

Martin Crouch
Director - Electricity Distribution
Office of Gas and Electricity Markets
9 Millbank
London
SW1P 3GE

Central Networks

Pegasus Business Park
Castle Donington
Derbyshire
DE74 2TU
central-networks.co.uk

Jonathan Ashcroft
02476 185766

Jonathan.Ashcroft@central-
networks.co.uk

Friday, 10th August 2007

Dear Martin,

Central Networks' response to "DPCR5 – looking ahead"

1. Central Networks welcomes the opportunity to respond to Ofgem's initial thoughts letter on the next electricity distribution price control review (DPCR5). The letter raises some interesting points and we look forward to further discussion with Ofgem as the price control review progresses.
2. Incentive regulation has provided significant benefits for customers, whilst at the same time providing a relatively stable framework for companies and investors. Consequently, we support the 'evolution not revolution' principle. However, as Ofgem acknowledges, the focus of future price controls needs to move from creating incentives for cost reduction to longer term incentives for efficient investment.
3. The key theme of our response and, we believe, the principal objective for DPCR5, is the need to create a stable framework that reflects the long-lived nature of the network assets, whilst allowing companies flexibility to meet both current and future obligations.
4. In this document we address the questions raised by Ofgem's letter. However, we have grouped our response under several key themes, which we believe are important from a strategic viewpoint. Briefly, these are:
 - ***Strategic drivers: We broadly agree with the strategic drivers that Ofgem presents in the letter. However, given the strategic nature of the paper we are surprised that the issue of long term financing of investment has not been addressed in much detail. Creating a***



Central Networks East plc
2366923

Central Networks West plc
3600574

Central Networks Services Limited
3600545

Registered in
England and Wales

Registered Office:
Westwood Way
Westwood Business Park
Coventry CV4 8LG

financing framework that is attractive over the longer term will be at the heart of ensuring efficient investment decisions over the coming years.

- *Roles and responsibilities: Ofgem should consider broadening the objectives of DNOs to allow efficient life-time investment decisions to be taken, which include carbon impact. Sustainability also implies a role in ensuring secure and affordable supplies through sufficient long-term provision of resources and skills.*
- *Long term nature of investment: Asset replacement will continue to dominate investment plans, but new drivers are emerging, including the potential impact of distributed electricity, mitigation of climate change effects and responding to changing weather patterns. The decisions taken now on investment will shape network development over the much longer term – the framework needs to provide continuity and consistency, but maintain regular reviews at a similar frequency to the present to provide adequate flexibility.*
- *Impact of Distributed Energy (DE): In time, DE could play a significant part in the UK's energy mix, although its actual contribution should be driven by its economic potential to meet climate change and energy security objectives. The consequences of DE for each DNO will be different, and clarity is needed on longer term policy goals and the role of DNOs in actively managing their networks. Innovative means of making information available to developers and of offering economic connections should be supported and rewarded by the regulatory framework.*
- *Financing: The allowed cost of capital needs to be sufficient to encourage new long-term investment and maintain an investment-grade credit rating. A key part of the review should be the modelling of the financial needs of networks against long term network investment scenarios that have been developed with the industry. Ofgem should avoid adopting assumptions which unnecessarily constrain companies' flexibility in choosing their financial structure, given the financial ring fencing provisions that have been put in place.*
- *Incentive design: Incentive regulation has served customers and the industry well and should be maintained, since its flexibility will allow it to be applied to the broader roles DNOs can play in future.*

Future incentives need to move away from a “one-size fits all” approach and encourage assessment of total lifetime costs in order to avoid distortions that can arise from opex/capex boundaries. Incentives should be geared to revealing process efficiencies and sharing them with customers, rather than creating a “virtual” company that no DNO is able to match. The impact of resource implications on cost, as well as the validity of assuming that DNOs can outperform the entire UK economy, needs to be reviewed.

- *Process: Ofgem has made a good start with this letter and early work on the consumer survey. A key learning point from DPCR4 is the need to provide clarity on intended incentive mechanisms early on in the process to ensure they can be reflected in business plan submissions. In order to maintain transparency, we would prefer an update document in September, to help manage stakeholder expectations and make the final decision process as smooth as possible.*
5. We also believe that the price control review process would benefit from an agreed vision of success to work towards. Therefore, in addition to the key themes summarised above, we also list our 10 key objectives for the DPCR5 process:
- **Investment plans**
DNOs can reference their investment plans to a clearly articulated set of long term network scenarios, which also have agreed processes and timescales for revision.
 - **Role of DNOs**
Future possibilities for DNOs are identified, with the likelihood and timescales of each one occurring being defined. Plans are identified for the introduction of new roles most likely to be needed in the short term, together with triggers for their introduction and funding routes.
 - **Financing**
The cost of capital and financial framework are aligned with the future investment requirements and the long lived nature of the assets concerned.
 - **Investment allowances**
Investment allowances reflect the higher levels of asset replacement required but reference to the scenarios described above. Where flexible mechanisms are introduced, clear understanding and

agreement of risks and returns is present between DNOs and Ofgem. DNOs are able to make efficient investment choices based on lifetime costs, including a value of carbon. New investment drivers (floods, physical security, DE) are recognised.

- **RRP and cost benchmarking**

The cost assessment and reporting methodology is reflective of the drivers identified in the long term scenarios. More weight is placed on total cost benchmarking to reflect efficient life time cost.

- **DE**

A framework is established that will provide allowances for network investment to facilitate the connection of DE, recognising that higher densities of DE will trigger higher levels of investment and increasing degrees of active network management.

- **Losses**

A losses incentive is retained that reflects the long term nature of investment plans to impact network losses and the trade-offs with investment in, for example, quality of supply.

- **Quality of supply**

CI and CML targets are based on a disaggregated target methodology that better recognises inherent differences in networks (e.g. fault rate, number of customers per feeder) and the long timescales required to address underlying characteristics through investment.

- **Skills**

A suitable allowance/funding mechanism is introduced that recognises the long term nature of the payback from investment in skills.

- **Customer service and Consumer survey**

The Consumer Survey is used to inform business plans and reflects the willingness to pay for improvements via incentive rates and associated capital investment. A more robust Discretionary Awards process plays an important role in driving behaviours.

6. The key themes summarised in paragraph 4 above are discussed in more detail in the following sections.

Strategic drivers

7. *We broadly agree with the strategic drivers that Ofgem presents in the letter. However, given the strategic nature of the paper we are surprised that the issue of long term financing of investment has not been addressed in much detail. Creating a financing framework that is attractive over the longer term will be at the heart of ensuring efficient investment decisions over the coming years.*
8. At the last review, the need for asset replacement to maintain the integrity of the network was recognised. As the letter acknowledges, new drivers for investment are appearing. The impact of distributed energy and mitigation of climate change are also accompanied by issues such as flood resilience and physical security (e.g. against potential terrorist action). The scenario development work should take proper account of future customers' general security requirements. Ofgem's review of network planning standards should identify those societal requirements which may necessitate the introduction of more specific security demands, beyond those of Engineering Recommendation P2/6.
9. An important objective of the next review should be to agree how risk is shared between companies and customers, given these changing and uncertain drivers. DNOs need to invest in networks to provide reinforcement and resilience today, but they also need to ensure this investment can be compatible with future needs.
10. This investment is of a long term nature and decisions taken over the next five to ten years will impact the shape of the network for the next forty to fifty years. It is therefore important that the regulatory framework allows efficient long term investment decisions to be made. The current framework tends to be focussed on shorter term timescales, and this needs to be addressed at DPCR5, through gaining consensus on and assessing requirements against longer term investment scenarios. We therefore fully support Ofgem's work in this area.
11. Finally, under this section, we believe that the review process would benefit from a vision for success, leading to objectives that can be used to inform incentive design. This should be agreed between Ofgem, the industry and stakeholders to make sure that the process addresses an agreed set of priorities.

Roles and responsibilities

12. *Ofgem should consider broadening the objectives of DNOs to allow efficient life-time investment decisions to be taken, which include carbon impact. Sustainability also implies a role in ensuring secure and affordable supplies through sufficient long-term provision of resources and skills.*
13. The next few years should see a broadening role for networks in terms of sustainability. As well as reducing environmental impact, sustainability includes other objectives – economic security for the UK is linked closely to electrical network security, and social objectives are also closely linked.
14. We would encourage as broad an outlook as possible here since, given the dependence on future demand for local generation, it may become appropriate for DNOs to take on a much more commercial role, potentially even acting as the aggregator in a future complex world of demand side management, local generation, and active networks. Increasing consistency between transmission and distribution frameworks (e.g. shallower charging) will also affect the risk profile of DNOs' activities and this again needs to be reflected in the long term scenario work.
15. In reviewing options for incentivising decisions that support the sustainability agenda, it will be helpful to review how the cost of carbon should be priced into investment decisions taken by DNOs. The value of the losses incentive is helpful here. However, looking to the future, the extent to which other carbon impacts can be transparently internalised also deserves some consideration.
16. Finally, skills development and innovation are key activities with long term paybacks that need clarity on funding beyond a fixed five year period. Investment in these areas today will tackle resource constraints in the future and avoid higher prices for customers in the longer term. We have separately indicated our concern about the position Ofgem has taken in the initial Gas Distribution proposals on skills, and we look forward to working with Ofgem and the industry on this issue.

Long term nature of investment

17. *Asset replacement will continue to dominate investment plans, but new drivers are emerging, including the potential impact of distributed electricity, mitigation of climate change effects and responding to changing weather patterns. The decisions taken now on investment will shape network development over the much longer term – the framework needs to provide continuity and consistency, but maintain regular reviews at a similar frequency to the present to provide adequate flexibility.*
18. The need for non-load asset replacement is likely to continue to dominate investment drivers. DNOs also need to ensure they can meet today's obligations with respect to reinforcement. Consequently, how assets will be replaced today, but still meet future obligations, needs to be addressed by agreeing a vision from which we work backwards to the next price control period. In this respect, the Long Term Scenarios work that Ofgem is undertaking will form a critical input to the DPCR5 review, and therefore needs to be adequately funded and synchronised with the review process.
19. No two networks are the same and change will occur at different speeds depending on the varying nature of local supply and demand and inherited network characteristics. The regulatory framework should therefore be geared to encouraging the right "behaviours" rather than absolute outcomes, although this inevitably makes measurement more difficult.
20. Given the current level of uncertainty surrounding future cost drivers, we advocate retention of periodic reviews of around the current duration. Nevertheless, one of the key objectives for the forthcoming review will be to increase visibility of incentives and allowances between price controls. This could include reference to longer term scenarios, but could also include specific mechanisms (e.g. rolling allowances). In this respect, we welcome Ofgem's approach to extending the IFI scheme.
21. The current approach to splitting opex and capex (based on a fixed proportion for broad cost categories, which is the same for all DNOs) does not encourage efficient consideration of total lifetime costs. For example, limiting opex spend may restrict projects which require opex but reduce costs overall. This might include the option of maintaining existing assets to avoid premature replacement before the impact of active networks can be properly assessed. Conversely, underlying

differences in capex activities levels may not be reflected in benchmarking of indirect costs, leading to distortions in benchmarking. Also, a company's decision on insourcing/outsourcing should not be driven by the regulatory framework but by what is right for customers. We are working actively on this issue with the ENA and believe it should factor in the development of Ofgem's policy towards benchmarking.

22. Lifetime cost impact should ideally also factor some form of carbon impact measure and other environmental impact costs (e.g. for fluid filled cables) and Central Networks and other DNOs are already developing carbon footprint measures. However, to avoid duplication and ensure consistency, work is needed sooner rather than later to develop a common approach that is acceptable to Ofgem.

Impact of Distributed Energy

23. *In time, DE could play a significant part in the UK's energy mix, although its actual contribution should be driven by its economic potential to meet climate change and energy security objectives. The consequences of DE for each DNO will be different, and clarity is needed on longer term policy goals and the role of DNOs in actively managing their networks. Innovative means of making information available to developers and of offering economic connections should be supported and rewarded by the regulatory framework.*
24. The role of DE in the UK's energy policy, and the responsibilities of DNOs need to be embedded in a consensus-based long term scenarios for networks. These are needed to inform a regulatory regime which is capable of rewarding DNOs for investing in response to market demand. Ofgem needs to take an open-minded approach to assessing possible future scenarios to understand the possible roles and responsibilities of DNOs during and beyond the next price control. These may include increasing commercial responsibilities and interfaces such as system balancing or maybe even providing aggregation services or a trading hub for locally generated power. Our expectation of DE is that it will emerge in clusters over the decade before any mass market impact. Increasingly, active network management approaches will be needed to manage the impact of these clusters, albeit with a local focus initially.
25. DNOs are seeking innovative approaches to facilitate future connection. For example, Central Networks' Registered Power Zone (RPZ) was the first in the UK and uses dynamic thermal capacity rating to manage a constraint that could otherwise require additional investment to

overcome. The IFI scheme has been successful in promoting increased R&D work and collaboration with academia. However, the need to invest now in resources that can work with DG developers in an innovative way, to build their skills and the toolbox of techniques required, as well as fulfil the new roles described above will impact indirect costs.

26. The hybrid incentive scheme introduced at DPCR4 provides a mechanism for DNOs to recover the bulk of reinforcement costs from use of system charges. However, it is our experience that the remaining connection charge still acts as a disincentive to connect. DNOs will actively seek to keep this cost as low as reasonably possible – but the issue of whether to move to a charging regime more consistent with transmission needs to be considered in the review. This is linked to the degree of proactivity expected from DNOs facilitating connection, including funding new investment ahead of DE schemes connecting. Our experience with our RPZ suggests that planning issues are still the principal barrier to the realisation of new DE schemes.
27. Consequently, an incentive scheme for DE capital expenditure, which takes into account different network characteristics and amounts of DE, may be appropriate. The aim of such a scheme should be to encourage and reward the right “behaviour” of DNOs in taking steps to accommodate distributed generation, rather than being driven by specific connection targets.
28. It may be possible to ascribe the benefits to the system of DE in terms of avoided losses or deferred reinforcement. However, we would urge caution to be exercised here and, initially at least, recommend that schemes are considered on a case by case basis, rather than making sweeping assumptions. This is because, depending how power flows are matched, a DE scheme may actually increase system losses as circuits become more heavily loaded. Furthermore, system security is the responsibility of the DNO and any reliance on DE would require contractual certainty. The limitations of DE contribution to system security are currently reflected in Engineering Recommendation P2/6.
29. As the concept of Energy Service Companies (ESCOs) develops, consideration will need to be given to the role of DNOs. The issue of whether ESCOs should, as far as possible, be incorporated within the current licensing regime needs to be addressed.

Financing

30. *The allowed cost of capital needs to be sufficient to encourage new long-term investment and maintain an investment-grade credit rating. A key part of the review should be the modelling of the financial needs of networks against long term network investment scenarios that have been developed with the industry. Ofgem should avoid adopting assumptions which unnecessarily constrain companies' flexibility in choosing their financial structure, given the financial ring fencing provisions that have been put in place.*
31. The need for a long term framework also applies to financing in order to ensure a cost of capital that reflects long term costs and risks appropriate to a longer term view of DNO responsibilities and network needs. Assessment should be based on views of long term trends consistent with long term investment scenarios.
32. The financial ring fence has proved effective in apportioning risk among financiers and hence gearing and other decisions on financial structure should remain a matter for companies. Any signals that the security of the ring fence is in question could have significant impact on the market's view of regulated utilities. Ofgem needs to consider the impact of financeability through modelling beyond DPCR5, against agreed long term investment scenarios, and consider the issue of diverging book and regulatory asset values.
33. Introducing indexation of cost of capital components would introduce volatility into distribution charges, transferring inflation risk to customers. Deciding on the baseline from which to index will also not be straightforward. We believe DNOs should be free to choose their financial structures and, additionally, there is currently significant debate around the overall cost of debt instruments, with the need to reflect any inflationary increase in repayment values within the funding debate, as well as the lack of maturity in the index-linked debt market.
34. Efficiently incurred pension costs (future service accrual and deficit recovery) should continue to be funded. This approach needs to recognise that longevity is increasing the liabilities of defined benefit pension schemes, legislation is placing new obligations on Pension Fund Trustees and companies do not have absolute discretion in relation to pension costs.

Incentive Design

35. *Incentive regulation has served customers and the industry well and should be maintained, since its flexibility will allow it to be applied to the broader roles DNOs can play in future. Future incentives need to move away from a “one-size fits all” approach and encourage assessment of total lifetime costs in order to avoid distortions that can arise from opex/capex boundaries.*
36. *Incentives should be geared to revealing process efficiencies and sharing them with customers, rather than creating a “virtual” company that no DNO is able to match. The impact of resource implications on cost, as well as the validity of assuming that DNOs can outperform the entire UK economy, needs to be reviewed.*
37. Going forward, the framework must offer companies a realistic opportunity to outperform their regulatory settlements, in order to encourage investment and innovation and the achievement of desired outputs. A framework which is geared to companies revealing process efficiencies through innovation and sharing benefits with customers, in a manner that is reflective of competitive markets, will ensure that cost efficient and correctly targeted investment can be achieved.
38. Almost 20 years from privatisation, there is growing consensus that opex costs have reached the stage where the “lemon has been squeezed dry”. We have already indicated how resource constraints and new investment needs are changing cost drivers, and care will be needed to ensure that cost comparisons do not lead to a distorted view. The review should aim to draw out network/engineering related costs and identify appropriate drivers for comparison. The work being undertaken by the industry and Ofgem in this area needs to be brought together and ideas shared at an early stage in the process.
39. A longer term approach also means that more reliance should be placed on total cost comparisons. Given that the state of the network is a strong driver of activity and investment requirements, this should factor in some measure or reasonable proxy for network state (e.g. historical investment/present size of RAV). The impact of equalising opex and capex incentives and introducing rolling allowances needs to be explored further, to avoid the creation of the sort of perverse incentive mentioned in paragraph 21.
40. With rising material and labour costs resulting from growing international and national competition, productivity assessment needs to

be more reflective of utility/infrastructure industry cost drivers. We are pleased to see that these issues are being considered in the Gas Distribution review, albeit in a currently understated fashion.

41. Given differences in the characteristics and regional demands being placed on different networks, a move away from “one size fits all” allowances is an area worth investigating further. Experience from DPCR4 has shown that menu regulation is a useful tool, but companies need sufficient notice of trade-offs between allowances and returns to develop their business plans efficiently.
42. We are interested in discussing further some of the comments made in the letter with respect to moving away from a focus on mechanistic incentives. However, we are concerned that, without careful thought, Ofgem could create a set of obligations that could never be matched in practice, given some of the complex trade-offs and interactions that need to be considered. This would increase the level of regulatory uncertainty faced by companies.
43. Discretionary awards have been successful in driving behavioural change. However, if this success is to be sustained, the awards process needs to be made more transparent and robust, and the decision process needs to be more objective.
44. Removal of the growth-associated revenue term could be considered, although further work is needed to understand what might replace it and how more “flexible” allowances – e.g. for capex – might be created. It is not immediately apparent how the revenue driver applied to Transmission might be applied to Distribution, given the different scale and diverse nature of our capital projects. There is a need to understand how best to separate volume and price risk. Going forward, the industry needs to work with Ofgem on a transparent and appropriate process to manage investment “churn” and uncertainty.
45. The use of disaggregated network benchmarks has been useful in understanding performance and has highlighted that there are inherent and consistent differences between DNOs, which are difficult to address without significant and prolonged investment. It is important that, in future, quality of supply incentive schemes reflect the ability of companies to influence output. We still have concerns that the process does not yet represent the true performance capabilities of networks – as evidenced in differences between our two licence areas. More work is needed to develop the disaggregated benchmark comparisons to reflect these inherent characteristics of the network more accurately, or to allow

for the timescales required to change performance through longer term asset replacement.

46. We believe that continued use of the CI and CML measures, which are easily understood, have international comparators and have driven improvements in network performance, is preferable to more complex measures (e.g. worst served customer performance). Such measures will be costly to monitor, as extra equipment has to be installed, and may not lead to overall cost-effective investment decisions being made. Similarly, we are also concerned that any incentive on short interruptions could negate the benefit of automation and discourage continued investment in this area. This trade-off is worthy of further investigation through the Consumer Survey.
47. The letter invites views on early extension of the CI/CML targets beyond 2010. Doing so would help to increase certainty over payback for investment in network performance improvement via automation, provided of course it remains consistent with the methodology adopted at DPCR4 and clarity extends beyond just the targets and encompasses views on revenue at risk. A view is also needed on the longer term trend of targets, given the reduction in achievable improvement rates once DNOs have completed their remote control and automation programmes. We would also be reluctant to accept early targets without an understanding of the longer term framework and how exceptional events should be considered against such targets.

Process

48. *Ofgem has made a good start with this letter and early work on the consumer survey. A key learning point from DPCR4 is the need to provide clarity on intended incentive mechanisms early on in the process to ensure they can be reflected in business plan submissions. In order to maintain transparency, we would prefer an update document in September, to help manage stakeholder expectations and make the final decision process as smooth as possible.*
49. We welcome the early opportunity that this letter provides to comment on the high level objectives for the next distribution price control. The degree of industry and stakeholder participation that Ofgem is encouraging in the development of the Consumer Survey is also welcome. At DPCR4, the workgroups that were convened were effective routes for policy development and we would encourage their use as early as possible in the process. We also re-emphasise the need for consensus from the long term scenarios work plan to allow DNOs to

feed the output into the development of their business plan submissions.

50. Whilst we welcome longer consultation periods, we do believe that the September proposals update document needs to be maintained. This is an extremely helpful publication in that it helps streamline final negotiations by concentrating on the key issues left to resolve. It also helps companies to manage expectations of investors and other stakeholders and provides added transparency to the process.
51. To help us develop our stakeholder consultation processes, we will need to develop a clearer understanding of the outcomes expected from these, in order for us to assess what questions should be asked, such that the best use can be made of evidence gathered during the consultation process.
52. There may also be some consultation processes that may be less suited to the public domain, and agreement needs to be reached on how these are best conducted. For example, there will be a need to explore drivers for targeted improvement of supply security and diversity with relevant local and national government and the security services.
53. Finally, thank you again for the opportunity to respond to your letter. Our response highlights what we consider to be the key themes and objectives for DPCR5. We also believe that a set of objectives agreed between Ofgem, the industry and stakeholders would be beneficial when setting priorities and establishing a vision of success for the review.

I trust that if you have any questions or comments on our response then you will feel free to contact me.

Yours sincerely

Jonathan Ashcroft
Regulation and Commercial Manager