



SP Transmission & Distribution

Developing Network Monopoly Price Controls

Response to Ofgem Update

Document of February 2003

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EXECUTIVE SUMMARY

ScottishPower remains committed to working with Ofgem and the industry throughout the review process to deliver a successful outcome, balancing the interests of customers, shareholders and all other stakeholders.

Price increases will be required to allow for additional costs and investment requirements. The key points supporting this position are:

- A sufficient and stable return must be provided to attract and retain equity funding from capital markets.
- A framework for the connection of renewable generation must be agreed and implemented if the Government targets are to be achieved.
- Allowed investment must be increased to secure the long-term safety, reliability and sustainability of the electricity infrastructure.
- A sound and transparent approach to efficiency analysis must be developed to ensure adequate funding of operating costs and to remove unnecessary uncertainty.

Addressing each of the above points in turn:

1. Cost of Capital

An increased cost of capital is strongly supported by market evidence, recent regulatory determinations and authoritative academic studies in this area.

- A higher cost of capital will promote the required future investment confidence and incentives.
- Companies must continue to be provided with the incentive to maintain tax liabilities at an efficient level.
- Continuing with a pre-tax cost of capital and an appropriate tax wedge will provide the correct signal.

2. Renewable Energy Requirements – Securing an Optimal Outcome

The Government targets are challenging, creating risk and uncertainty for all stakeholders. The following foundations are required to support the achievement of those targets:

- A commitment from Ofgem that the investment needed to facilitate distributed generation will be secured in the RAV at a sufficient rate of return.
- A forward looking investment framework to ensure that additional network capacity is made available when and where it is needed most.
- An allowance for the additional operating costs resulting from the increased complexity of network operation.
- A scheme to ensure that the price increases required to fund the cost of meeting Government targets, are fairly spread across all customers in Great Britain.



A significant proportion of the new renewable and CHP generation will be located in our licensed areas, and ScottishPower remains committed to playing a key role in meeting the Government goals.

3. Securing the Long-Term Safety, Reliability and Sustainability of the Network

Allowed investment levels must be increased to secure the long-term safety, reliability and sustainability of the electricity infrastructure.

- Full consideration must be given to ensuring that the network performance, security and safety in the medium to long term is not compromised by short-term constraints on investment.
- A prioritised investment programme needs be agreed now, and will require long-term commitment and support from Ofgem.

Strong and reliable electricity networks are vital to achieving the goal of maintaining the reliability of energy supplies and the promotion of competitive energy markets.

4. Comparative Analysis of Distribution Network Operators

There must be recognition that lowest cost is not necessarily the most efficient.

- Adequate account must be taken of outputs, regional cost-drivers and the differing risk appetites amongst companies.
- A sound and transparent approach to comparative analysis is required, and reliance cannot be placed on any single measure of relative efficiency.
- The reduced number of comparator companies and data problems raises issues over potential biases in the estimates of relative efficiency.

The electricity industry is facing unprecedented change and uncertainty, some of which is being driven by the developments proposed in the Energy White Paper. The regulatory framework and the review of the price control are clearly fundamental in dealing with these issues and to the successful implementation of Government policy.



1. INTRODUCTION

- 1.1 This document is the response of SP Transmission & Distribution to the Ofgem consultation paper of February 2003 entitled “Developing Network Monopoly Price Controls Update Document”. The focus of the response is the distribution price control review and Scottish transmission price control review, however many of the principles set out in the response are applicable to all network monopoly price controls.
- 1.2 The industry is facing unprecedented change and uncertainty in many areas including developments in Government policy as set out in the recent Energy White Paper. The price control and regulatory frameworks are fundamental to dealing with these issues and to the successful implementation of Government policy.
- 1.3 The forthcoming price reviews are different from previous price reviews in that price increases will be required to fund additional costs and investment requirements.
- 1.4 To summarise, the key issues for electricity network owners and operators that require to be addressed are as follows:
 - Providing a sufficient and stable return to allow companies to attract and retain equity funding from capital markets.
 - Implementing the key steps necessary to facilitate the connection of renewable generation in support of Government targets.
 - Increasing the levels of allowed investment to secure the long-term safety, reliability and sustainability of the electricity infrastructure.
 - Developing a sound and transparent approach to efficiency analysis to ensure adequate levels of funding and remove unnecessary uncertainty.
- 1.5 We are committed to working with Ofgem and the rest of the industry throughout this process to deliver a successful outcome that balances the interests of customers, shareholders and all other stakeholders. We hope that our comments in this response will prove helpful in meeting this objective.

2. FINANCIAL ISSUES

Cost of Capital

- 2.1 Ofgem must provide a clear, settled long-term regulatory framework, in particular with regard to distributed generation, in order to reduce any adverse impacts on the cost of capital.
- 2.2 An increased cost of capital is strongly supported by a review of market evidence, recent regulatory determinations and authoritative academic studies in this area. There are a number of key uncertainties surrounding this review, and future investment incentives will be undermined by a cost of capital that is set



'too low'. This will have serious implications on the achievement of Government energy policy targets.

- 2.3 A number of developments that have taken place since the last review, including the substantial falls in equity markets alongside increasing degrees of market volatility, suggest equity premia have risen.
- 2.4 Ofgem's assertion that companies must be able to raise finance from capital markets on reasonable terms is welcome. Flexible, efficient access to capital markets is vital to enable companies to invest and deliver networks that meet the demands of future generators and consumers.
- 2.5 The conditions of the terms for raising finance are dependent on the financial position and prospects of the companies. The analyst community and credit rating agencies take into account the impact of the price controls reviews when forming their view of network company prospects. The financial community must therefore see that the companies receive fair treatment during this review.

Capital Structures and Gearing

- 2.6 Ofgem's intention to continue with the broad approach taken to estimate the cost of capital is welcome.
- 2.7 Each company must retain the flexibility to choose its own capital structure, consistent with its ownership, and future financing options. It must not be constrained by assumptions made by Ofgem during the price review, particularly in light of increasing requirements to invest in networks. It is clear that distributed generation will also bring the need for maximum flexibility for raising funds.
- 2.8 The theoretical gearing level of 50%, as applied at previous price reviews, should be continued. We note that gearing will continue to be based on a consistent theoretically optimal position across all companies.

Taxation

- 2.9 The use of a pre-tax cost of capital must be continued, and the "stylised adjustment" or tax wedge should be set at an appropriate level. Companies must continue to be provided with the incentive to maintain their tax liabilities at an efficient level.

Incurred Fixed Costs of Debt

- 2.10 Ofgem should consider contemporary market evidence and the costs associated with embedded debt in their calculation of the cost of debt.
- 2.11 Financing decisions must have long and short term recourse. Companies are bound to decisions that were valid at the time they were made. Replacement of more expensive debt with current market offerings currently carries penalties or



unacceptable risk, making refinancing options potentially 'inefficient'. Companies are currently borrowing in more volatile capital markets than previously experienced and the theoretical exercise of setting the cost of capital needs to be balanced against the reality of the markets.

The RAV and Approach to Depreciation

- 2.12 The current method of calculating the initial RAV must be continued. Any "changes to the method of calculating (and the value of) the initial RAV" will have a significant negative impact on the perception of regulatory risk not currently captured by the estimates of the cost of capital. If a change is introduced, then the cost of capital will require a commensurate increase.
- 2.13 Network monopolies must retain the benefit of any efficiency savings over a fixed period. There are a number of options being considered for updating the RAV on some form of "rolling RAV" mechanism and we would seek to review and contribute to any method currently being explored by Ofgem.
- 2.14 Companies must receive a reasonable or equitable share of efficiency savings, especially in light of tightening cost bases and the difficulties of obtaining such savings.
- 2.15 Ofgem raise the issue of the sharp fall in the allowed level of depreciation for pre-Vesting assets. Companies facing this issue at the end of this price control period must be treated on a basis consistent with the approaches used at the last price review. This will maintain the net present value of the RAV.
- 2.16 The Scottish DNOs will not face the depreciation reduction issue until the end of the next price control period. It will not therefore be necessary to make any adjustment to the depreciation profiles of the Scottish companies during this review.

Pensions Deficits

- 2.17 Any Pension deficit must be treated as a normal business expense and funded accordingly.
- 2.18 The FTSE All Share Index has fallen by almost 30% since March 2001 when the latest Actuarial valuation of our Pension fund was carried out. The majority of Pension funds are invested in equity, and the fall in the market will have led to a significant deficit for all companies. Ofgem must work with the Actuaries of the Pension schemes to independently confirm how the scheme is valued and to establish the size and possible duration of the deficits.

Financial Modelling

- 2.19 The use of financial modelling will help to ensure that the key ratios analysed by the financial community can be properly assessed. Each company must have access to its own financial model, with sufficient detail on the underlying



assumptions to allow full understanding of the outcome of the price review. Ofgem's establishment of a working Group on Financial Modelling in parallel with this consultation is welcome.

Asset Disposals

- 2.20 Ofgem must consider the most appropriate way of treating asset disposals to ensure companies have appropriate incentives and that there is an appropriate level of consistency in approach.

3. DISTRIBUTED GENERATION

- 3.1 A disproportionate amount of the renewable and CHP generation required to meet Government targets will locate in our licensed areas. Our businesses are currently handing applications and enquiries for around 4000 MW of distributed generation. This figure has doubled since our response to the August consultation paper and continues to increase rapidly.
- 3.2 To avoid unnecessary risk and uncertainty for all stakeholders and to enable companies such as ours to play their full part in meeting challenging Government targets, Ofgem must take the following key steps:
- Provide an explicit commitment that investment required to facilitate distributed generation will be secured in the RAV at a sufficient rate of return.
 - Provide a framework to allow companies to undertake advance investment to ensure that additional network capacity is made available where it is most needed.
 - Make appropriate allowance for the increased operating costs resulting from the increased complexity of network operation.
 - Introduce a scheme to ensure that the price increases required to fund the cost of meeting Government targets are spread across all customers in Great Britain.

We have been developing our detailed thinking on distributed generation and look forward to working with Ofgem and the rest of the industry to progress the issues noted above.

4. INVESTMENT

- 4.1 Ofgem must use its assessment of the Asset Risk Management policies and practices of each company as a major determinant in establishing the credibility of investment plans. The survey assessed the companies' long-term investment planning processes, and those companies with a robust process should be rewarded.
- 4.2 Ofgem should build on the work carried out in the Asset Risk Management Survey to assess the investment needs of the companies. Investment in networks over the previous two price control periods has not been sufficient to maintain the average age of our assets, and the average age of the infrastructure



assets has been steadily increasing. Current allowed investment levels reflect a turnover of the UK electricity network asset base that is significantly in excess of 100 years. While age alone does not give a complete picture of the need for investment, it does serve as a useful proxy for the complex issue of asset risk and provides a warning of potential problems ahead.

- 4.3 Levels of allowed investment need to be increased, through a prioritised programme of investment, to secure the long-term safety and integrity of the electricity infrastructure. This investment programme needs to be agreed now, will span at least the next two price control periods and will require commitment and support from Ofgem over this period. Strong and reliable electricity networks are vital to achieving the Government's goals of maintaining the reliability of energy supplies and promotion of competitive energy markets.
- 4.4 Full consideration must be given to these issues during the forthcoming price reviews to ensure that the network performance, security and safety experienced by customers in the medium to long term is not compromised by short-term constraints on investment

5. NEW OBLIGATIONS

- 5.1 We agree with Ofgem's view that the objectives for the price review should take into account guidance from Government on social and environmental objectives. Companies have a responsibility towards delivery of the Government's social and environmental objectives and we are committed to playing a key role.
- 5.2 Any additional expenditure arising from Government policy and objectives must be fully funded through the price control. As set out in the Energy White Paper, "Energy producers, investors, business and consumers need a clear settled long-term framework within which they can plan and make decisions with confidence". The price control and regulatory frameworks are therefore fundamental to the successful implementation of Government policy and must be used by Ofgem to set the direction for, and encourage appropriate behaviour from, the industry.
- 5.3 Additional funding must be made available where obligations are imposed part-way through a price control period. The price control final proposals must clearly set out all the obligations for the next price control period and demonstrate how the required expenditure has been funded.

6. ASSESSING COSTS AND INCENTIVES FOR EFFICIENCY

Assessing Costs

- 6.1 Ofgem must adopt a sound and transparent approach to comparative analysis to remove unnecessary uncertainty. Adequate account must be taken of outputs, regional cost-drivers and the differing risk appetites of the companies when assessing efficiency. Lowest cost is not necessarily the most efficient.



- 6.2 Ofgem must not rely on any single measure of efficiency. Estimating relative efficiency is a considerable challenge for statistical and other quantitative techniques. Given the reduced number of comparator companies that are now available, and the well known problems of data comparability, an estimate of relative efficiency is likely to contain substantial noise and potential biases. This will tend to mask genuine information about the underlying efficiency of individual companies.
- 6.3 There is a significant amount of uncertainty associated with an estimate of an efficiency “frontier”. A more reliable approach is to estimate the average efficiency of the companies and the scope for industry wide efficiency improvement.
- 6.4 The use of comparative analysis of activity costs within companies and the use of ‘best in class’ costs across all activities leads to an unattainable cost base. It is appropriate to review the different cost allocation methodologies that exist within the companies to determine true benchmarks. Proper account must be taken of the lack of definition of cost assessments and the resulting inconsistency.
- 6.5 Costs must be comparable and individual cost drivers clearly understood. Given the efficiencies that have been achieved since privatisation, it is likely that variances around the average efficiency line are a product of inherent and inherited cost pressures, rather than differing relative performance. Ofgem’s analysis must therefore take proper account of such factors. Analysis must also take account of legitimate cost increases in a number of areas including pensions, security and insurance.
- 6.6 The price control should remain a review of single companies in so far as each is an individual licence holder. However, Ofgem needs to consider the way that merged companies operate when assessing efficiency.

Incentives for Efficiency

- 6.7 We welcome Ofgem’s confirmation that companies will retain capital expenditure efficiency benefits for a fixed five-year period. Similar proposals must be implemented for operational expenditure efficiencies, to reduce the periodicity resulting from the current price control.
- 6.8 A scheme that rolls out-performance into the regulatory capital value with a lag, will not provide incentive consistency between opex and capex. Any out-performance (or under-performance) on expenditure must affect the company’s enterprise value in exactly the same manner. This will ensure that the company’s preferences between expenditure options are aligned with economic efficiency objectives and protection of customers’ interests.



6.9 We are currently working on an enhanced scheme that builds on Ofwat's approach and adds the following:

- A regulatory reserve used as a way of capturing efficiency out-performance that has been accrued, but has yet to be passed on to customers
- A structural consistency of incentives by utilising the regulatory reserve mechanism, rather than a rolling RAV, to return capex efficiencies.

6.10 We look forward to discussing the detail of this scheme with Ofgem.

Non -Operational Investments

6.11 Non-operational capex should be treated as investment expenditure, although further work is required on appropriate depreciation lives.

7. DEVELOPING THE OVERALL INCENTIVE AND PRICE CONTROL FRAMEWORK

7.1 The focus of the incentive framework must be on refining the operation of IIP (as applied to the existing output measures) rather than extending the range of output measures. In particular, the price review must address the following problems associated with the current IIP incentive scheme:

- The potential exposure of DNOs to events outside their control. (e.g. weather).
- The degree of subjectivity in adjusting reported performance.
- The variation in the degree of difficulty of system performance targets across the industry.
- The short-term nature of the existing targets.
- The lack of clarity in how the incentive mechanisms are to be rolled forward.
- The variation of incentive rates across DNOs and whether they appropriately reflecting customers' willingness to pay.

7.2 The overall incentive framework must be consistent with the price review objectives. An inappropriate incentive regime will distort behaviour and negatively impact customers' interests.

7.3 As a general principle, incentive schemes must be based on absolute rather than relative performance and must include appropriate "floors" and "ceilings".

7.4 There are a number of fundamental principles that must be applied when designing the incentive regime. These principles are set out in detail in our response to Ofgem's open letter of 14th March.

7.5 It will not be feasible to introduce a viable incentive in every area. In some circumstances it will be more appropriate to use other regulatory instruments, rather than an incentive mechanism that adjusts the allowed revenue.

*Rationalisation of incentive mechanisms with standards of service*

- 7.6 Companies must not encounter 'double or multiple jeopardy' from one incident. There is already some unnecessary overlap between existing Overall Standards and the current output measures that are incentivised through IIP. The principle of rationalisation of the incentive mechanisms and standards of service to eliminate such overlap is therefore correct.
- 7.7 The potential financial penalty under the Electricity Act 1989 (as amended) for failure to meet specified levels of performance must be removed if performance against Overall Standards is included in the IIP incentive scheme. It will also be necessary to review the specified levels of performance to set challenging yet appropriate targets.

Targets

- 7.8 The setting of longer-term targets for output measures is generally correct, especially where improvements are required to implement fundamental changes to networks. Such an approach would help to reassure customers that companies are maintaining the network to secure its longer-term integrity. It is inappropriate to require improvements that go beyond the levels of the expenditure assumptions underlying the price review. Ofgem must not curtail future expenditure assumptions at subsequent price reviews in a way that could risk the delivery of desired performance levels.

Exceptional events under IIP

- 7.9 The existing exemptions under IIP should continue. The exceptional event process requires review and must address:
- The removal of the subjective elements of the process
 - The creation of a separate mechanism to incentivise companies to take appropriate actions in preparation for, and during, exceptional events.
- 7.10 The current process for the exclusion of exceptional events retains an element of discretion by the examiner or by Ofgem. This discretion significantly increases uncertainty and the associated risk exposure of DNOs. This unnecessary uncertainty is detrimental as it undermines the effectiveness of the incentive on companies to invest in processes or measures to improve performance.
- 7.11 The reported CI and CML must be adjusted for the full impact of an exceptional event, irrespective of a company's effectiveness and mitigating actions taken.
- 7.12 Ofgem should introduce a separate mechanism to incentivise companies to perform well following storm conditions. The costs of achieving any expected improvement in performance would be treated on a company specific basis, and would require full funding through an appropriate allowance. It is unlikely to be



economic to significantly reduce the impact of the most severe events, as this requires substantial redesign and replacement of overhead networks.

- 7.13 It is appropriate to review the absolute number of exceptional events, and any trends in their occurrence, against customer expectations and anticipated weather patterns during the price review. This will help establish the necessary investment programmes to influence the recurrence of future events.

Exemptions from Guaranteed Standards

- 7.14 Ofgem must clarify the interpretation and application of the relevant regulations through its forthcoming determinations. The confusion surrounding the variety of interpretations of the current exemptions to Guaranteed Standards and the subsequent high level of disputes are of significant concern.
- 7.15 In principle, it is possible to remove exemptions from Guaranteed Standards if companies are given full funding to meet the costs of the associated compensation payments. Companies will also require appropriate funding to undertake the necessary investment programmes to reduce exposure over time. Removing restrictions is unlikely to avoid a large volume of customer disputes, as many also relate to the perceived duration of the interruption and the potential liability for consequential loss.
- 7.16 The cost of implementing systems and procedures to support the introduction of automatic payments under GS2 will be prohibitive for the foreseeable future. This is due to the difficulty of identifying, recording and updating the phase to which single phase customers' premises are connected.

Assessing Customers' Preferences

- 7.17 Ofgem's efforts to consider customers' preferences in developing the incentive and price control framework at this review are welcome. The industry must ensure that there is alignment between the marginal benefit and marginal cost of introducing incentive regimes for quality and security of supply.
- 7.18 Performance improvement requires significant investment. The increasingly complex nature of networks and regulation means that it is important to understand what customers value in terms of outputs.
- 7.19 Customer preferences are difficult to assess. There are many different approaches to market research, each with technical limitations and the final approach must consider all parties involved in the process.
- 7.20 Ofgem must acknowledge that in fulfilling its duty to customers, investment is also required for the greater good. Individually, customers may not be prepared to pay for long term security and improvement of the network even though such investments are vital to maintain the integrity of electricity infrastructure. Any consideration of customer willingness to pay must take into account other appropriate government and regulatory guidelines.



8. UNCERTAINTY

- 8.1 Ofgem must recognise that licensees are under different forms of ownership, and that diversification across *all* distribution networks is therefore not an option open to investors. The issue of risk and who is best placed to manage it, is clearly a determinant of the appropriate mechanism to deal with a particular uncertainty.
- 8.2 Ofgem's consideration of uncertainty in this review process is welcome and we remain supportive of the use of the working groups to consider the issues.

9. CONSISTENCY OF PRICE CONTROLS

- 9.1 It is unsatisfactory to pursue price control consistency at the expense of solutions that meet the specific requirements or circumstances of an individual company or sector.

Application of aspects of the transmission framework to distribution

- 9.2 It is inappropriate to consider applying aspects of NGC's system operator incentive scheme to a DNO. Distribution networks will acquire some of the properties of transmission networks following the increase in distributed generation. There are however fundamental differences between distribution and transmission systems. DNOs are not currently responsible for the system operation functions of frequency control and system balancing within a distribution network, and will not be during the next regulatory period.
- 9.3 Further evidence supporting the inappropriateness of the proposal is that asset ownership arrangements have been preserved within NGC's Transmission Owner (TO) business, adopting a framework that is similar to the current DNO framework.
- 9.4 It is premature to consider the introduction of similar system operator incentive schemes to distribution. The issues surrounding transmission access and deep System Operator (SO) incentive schemes require considerable further work before they will be resolved. A review of the responses to the latest Ofgem consultation on SO incentives provides evidence that there is little industry support for the deeper SO incentives. These incentives involve the allocation of entry and exit capacity rights and market signals for investment. If there is any doubt about the liquidity of a market for exit rights in transmission, then there must be serious doubts about its viability in distribution networks.

Investment at Grid Supply Points

- 9.5 If, over and above our own investment priorities, there is a need to replace assets at sites shared with NGC, then this needs to be treated as incremental in terms of our allowed investment, and funded accordingly. Where a need arises to replace some or all of the assets in a shared site, then NGC and the relevant DNO need to work together to find the most cost-effective solution from the



customer's perspective. We have regular discussions with NGC regarding prioritisation of investment at shared sites, but have a robust independent method for prioritisation of investment on all our assets.

10. DATA/INFORMATION REQUIREMENTS

- 10.1 Ofgem raise the issue of the time period over which costs are forecast and must recognise the long-term strategic aims of Asset Risk Management policies. A short-term view runs the risk of implementing price reductions that have to be reversed in subsequent periods to ensure long-term integrity of the asset base. A commitment to long-term investment and expenditure programmes, rather than the provision of detailed projections and forecasts, will help to mitigate this risk.
- 10.2 Our position on the publication of business plans remains the same as in our previous response. Ofgem's intention to make additional relevant information available is correct as long as this does not compromise confidentiality in any way.
- 10.3 Ofgem raise the issue of audits of companies' forecasts. An additional audit burden will complicate a process that is already subject to demanding timescales. Unlike historical data, future projections are difficult to audit and the use of scenarios to indicate the potential forecast ranges is a reasonable compromise. The introduction of the Regulatory Accounting Guidelines and the Asset Risk Management Survey has made a significant contribution to the existing audit process.

11. PROCESS/TIMETABLE

- 11.1 It is important to identify and act upon lessons learned from previous reviews and we support a review of the price review process following its completion. In order for all stakeholders to obtain maximum benefit from such a review, it is essential that an independent body reporting to the Authority conduct this review.
- 11.2 Ofgem has set a challenging timetable for the price review. The timetable provides little scope for slippage and all parties must work together to ensure delivery and enable the production of robust final proposals within the available timescales.