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Developing Network Monopoly Price Controls, EME Response to Update Document

Dear Adrienne

This letter outlines the response of East Midlands Electricity to the Ofgem Consultation Paper "Developing Network Monopoly Price Controls: update document" dated February 2003. It also incorporates EME's comments on the two reports by Frontier Economics, published in March 2003. We would like to express support for the EA letter from Mike Boxall on Ofgem's timetable and, therefore, have not repeated our views here.

Firstly, EME would like to emphasize the importance of the effect of regulation on distribution networks. The Government's Energy White Paper makes it clear that the uninterrupted operation of gas and electricity networks is essential to security of supply, and safe and reliable supplies of electricity and gas are fundamental to our economy and way of life. It also recognises that electricity distribution networks will have to change very substantially in the way they are designed, organised and financed to accommodate a large increase in directly connected generators. As key players and facilitators in the energy industry, DNOs need to be allowed to invest in and manage their networks appropriately to meet these responsibilities, including significant challenges with the existing infrastructure. Therefore, Ofgem should ensure that regulatory policy and incentives align with the declared aims of the energy policy, in that sufficient weight is given to energy security and the impact on the environment and social objectives.

The introduction of the phase 1 objective setting and framework in the overall review process is an important step, which we welcome, and EME are fully supportive and strongly engaged in the process. Furthermore, the timing of this review of the framework for network monopoly price controls is very appropriate, given the current climate due to:

- the risks associated with management and regulation of networks, highlighted by events such as major rail incidents, which underpins the development of the Asset Risk Management Survey

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- the impact of changing weather patterns on electricity distribution and changing customer expectations and reliance on electricity, which has been brought to the fore by the storms affecting several DNOs in October 2002
- the more overt threat of terrorist action, which emphasises the need for secure supplies and the potential impact on the economy should terrorists target key network assets.

In this environment, it is imperative that the price control framework provides clear objectives and deliverables to DNOs over the longer term.

EME is supportive of the approach to the price control review process taken by Ofgem, and applaud the openness and transparency. Our response focuses on areas where we have concerns and where we feel we can add most value. The detailed response attached to this letter covers the following areas:

- Sustainable Investment
 - Use of Asset Risk Management Survey
 - Skilled Resource
- Assessing Efficiency and Efficiency Incentives
- Financial Issues
- Guaranteed Standards, Overall Standards and IIP
 - Normalisation and Targets Setting
- Assessing Customers' Willingness to Pay
- Competition in Connections
- Metering

The main points are summarised here:

EME is supportive of the price control review process to date, which has been open and transparent.

EME agrees with the principal objective to protect the interests of present and future consumers in terms of price, quality and security of service, whilst allowing shareholders to earn a reasonable rate of return on their investment.

DNOs respond to the incentives provided by the regulatory framework and it is important that Ofgem considers carefully what it is DNOs should deliver before finalising any incentive mechanisms. It is imperative that the price control framework provides clear consistent objectives and deliverables to DNOs in the longer term. Uncertainty beyond each 5 year price control period weakens incentives. More importantly, network investment incentives need to be strengthened in order to allow companies to properly balance risk and reward over the life of the asset.

Customers have enjoyed real benefits as a result of RPI-X regulation; improved asset management has enabled the industry to lower prices to customers, however the service customers enjoy is the result of past, as well as current, investment levels. The network infrastructure has built into it an inherent resilience, which should not be mistaken as a reflection that current levels of investment are sustainable. For EME, the asset turnover rate at current levels of investment is 140 years, taking us to DR35. This is manifestly not sustainable.

It is important that the incentive to invest in the network is aligned with the drive for "re-wiring Britain". In an increasingly international market for capital, it is not likely that the required level of investment will attract investors unless returns are substantially higher than current levels. Furthermore, the next DNO price control review needs to ensure that companies are in a position to invest in training, college / graduate intake and succession planning within companies to ensure the skill base is adequate for re-wiring Britain.

In the interests of balancing incentives on shorter term efficiency and longer term sustainable investment, any efficiency incentive mechanism should be used in conjunction with equally strong incentives to invest.

It is important that Ofgem sets out some criteria/guidelines relating to assessment of efficiency for this review period and the DR4 period. It is equally important that due regard is given to outputs in making a judgement of efficient spend. Clarity in this area would promote confidence that sound management decisions will not be penalised, and prevent weakening of incentives due to uncertainty.

In the proposed review of outputs, it is necessary to go back to first principles and consider what the GS, OS and IIP are designed to do for consumers and how to incentivise companies appropriately.

We consider that robust normalisation is required to make quality of supply comparisons. However, the complexity of the area under consideration has not to date suggested the potential for a robust normalised process. . In the end, it should be for individual negotiation as to the acceptability of targets linked to capital / operational allowances and incentivisation schemes.

Spot targets are not consistent with the inherent variability in network performance or an accuracy level of 95%; EME supports the use of deadbands or averaging to accommodate variability in performance.

No matter what the change in weather patterns or customer expectations, the principle behind 'force majeure' and exemptions is that DNOs are not penalised for something which is outside their control. Arrangements should be consistent across standards and a clear consistent message given to consumers.

It is, of course, necessary for Ofgem to carry out a customer survey; however, results from a customer survey could only be used to understand marginal preferences. As with all investments of this nature, there is a cost/quality or cost/risk trade-off, in EME's view it is not appropriate for relatively uninformed consumers to make decisions that will impact the integrity of such key asset infrastructures. Societal value of energy delivery systems for both present and future customers are better assessed elsewhere and will in any case require leadership to drive appropriate alignment with overall energy policy objectives.

It is important to review the sum effect of the incentives on DNOs and ensure that they are consistent with required deliverables and that there are no perverse incentives and no double hits. Ofgem should ensure that regulatory policy and incentives align with the aims of the Government's Energy Policy.

Finally, EME are supportive of the principles set out in the Better Regulation Task Force report. However, it should be recognised that many of the practical actions to achieve those principles are not consistent with the current short-term comparative regulation regime.

I would be happy to discuss the views expressed in this response in more detail, if you wish to do so or wish to seek further clarification please contact me via email or telephone, on 01332 393301.

Yours sincerely

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SUSTAINABLE INVESTMENT

EME agrees with the principal objective to protect the interests of present and future consumers in terms of price, quality and security of service, whilst allowing shareholders to earn a reasonable rate of return on their investment. Furthermore, we are supportive of the value for money approach and have already expressed our support for evaluation of total cost quality assessment in principle, whilst recognising the practical implementation issues probably suggest a formal DR5 implementation.

DNOs respond to the incentives provided by the regulatory framework and it is important that Ofgem considers carefully what it is DNOs should deliver before finalising any incentive mechanisms. It is imperative that the price control framework provides clear consistent objectives and deliverables to DNOs in the longer term. Uncertainty beyond each 5 year price control period weakens incentives. More importantly, network investment incentives need to be strengthened in order to allow companies to properly balance risk and reward over the life of the asset.

Customers have enjoyed real benefits as a result of RPI-X regulation; improved asset management has enabled the industry to lower prices to customers, however the service customers enjoy is the result of past, as well as current, investment levels. The network infrastructure has built into it an inherent resilience, which should not be mistaken as a reflection that current levels of investment are sustainable. For EME, the asset turnover rate at current levels of investment is 140 years, taking us to DR35. This is manifestly not sustainable.

EME has proactively sought out efficiencies, and innovation in both asset risk management and targeting of available investment. Although such improvements can be carried forward, the level of investment is not sustainable. Indeed, to enable EME to continue to meet the challenges of security, quality and safety of supplies, network risk needs to be recognised and investment levels increased accordingly.

The asset base is ageing, with consequential links to its inherent condition, and replacement of these assets requires a long term, co-ordinated approach in order to minimise disturbance to customers, protect security of supply, ensure adequate skills resources are available and best manage possible price fluctuations.

EME considers that in order to achieve the principal objective, capital investment should be based on network needs through a risk based asset management approach, with regard to network integrity, agreed levels of risk, appropriate quality of supply, price stability, environmental objectives and energy policy. The asset risk management survey should give comfort that DNOs are best placed to manage the network effectively. EME believes that the tools it has developed in-house, condition analyser, performance analyser and risk register, are best in class and will lead to development of a robust capital investment forecast with explicit risks which cannot be ignored.

The network infrastructure is increasingly becoming overloaded with the consequent requirement for large “lumpy” load related tranches of expenditure and Distributed Generation will exacerbate these issues. It is important that the incentive to invest in the network is aligned with the drive for “re-wiring Britain”. In an increasingly international market for capital, it is not likely that the required level of investment will attract investors unless returns are substantially higher than current levels.

Use of Asset Risk Management Survey

We welcomed the opportunity to meet with John Scott and Steve Argent, and of particular relevance is the discussion relating to Ofgem’s Asset Risk Management Survey. EME supports the use of the survey in the price control review process to assess the underlying

processes that deliver asset stewardship and to facilitate incentivisation of reliability measures.

We would support development of further audit based surveys to focus on the ARM processes that establish “what needs doing”, for example:

- risk capture / review and quantification assessment
- linkage between risk assessment and what needs to be done

Once such a process has established “what needs to be done”, cost for implementing and delivery needs to be established and a value for money judgement made separately.

Although we believe that the review of processes in such a survey is a valuable input to the price control review, we believe that the output of the ARM survey cannot be used mechanistically. We would like to emphasise the need for a holistic approach, i.e. one that considers not only the processes but also considers the inputs and outputs, and the effectiveness of prioritisation and delivery.

Skilled Resource

Regulators have driven the business in the direction of cost reduction. The emphasis on operational efficiency has led to a reduction in employees in the industry across the country. In considering training, college or university courses, young people naturally assess the employment market, making decisions on their potential careers based on the current economic climate.

The latest number of power engineering graduates is in the order of 50 across the country. This is an extremely worrying statistic, which leads to the view that there will be a lack of availability of skilled resource in the medium and long-term. The next DNO price control review needs to ensure that companies are in a position to invest in training, college / graduate intake and succession planning within companies to ensure the skill base is adequate for re-wiring Britain. EME have already taken some limited steps in this direction, but the issue needs to be tackled at an industry level.

ASSESSING EFFICIENCY AND EFFICIENCY INCENTIVES

EME supports evaluation of a total cost quality approach in principle, but recognises that practical issues probably preclude formal implementation in this review. In particular, any total cost calculation needs to incorporate a true representation of historic capex and companies should not be penalised for the pattern of capex investment due to past allowances and the capex bow wave. This needs careful evaluation if erroneous and potentially dangerous judgements are to be avoided.

The current market structure has added further complexity to the factors that differentiate companies and, therefore, need to be accounted for in any benchmarking exercise.

Ofgem’s merger policy document makes the comments:

- *“Following a merger companies will continue to provide some information on a separate basis. This will enable some of the comparisons which were possible prior to the merger taking place still to be made. However, the value of those comparisons is weakened because they no longer reflect the efforts of different independent management teams trying to improve the way they operate in terms of cost and quality.”*

However, it is EME’s view that comparisons between 14 DNOs are now actually invalid. Furthermore, market activity has come about as a direct result of management decisions, which indicates that benchmarking of companies can now only be carried out with 8 observations.

Benchmarking using statistical methods is clearly not robust with only 14 observations, and is even more tenuous with 8. EME understands Ofgem’s preference for direct comparisons, and

prefer the plan to use several methods of assessment, including the application of reasonable judgement alongside mechanistic techniques, as opposed to one single benchmarking technique. Caution is needed in both approaches:

- relying on a single benchmarking technique means that errors in the data could be mistaken as differences in efficiency, and relying on one or two companies costs without understanding their asset management policy means that all companies will be driven down the same route and the apparently efficient companies may not be good asset managers in the short, medium and long-term
- using a number of techniques will require significant and exemplary standards of transparency from Ofgem with clear explanation of any judgements made if a productive consultation process is to take place

The impact of regulation on distribution networks is seldom immediate, and in an infrastructure business recovery from an overly cost focussed regulatory regime is likely to be onerous, prolonged and costly. Furthermore, benchmarking at a point in time cannot take account of past investment decisions and current asset risk profile.

Given Ofgem's objective not to drive market structure, it is important that merged and single DNOs are treated equitably so that Ofgem's policies do not unduly influence competitive activity.

EME broadly supports the move to fixed retention periods for both opex and capex savings. This method addresses one of the issues associated with periodicity and, depending on retention period, has the potential to provide a stronger incentive to companies to make savings and hence provide benefits to customers in the long term. The retention period would need to be 10 years or more to strengthen incentives on companies, this would equally lead to optimum sharing of savings with customers over the long-term. However, it is necessary to consider the interaction between this mechanism and the 5 year reviews, and ensure efficiency savings are not counted twice. In the interests of balancing incentives on shorter term efficiency and longer term sustainable investment, this mechanism should be used in conjunction with equally strong incentives to invest.

It is important that Ofgem sets out some criteria/guidelines relating to assessment of efficiency for this review period and the DR4 period. It is equally important that due regard is given to outputs in making a judgement of efficient spend. For example, what is efficient spend as opposed to what is underspend, and the treatment of overspend which may be due to necessary investment in the network, rather than inefficiencies. The latter is particularly relevant to load related spend, where we are obliged to connect customers and maintain the security of the network with no control over load growth or volumes. Clarity in this area would promote confidence that sound management decisions will not be penalised, and prevent weakening of incentives due to uncertainty.

Equally, the mechanism should not override the principles set at DR3, where the concept of commitment to a year by year investment programme was not established; in particular, we did not commit to a year by year investment programme.

FINANCIAL ISSUES

EME agrees with Ofgem that an efficient capital structure is one which ensures that a company can respond to changing business and financial circumstances.

Traditionally DNOs are seen as relatively low risk businesses and are required to maintain a stable level and trend of key financial ratios consistent with an investment grade credit rating. It will be necessary to ensure that the price control enables DNOs to continue to meet the required ratios. New risks should be recognised and appropriate mechanisms introduced to deal with these. Distributed generation is a major new challenge, however, this should not overshadow other risks, such as changes in tax rules, street works, lane charging, insurance

and the new Electricity Safety, Quality and Continuity Regulations. Each of these risks has the potential to increase costs by tens of millions of pounds. It is important that appropriate mechanisms and processes are put in place to allow any significant cost increases to be evaluated and taken into account in assessing income. Some of these may be set pre-DR4 or during the DR4 period.

The paper by Frontier Economics on uncertainty provides a useful general overview. We would be interested to understand how Ofgem intends to take this, or any other model, forward in more detail.

In the interests of transparency, it would be valuable if Ofgem specify the test ratios to be used, ranked in order of importance and calculate the ratios based on arms length dividend and interest policies.

It is imperative that the treatment of interest and tax costs is explicit in Ofgem's financial model so that the impact of the price control on the key credit rating ratios can be assessed. In particular, the model will need to take proper account of the changes in treatment of capital expenditure for tax purposes, which come into effect from 1 April 2005. EME considers that it is necessary to make full compensation for tax costs and that these should be assessed on an individual company basis. EME concurs with Ofwat in favouring calculation of the cost of capital on a post-tax basis going forwards.

We are pleased that Ofgem are considering how to properly fund ongoing pensions cost liabilities and look forward to discussion of this issue in the principles document due in May. With such an emotive and topical issue, identifying any efficient level of cost will need to have full regard for transparency, consistency and fairness.

We welcome the proposed evaluation of the benefits of inclusion of non-operational capital expenditure in the RAV and clearly this will be part of the overall funding debate. Issues for consideration should include:

- the definition of non-operational capex
- the life over which such expenditure would be depreciated, this should be in line with the life of the asset e.g. 3 to 5 years for IT spend
- the appropriate rate of return
- treatment of under/over spend, and
- treatment of other investments that lead to savings, such as restructuring costs.

In considering the appropriateness of accelerated depreciation and expensed capex where DNOs are required to finance a significant increase in investment in the DR4 period, Ofgem needs to assess any longer term consequences of adjusting future depreciation. In addition, it should be recognised that deduction of asset disposals from the RAV could result in stranded assets. This issue is also linked to the mechanism of rolling retention of efficiency savings, and clarity of treatment would be welcome. Finally, to optimise the funding decision companies should be allowed the option of accelerated depreciation or alternatives such as expensed capex.

GUARANTEED STANDARDS, OVERALL STANDARDS AND IIP

EME agrees that a review of outputs required of DNOs and preferred by consumers would be valuable. It is necessary to go back to first principles and consider what the GS, OS and IIP are designed to do for consumers and how to incentivise companies appropriately. It should be noted that inconsistent, unclear, needlessly complex and time consuming processes for determination on exemptions and penalising companies for something that is outside their control weaken the incentive considerably.

In the review consideration should be given to the incentive power of any targets set. More specifically, setting spot targets weakens incentives since performance to that degree is not within a company's control. Spot targets are not consistent with the current nature of electricity distribution networks or an overall accuracy of 95%. EME supports the use of deadbands or averaging to accommodate variability in performance. Frontier Economics, working on Ofgem's behalf¹, concur with our view.

- *“out-turn levels of quality will depend on many random factors which are largely outside the control of the company, principally the weather”*
- *“we might expect much of this ‘noise’ to be smoothed out of the data on which any incentive mechanism might work”*
- *“a slightly more complex version of this model based on the view that companies can select a range in which quality will fall and that companies have reasonable control over the upper and lower bound of that range.”*

There is ongoing concern regarding the effect of severe weather and other exceptional events on supply to customers. In the current environment of increasing use of and dependency on high quality electricity supplies, customers are less willing to accept any interruption to their supply. There are many pertinent examples of a change in customers' expectations where the current quality of supply levels had previously been acceptable, such as the conversion of former farm properties in rural areas into office units. Furthermore, Ofgem has expressed concerns that a change in weather patterns i.e. an increase in adverse weather affecting the network, would mean that the exceptional weather we see now may become the norm.

Nonetheless, electricity distribution networks were designed and built to the standards that were acceptable more than 50 or 60 years ago. They are not designed to withstand extreme weather. If expectations are that distribution networks of the future should withstand a greater range of weather conditions then significant investment is needed. As with all investments of this type there is a cost/quality or cost/risk trade-off. In rejecting EME's Vision 2020 submission at DR3, which was developed to give a step change in performance for like for like replacement costs, Ofgem expressed the view that EME's overhead line network did not need to be replaced. Therefore, the inherent performance of an overhead line network with its existing age profile and vulnerability was accepted.

No matter what the change in weather patterns or customer expectations, the principle behind 'force majeure' and exemptions is that DNOs are not penalised for something which is outside their control. Arrangements should be consistent across standards and a clear consistent message given to consumers.

Normalisation and Target Setting

EME considers that the joint Ofgem DNO working group on this issue is providing an excellent forum in which both Ofgem and the DNOs are working together to understand the complexities of the numerous facets that underpin electricity network performance. We welcome the continuing involvement of this group in both disaggregation and target setting. We consider that it will be important that the working group is also involved in assessing the linkages between the BPQ asset scenarios and network performance. This will enable robust defined asset scenarios that can be equally judged across the industry.

It will be important to establish the linkage between quality of supply performance and the other elements in the DR4 process. In addition, it is imperative to establish an end to end process that the disaggregation/normalisation models will support. We also urge caution to ensure that recognition of all relevant factors is taken into account. Some of these will be more qualitative and hence more subjective in nature, but nevertheless must be factored into any robust performance comparison and target setting methodology. Such developments will

¹ Developing Network Monopoly Price Controls: Workstream B, Balancing Incentives. March 2003, section 2.6.1

facilitate further understanding of how any perceived gaps in performance may be closed if so required.

Although good progress has been made, we consider that robust normalisation is required to make quality of supply comparisons. However, the complexity of the area under consideration has not to date suggested the potential for a robust normalised process. In the end, it should be for individual negotiation as to the acceptability of targets linked to capital / operational allowances and incentivisation schemes.

ASSESSING CUSTOMERS' WILLINGNESS TO PAY

The working group meetings on developing a customer survey and assessing customers' willingness to pay have proved a useful forum for debating the relevant issues. It is encouraging that Ofgem and the DNOs seem to agree that any customer research must be robust and results must be given an appropriate weighting when considered alongside other factors such as government policy and network needs.

However, it is still not clear how Ofgem intends to use any results to inform the development of the price control review framework and what information would be useful, i.e.

- what can companies and Ofgem positively respond to
- what are reasonable options to give to customers, based on what is technically achievable
- what would be the objectives
- how to ensure a robust methodology to take account of views of a representative sample of types of customers and regional variations

In the interests of transparency, Ofgem should consult on the preferred survey methodology.

Ideally, trade-offs between quality outputs and prices should reflect consumer preferences. It is important to bear in mind that, customers relate to their own recent experiences and tend to want an improvement from the current position. It is therefore important to establish what the customer considers to be the baseline and to understand how to translate individual expectations into averages, such as CMLs and CIs.

The same issue arises in the consideration of other factors such as network losses and visual amenity and noise. In particular, we believe that visual amenity issues concerning the network need to be addressed in the review. We have a major national park, the Peak District National Park, and numerous areas of natural outstanding beauty in our area, which impact on our existing and new network. The future design of networks in these areas will be part of the challenge of the longer-term stewardship of the assets, and we will need to take account of the views of other stakeholders, such as the Peak District Joint Planning Board.

As Ofgem is aware, it is not possible to offer customer specific services in electricity distribution. However, it is unlikely that a survey will show a consensus of opinion on all issues across all customers and regions. The resolution of conflict needs to be addressed. For example, in the 1999 survey commissioned by Ofgem, two thirds of domestic customers were willing to pay a median value of between £5 and £11 for specific improvements whilst one third were not willing to pay for those specific improvements. Furthermore, conflict between network needs, government policy and customer preferences may be an issue, for example, customers may not be willing to pay for the investment needed to accommodate the government's target levels of renewable energy and associated active networks, or longer term network security.

In any survey the depth of understanding of the 'product' determines the quality of the responses. It should be noted that the majority of consumers are not aware of long term investment issues or risks of short term gain, i.e. unsustainably low prices now may necessitate high recovery costs should the current levels of system risk and performance be allowed to become unacceptably low. Therefore, societal value of energy delivery systems for

both present and future customers are better assessed elsewhere and will in any case require leadership to drive appropriate alignment with overall energy policy objectives. Results from a customer survey would then be used to understand marginal preferences.

Our experiences at EME have shown that once customers are aware of the investment needs of the network, and the product they currently purchase, they are more than happy to have an increase in their bill of the order of 20%, to improve asset integrity and hence security of supply.

COMPETITION IN CONNECTIONS

EME is supportive of the development of competition in connections, and have one of the most open Connections markets. We work with Ofgem via our quarterly audit process. It is, however, EME's view that there are some key issues yet to be resolved:

- industry / Ofgem role on accreditation
- adoption risks and safety, where EME would prefer to adopt, but a statutory framework may be necessary
- live jointing

METERING

EME have outsourced Metering provisions and maintenance. However, our experience suggests there is not a liquid market for metering assets. We fully support the EA proposal, i.e. any solution must support competition and avoid stranded assets, which would undermine regulatory principles and give the wrong signals at a time when investment in UK infrastructure is urgently required.