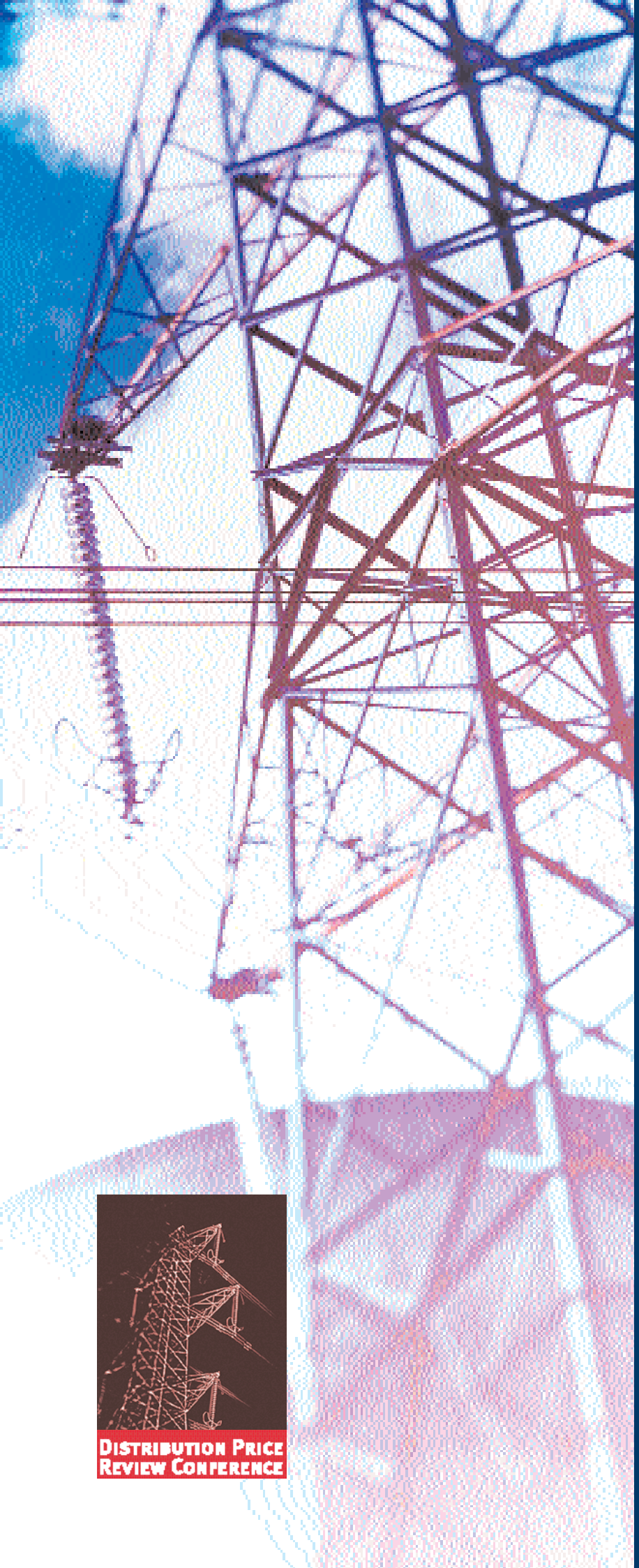

Distribution Price Review 2005 Conference

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FOREWORD BY DEREK SIMPSON

Derek Simpson, Amicus General Secretary

On the 16th October 2003 Amicus organised a conference to help bring about a greater awareness of the impact on stakeholders of these periodical distribution price reviews, of cost and prices in electricity distribution and the possible impact of the price review if certain areas are not taken into consideration.

A wide range of stakeholders from within the distribution industry took part in the conference, highlighting their concerns and what they would like to see happen within the next distribution price review

Amicus have been clear, consistent and focused about our aims. We want those distribution network operators to be rewarded in the price review 2005, who pursue the following policies,

1. Increased investment in the network system
2. Increased productivity of their employees through personal development programmes
3. Maintain a direct labour force
4. Make a reasonable profit, but give value for money, security and quality of supply to the customer/consumer.

In April 2005 the conclusions of the price control review will be implemented. We have until March 2004 to try and influence what those conclusions will be.

It's important now, more than ever that we work together, be informed and proactive in seeking to influence the outcomes of the distribution price review.

Derek Simpson
General Secretary

DISTRIBUTION PRICE REVIEW 2005 CONFERENCE

PROGRAMME

Opening of Conference
Professor John Bridgeman CBE TD DL

Electricity Network to Meet the Needs of the Nation
Dougie Rooney,
National Officer, Amicus

Cost Drivers
Robert Symons,
Western Power Distribution Holdings

Asset Risk Management
Mark Horsley,
CE Electric UK Funding Company

Meeting The Challenges of the Energy White Paper
Rt Hon Patricia Hewitt MP,
Secretary of State for Trade and Industry

The Cost Of Capital
Jonathan Marsh,
Scottish & Southern Energy plc

Distributed Generation
John Roberts,
United Utilities

What Do You Do When The Network Is Running At Full Capacity?
Robin Maclaren,
Scottish Power plc

Metering
Andy Phelps,
Aquila Networks plc

Improving The Balance: Investment Incentives In The Distribution Sector
Derek Holt,
OXERA

Resourcing The Future
Bob Taylor,
Powergen UK

Accounting For Difference
Vincent de Rivaz,
EDF Energy

Balancing Objectives
David Gray,
OFGEM

Chairman's Summary and Close

OPENING OF CONFERENCE

Professor John Bridgeman CBE TD DL,
Conference Chairman

Electricity is the oxygen of modern living. When its supply is interrupted, the effects can be devastating, Professor John Bridgeman made clear as he opened the groundbreaking and innovative Distribution Price Review 2005 conference.

Society's dependence on electricity is so high, he explained, that even a few minutes without power can cause untold complications for those at work, at home or travelling. And, while people don't generally understand how electricity is made, they do know that it is the distribution companies who are to blame when the power goes down. Quite simply, nothing happens without electricity and customer expectations from their electricity companies are high.

The UK's distribution network remains the envy of the world, Professor Bridgeman remarked. There are very few countries which have the low cost or reliability enjoyed in the UK – or who can begin to calculate how much extra they would have to pay for the same reliability. Achieving the balance between cost to consumers and security of supply against the backdrop of an ageing system, reduced workforce and corporate pressures would therefore be of paramount importance in addressing the challenges of the forthcoming distribution price review.

Commending the role of Amicus in organising the conference, Professor Bridgeman made clear the imagination which the union had shown in recognising that it has a unique part to play in catalysing the debate.

Professor John Bridgeman CBE TD DL

ELECTRICITY NETWORK TO MEET THE NEEDS OF THE NATION

Dougie Rooney,
National Officer, Amicus

Dougie Rooney responded to the Chairman's opening remarks by reiterating the importance of involving all stakeholders in the distribution price review from an early stage. The chief objective for the conference would be to get the issues onto the table and discuss them in a frank and open way. Working towards agreement on a possible way forward would result in a win-win situation for all those with an interest in the debate, spanning distributors, contractors, electrical retail and those responsible for the transmission system – as well as the regulator and ultimately consumers.

The move to address the issues at such an early stage had been born out of the lessons of the last distribution price review in 1999 when the traditional approach of reacting to the regulator once the die was cast had failed the industry so miserably. The lessons from this had cost the industry and its workforce dear following translation into the practice of 'cost cuts of X meaning job losses of Y' – a mistake not to be repeated.

By attempting to influence events from the beginning the industry would be in a better position to lead on issues of concern. Customers, he remarked, were increasingly demanding security of supply at a more competitive price and, as a union, Amicus had no basic argument against this. However, the regulator will be required to ensure an electricity distribution system that will be capable of taking this country forward into the 21st Century and an overemphasis on price cuts – not least for the sake of political expediency – could severely compromise renewal of an ageing system.

Furthermore, scope would also be needed for investment in the system to improve its reliability, including the opportunities which exist to take advantage of renewables and embedded generation. Investment on a massive scale is also needed to guarantee a reliable and properly trained workforce. The current demographic profile within distribution companies gives rise to concerns not least because of the inconsistent approach to training – from apprentices to mature workers. If this isn't addressed and soon, the industry will run into problems, although it will need the incentive of reward to tackle this head on.

Dougie Rooney explained that the role of direct labour organisations will form an important part of shaping the workforce of the future, reflecting the discernible evidence that those firms with their own staff are able to maintain higher training and safety levels, better

Dougie Rooney, National Officer, Amicus

motivation and more successful response to interruptions of supply. The gains from maintaining a complete labour team under the management's direct control have already begun to pay dividends to some distribution companies who have seen productivity and efficiency rise, he told the audience.

Meanwhile, the whole question of balancing lowest cost against delivering value for money to the customer also had to be weighed up. The vast majority of customers want value for money above all else – and definitely don't want to pay less for their electricity at the expense of a secure supply.

The focus now would be to work to persuade OFGEM to develop a formula for the next price review that will enable all these elements to be incorporated.

Robert Symons, Chief Executive, Western Distribution Holdings


Robert Symons, Chief Executive, Western Distribution Holdings

COST DRIVERS

Robert Symons,
Chief Executive, Western Distribution Holdings

Cost drivers are, quite simply, another way of talking about value for money, but they also have to be understood in the context of how we reward performance, began Robert Symons.

Understanding operating cost drivers in the context of the distribution price review would, he explained, lead to an equitable and fact-based settlement for all companies. It would also enable an alignment of costs with reliability benchmarking and allow rewards for firms that perform and penalties for those who do not.

Setting the scene, he described the need for Ofgem to form a view of what distribution business efficient costs should be for a given level of service. Efficiency is not the same as lowest cost, he cautioned, stressing how the October 2002 storm had shown that a 'frontier' company in cost terms as defined at the last price review could not deliver basic services. Thirteen years on from privatisation, cost drivers should be well understood and a detailed approach taken at this review based on the causes that drive costs.

The focus of the presentation was primarily on operating costs arising from the four chief activities of the distribution business and on the importance of communicating to the regulator how these are composed, highlighting how assets are the key driver impacting on their costs.

The areas considered comprised corporate costs (the costs of running a business – legal, regulatory, finance etc), information technology and communications (notably operating systems in order to schedule and control the network, fieldwork and corporate systems), engineering (people climbing poles and digging holes to repair, maintain, extend and renew network components) and customer interactions.

Corporate costs needed to be identified separately, Robert Symons stressed, since these have in the past been spread across operating costs, muddling the picture as a result. The majority of corporate costs are fixed with only a tiny element variable.

IT and communications costs are principally stepped costs. Stepped costs result from an incremental increase in the cost driver and do not produce any increase in costs until a particular threshold is reached. An extra 10,000 km of line added to a network will probably not result in an increased IT spend but a threshold will be reached when a step change in costs occurs.

Robert Symons, Chief Executive, Western Distribution Holdings

Stepped costs can be relatively small as borne out by Western Power Distribution's experience when it bought the South Wales distribution business with IT costs rising from £9m to £11m.

The bulk of the costs borne by distribution companies, though, relate to engineering and the main point noted here was that operating costs are basically asset driven. The drivers for the three key areas of operating costs – maintenance of assets, faults and wayleaves – are asset based.

Cost drivers resulting from customer interactions largely relate to new connections, fault calls, MPAS calls and claims. Analysis showed that the capital costs tended to be customer driven with operating costs asset driven.

The relevance of understanding where costs come from and their drivers cannot be underplayed, Robert Symons emphasised. At the last review, customer numbers were regarded as the primary driver of operating costs and yet only 2 percent of these costs are customer driven once an in-depth analysis is done. This time, the industry regulator needs to benchmark the asset driven operating costs, compare fixed operating costs and make the connection with quality of service.

Ofgem has already carried out much work to compare performance between companies to allow for more effective benchmarking of reliability. There has also been a great deal of analysis into to the performance of companies during the recent storms. In order that companies are incentivised for continued performance improvements two things need to happen:

- Allowed efficient operating costs need to be adjusted for a firm's current performance delivery based on benchmarking
- Financial incentives for improvement need to be strengthened

Overall, the message was clear: at the next price review, the information given to Ofgem by distribution companies should allow a full understanding of fixed costs, with clear separation of operating and capital expenditure. It should also provide the ability to analyse the cost drivers and so allow a fully reasoned logical basis for allocating the costs necessary to deliver and exceed benchmark performance for the UK distribution businesses.

Finally, environmental factors need to be adjusted for. On this basis, an accurate assessment and equitable review can be made, encouraging and rewarding those who perform and penalising those who do not, giving a value-for-money service to customers.

ASSET RISK MANAGEMENT

Mark Horsley,
Chief Executive, CE Electric UK

Asset risk management is not only a vital aspect of how companies are being run, but also central to the successful management of distribution network operators. Because it is so important, it is vital that proper consideration of asset risk is incorporated into the forthcoming price review, argued Mark Horsley of CE Electric UK.

Since privatisation, he explained, there has been considerable emphasis on the application of network assets and the obligations that go with this. Typically, the assessment, mitigation and ongoing control of asset related risk is at the heart of the core skills.

Now, electricity distributors are looking to Ofgem to ensure the introduction of a robust consideration of the underlying technical risks that the companies face in managing their businesses in the next period. Asset risk management is a particularly relevant tool for the forthcoming price review where assessment of investment levels is potentially more crucial this time than ever before. If undertaken well, it gives companies the chance to prove that they are indeed in the best place to judge what level of investment is required in their business by introducing both transparency and objectivity to the assessment.

The reason why asset risk management is such a significant challenge to management stems largely from the need to balance competing outputs and the diverse stakeholders who have dissimilar and sometimes conflicting objectives. While owners require an appropriate and stable return, customer demands are centred on reliability and price. Safety and amenity, meanwhile, are the chief concerns of staff and the public.

Only by achieving a balance of the needs of all stakeholders for safety, quality of service and financial performance (both price to the customer and return to the shareholder) can the management challenge be overcome. All three 'virtues', meanwhile, are threatened by the capacity of assets to fail, in other words the underlying risk that what is intended does not materialise.

Achieving the 'right' balance is no easy task – although risk is a completely central concept to management judgement and decision-making. Maximising operational performance, of course, cannot be achieved alongside maximum financial performance. Therefore a dynamic blend of cost, performance and risk has to be achieved,

Mark Horsley, Chief Executive, CE Electric UK

always within the context of prevailing law.

Effective policy, strategy, tactical and operational plans are not confined to the boardroom and strategy office, however. They all translate, ultimately, into safer delivery, more reliable networks day-to-day and better performance in extreme conditions. Companies operating good asset risk management programmes will see the results in terms of network reliability, safe performance and network resilience.

Describing Ofgem's recent treatment of asset risk management, Mark Horsley said this had been well supported when it was introduced and the experience was felt to be a good contribution to the regulatory debate. Given that before the last price review there was relatively little input into the critical subject of underlying asset risk, the steps taken by Ofgem to address this represent a useful advance. It would, he hoped, provide a route into the price review debate for these essential aspects for the benefit of all stakeholders because of the increased transparency and objectivity it allows – although for this the asset risk management inputs will need to be produced in good time in order to be properly included in the considerations.

Describing his own company's experience, Mark Horsley explained that the full scope of CE Electric UK's business is covered by asset risk management so that there is clarity about the contribution of each part of the chain towards effective management of those assets.

It is important that Ofgem should also recognise these aspects as important in the price control treatment, he said. A company's all round performance should be considered when assessing efficiency and he was concerned that the 'underlying assurance' that good asset risk management brings can be lost in the cut and thrust of an essentially economic assessment.

Summing up, he concluded that asset risk management is a vital element of both the regulatory price control review and the management of the businesses, highlighting the fact that investment demand is starting to increase as the industry enters a phase of asset renewal. The key question is to know 'how much and how fast?' Ultimately, asset risk management is not a recipe for hiking up investment but helps to ensure efficiency. If done well, it is a basis for good business management by providing a valuable assessment of the appropriateness of a company's plans.

While there will be some differences in the approaches taken by companies, a transparent, clear rationale will provide a necessary part of an effective review.

MEETING THE CHALLENGES OF THE ENERGY WHITE PAPER

Rt Hon Patricia Hewitt MP,
Secretary of State for Trade and Industry

Drawing attention to the broad industry representation at the conference, the Secretary of State for Trade and Industry gave particular thanks to Amicus for drawing together so many stakeholders, including Ofgem, in a partnership that would be central to meeting the challenges which lay ahead.

Taking as her main theme the challenging goal of cutting carbon emissions by 60 percent by 2050 to tackle climate change problems as set out in the recent Energy White Paper, Patricia Hewitt described the opportunities before the industry to innovate, transform and enjoy sustainable success.

She paid heed to the dwindling indigenous energy supplies within the UK, outlining how by 2010 the UK will be a net importer of both oil and gas. Imported energy by 2020 could account for three quarters of the country's total primary energy needs, a shift that means a new energy policy will be needed as well as increasing reliance on relations with overseas partners.

For the present, the public not only want cleaner, greener energy, they want security of supply, she explained. The quest for a low carbon economy is the key driver for change, presenting not only significant challenges but also great opportunities.

The policy choice of the government has been to protect the environment by massively improving energy efficiency and increasing renewable energy sources. Emphasising particularly that the government is very serious about transforming the energy economy by developing a low carbon economy, she said that this commitment would be translated into securing renewable energy sources for the long-term. Renewable and, increasingly, offshore energy sources would play a key role here, as well as the introduction of an emissions trading system.

As far as customers are concerned, the opportunity exists to make it easy for them to access the renewable energy that they want. This will involve protecting the network from extreme weather conditions to ensure that supplies are secure. It will also mean ensuring that if things do go wrong, such as in the October 2002 storms, there is every incentive for them to be put right.

Developing new technology, however, is a priority and the government is supporting research and development into longer-term options such as the hydrogen economy,

Rt Hon Patricia Hewitt MP

particularly how Britain can become a thriving energy manufacturer as well as a user. It is also part of the DTI's strategy to make this happen. The aim is to see Britain become a world leader, exporting new high tech green equipment and creating new high-tech green equipment.

The diversification of supply is a further area of opportunity. As the government's commitment to expanding the generation of onshore and offshore wind power gathers momentum with the introduction of new facilities, there is increased pressure for the development of networks that can distribute the electricity that they generate.

For the network operators the corresponding challenge is to deliver this new and more diverse supply onto the network, to the customer. Networks need to be more flexible than ever before to adapt to more renewable energy and to small, decentralised power generation in homes and businesses.

Turning to the implications for the electricity distribution network, Patricia Hewitt pointed to examples of companies like Northern Ireland Electricity which has taken the initiative to introduce systems for recognition and diagnosis of faults to achieve better customer service and a more rapid response. A partnership approach between the regulator and the unions could, she stressed, have the potential to pay huge dividends if network operators can develop improvement schemes for the regulator's consideration.

Recognising that the ageing distribution network was not designed to cope with the huge changes now being experienced, the Secretary of State also called for more effective and efficient solutions to lengthen network life and enhance performance. Ofgem's role would, she said, be crucial here since it is expected to deliver on the White Paper priorities.

Rt Hon Patricia Hewitt MP

Capital investment would be part of the equation in achieving an improved distribution network, but so too would better management, better skills and better customer service. Like the rest of the economy, the energy industry faces skills shortages, something that is being addressed through a government strategy which has been developed jointly with the Department for Education and Skills and other agencies to set out how the skills gap will be addressed.

Regarding customer concerns, Patricia Hewitt pointed to the alarm caused by blackouts not only in London and the Midlands over the past year, but in New York recently which left 60 million people without power. Meanwhile, a nine-hour interruption to supply had spread throughout Italy, affecting 50 million and a further five million people in Denmark and Sweden who experienced similar difficulties after a major blackout had shaken confidence.

The fact that the blackouts in the UK were not caused by capacity shortages, lack of investment or a liberalised market was encouraging – as was the rapid recovery: just over 40 minutes in each incident. However, with the approach of winter consumer anxiety runs high because of the risk of severe weather conditions, fuelled by scare stories predicting power cuts. The collaboration between the industry and DTI, Ofgem and EnergyWatch through the Network Resilience Working Group is therefore to be welcomed. This partnership aims to learn the lessons of last year's storms and to do everything possible to ensure that history does not repeat itself this winter.

It is also clear from the National Grid Transco's Winter Operations Report, just published, that the energy capacity outlook is not as dark and gloomy as many would make believe and that this is in fact a properly functioning market. The generation capacity reserve is actually increasing as the market responds to higher prices and some mothballed capacity is coming back on line.

Concluding, the Secretary of State remarked that while winter is a difficult time with the risk of severe weather and increased demand, the system is nevertheless robust and well-regulated. The average number of power cuts has fallen by 11 percent and their duration has dropped by almost a third since 1991/92. Nevertheless, she reassured those present, the government is certainly not complacent about these issues and is looking very closely at recent incidents at home and abroad to see whether there are lessons to be learnt to reduce this figures still further.

THE COST OF CAPITAL

Jonathan Marsh,
Corporate Finance and Tax Manager,
Scottish & Southern Energy plc

While the cost of capital was important in previous price controls, it will take on even more significance for the present distribution price review. This, explained Jonathan Marsh, is because the present price control review is being undertaken against the background of substantial upward pressure on network investment programmes arising from anticipated growth in distributed generation, quality of supply improvements and increasing environmental constraints. It is therefore vital that Ofgem set the allowed cost of capital at an appropriate level to incentivise companies to invest in their respective networks.

The cost of capital is important as it is one of the main elements of the 'building blocks' in arriving at allowed revenue within the price control. Other 'building blocks' include capital expenditure and operating costs. It is vital that all these factors are set at an appropriate level. Without the right returns there simply will not be the required incentive for companies to invest and in some cases may affect ability to raise finance to support investment requirements.

In the last price control Ofgem allowed 6.5 percent cost of capital, on a pre-tax basis, based largely on cost of equity (6 percent), tax wedge (30 percent), cost of debt (4.3 percent) and gearing (50 percent). However, the cost of capital was only one of the factors in setting the price control and Distribution companies accepted proposals as an overall package.

The main issues for this price review centre on whether the cost of capital should be set on a pre- or a post-tax basis, the treatment of tax, appropriate return and the new risks for network companies.

There is a strong case for moving to a post-tax calculation which would give companies the right incentive to manage their tax affairs efficiently and this would also give consistency with the water industry.

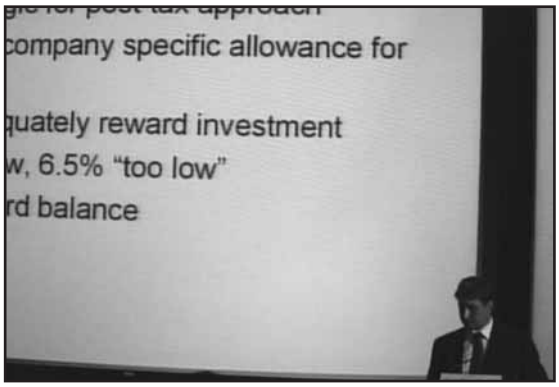
There are two broad options for the treatment of tax in the price review: pass through, or front end allowance methods. Jonathan Marsh maintained that upfront allowance should be the way forward as this would achieve consistency of treatment of tax with other operating costs and would incentivise companies to achieve tax efficiencies. It was also emphasised that the tax treatment for non-load refurbishment expenditure is due to change from April 2005 and will increase the tax burden on the industry by circa £150m-£200m per annum. Jonathan Marsh maintained that it is essential that this additional tax burden be fully reflected in the forthcoming price control.

In terms of appropriate return, reference was again made to the previous price control being accepted as a package and it was suggested that there is strong evidence that the risk premium has increased in recent years. Mention was also made of recent high profile corporate failures in the sector. It is vital therefore that Ofgem set the cost of capital at an appropriate level and fully reflect these risks and Jonathan Marsh stressed that if it did not then incentives to invest would be undermined and, in some cases, may affect ability to raise finance to support investment requirements.

Examining the new risks facing the industry, Jonathan Marsh pointed to the growth in distributed generation and said that new incentive mechanisms, such as IIP, losses and guaranteed standards and compensation were significant here. The danger of increased risks to distribution network operators also had to be taken into account and this risk should be reflected in the cost of capital.

Summing up, he stressed investment would need to be adequately rewarded beyond the last review level of 6.5 percent which was deemed too low. He also referred to the strong logic that exists for a post-tax approach, with an ex-ante, company specific allowance for tax.

Ultimately, a proper balance between risk and reward needs to be established if the industry is to meet the challenges that lie ahead.



Jonathan Marsh, Scottish & Southern Energy plc

Jonathan Marsh, Scottish & Southern Energy plc


John Roberts, Chief Executive, United Utilities

DISTRIBUTED GENERATION AND THE 2004 PRICE REVIEW

John Roberts,
Chief Executive, United Utilities

The way that energy is generated has changed substantially over the working lives of most people in the UK industry, moving from the growth of nuclear in the sixties and seventies, of gas-fired generation in the nineties and the decline of oil and coal. However, the way that energy is transmitted and distributed has hardly changed and there has been little investment in new lines.

The government's new focus on more sustainable energy changes this and, as John Roberts set out, there has been talk that this may represent the most fundamental change in the way that the energy system operates for over 40 years. As a result, there will be wide-ranging implications for the industry, with changes for generators, for transmission and distribution network operators as well as energy suppliers.

The proposals facing the industry are revolutionary but, if the country can achieve the government's targets for rapid growth in CHP, better energy efficiency and a massive expansion in renewable generation, the job of distributors and transmission operators will be radically different over the next 20 years, and the networks themselves will have to change. The critical question is what distribution network operators will need to do in the next five years to prepare for this.

In preparing for the future, United Utilities has repeatedly come up against the same issues. The first of these is planning permission, an area where new government planning is years overdue to weigh the national, environmental benefits of development against the views of the local communities affected.

The second major issue is funding. The renewables market is still immature and lenders are charging a high premium to reflect the risks, although the biggest single uncertainty is income. Although prices for renewable energy are healthy now, future prices are speculative and highly dependent on how the government runs the recently introduced Renewables Obligation – already subject to tinkering which is destabilising confidence. What is needed is a government commitment to, say, a 20 percent target by 2020 and guarantees that any buy out will continued to be recycled.

The third issue is infrastructure. While existing networks work well for the current energy mix, delivering power from the grid and a few large local power stations to customers, they weren't designed to accept large amounts of distributed generation. Getting the right infrastructure in place is of paramount importance for this price review if renewable generation is to be properly sited.

Significant generation within the distribution system will also give rise to some technical and operational challenges for the industry as the system becomes more dynamic and needs more active management.

The question is, who will pay for 'rewiring Britain', John Roberts asked, referring particularly to who should pay for reconfiguring electricity networks to accept renewable generation. There is much uncertainty over how much investment will be needed, or exactly when or where. It is unsurprising therefore that Ofgem has struggled to develop a framework for dealing with distributed generation in the price review. It is not at all obvious how the regulator should approach the uncertainties of a growing, developing system.

Since the entire UK population stands to benefit from reduced emissions, one might argue that taxpayers should help shoulder the cost, alongside the generators, their shareholders and investors who will also benefit. Ofgem's current thinking – although its proposals are not yet finalised – is that generators should pay similar charges to those they currently pay, only over the life of the connection rather than all up front.

However, this begs the question of who would pay for reinforcement costs if generators could not. It would seem that the burden would fall on distributors' customers, the energy suppliers, who will in turn offload these to their customers, which implies that customers will be paying the greater part of the infrastructure costs of connecting new renewable generation.

United Utilities has raised this with Ofgem, calling on the regulator to adopt a new way of allocating resources for strategic network enhancement, essentially distributing funds from a national pot to those areas with the greatest need for new infrastructure. The idea would be for this to work in a similar way to the Renewables Obligation, injecting competition between distribution network operators to build infrastructure and make connections and allocating funds efficiently to those areas where new generation is most attractive.

Where acceptable returns are likely, distribution network operators will actively look for opportunities to connect. However, no network operator is going to be prepared to take the risk of investing if costs cannot be recovered or if there is the possibility of stranded assets. This means that regulatory changes will be needed to ensure a fair return and give industry the encouragement that it needs to invest – rather than focusing solely on improving system reliability.

Ofgem has accepted the case for providing incentives, but the deal being offered falls well short of that needed to actively promote new network connections. Getting the balance right is fundamental to whether distributors change the way in which they operate. A step change in behaviour from distribution network operators is needed if the sought-after step change in network capacity is to be secured and for that the right incentives are needed.

Summing up, John Roberts highlighted the new energy challenges faced by the country and the new approaches this would entail. The government had set out its vision and is clear that it sees the price review as an opportunity to change the rules so that distribution network operators can play their part in delivering this vision.

The new price control offers a chance to align incentives with government's aims. The industry needs to take this opportunity to have a remote chance of meeting the government's renewables targets, and in a way that ensures that the costs of renewable generation fall on those who benefit, he concluded.

WHAT DO YOU DO WHEN THE NETWORK IS RUNNING AT FULL CAPACITY?

Professor Robin MacLaren,
Scottish Power plc

Robin Maclaren described the four challenges facing distributors as sustainable networks, facilitating renewables, balanced incentives and dealing with uncertainty. These key areas, he said, needed to be addressed in order to achieve a successful outcome to the distribution price review.

Even though the review covers only a five-year period, anything that is done must be sustainable in the long term. The asset sweating of the 1990s, when companies made best use of their resources, could not continue in the same way now and there is today a need for planning over a longer period.

Renewables, of course, have to be addressed against very clearly defined targets and the infrastructure to support them will be a fundamental component, as many companies have already urged.

Incentives are essential to encourage capital investment are similarly important as those committing funds need to have a clear understanding of who will benefit and how, efficiently and economically.

The many uncertainties, meanwhile, also cast a shadow over the coming years. The future is still unclear on how CHP, onshore and offshore energy sources will be brought to bear and influence patterns of demand.

Describing how capital investment had peaked in the 1960s, Robin Maclaren said that it was realistic to look for increased investment, compared with current levels. The pressures of performance, safety and the environment had to be balanced and required a long term investment programme. The pattern was that capital expenditure on asset replacement should increase. Additionally, more investment is now required to deliver the sustainable networks being sought in conjunction with efficient operations.

Future capital expenditure would be unlikely to reflect the investment peak of the sixties because of the natural spread in asset replacement. To maintain existing levels of integrity and performance, it is estimated that capital expenditure would need to increase to £2bn by 2020 against current levels of around £1.4bn, a rise of some 30 percent. Investments will initially be focused on short life assets, such as overhead lines and switchgear.

In the longer term, replacement of underground cable (accounting for half the asset base) will be necessary, though this is not an immediate priority. It is an investment increase which needs to start rising now if the government's substantial renewable targets are to be met.

Setting out the background to the renewables market, Robin Maclaren highlighted the government targets and how these equate to 8000 MW of renewable capacity across the UK. Scotland and Wales – where political support is strong – already offer an attractive resource for this, with interest in Scotland already at a high level, seeing over 8000 MW at various stages between initial interest and fully connected supplies. However, networks will need to be upgraded to accommodate renewable generation for transmission and distribution.

In terms of progress, Scottish Power has undertaken much research into where network upgrading will be required to change the profile of the distribution pattern by 2010 and the company is committed to long term planning now. The challenge is primarily to make network capacity available when and where it is needed, and the main enablers need to be put in place now. This includes a forward-looking investment framework based on an assessment of need. It will also necessitate investment secured in regulatory asset value at a sufficient rate of return.

The Renewable Energy Transmission Scheme was an initiative, said Robin Maclaren, which was enabling plans for the UK transmission infrastructure for a range of renewables to take place. One of the key challenges was to work with the regulator to discuss appropriate ways of funding – the other, the obtaining planning consentsfor the future network.

In terms of regulation, the Scottish Power view was very strongly that perfect economic outcomes are seldom achieved: there always has to be a balance over timing of building and the risks at that particular time. A large-scale strategic infrastructure needs to be planned and there will always be a risk that planning assumptions might turn out to be wrong. And, while market based signals for investment in infrastructure can work to a limited extent, a degree of intervention is nonetheless required.

The relevant criteria to the choice of funding mechanism were founded on the urgency of need for investment, its scale, economic efficiency and delivery timescales. A mix of approaches is possible, through price control, based according to scale and urgency, but whichever solution is adopted, rapid progress is going to be required to implement the decisions.

In the case of the development of the mid-Wales network for generation targets, innovative technological solutions might be used to provide new capaicty. Traditional arrangements were viable, but other opportunities (such as more control and capability in computing) to keep costs down would also need to be examined. New concepts can also be looked at to improve efficiency and find the right solutions, Robin Maclaren stressed, pointing to the opportunities of, for example, running hydro electric power with wind sources.

Innovative commercial arrangements would also play a key role in going forward, including constraints forecasts, connection agreements and developer and financier acceptability. Distribution network operator acceptability would also be critical, as supplies to existing customers must be maintained at least to current reliability levels.

Concluding, he emphasised that underlying the success of meeting the challenges of the future, though, would be the ability to have the right on people. The current shortage of power engineers for the UK needs to be addressed urgently and it is incumbent upon the energy industry to do more to attract young people to the profession.

METERING – REGULATING THE TRANSITION TO A COMPETITIVE MARKET

Andy Phelps,
Regulation Director, Aquila Networks plc

Winding the clock back to take conference delegates through the regulatory background of the energy industry, Andy Phelps described the changes which had occurred in the treatment of metering since the industry's privatisation in 1990.

In 1994, customers of over 100kW were given access to retail and metering competition. However, this led to significant data collection problems. Unsurprisingly, when universal retail competition was introduced in 1998 it was not accompanied by the opening of the metering market. This was delayed until 2000.

Currently, the regulatory framework gives suppliers responsibility for appointing meter providers and operators. However, distribution network operators have a licence obligation to provide a last resort service and have indirect controls on their prices. They also have protection against any stranding of costs which occur in the transition to a competitive market.

The existing British metering market is £390m, of which meter provision and operation accounts for the lion's share of £275m (71 percent). Data services account for £115m. In terms of the share of the household electricity bill, metering costs account for 4 percent, or about £8 per annum.

In the future, competition is expected to develop rapidly. It will be driven by five or six key suppliers, rather than customers, and distribution network operators are likely to lose considerable market share by 2005. The regulatory framework will need to take account of this reshaping.

Ofgem is currently proposing a separate metering price control to take effect from April 2005, but will require distribution network operators to retain their existing last resort obligations. In addition the proposals will require the separation of metering assets from distributors' Regulatory Asset Base. This could, as Ofgem has acknowledged, expose distribution network operators to stranded costs.

Andy Phelps explained that Ofgem's proposals would strand costs of both meter assets and meter operation. For meter assets a replacement cost valuation will reduce the stranding risk, though DNOs would still be vulnerable to premature replacement of meters through competition. Within meter operation, the costs of discharging past and any future licence obligations could also be stranded as competitive developed. He added that it was established regulatory practice for such costs to be recovered by the incumbent distributors.

Putting forward an alternative approach to protection from stranded costs, he advocated removal of the obligation on distribution network operators to provide new meters and metering services, together with a removal of price controls on meter operation. If necessary, pricing guidelines could be specified for existing meters.

Such an approach would facilitate competition, protect distributors against the stranded costs legitimately incurred in discharging licence obligations and prevent distortion of the market between the incumbent and new entrants. It would also allow distribution network operators to exit the market if they so wished. Competition aspects would be policed via legislation rather than complex price control arrangements, and there would be no need for termination charges to discourage the premature replacement of existing meters.

Summing up, Andy Phelps stated that competition was likely to develop very rapidly in metering and this would impact on market shares. Distributors required protection from stranded costs during the transition and the removal of their licence obligations which would crystallise existing charges out of market costs. Finally, in the light of these developments Andy Phelps was strongly of the belief that the construction of a new metering price control in 2005 is unnecessary.

Professor Robin MacLaren, Scottish Power plc

Andy Phelps, Regulation Director, Aquila Networks plc

IMPROVING THE BALANCE: INVESTMENT INCENTIVES IN THE DISTRIBUTION SECTOR

Derek Holt,
OXERA

Developing innovative regulatory solutions to improve investment incentives is a key challenge for the next distribution price control review, said Derek Holt, Senior Managing Consultant at economics consultancy OXERA.

Investment by electricity distribution companies has been fairly steady at the rate of around £1bn per year since privatisation. While this is relatively low compared with the water and rail sectors, both of which have recently been spending around £3 billion on investment per year, the investment intensity of the electricity industry is similar to that in water once the lower regulatory asset base is taken into account. Therefore an important issue that the electricity sector must address is how any increased investment requirements, for instance to improve security of supply, should be financed.

The key drivers of future investment in electricity distribution would, Derek Holt explained, be network resilience and the challenge of 'rewiring' Britain.

In recent years, companies have tended to extend the lives of most asset types without apparent deterioration in network performance. However, companies have noted that while extending the life of assets through maintenance and repairs has been beneficial to customers, this cannot continue indefinitely without increasing the risk of asset failure. Others have noted that the asset turnover rate at current levels of investment is 140 years, taking the industry to DR35.

'Rewiring' Britain, meanwhile, is potentially the biggest challenge for the 2005 distribution price control review. It will require significant investment for the connection of generators and for network reinforcement. However, there remains much uncertainty regarding the type, timing and location of new power generation, as well as on the investment needed. There is also the fundamental question of how much investment is desirable, as well as how companies can capitalise on low interest rates and yet protect customers against the costs of unnecessary investment.

The options for sources of finance are threefold: debt, new equity and retained earnings, and the challenge is to predict whether access to these will be more or less difficult in the future taking account of increased pressure on balance sheets and a tougher regulatory framework combined with reducing potential to secure outperformance against operating cost targets.

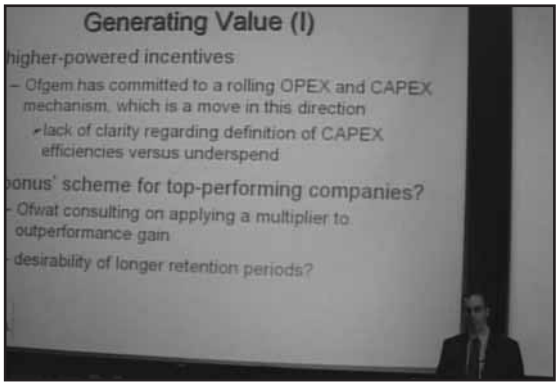
Derek Holt also examined the underlying borrowing requirements for the sector. In the context of the difference between net capital expenditure and depreciation allowance against Ofgem's own analysis, he saw some evidence of increased borrowing needs. The cashflow shortfall during the previous regulatory period was £448m, some 3.7 percent of the industry's initial regulatory asset value. This could be much higher in the next control period, Derek Holt cautioned, though he added that this needed to be put into perspective: equivalent figures in the water industry for this review period saw a shortfall of more than £7.1bn, ie. 24.8 percent of initial regulatory asset value.

Turning to opportunities for issuing new equity to relieve the pressure on balance sheets of increasing debt levels, the United Utilities rights issue had appeared to have been successful, with a 91.3 percent take up rate. However, this could have been attributable to the fact that it was offered at a significant discount – 42.7 percent of stock price. Given that it is particularly difficult to gauge market values in the electricity distribution sector due to ownership patterns, the appetite for new equity will only become apparent over time.

Various regulatory options could be considered in order to improve the financeability of the sector, thereby improving access to capital markets. To make industry more attractive to equity, it might also be necessary to increase the scope for generating value. Several ideas are worth considering here, in particular since a reduction in depreciation may hit companies in the next review period, affecting cashflows and ratios. It might even be possible to rebalance cash over the longer term and provide cash up front for a part of capital expenditure on a pay as you go basis. Longer control periods would allow smoothing of prices.

Other ways to improve financeability might be to apply a nominal cost of capital to an asset base that is not inflated by the retail price index, although this does raise the issue of how Ofgem would carry out and interpret 'financeability checks'. Either way, there is a need to think about the trade-offs between customers today and long term financing.

A longer-term package of higher power incentives might also be appropriate here to improve scope for generating value. Ofgem has already committed to a rolling operating expenditure and capital expenditure mechanism which is a move in this direction. However, there is still a lack of clarity regarding the definition of capital expenditure efficiencies versus underspend which needs to be resolved.



Derek Holt, OXERA

Ofgem has also proposed incentives for distributed generation investment and the proposed hybrid incentive could provide a return above the business-wide cost of capital. However, this would necessitate a return below the business-wide cost of capital in the short term. Further means of improving the scope for generating value might also come from incremental cost pricing for new capital expenditure, away from the building blocks approach. This option could have desirable efficiency properties and was proposed (though not eventually adopted) by the Civil Aviation Authority for airport operator BAA's last review.

Taking questions from the floor at the end of his presentation, Derek Holt responded to a delegate who asked how it was possible to talk about increasing investment without shedding jobs. He responded by saying that it was possible to reconcile the two in that the two separate elements of network investment and staffing are in fact interrelated. Additional investment will depend on the balance between rates of return and risk, an issue that he believes needs to be tackled at an early stage.

Bob Taylor, Powergen UK

RESOURCING THE FUTURE

Bob Taylor,
Powergen UK

Resourcing the future is a major challenge for the future of the electricity industry, said Bob Taylor, remarking on the under-representation within the conference of people under the age of 30, and also of women, as he began. The number of people employed by the electricity industry had decreased by 62 percent since privatisation from 150,548 in 1989/90 to 57,240 in 2001/02, he said, quoting from Electricity Industry Review.

The change has been driven by competition in generation and in retail, notably the separation, reorganisation and systems changes that have been experienced in distribution networks. Aggressive regulation in distribution networks has delivered results and very successfully, reducing network use of system charges by 40 percent in real terms to approximately £60 per year for a domestic customer, although this had had a radical impact on the workforce.

Redundancy programmes and low recruitment initiatives have resulted, with an attendant loss of skills, knowledge and experience. Apprentice training programmes have been reduced, with flatter structures now the norm, featuring 'multi-skilled' staff. This has also resulted in the emergence of 'technician' roles, competing with the traditional engineer/craftsmen posts of the past. The drive for efficiency has meanwhile led to enhanced performance-based rewards and the need for management to adopt skills to cope with continuous restructuring and change.

In the future, the challenge for distribution network operators will be the need to innovate and seek continuous performance improvement. It will also require investment to sustain networks and facilitate distributed generation and renewables development. Companies will have to lead and take responsibility for the development of skilled resource and they will have to face up to the choice of working together with others in the industry or running the risk of going it alone. After all, people are vital assets too.

Unfortunately, recruitment difficulties today are very common. The 2001 Employment & Skills study by ETA showed that over three quarters of electricity employers have or are expecting problems in this area, notably amongst technician and craft workers, and particularly in the area of electrical engineering. Similar numbers already have problems in attracting good graduates, while half encounter difficulties recruiting apprentices, with some regions suffering more than others. On the positive side, there is less difficulty today in recruiting commercial/business and information technology and communication skills.

The age imbalance in the demographic profile of company workforces is also a problem and, while there are variations between companies, the general picture is that 38 percent of staff are aged between 45 and 59, typically male (75 percent), with a small ethnic (3 percent) and disabled (0.5 percent) representation.

Recruitment problems are commonly held: there is competition for the same limited resource pool, and only limited training of new resources. The industry also has a poor image: it isn't 'sexy' and there is considerable

competition from other sectors for those who perform well academically, taking them out of the industry's grasp. In 2003, for example, there were just 50 applicants for electrical engineering degree courses in the UK. One reason for this is perhaps the fragmentation of relationships post-privatisation which has seen partnerships between key universities and providers dwindle.

For the future, the industry needs to address its image, tackling the old versus new economy syndrome which is such a drain to more traditional jobs in the sector. The supply of skilled resource also needs to be addressed with a revisiting of how local opportunities can be made more attractive to technical and craft workers, bolstered by ongoing training, balanced with the offering to electrical engineering graduates coming in at national level. Stability and predictability of the regulatory environment – key factors for investing in resources is also essential.

For technician and craft recruitment, there is less of a problem. The national framework provides for partnerships with local contractors, endorsed by trade unions are working successfully, however further development will be required to offer different levels of the programme for different jobs. The key to success long term is taking action now to ensure that more apprentices come into the industry, especially since it takes four years for them to qualify.

To tackle the diminishing interest of graduates in the sector, new initiatives are needed. A very interesting proposal has been put forward for an Electrical Engineering Academy whose scope and purpose would meet the needs of the industry very effectively. The main partners for such an academy would be the network power companies (via ENA), selected universities and the Institute of Electrical Engineering (IEE). Proposing endorsing partners would include the Energy & Utility Sector Skills Council, DTI and Ofgem.

A 'virtual' organisation, it could provide a framework for stakeholders to work together. It would be a brand with which to market university places to 'A' level students, positioned as prestigious by nominating its members as scholars.

The key characteristics of such an academy would be the offering of recognised electrical engineering degree courses, with financial and non-financial sponsorship of those taking part. Mentors and coaches would be provided, drawn from both industrial and academic backgrounds. There would also be a key role in facilitation for the IEE, by offering a stepping stone to Chartered status and privileges currently afforded to the Institute's members.

The benefits would be manifold. The academy would allow economies of scale and the ability to nurture a critical mass of academic experience and training in electrical engineering. It would also provide a cadre of experienced graduate electrical engineers for the UK electricity industry.

For sustained long-term success, it is essential that there is investment in the network and people assets.

ACCOUNTING FOR DIFFERENCE

Vincent de Rivaz,
Chief Executive, EDF Energy

EDF Energy has chosen vertical integration as its business model because the company believes strongly that this is the best way to protect its customers against the volatility of markets and to ensure they are provided with the reliability, value for money and service they expect. It is a strategy which has yielded encouraging results to date, Vincent de Rivaz reported to the conference.

As the largest electricity distribution company in the UK, EDF Energy has achieved considerable success through its approach, achieving a reliability rating of 99.99 percent in its London and regional networks, an outstanding figure when set against the service delivery figures for many other public service companies.

The biggest change among customers is that they now expect the same level of security of supply from their local electricity distribution system whether they live in the city or in the countryside – and restoration times following power cuts are expected to be considerably more rapid than in the past.

The characteristics of the distribution systems serving urban and rural areas are very different. London, for example, has a highly concentrated supply network, reaching seven million people who use 25.5 TWh of power which is delivered through around 30,000 km of underground lines. Contrast this with EDF's East of England network with around 8 million people using only a little more power but carried through three times as much cable - most of which is overhead lines. The lines in East Anglia will always be more vulnerable to damage than the London network, of course, but delivery of the same quality of service is required for all customers. This is something which has to be addressed in ongoing programmes to maintain and upgrade the system.

However, a supply can never be guaranteed completely. This means that network engineers must be responsive and flexible so that when faults do occur they can be quickly isolated and power restored. This in turn means making choices about the priority given to different customer groups, but it does not mean any less importance is attached to the very last customers who are reconnected after a blackout.

As electricity distributors EDF Energy's responsibility is to continue to strengthen and maintain the network in a cost effective way, because an ageing infrastructure can apply an unwanted brake to economic growth. North

Vincent de Rivaz, Chief Executive, EDF Energy

American power cuts have been estimated to have cost their economy at least $100bn per year – without including the extreme events which were seen last August.

It would not be realistic, though, to advocate replacing all overhead lines with underground cables – the cost in the UK alone would be prohibitive – somewhere in the region of £6bn, around 20 times the current capital investment of £300m per year. Bill paying customers need to understand this through open dialogue, so that they have realistic expectations about the service they can expect in the context of value for money.

From a regulatory perspective, the industry is going through a period of change, perhaps the greatest since the privatisation programme of the 1980s. Competitive pressures are mounting, driven by the desire of regulators to maintain price levels for domestic and business customers. The EDF Energy agenda for change is clear and, explained Vincent de Rivaz, is based on the belief that a single liberalised market should exist throughout the European Union that establishes a level playing field for all electricity companies, in whichever Member State they operate. It appears from EDF Energy's dialogue with Ofgem that the regulator too takes the view that the European dimension needs to be high on the priority list.

In the context of the five-year regulatory cycle, it is crucial that there is a clear understanding of how distributors will be encouraged to make investment decisions for things which will deliver value over much longer periods of time. This is particularly significant given that asset lifespans can be 40 or 50 years and an important element of EDF Energy's response to the current distribution price review.

A further issue is the level of incentives for efficiency improvements to take into account the diminishing opportunity to continue to make further improvements.

In terms of expectations from the 2005 review, there are those who would argue that the industry should leverage their distribution businesses much more highly than at present, but this is not the view of Vincent de Rivaz. In contrast, he believes that running electricity networks is a specialist business and to be effectively owned by financial institutions would be a distraction from the business of serving customers.

The modest return of 6.5 percent on the value of companies' distribution assets is very low. However, if the UK industry is to face up to the challenge of raising capital in global capital markets, it must be able to tempt investors away from the attractions of higher yielding competitors overseas. This will be a key issue for Ofgem to address to ensure that the industry can earn a sensible return compared to those operating in other European countries – even though it will be hard to strike the right balance within the price control review.

A more robust and comparable set of data will be critical to proper analysis of each distribution area so that this balance can be achieved and transparency will be important to ensure that there are no automatic assumptions that differences are due to inefficency.

Reward for those who have in the past been deemed to be 'frontier' companies is a further area of concern that will need to be addressed so that idea sharing is not discouraged at the expense of the advancement of the industry as a whole.

One area where costs will never be allowed to constrain results, though, is health and safety – accorded the highest priority by EDF Energy and a commitment to extending health and safety initiatives across the company to achieve excellent performance will remain whatever the outcome of the distribution price review.

Furthermore, the emphasis on continuing to approach the management of the business on the basis of 'one team, one company' will put EDF Energy in a strong position to ensure that it can draw on asset management and operational experience from each part of the business and apply it to all parts. This allows a rounded view to be taken of the best ways to serve customers and to optimise whichever part of the supply chain will provide the most benefit. Above all, the quality and commitment of employees is key to the success of the network, recognising that staff are the company's greatest asset.

Having people in-house allows a company to take responsibility for its core business and the quality of service to customers. Maintaining the pool of committed, high quality people with the right skills is an ongoing challenge, however, and like other companies there are concerns over the reducing flow of new entrants to the business.

The looming skills shortage is an issue that is brewing and, without urgent action, will begin to hit the industry within the next five to ten years. Meanwhile, the extent to which the industry as a whole relies on outsourcing is also a cause for concern, reflected in the preference which EDF Energy has for maintaining core customer service activities in-house – whether call centres or core network maintenance.

To address this, employers must act now, putting more effort into staff training and to further the potential of technical and craft employees. Partnerships with the education community, Amicus and other trade unions will also be valuable in reinforcing such initiatives, generating a bigger pool of talent from which we can draw. Ultimately, however, it is the partnership between the companies and their employees, as borne out by the EDF Energy experience, which will really account for the difference.

BALANCING OBJECTIVES

David Gray,
Managing Director, Regulation & Financial Affairs,
OFGEM

David Gray began by thanking Amicus for sponsoring the occasion and for giving OFGEM the opportunity to make a presentation to an audience in which the industry was so well represented. He recognised the significance of the event, highlighting the fact this price control review process would be more complex and carry with it a wider set of objectives than in the past.

Developing network monopoly price controls would, he acknowledged, require four key areas to be addressed, as outlined in Ofgem's consultation paper published in June. Preparatory work for the review had shown that incentive regulation is still seen as the best way forward and recent activity has looked specifically at incentive regulation and the efficacy of incentives (with a move towards addressing rolling retention periods), operating and capital expenditure distortions, non-operational capital expenditure and the increasing need to deal with uncertainties. In terms of financial issues, the financing of regulated business, cost of capital, tax and pension issues were all high on the priority list. The consistency of the framework was a further area for consideration.

The consultation paper suggested that Ofgem should try to resolve key policy issues at an early stage and to ensure the consultation process is open and transparent issues. Policy areas in which Ofgem was seeking to make early progress included distributed generation guidelines for the treatment of pension costs. In principle, these are seen as a legitimate part of financing costs but existing pension deficits would need to be examined to try to achieve some clarity on where shareholders rather than customers should be responsible. Other guidelines are planned for March next year. Finally, the consultation paper set out the goal of achieving open and transparent consultation.

The objectives for the review had been well received according to David Gray. There is still scope for achieving improved efficiency and reducing costs, but there is also recognition that this review is taking place at a more complex stage of the industry's development. Quality and security of supply, for example, feature more prominently than before, including the need to design improved incentives for better service to customers as well as to boost network resilience. Distributed generation, meanwhile, would require the issue of connection charges to be tackled, alongside further incentives for network reinforcement.

Ofgem's principal objective, he explained, is to protect the interests of consumers, wherever appropriate by promoting effective competition. The previous control had reduced charges by 23 per cent, transferring £650 million per year to customers, without damaging investment and coinciding with improving quality of supply. The number of power cuts and their duration, for example, had fallen.

Performance under the current price control review does not suggest that further improvement cannot be made, however. The difference between standard controllable operating expenditure assumed and actual costs saw a gap of around 21 percent less spending than had been predicted. Most companies, said David Gray, are also spending less on capital expenditure than assumed, and are achieving a rate of return between 8 and 12 percent – much higher than the 6.5 percent per annum used as a base-line in the previous review.

The performance differences are not perceived by Ofgem to be a bad thing. Even though the last review was felt to be tough, companies nevertheless faced up to the challenge of improving their businesses rather than going to the Competition Commission. This time, Ofgem intends to look at a range of data comparisons, including bottom-up and top-down cost assessments, to see what is both credible and necessary in terms of future spending expectations. DNO forecasts will be reviewed and there will be recognition of the linkage between operating and capital expenditure. Key to this will be the availability of reliable data so that more weight can be given to the companies' own forecasts.

There are also some financial issues to be addressed, starting with the financing of regulated businesses, notably gearing levels and the need for a special administration regime. The question of actual rather than notional tax needs examining to take account of the divergence of effective tax rates and the fact that, under the current approach, savings on tax are not passed through to customers. The removal of perverse incentives for high gearing will fall under this bracket. The cost of capital will also be explored with a continued focus on the Capital Asset Pricing Model (CAPM) and the possibility of a move to working on the basis of post-tax cost of capital. Pension costs will continue to be discussed with a range of decisions required on how the rules will apply in this area.

Improved incentives for quality of supply are needed, with the objective of providing a better service to customers. Not surprisingly, the main areas of concern to Ofgem are the number of power cuts and their duration, coupled with the importance of communications with customers during interruptions to supply. Research also suggests that some customers may be prepared to pay a little more to ensure quality of supply and Ofgem now needs to go back to get more detail on this. Detailed work is being undertaken to comparing quality of supply performance, while further research on customers' 'willingness to pay' on the cost of improvements is also being carried out. A review of standards of performance will help here in order to agree new arrangements compensation for interruptions caused by storms, alongside a full review of performance arrangements and exemptions.

The October 2002 storms concentrated interest in the area of security of supply more strongly than ever before and there is today a need to address the limited understanding of what is meant by 'network resilience'. More explanation is needed to define what is meant by

David Gray, OFGEM

this term as well as what factors drive it. A better analysis is also needed of the linkage between severe weather and the impact on both the network and customers. The issue is not, however, simply a question of incentives for long term investment; rather a possible need to develop measures to incentivise efficient management of network resilience. Value for money continues to be the watchword here.

A mechanism is also needed to encourage the connection of distributed generation (primarily renewable generation) to the distribution networks. Ofgem's role here is to make sure there are no unnecessary obstacles impeding progress. The structure of charges is going need to reflect shallower, more transparent (and fairer) connection charges as well as generator use of system charges. Charging will also need to be more understandable and predictable. Incentives for network reinforcement will be required to provide incentives for DNOs to invest (with downside protection), while account will have to be taken of the fact that higher risk implies a premium return – and the reverse.

Ofgem's job in this price control review is undoubtedly more complex than in the past and will require the regulator to balance potentially conflicting objectives. However, customers should gain from a combination of continuing improvement in efficiency and improved incentives for performance and investment which Ofgem will looking to build into the next control period.

CHAIRMAN'S SUMMARY

Professor John Bridgeman CBE TD DL

The day had been both fascinating and enjoyable, said Professor Bridgeman summing up the highlights. He paid tribute to the speakers who without exception has been of the highest quality, and also to Amicus for having organised the event. For a trade union to think so imaginatively and strategically about how to approach such an important issue and then to organise this groundbreaking conference, with top level speakers addressing issues of national importance, was without precedent.

The conference, quite simply, had been a trail blazer, a model for what other unions could do, and Amicus deserved huge congratulations for staging it.

Dougie Rooney (Amicus) had opened the conference with a call to arms, inviting all the issues to be put onto the table and ending some of the industry secrecy which has existed up to now. There was indeed frank and open discussion of what needs to be done to secure the electricity distribution industry and the economy. It is now up to the industry to address the issues, elucidated so distinctively and openly over the course of the day.

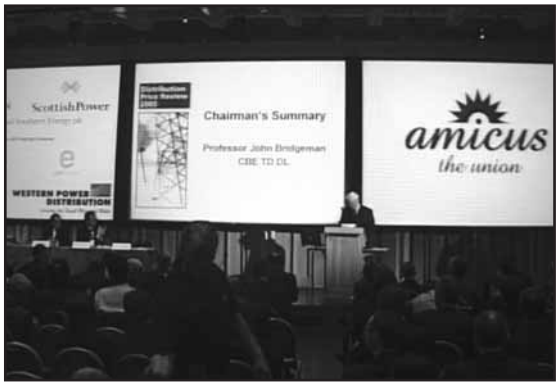
Patricia Hewitt's grasp of the ageing network, the need to secure capital investment, to close the skills gaps and to improve the skills base all showed that while she recognised the industry's achievements, there was no cause for complacency.

John Roberts (United Utilities) highlighted what many agreed with: that the government probably needs a 'poke in the ribs' on both planning guidelines and the extent to which it is prepared to offer financial support for the development of renewables.

The importance of the government's national role as well as of private sector corporate responsibilities for skills development was another important theme. It is in fact an example of where the government needs to take a more strategic view when looking to the future.

Asking what customers might think, Professor Bridgeman stressed the need for distribution companies to make a proactive effort to communicate with them in advance of the next price control review. Distribution companies should make clear that the important issues are being addressed both corporately and through industry forums, he told delegates. Support will only be secured through building a constructive dialogue. The industry also needs to help customers to understand that their needs are understood and that security of supply is of paramount importance, particularly to those

Professor John Bridgeman CBE TD DL



Professor John Bridgeman CBE TD DL

who face the challenge of retirement, disability, illness or infirmity, all of whom need special reassurance.

Even the regulator admitted that it's impossible to get everything right all the time. It is only when there are proper debates, such as we have seen at this conference, that progress is made. The day needs to be seen as the start of a substantial journey to help the regulator not to make mistakes. Meanwhile, the industry must not be afraid to look at other industries such as railways, which are becoming increasingly disconnected and fragmented, to see what could happen to electricity distribution if the next regulatory round is mishandled.

Other highlights over the course of the day spanned the importance of benchmarking, the complex worlds of the cost of capital and of metering – both skilfully demystified by the speakers – and industry skills. It is quite true that the government needs to be motivated to develop its own national strategy with regard to technical skills but there is still much that the industry itself can do to show it itself off as both an exciting industry and a rewarding industry. Is the electricity industry, for example, really going out into the education community – to schools and colleges – with the right messages and the right reward packages? Are there enough apprenticeships and studentships on offer and are there enough supervisory and management training programmes taking place? This is something which the industry has to answer for itself, and companies need to look within to see where action is required.

Finally, Professor Bridgeman remarked that he had had to pay tribute to the Regulator who was not only very open in his presentation, but who also fielded questions very frankly, particularly on the issue of pensions and the issue of 'who pays'.

There's no doubt that the world has changed, and the UK's Energy Regulator knows that. He can't help but realise, given the dramatic reduction in the electricity workforce since privatisation from 157,000 people to just 60,000 today. David Gray's openness in expressing his understanding of the issues was highly encouraging. It will, said Professor Bridgeman, set the tone for delegates to leave the conference and ask, as the long path to the next price review begins, what each of those present can and should do about it.