proposals for the treatment of uncertainty;
- the way in which Ofgem proposes to treat gearing in the financial model when this is different from its assumption of 60%;
- Ofgem's position on the use of financial ratios to assess the financeability of the DPCR4 settlement; and
- incentive mechanisms for quality of service and capital investment.

The comparison between Ofwat's assumption in its Draft Determinations<sup>4</sup> of a 5.1% real post-tax equity, post-tax debt cost of capital and Ofgem's use of the midpoint of the range 4.2–5% on the same basis is also analysed. While Ofgem is to be commended for recognising that the lower end of the cost of capital range implied by its 'building block' analysis is inconsistent with the investment focus of this review, it is of concern that the Initial Proposals document rather arbitrarily chose 4.6%.

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<sup>3</sup> Ofgem (2004), 'Electricity Distribution Price Control Review: Initial Proposals', June.

<sup>4</sup> Ofwat (2004), 'Future Water and Sewerage Charges 2005–10: Draft Determinations', August 5th.

## **2. Discussion**

### **2.1 Comparison of water and electricity distribution**

Ofwat has stated that ‘our judgement is that a cost of capital of 5.1% real, post-tax should allow companies to maintain access to the capital markets at reasonable rates and enable the water industry to remain attractive to a diverse range of finance, including equity.’<sup>5</sup> This 5.1% figure is beyond the top of Ofgem’s cost of capital range, and it is worthwhile examining why Ofgem might consider following this precedent. Importantly, Ofwat states that ‘companies need to access a wide range of sources of finance in order to fund their capital programmes and we would not wish to preclude them from doing so. Consequently we have used a cost of capital towards the high end of the range [4.2% to 5.3%] but not at the top.’

#### **2.1.1 Business and financial risk**

Arguably, if DNOs and companies in the water sector are to receive the same cost of capital, they should share similar risk profiles. It is theoretically reasonable to split risk, as the capital asset pricing model (CAPM) does, into two elements—business, or unlevered risk, and financial risk. Business risk relates to the extent to which company returns (that are unrelated to levels of debt in the regulated business) are sensitive to returns on the market as a whole. A major influence on this will be the level of capital spend during the control period for which the cost of capital is being set. Table 2.1 presents forecast (depreciable) capital expenditure (CAPEX) to regulatory asset values (RAV) ratios for the DNOs and water companies as a whole during their respective next control periods.

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<sup>5</sup> Ofwat (2004), *ibid.*, page 187.

**Table 2.1: Comparison of post-2004/05 CAPEX:RAV in electricity distribution and water**

<b>Company/sector</b>	<b>CAPEX:RAV (%)</b>
CN Midlands	59.7
CN East Midlands	56.6
United Utilities Electricity	59.5
CE NEDL	55.1
CE YEDL	47.5
WPD South West	42.6
WPD South Wales	37.9
EDF LPN	52.9
EDF SPN	82.0
EDF EPN	66.1
SP Distribution	32.4
SP Manweb	57.7
SSE Hydro	31.8
SSE Southern	45.9
<b>DNO Average (unweighted)</b>	<b>52.0</b>
Water	44.4

*Note:* CAPEX is total forecast capital expenditure eligible for depreciation over the period 2005/06 to 2009/10, as proposed by Ofgem in its Initial Proposals document, and by Ofwat in its Draft Determinations. RAV is defined as opening RAV at the start of 2005/06.

*Source:* Ofgem (2004), 'Electricity Distribution Price Control Review: Initial Proposals', June, pp. 117–30, and Ofwat (2004), *ibid.*, tables 9 and 42.

It is significant that, despite Ofgem's assumption in its Initial Proposals document of a lower cost of capital for the DNOs than has been committed to by Ofwat, DNOs are, on average, expected to invest in proportionally more CAPEX (relative to the RAV) during the next control period. This ratio is higher for DNOs, despite the fact that figures used in the table are derived from water companies' final business plans, which are subject to review by Ofwat, whereas the DNO figures are those used by Ofgem in its initial proposals for price limits. This is a substantial change from previous reviews, where environmental, quality and replacement expenditures for water companies substantially outweighed the DNOs' investment burden.

Business risk may also be affected by the extent to which revenues are exposed to volumes. For DNOs, tariffs are set such that 50% of revenues are exposed to units distributed. In contrast, in the water sector, OXERA analysis of June Returns data suggests that, for 2004/05, under 43% of *volumes supplied* are measured across all users. Since there is no reason to expect future water demand to be more variable than is the case for electricity, this again would appear to suggest that there is no case for the electricity distribution level of returns being set below those for water.

The second element of risk is financial. In his article in *The Utilities Journal* in 2003,<sup>6</sup> Peter Bucks noted that at March 2003, total recourse debt of the DNOs represented around 82% of total RAVs. This compared with a water sector-wide regulatory capital value (RCV) average of 57%. While the article admitted that the DNO figure was 'skewed by a minority of extreme

<sup>6</sup> Bucks, P. (2003), 'Financial Leverage and the Regulator', *The Utilities Journal*, October, pp. 38–39.

cases', it remains the case that gearing and, hence, financial risk would seem to be higher for DNOs than for water companies.

On both counts, therefore, DNOs would seem to be of a similar or higher level of risk than water companies, and yet Ofgem is assuming a lower cost of capital than Ofwat. The evidence would seem to point towards a cost of capital that is at least at the top end of Ofgem's range, in order to align it with the returns assumed in the water sector.

### **2.1.2 Treatment of uncertainty**

Ofgem's proposals for dealing with uncertainty suggest that DNOs are expected to bear more risk than, for example, water and sewerage companies, in relation to uncertain elements of the next price-control period. Companies regulated by Ofwat are able to apply for interim determinations via either the Relevant Change in Circumstance (RCC, specified items on which actual expenditure or receipts are likely to diverge from the levels assumed at the last periodic review) or Notified Item (NI, expenditure that, at a price review, Ofwat has recorded specifically as having been allowed for in part or not at all) mechanisms. There is also the 'shipwreck clause', which allows companies to seek an interim determination if circumstances that are beyond their control change, such that, in NPV terms, 20% or more of turnover is affected. Finally, there are procedures for logging up or down at the start of the next control period, if outputs required of companies in the previous period have changed.

There are currently four RCCs, relating to any new legal requirements not taken into account in price limits; land disposals; changes in the construction price index relative to the retail price index; and failures to achieve outputs for which funding had previously been provided. For AMP4, Ofwat is proposing to retain NIs in relation to the Water Industry Act 1999 for the take-up of free meters and levels of bad debts that were in place for the 1999 review. It is also proposing additional NIs for lane rentals, and payments to British Waterways and the Environment Agency.

Ofgem's current proposal is for 'specific arrangements where there is cost uncertainty, which has not adequately been dealt with under the price control.'<sup>7</sup> It has concluded that there are two areas where cost uncertainty is sufficiently significant to merit some form of re-opener provision—lane rentals and changes to the Electricity Supply Quality and Continuity Regulations (ESQCR).

However, there remains a marked contrast between how Ofgem and Ofwat deal with uncertainty. Arguably, water and sewerage companies are much better protected against downside risk than the DNOs as a result of the IDoK mechanisms. Ofgem's December document provides some rationale for this, noting that the Director General of Water Services' statutory duties include ensuring that companies are able to finance their functions, whereas in electricity and gas 'the principal objective of the Authority is to protect the interests of customers, where appropriate by introducing effective competition.'<sup>8</sup> This difference in duties *has to mean a priori* that the cost of capital for electricity distribution would be at least as high as for water. Particularly in light of Ofwat's assumption of a 5.1% post-tax equity, post-tax debt cost of capital, this again suggests that it would be reasonable for Ofgem to place its cost of capital assumption towards the top of its range, rather than the midpoint.

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<sup>7</sup> Ofgem (2004), 'Electricity Distribution Price Control Review: Initial Proposals', June., p. 14.

<sup>8</sup> Ofgem (2003), 'Electricity Distribution Price Control Review: Second Consultation', December, p. 23.

## 2.2 Financial ratios

Ofgem's stance, as outlined in the initial proposals document, on the use of financial ratios to assess the financeability of the DPCR4 settlement, represents a substantial change in regulatory practice. Although Ofgem's modelling currently suggests that only EDF-SPN is showing financial ratios outside of Ofgem's (admittedly quite conservative, relative to DPCR3) range, the principles that Ofgem is seeking to change are highly likely to alter investors' perceptions of the riskiness of the industry.

The first element of change is the abandonment of the assumption that breaches of financial ratios, even if these are driven by high CAPEX, would be addressed in the revenue line rather than through injecting new equity into the balance sheet. This is reflected in the statement in Ofgem's paper that:

particularly if only a small number of companies are affected and there is not a general financial constraint across the sector, it is reasonable to assume that, rather than allow credit quality to deteriorate, shareholders would provide additional equity<sup>9</sup>

The second is the observation made by Ofgem that:

for some companies, Ofgem's modelling shows strong financial ratios—perhaps to the point where it would be possible to *reduce* prices in the period 2005–2010 by reducing depreciation allowances [emphasis added]

The first change in policy begs the question of whether the cost of equity being allowed by Ofgem is sufficient to entice equity investment during the next control period. While United Utilities was able to issue £500m of equity in September 2003, the 10% underperformance of United Utilities shares relative to the FTSE All-share in the two weeks after the announcement suggests unwillingness on the part of equity investors to pay for new CAPEX. The appetite for equity, and the ability of companies that are often listed outside the UK to raise it, is still unclear, and the assumption that companies can simply address high investment through equity issues has not been tested.

The second change in policy—while at this stage only a suggestion—would, if driven through, alter the expectations of both equity and debt investors, who up to now have formed expectations on the basis of cash in the balance sheet from pre-Vesting depreciation allowances. Ofgem is now suggesting that these allowances should be 're-sculpted' as financial ratios are temporarily strong. At the very least, this will reduce equity investors' dividend expectations, and will cause debt investors to reassess the future funding needs of the regulated business. In both circumstances, the cost of capital will rise.

This change in Ofgem's policy provides further evidence indicating Ofgem's selection of a cost of capital towards the top end of the range put forward in its March<sup>10</sup> and June papers.

## 2.3 Gearing and tax

Ofgem's treatment of the remuneration of tax at different levels of gearing appears to send some rather strange signals. Since Ofwat's reaction to the first case of financial restructuring in the water industry, it has been established regulatory good practice to leave it up to companies to

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<sup>9</sup> Ofgem (2004), 'Electricity Distribution Price Control Review: Initial Proposals', June, p. 108.

<sup>10</sup> Ofgem (2004), 'Electricity Distribution Price Control Review: Policy Document', March.

decide on the appropriate level of gearing within the regulated business. However, Ofgem’s current proposals—to use its preferred level of gearing in financial models for the purposes of determining tax remuneration, unless it is above this level, in which case actual gearing will be used—effectively forces companies with gearing of less than 60% to increase debt to this level, or face being under-funded for tax during the next control period. As an incentive not to refinance group-level debt within the regulated business, this asymmetric approach—disincentivising companies from increasing gearing to above 60%, while preventing companies from having lower debt levels—will have the undesirable effect of preventing companies from exercising choice about how to finance their businesses.

The implications of Ofgem’s stance in this area for investors are worrying. It suggests that the regulator is willing to countenance forcing companies to gear up to the maximum that ratings agencies believe is consistent with a certain credit rating, regardless of the cost of the additional debt that this involves. This policy also seems logically inconsistent with the proposals, discussed above, on the use of minimum financial ratios as a tool to assess financeability. This raises the potential situation where the regulator might presume that a company can avoid a problem with financial ratios derived from the price-control settlement by issuing equity—while at the same time not remunerating the company for the increased tax payments associated with the new level of gearing.

## 2.4 Incentive mechanisms

### 2.4.1 Revenue exposure to quality of service

Ofgem’s June document sets out proposed changes to DNOs’ revenue exposure to quality of service incentives. In particular, this amounts to a ‘strengthening’ of incentives, with the net result being more revenue exposure and increased downside risk relative to upside potential. Table 2.2 reproduces Table 4.1 from Ofgem’s document, which clearly demonstrates this change.

**Table 2.2: Revenue exposure to quality of service**

Incentive arrangement	Current	Proposed
Interruption incentive scheme	+2% to –1.75%	±3%
Storm compensation arrangements	–1%	–2%
Other standards of performance	Uncapped	Uncapped
Quality of telephone response	±0.125%	+0.05% to –0.25%
Quality of telephone response in storm conditions	Not applicable	0 initially; ±0.25% for 3 years
Discretionary reward scheme	Not applicable	Up to +£1m
Overall cap/total (excluding discretionary reward and other standards of performance)	+2% to –2.875%	4% on downside; no overall cap on upside.

*Source:* Ofgem (2004), ‘Electricity Distribution Price Control Review: Initial Proposals’, June, p. 30.

Both the levels of risk that Ofgem is expecting the DNOs to bear (up to 4% of revenue on the downside)—which is much greater than the ±0.5% exposure to quality-of-service incentives in the water industry in the current control period (an exposure set to decrease in light of Ofwat’s Draft Determinations)—and the asymmetric nature of the incentives (more downside than upside), suggest that Ofgem’s cost of capital assumption should be much closer to Ofwat’s.

### **2.4.2 CAPEX sliding scale**

This innovation in the June paper also leaves companies rather exposed to downside risk. The situation in which a company has bid, for example, 140% of the PB Power forecast is already suggestive of a downwards bias in Ofgem's consultants' forecasts. If, on average, PB Power's forecasts are correct, but subject to a confidence interval, a situation in which they are well below the company's forecasts would imply that the consultants' estimates are likely to be below the 'true' required value of investment. Compounding this situation is the sliding scale, which, in this situation, would lead the company to be underfunded by 5%, even when its forecasts were correct. Either the company would receive insufficient returns, or it would spend less than it should to mitigate the effects of the incentive mechanism, potentially leading to future difficulties with the sustainability of its network. Furthermore, Ofgem has introduced this mechanism *after* companies have submitted their estimates of the size of their CAPEX programmes, and *after* it has presented its cost of capital range. Had it presented this change in policy earlier in the price-control process, it is likely that that companies would have been able to respond accordingly, and that the increased risk inherent in the new mechanism would have been priced by the market, and could therefore have been reflected by Ofgem in its cost of capital range.

## **3. Summary**

There was very little justification for Ofgem's movement from an assumed range of 4.2% to 5% for the real, post-tax equity, post-tax debt cost of capital to the midpoint of this range. This was disappointing, for the June paper included some important changes in policy that would further reinforce the conclusions from previous OXERA papers that a cost of capital for DNOs toward the top end of Ofgem's proposed range would be appropriate. These include the positions on the use of financial ratios for financeability tests, the treatment of gearing levels below 60% for tax remuneration, and quality of service and CAPEX incentive mechanisms. Moreover, when compared with the water industry, where Ofwat has proposed a cost of capital beyond the top of Ofgem's range, it becomes apparent that electricity distribution would seem to require at least the same cost of capital as the water and sewerage companies. Evidence has been presented that suggests that, on the basis of volume risk, operational gearing, financial risk and the treatment of uncertainty, DNOs would seem at least to be an equally risky investment proposition. Ofgem should, therefore, consider carefully whether the use of the midpoint of its cost of capital range is sufficiently reflective of the risks associated with the regulatory settlement it is proposing.