

Electricity Distribution Price Control Review (DPCR5)
Methodology and Initial Results Paper

Electricity North West Response

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Note on Layout

Our response to the Ofgem Methodology and Initial Results Paper follows the framework set out in the original consultation. The document is prefaced with an executive summary.

The first sub-section of each chapter contains a summary of the detailed responses contained within the chapter. Answers to Ofgem's specific questions are contained within the body of each chapter but are summarised with cross references at the end of each chapter for ease of reference.

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1 Executive Summary

There is much that we welcome in this document and it is encouraging to see emergence of a policy framework as decisions on the details of price control “mechanics” are made.

- We are committed to outputs and to the development of a common outputs framework. We have pioneered some of the work in this area; particularly the characterisation of outputs into three tiers which we think is a helpful framework for future development.
- We strongly support Ofgem’s proposal to equalise the incentive power across areas of expenditure. We believe that an equalised approach will provide an incentive to DNOs to deliver lowest whole life cost solutions and have developed our FBPQ submission on this basis.
- We welcome the regulatory consistency provided by Ofgem’s commitment to the continued use of 20 year depreciation lives and believe this provides important reassurance to investors.
- We welcome the Ofgem commitment to maintaining the current approach to setting tax cost allowances on an ex ante basis. We believe that this incentivises DNOs to operate efficiently and therefore reduces the risk and cost to customers.
- We support Ofgem’s continued use of an IQI incentive to recognise information asymmetry between Ofgem and DNOs and the decision to resist calls to make this mechanism even more complicated.

We also recognise that the Methodology and Initial Results paper represents a “snap shot” view of the early stages of Ofgem’s cost assessment work and we are pleased that in the numerous discussions we have had with your teams since the drafting of the paper, this work has continued to develop. In many areas the debate has moved on so far that replying to this document almost seems like we are going over old ground. However, given that price control review debates are, quite appropriately, largely conducted in the public domain, it is essential that we set out a comprehensive response to all of the points specifically raised in your paper.

Whilst considerable progress has been made with the cost assessment work, there is much more still to be done. The analysis as published was far from fit for purpose, containing both material data errors and inappropriate methodologies and approaches. Our response to these issues has been tempered by the Ofgem commitment to take a broader range of evidence and other considerations into account in making judgements about cost baselines.

We believe our FBPQ forecast represents the most appropriate expenditure plan to meet the needs of our customers in the North West and those of our wider stakeholders, developed through the application of class-leading asset management techniques to our network. The overall impact of our expenditure proposals on customer bills is small. Our plans represent an initial increase to the average electricity customer's total bill of around 3%. To put this into context, for this moderate increase in prices we will ensure that customers in the future enjoy the same levels of service and security of supply that we enjoy today, despite the needs of an ageing network and whilst meeting our increasing statutory obligations. We know that we have made significant improvements in efficiency during DPCR4 and believe that our current business model is yielding significant benefits for customers, reducing the costs of maintaining a high quality of supply. These have been reflected in our FBPQ submission which includes an overall cost efficiency from economies of scale and scope totalling over 1.8% per annum of operating and indirect costs.

Given the robust nature of our submission we would need Ofgem to provide compelling evidence before we would adjust our position. We suggest that the comparative analysis that Ofgem undertakes needs to be conducted at an appropriate level to both avoid the significant risk of 'cherry-picking' inherent in significantly disaggregated analysis, and also to allow the scope for companies to differ in their approaches and emphasis in a particular five-year period as they seek to respond appropriately to the specific requirements of their networks and their regional stakeholders.

We include detailed comments on the modelling approaches adopted in the relevant Appendices, but we observe as a general point that all the modelling is comparative, with any variance due, at least in part, to the decisions and strategies of other companies over whom we have no control and little visibility. The modelling uses some industry data which is known to contain differing assumptions by companies, and is unaudited. Whilst we have commented on how this analysis may be improved, we do not believe that even if Ofgem implemented all of the suggestions we propose the results would, necessarily, be appropriate for consideration on their own. A range of approaches and different evidence must be considered in determining cost allowance baselines.

We have also made extensive comments on the methodology for utilising baselines and developing allowances. The assumption that business support costs have only a weak connection to maintaining a distribution business is misguided. We recommend that IT, property and network policy costs are subject to the same incentives as other network costs and included within the IQI mechanism to avoid a material distortion to company decision making. To ensure that the pressure on customer bills is resisted wherever possible we also propose that the proportion of costs added to the RAV should be fixed based on the proportion that would have been capitalised in accordance with DPCR4 rules applied to DPCR5 spend.

It is also important that whilst risks in the DPCR5 price control are managed to ensure that customers are shielded from steep rises in the cost of capital, the calls from other DNOs for protection mechanisms do not result in customers holding too many of the risks that companies can control and manage. Therefore we have included proposals on tax triggers and a substantial effects mechanisms which is a more proportionate

and practical response to these concerns than the Ofgem concept of an interim determination mechanism.

We are disappointed with proposals to weaken the interruptions incentive scheme which will result in the cessation of existing response measures and a marked drop in performance improvements. The willingness to pay survey indicated that customers place much more value on potential reductions from current service levels than they do on further improvements. This is strong evidence for the maintenance of the current incentive that has yielded the high quality of supply that customers value. We are also disappointed that Ofgem have not taken this opportunity to revise the methodology for setting interruption targets and propose that the step-change of the ratchet is replaced with a glide-path.

We are committed to continue to work with the Ofgem team to address all of the points raised in this response. The process of wide ranging and comprehensive bi-lateral dialogue that has characterised the review so far supports such continued engagement and is a positive development in the overall approach to conducting the review. Given that so many more decisions need to be made to generate Initial Proposals by the end of July it is essential that Ofgem are able to check the results of further analysis with DNOs before publishing to ensure that the next publication avoids the inaccuracies of the May document.

2 Overview of FBPQ forecasts

2.1 Chapter Overview

In DPCR5, DNOs will face a range of pressures on overall investment levels, including the need to manage an ageing asset base, maintain performance in line with customer expectations, accommodate changing demand and generation patterns and adapt to the effects of new and amended legislation. In addition, the industry will be required to accommodate both input price uncertainty and the emerging labour skills shortage.

Our FBPQ forecast represents a balanced view of requirements which was presented following extensive stakeholder consultation and the application of class-leading asset management techniques to our network.

2.2 DPCR4 comparisons

We note that Ofgem's prime method of presenting DNO DPCR5 forecasts in this chapter is with reference to DPCR4 outturn, despite repeated and welcome acknowledgement elsewhere in the document that this is just one amongst many inputs to forming a view of the forecast's appropriateness. For both us and the industry as a whole, this illustrates the significant increase in investment required to 2015, however no mention is made in the text of the significant justifications for this investment, both in terms of mitigating the impacts of an ageing asset base on behalf of customers, and the new obligations that DNOs have to meet.

As we have discussed with Ofgem through the RRP process and elsewhere, our DPCR4 investment pattern has been characterised by two low years followed by two years of significantly increased spend. This is due to the following reasons;

- A deliberate reduction in programming whilst policies were being reviewed to identify efficiencies to offset unit cost and RPE challenges, and whilst extensive data collection exercises were completed to ensure appropriate investment prioritisation,
- Issues with delivery in early years with the change in sub-contracting arrangements; and
- The introduction of the Asset Services Agreement (ASA) with our Service Provider which is delivering significant efficiency improvements.

Overall, the ASA approach has delivered substantial efficiency improvements which have helped control our DPCR4 expenditure.

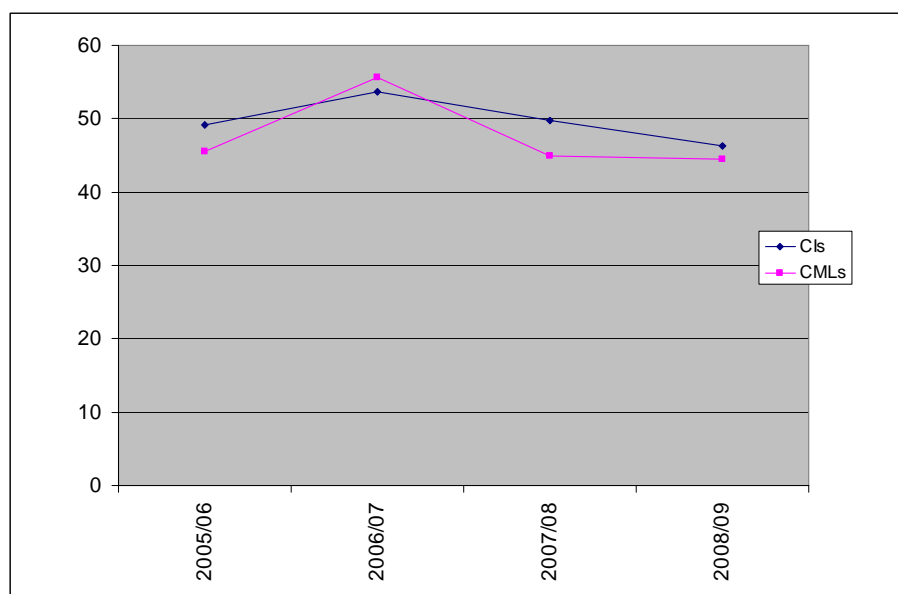
Our strong performance in DPCR4 is not just about spending less money, but also finding ways to offset the costs for customers (hence delivering more value) by a range of incentive responses that reduce net RAV additions in DPCR4 such as finding new excluded services income and seeking out appropriate asset disposals.

In terms of LRE, we have discussed with Ofgem the disproportionate impact of the Orrell reinforcement project on period-period comparisons. Up until 12 months ago,

we were anticipating this being completed in DPCR4; however planning difficulties have led to its postponement into DPCR5. Due to its size (>£20M), if the project had gone ahead in the previously envisaged timescale, the DPCR5 submission would actually represent a decrease on DPCR4 levels, illustrating the need to account for specific factors in Ofgem's analysis.

2.3 Delivery for customers

In DPCR4, we have delivered for customers, whilst restraining investment to appropriate levels. We have delivered improving CI and CMLs, as measured by IIS and are consistently one of the top three DNOs in terms of absolute performance.



This has not simply been achieved for the bulk of customers at the expense of those in areas of marginal supply quality as we consistently report the lowest number of Worst-Served Customers outside of central London. In addition, we would highlight the following areas where our investment on behalf of customers has been driven by new challenges that go beyond what was formerly considered to be “business as usual”:

- Much improved telephone response (10th to 4th of 14) through installation of an innovative IVR telephony system;
- Invested significantly in asset data and condition based risk management;
- Successfully delivered the undergrounding programme to general stakeholder acclaim;
- Successfully initiated and undertaken a comprehensive stakeholder consultation process, in line with Ofgem's aspirations;
- Undertaken the successful delivery of strategic investments at Penwortham, Kearsley and Preston East, demonstrating the capacity to develop, manage and implement major construction projects;
- Reacted appropriately to new and emerging investment requirements with appropriate whole-life solutions, eg ESQCR compliance programme and BT21 preparatory works;

- Maximised use of the IFI allowance including trials of demand side management and new equipment and techniques for fault response and management at LV and HV;
- Introduced a new and innovative business model to drive further efficiencies and introduce strong incentives on delivery and performance.

2.4 Cost assessment

We welcome Ofgem's intention to take a rounded view of inputs to the cost assessment work but note several contradictions in the document; for instance, taking a holistic view of many inputs when deciding allowances, yet only accepting 'compelling' evidence to move from the results of high-level comparative modelling. In a similar vein, divorcing assessment of the outputs proposed by a DNO from the forecast of funding requirements, whilst applying restrictions on 're-bidding' as part of the IQL process, risks leading to a disconnect between allowed investment and the concomitant outputs expected.

We also welcome acknowledgement of the relationship between replacement and maintenance as this more accurately represents the way in which these assets are managed in practice, and look forward to discussing with Ofgem how this will be taken into account in terms of assessment. Our submission has been based on taking a 'whole-life' view of the assets, in some cases increasing short-term opex requirements where this is justified by resultant longer-term life extension (eg painting of towers).

We note in Figure 2.4 and elsewhere that some data is based on the February FBPQ, and some has been updated for subsequent versions (eg Table 2.8). It is not clear which data has informed what and this is not made clear in the document. We expect that some of the key data presented will have already changed following working-level discussions with Ofgem, and expect this process to continue through to the June FBPQ re-submission.

We would welcome further clarity over the process by which allowances will be determined and how Ofgem propose to deal with the potential 'cherry-picking' between volume, unit costs and output assessments to avoid unacceptable and unsustainable investment propositions being made in the Initial Proposals. We would also welcome greater visibility of the models used to perform the investment expenditure assessments than has been the case to date, where we have only seen selective results from the modelling.

2.5 Responses to Chapter Questions

2.5.1 What are your views on the DNO cost forecasts presented in this chapter?

See sections 2.1 to 2.4.

3 Operational Cost assessment methodology and results

3.1 Chapter Overview

Whilst we have commented on how this analysis may be improved, we do not believe that even if Ofgem implemented all of the suggestions we propose the results would, necessarily, be appropriate for consideration on their own. A range of approaches and different evidence should be considered in determining cost allowance baselines. Our response to this chapter of the consultation is largely limited to the analysis provided within the document. When discussing the approach to generating allowances, it must be recognised that we are constraining our discussion to one view based upon this modelling exercise. There are numerous other approaches available to Ofgem which should be reviewed in parallel to form an appropriate opinion on the revenue requirements for DPCR5.

We recognise a number of material weaknesses in Ofgem's analysis to date. We are very concerned that these shortcomings will not be remedied in time for appropriate DNO allowances to be set, potentially resulting in insufficient allowances for some DNOs, should this approach be implemented in isolation, and hence the need for unsustainable costs cuts which, in turn, would increase long term costs to customers.

3.2 Establishing a benchmark via efficiency modelling

We are very concerned that the results of Ofgem's initial modelling indicate significant shortcomings in approach. In particular, the very wide range of results, material differences in results between companies in the same ownership groups and apparent systematic favouring of small companies all suggest that model results cannot be relied upon for allowance setting.

We are particularly concerned that the comparative efficiency results are materially different from the results obtained via alternative top-down models where different companies are seen to form the frontier.

We believe that a number of factors are contributing towards these shortcomings including:

- Shortcomings in data
- Inappropriate cost adjustments
- Models that do not include all cost drivers
- Shortcomings in the treatment of fixed costs
- The existence of boundaries between cost types and resultant cherry picking

We explain our concerns further in the following paragraphs and suggest an approach to mitigate these issues.

3.2.1 Data issues

We recognise that Ofgem has made significant progress through the RRP development in obtaining appropriate cost data for all DNOs on a broadly consistent basis.

However, there are still outstanding data consistency issues, largely as a result of residual boundary issues, that must be recognised in modelling.

During the FBPQ process to date Ofgem has recognised that an RRP designed to ensure consistency with DPCR4 rules has not captured sufficient data to assess comparative efficiency. The fact that DNOs are being asked to report historical costs on a different basis in the FBPQ will introduce a further level of uncertainty into the data used for comparative analysis as costs reported will not have been subject to the level of scrutiny associated with annual RRP cost reporting processes.

Going forward it will be important to develop cost reporting to provide the right data for comparative efficiency, rather than construct sub-optimal comparative efficiency approaches that are driven by the data available.

Having identified shortcomings in RRP data and requiring DNOs to re-state costs we are surprised to see that Ofgem continues to model efficiency using RRP data rather than FBPQ data. This means that cost adjustments for activities such as faults and inspection and maintenance cannot have been correctly made and that adjustments to re-state costs consistently with latest rules have not been correctly made.

We also note a number of errors in Ofgem's data. Most materially for ENW, we note that our normalised pension costs have not been consistently removed in Ofgem's analysis. This means that our costs are being interpreted as materially higher than equivalent costs of other DNOs in models that exclude pensions.

3.2.2 Cost adjustments and exclusions

We agree that it is appropriate to adjust modelled costs to ensure that comparisons are made on an equivalent basis. Before making adjustments Ofgem must have evidence of genuine distortion of costs and a robust methodology for making adjustments. We have severe reservations about some of the adjustments proposed by Ofgem, both their appropriateness and the availability of appropriate methodologies to make adjustments.

We are pleased that Ofgem has recognised that regional variations in labour and contractor costs are not significant or consistently observed outside the Greater London area. We believe, however, that the "sum zero" approach to adjusting costs may distort model results. Instead, adjustment to costs should be limited to EDF LPN.

We also pleased that related party margins have been included in Ofgem's chosen models. This avoids distorted modelling results, allowing the true relative efficiency of different operating models and procurement strategies to be revealed.

As mentioned previously, we believe that the legitimate differences in pension contribution rates between DNOs will distort modelling results disproportionately if pension costs are included within modelled costs. The normalisation of pension rates within models, whilst superficially attractive, will simply create problems of determining the appropriate level of modelled costs to be removed to avoid double counting with pension allowances. We are pleased that Ofgem agrees with our view.

The exclusion of some of EDF's indirect costs falls some way short of the robust adjustments we would expect in core comparative efficiency models. To make unilateral adjustments to costs without considering whether other DNOs may be similarly affected risks material distortions to results. We observe that DNOs who either insource activities or who have increased transparency of contractor costs will be disadvantaged in Ofgem's current models; in the case of our own costs by insourcing, for example, all design activities and as result of our reporting all Service Provider costs against RRP rules our indirect costs are higher than average resulting in perceived "inefficiency". Ofgem must take steps to adjust for the inherent favouring of companies who outsource in their models via a systematic approach, including top-down models that include capex, rather than making one-off adjustments for a small proportion of DNOs.

We are concerned that those companies currently modelled as forming the frontier are those with greatest proportions of costs excluded from core models. We urge Ofgem to review the basis that costs have been calculated to ensure that costs excluded are only those directly associated with excluded activities. Ofgem should also test for distortions by including top-down models that include those costs excluded from bottom-up analysis.

In including storm costs incurred as part of setting allowances Ofgem must take into account which DNOs have experienced such events and the nature of those events. Allowances must reflect the likely frequency of severe weather events, including the likelihood of events of greater magnitude than experienced during the current period and the possible impact of climate change on frequency of severe weather events. Inclusion of storm costs will result in those DNOs who did not have material storms in 2007/08 being deemed "frontier" and will fall short of compensating for more severe, but less frequent, events.

3.2.3 Construction of models

It is extremely important that cost modelling approaches recognise the real drivers of costs. Models that ignore drivers of cost and changes in drivers will incorrectly influence allowance calculations. Limiting models to prime driver and/or the incorrect selection of measures of drivers may result in the identification of perceived inefficiencies that actually arise from the effect of missing drivers. This must be recognised and adjusted for in allowance setting.

We agree that most suggested drivers of blocks of cost seem sensible primary drivers. However the apparent favouring of smaller companies suggests that scale is missed as a separate driver of costs. Regressing residuals from Ofgem's top down modelling against measures of scale suggests that at least half of the apparent "efficiencies" and "inefficiencies" are in fact due to scale.

We believe the current cost groupings are now broadly correct, with the exception that they do not reflect the strength of the relationship between Engineering Management and Clerical Support costs and delivery of the capital programme. We suggest this category of expenditure be moved to be grouped with other capex-related activities. We are pleased that Ofgem has acknowledged the largely fixed nature of Network Policy costs by moving it into Business Support costs.

We are pleased that Ofgem has recognised that some costs can be shared by DNOs in the same ownership group, but stress that this sharing can also distort models if fixed costs are inaccurately apportioned. The group-based analysis undertaken by Ofgem to date demonstrates this to be the case. We are, however, concerned about the extent to which EDF – as a very large and relatively expensive Group – can distort modelling results. This has the effect of underestimating the extent to which fixed costs can be shared. This must be taken into account in modelling and consequential allowance setting.

Finance & regulation, CEO, network policy, IT, property, control room, call centre and HR activities all have large elements of fixed costs that can be shared between companies within one ownership group. We believe that analysis of these activities should be evaluated on an ownership group basis, with allowances set per ownership group, not per licensee.

Many other activities can be shared to a smaller extent eg Network Design and Engineering (for system planning activities), Engineering Management and Clerical Support (for central administration teams), Vehicle and Transport (asset planning activities), Project management (overall Programme Management activities), etc. The extent to which companies can share these costs should also be taken into account in allowance setting.

3.2.4 Modelling variations

We agree with Ofgem's proposed approach of using alternative modelling approaches including different functional forms, and use of DEA and SFA, etc. The potential errors associated with cost exclusions, normalisation adjustments, choice of relevant drivers, measurement of drivers, selection of an appropriate functional form of the model and legitimate differences that can never be fully normalised for in bottom-up models (such as insourcing and outsourcing) mean that appropriate "sense checks" are essential. We think it is important to augment these with top down models as outlined in section 3.2.8.

We agree that it is sensible to use standard statistical tests to assess the validity of results. It is essential, however, that Ofgem are not tempted to chase strong statistical results at the expense of a logical modelling approach. It is important that Ofgem recognise that the existence of a seemingly strong statistical test result will not always be indicative of a sensible model; it can indicate co-variance of drivers, coincidence of DNO approach due to allowance setting in prior reviews or indeed be a random result.

3.2.5 Boundary issues not addressed by current models

The bottom-up nature of Ofgem's analysis fails to take into account a number of boundary issues that distort the levels of expenditure reported by each DNO for each bottom-up category of expenditure. Boundaries result for a number of reasons including:

- Operating structure, eg

- Insourcing arrangements (companies who insource a greater proportion of work report higher levels of indirect costs eg ENW design costs)
- Contract arrangements – structure of invoices (eg ENW report all costs incurred by our Asset Service provider against RRP rules whereas others would absorb many more indirects into direct activities)
- Structure of ownership group (eg allocation of fixed costs between DNOs in the same ownership group)
- Company decisions, eg
 - Active promotion of competition in connections (eg ENW incurs materially higher design costs as a result of the high levels of competition in connections in our area resulting in a requirement for multiple quotes for different points of connection. Models that consider value of own direct expenditure would suggest these efficient costs are “inefficient”)
 - Automation of processes (eg ENW’s automation of many System Mapping activities has reduced drawing office costs but increased IT costs)
 - Risk appetite (eg ENW insure for fewer events and accept higher insurance excesses than several other DNOs. As a result we incur lower insurance costs but slightly higher fault, property and vehicle costs Overall costs are reduced and employees are given correct incentives to manage risks, both of which are in customers’ interests)
 - Capex/ opex investment decisions (eg DNOs who have invested in unusually high levels of capex in previous years may benefit from reduced operating costs)
 - Levels of QoS service (eg DNOs offering a high level of QoS service may incur higher levels of fault, control room and IT costs)
- Reporting, eg
 - Transparency of contract costs
 - Interpretation of non QoS fault cost definitions
 - Consistency of reporting of costs excluded from comparative models eg submarine cables

These boundaries are exacerbated, as explained earlier, by Ofgem’s use of RRP data meaning that full adjustments cannot be correctly made to all data.

It is essential that Ofgem recognise the legitimate differences in reported cost structures that can arise - as a result of cost reporting rules - depending on the factors outlined above. The cost reporting rules will result in different efficient levels of direct and indirect expenditure dependent on operating structures. We urge Ofgem to be aware of the exacerbating effect that these boundaries will have on “cherry picking” that inevitably exists in bottom up modelling. It will prove very difficult to normalise for this within any disaggregated cost model that analyses separate blocks of costs. We believe that the most sensible test is to undertake independent top-down modelling to test for the extent of cherry picking – for all DNOs – and to adjust allowances accordingly.

3.2.6 Cherry picking

The existence of multiple un-addressed boundaries within Ofgem's models, combined with models that do not take into account all drivers of costs and have not accounted for all data issues, is resulting in "cherry picking" of modelled results. This results in different DNOs forming the frontier in different models, resulting in inappropriate overall results. This is apparent in the very wide range of overall efficiency results; it is not credible to believe that so many DNOs are spending at levels so different from those suggested by models.

This is further exacerbated by the fact that Ofgem are pursuing separate approaches to allowance setting for opex and capex activities. As capex benchmarks are considering only direct costs, those companies who insource capex are likely to be deemed more efficient and form capex benchmark whereas companies who outsource will tend to form the benchmark for indirect and opex activities, resulting in an overall benchmark that is dis-proportionally stringent.

Cherry picking will also occur as a result of the extent to which DNOs within the same ownership group can share fixed costs. This will disadvantage singleton DNOs.

3.2.7 Lack of independent top down models

It will always be necessary to use top-down analysis to assess the scope of cherry picking in more disaggregated cost models. Ofgem's current approach of constructing top-down models including a composite driver based on the results of bottom-up models will contain the same systematic errors and boundary issues as its bottom-up counterparts. The fact that Ofgem has had to include an arbitrary overhead line network length for EDF LPN in creating the composite is further evidence of the inappropriateness of the current top-down models as a test of the results of the bottom-up approach. We urge Ofgem to model a range of alternative top-down models incorporating different cost constructs and different drivers to test for any systematic errors in their core model.

We note that the top-down analysis undertaken by CN often shows different DNO efficiency scores from the Ofgem results, with DNOs ranked very differently. Those DNOs that Ofgem's current models rank as being most efficient often appear much less efficient in independent top down models. This suggests that Ofgem's core models are not robust enough to use for allowance setting.

We suggest that Ofgem develop top down models that:

- Add back costs excluded from models
- Include opex and capex
- Include opex and indirects associated with opex
- Include historical capex levels
- Replicate the DCR4 approach

Where the results of top down models are materially different from those obtained from core models Ofgem should consider the core model to be unreliable as a means

of setting allowances. In such circumstances a range of top-down models, potentially combined with the core model, should be used to set allowances.

It is also important to recognise that DNOs have been incentivised to improve efficiency as measured by the models utilised in DPCR4, particularly Normalised Controllable Costs and Faults. It will be important to repeat the analysis of DPCR4 as a reference point from which to evaluate new methods and to demonstrate a degree of regulatory consistency. We understand that Ofgem has undertaken such analysis and that the results suggest very different levels of comparative efficiency from Ofgem's core models. We urge Ofgem to include these models based on the DPCR4 approach as part of a range of models used to test the validity of results.

3.2.8 Alternative approaches

A range of approaches and different evidence should be considered in determining cost allowance baselines. Our comments contained within this chapter of the consultation are largely limited to the analysis provided within the document. When discussing the approach to generating allowances, it must be recognised that we are constraining our discussion to one view based upon this modelling exercise. There are numerous other approaches available to Ofgem which should be reviewed in parallel to form an appropriate opinion on the revenue requirements for DPCR5.

Alternative approaches provide a valuable sense check to the results of the analysis contained within the consultation. Using top down modelling approaches, reviewing the robustness of DNO forecasting processes and underlying data, consideration of stakeholder priorities, and historical performance should also be considered to inform the collective view of comparative efficiency.

3.3 Non-modelled costs

We agree that it is not sensible to assess required expenditure via comparative methodologies where:

- DNOs have limited control over costs eg business rates, licence fee, exit charges
- Costs are only incurred by some DNOs and not others eg island generation
- Where DNOs incur expenditure at different rates for legitimate reasons that cannot be factored into models eg wayleave costs, pensions, lane rentals

As such we agree with most of Ofgem's suggested approach to costs to be excluded from comparative analysis.

It is important that DNOs receive appropriate allowances to fund those activities that are excluded from analysis. Non-comparability of costs must not be considered evidence of inappropriateness.

In setting allowances for excluded costs it is of fundamental importance to recognise the potential boundaries between modelled costs and costs excluded from modelling and the implications for distortions in resulting allowances. We are concerned that

those companies currently modelled as forming the frontier are those with greatest proportions of costs excluded from core models. We urge Ofgem to review the basis on which such costs have been calculated to ensure that costs excluded are only those directly associated with excluded activities. Ofgem should also test for distortions by including top-down models that include those costs excluded from bottom up analysis.

3.3.1 Proposed allowance setting for non-modelled costs

We support Ofgem's view that insufficient data is available on the long-term costs and drivers of IT and telecoms to assess these via comparative analysis. We agree with Ofgem's proposal to appoint consultants to review required levels of future expenditure.

- We note that the current approach does not include all categories of IT and Telecom expenditure eg indirects associated with operational IT and telecom costs and urge Ofgem to also set allowances for these areas of cost.
- We are concerned that the use of workstations as an endogenous denominator in assessing efficiency will advantage those DNOs who have dis-proportionally more workstations.
- We are concerned that the analysis we have seen to date does not take into account the savings that DNOs may make elsewhere as a result of IT investment (eg use of CBRM to optimise investment programmes) or improvements in customer service that result from IT investment (eg mapping).

We support Ofgem's view that insufficient data is available on the long-term costs and drivers of property costs to assess these via comparative analysis. We agree with Ofgem's proposal to appoint consultants to review required levels of future expenditure.

- We are pleased that Ofgem's Property consultants are taking into account insourcing and outsourcing on levels of required activity. It will be important to ensure that this analysis is extended to take into account the distortion of costs associated with related party service providers. The different treatment of related party costs and third party costs are clear sources of boundaries between cost types.
- We are concerned that the use of endogenous denominators (such as FTEs) may distort results in favour of DNOs with lower overall efficiency levels.

We agree that workforce renewal costs should be modelled separately. Different DNOs have invested very different levels of expenditure on apprentices to date; this difference is sufficiently material as to distort modelling approaches. Separate analysis of anticipated expenditure will also allow appropriate attention to be placed on the very real problem of imminent skills shortages as a result of increasing capex programmes and ageing work-forces. Allowances should be based on:

- A clear link to the agreed investment programme
- Consideration of likely areas of skills shortage
- Efficient recruitment, training and salary unit costs

We agree that the “lumpy” nature of low volume high cost faults (particularly EHV and 132kV faults) means that modelling these costs is inappropriate. We suggest that allowances are set based on the average of 2005/06 – 2008/09 actual costs.

An averaging approach is much less appropriate for setting allowances for low volume high cost inspection & maintenance activities; costs in these areas can be distorted by many factors including historical capex, historical opex, decisions to refurbish rather than maintain assets, changes in maintenance policy, deferral of work due to need to focus on other activities, decisions to let contracts for work concentrated in particular years, etc. We suggest that a modelling approach is inappropriate in this area and that instead Ofgem should seek detailed information from DNOs on their maintenance policies, condition data, work plans and unit costs and set allowances accordingly. For 33 and 132kV overhead lines we suggest that Ofgem consider maintenance proposals in parallel with capex proposals and set holistic allowances. This would be entirely consistent with Ofgem’s approach to equalising incentives for such activities.

Allowances for substation electricity should be set in line with Ofgem’s decision on how to account for losses and own-use electricity. The allowance should be consistent with whether own use is to be treated as losses or as units bought in the Supply market.

Insurance is an area of cost where the boundaries associated with the risk appetite of DNOs are particularly clear. For example, ENW insure for fewer events and accept higher insurance excesses than several other DNOs. As a result we incur lower insurance costs but slightly higher fault, property and vehicle costs. Overall costs are reduced and employees are given correct incentives to manage risks, both of which are in customers’ interests. We are concerned that the high level of insurance costs paid to captive insurers may also materially distort the cost base. To avoid penalising DNOs who manage these risks in this way we suggest that Ofgem set allowances for insurance costs based on the average of all DNOs’ costs, in that way DNOs are given an incentive to manage insurance costs and associated risks.

Submarine cables and island generation are costs associated with activities that are only incurred by a small proportion of DNOs. Nevertheless they represent quite material blocks of costs for these DNOs. We would urge Ofgem to assess the basis on which the costs for exclusion have been calculated by DNOs to ensure that no costs associated with core activities have been excluded. Having established that costs are correctly excluded from core models we suggest that Ofgem commission consultants to assess an efficient level of expenditure in these areas.

Future costs associated with Traffic Management Act and New Roads and Streetworks Act are a mixture of certain and uncertain costs. We recommend that Ofgem set allowances for certain costs based on a combination of 2008/09 levels and positive indications from councils that they will adopt the new procedures, indexed for future volumes of activity. Material increases in costs beyond this level should be considered via general uncertainty mechanisms.

DNOs have seen increasing upward pressure on wayleave costs recently as a result of increased pressure from land-owners to secure greater remuneration from DNOs on their land. It is important that Ofgem recognise this increase in costs whilst retaining an incentive on DNOs to manage wayleave costs efficiently.

Inclusion of DPCR4 storm costs within core models will fall short of compensating DNOs for more severe, but less frequent, events. It is essential that Ofgem provide allowances that recognise the costs associated with 1 in 10 and 1 in 20 year storm events. A review of historical costs of such exceptional events should be made (we suggest consideration of all exceptional events back to 1989); allowances could be set in a similar way to DPCR4 with DNOs receiving allowance for half a 1 in 10 year event and quarter of a 1 in 20 year event.

Other atypical costs are generally associated with company restructuring and severance activities. Such activities deliver savings for customers in the longer term and should therefore be funded in the event that Ofgem impose material frontier shift assumptions.

3.4 International comparisons

We are very concerned at Ofgem's use of international data to suggest that UK DNOs have the potential for further efficiencies. We contend that the differences seen between countries in the data as presented are more likely to result from differences in outputs, responsibilities, ownership structures and regulatory approaches or the level of development of regulatory cost definitions rather than genuine differences in efficiency. Ofgem's own experience of developing a set of consistently applied definitions via the RRP process must lead them to recognise the complexities associated with comparing data between companies; we do not believe that data sets that are comparable to RRP data are available anywhere outside the UK.

3.5 Allowance setting

3.5.1 Establishing a benchmark

In establishing a benchmark to be used for allowance setting Ofgem must take into account:

- Shortcomings in the data used for modelling
- Boundary issues between models as a result of operating structures, DNO decisions as well as reporting irregularities
- The "cherry picking" effect of choosing separate benchmarks for each cost grouping, including setting separate allowances for capex and opex activities
- The exacerbation of this cherry picking effect as a result of insourcing and outsourcing strategies influencing the modelled efficiency in each cost block.
- The level of efficiency for the DNO as suggested by a range of top-down models
- The level of customer service provided by each DNO and the impact this has on value for customers.
- The extent to which cost groupings include fixed costs and whether these can be shared by DNOs within ownership groups.
- The extent to which apparent "inefficiencies" may be a result of the limitations of modelling approach

Ofgem must remain mindful of the long term implications of imposing allowances that are too low on DNOs. When faced with insufficient allowances the DNOs' only options are to cut costs in an unsustainable way that is likely to lead to material increases in costs in the future.

Where the rankings of DNOs differ materially between bottom-up and top-down models or between different bottom-up or top-down models Ofgem will need to look carefully at the modelling approach and be absolutely confident that such results do not indicate fundamental modelling errors.

Where there is any doubt as to the validity of model results Ofgem must conclude that the DNO's current cost base is efficient.

Where top down modelling combined with bottom-up analysis suggest a relatively consistent range of efficiencies for a DNO it must be remembered that no one approach is perfect and therefore no model will adjust for apparent "inefficiencies" that result from the limitations of modelling approach. It is therefore sensible to set benchmarks based on 3rd decile or even average costs or via "best of" or "average of" several modelling approaches.

For activities that contain significant levels of fixed costs it is important that in setting allowances no implicit assumption is made that material efficiencies can be made from these fixed costs without any supporting evidence. Similarly, where evidence suggests that fixed costs can be shared between DNOs in the same ownership group allowance setting must reflect this and provide extra fixed cost allowance for DNOs in single ownership groups.

In setting benchmarks Ofgem must also consider the quality of the outputs that a DNO has committed to for DPCR5 and, where high quality outputs are proposed, adjust benchmarks accordingly.

3.5.2 Forecasting the impact of changes on costs

Given developments such as recent falls in demand, combined with a need to materially increase capex volumes for the DPCR5 period, it is important that Ofgem recognise that the role of history in determining future spend requirements is becoming increasingly unclear.

We are pleased that Ofgem has recognised that indirect cost allowances must be increased to reflect the increasing level of direct activities that they support. As such, comparative efficiency must be used in conjunction with cost projections in determining allowances. This adjustment must also take into account agreed network outputs and the relative customer service provided by DNOs.

Allowances must also be adjusted for the anticipated impact of input price changes relative to RPI. Our proposed approach to input prices is discussed in chapter 6.

3.5.3 Applying catch up, ongoing efficiencies and adjustments

The fact that the majority of DNOs are overspending their DPCR4 opex allowances illustrates the extent to which there is very little scope remaining to make further

efficiencies. Ofgem must recognise that their exclusion of some related-party margins and their adjustment for income associated with sale of assets and excluded service revenues from their comparison of costs to allowances mean that many DNOs' opex outturn is in fact even worse; indeed in our own case the underlying position is of overspending DPCR4 allowances. Customers are benefiting where DNOs have responded to the incentive properties of the regulatory framework, as the RAV is reduced. Whilst this effect is appropriate Ofgem must exercise care to ensure that they do not anticipate an ongoing efficiency improvement that results in unsustainable allowance levels. We do not believe Ofgem should apply further efficiency adjustments to modelled costs. This issue is discussed in more detail in chapter 6.

3.6 Responses to Chapter Questions

3.6.1 Have we exposed the correct costs to comparative benchmarking?

See section 3.2

3.6.2 Do you agree with the assumptions we have made for our core analysis?

See section 3.2.3

3.6.3 What are the appropriate cost drivers for each of the cost groupings?

See section 3.2.3

3.6.4 How should we determine baselines for the costs excluded from comparative benchmarking?

See section 3.3

3.6.5 How should we treat atypical costs in the price control settlement?

See section 3.3

3.6.6 What weight should we give to the benchmarking relative to other considerations?

See section 3.5

4 Core network investment

4.1 Chapter Overview

We welcome Ofgem's holistic approach to cost assessment, including the commitment to consider a wide range of evidence (such as specific condition information) when formulating views of appropriate allowances.

We suggest that the comparative analysis that Ofgem undertakes needs to be conducted at an appropriate level to both avoid the significant risk of 'cherry-picking' inherent in significantly disaggregated analysis, and also to allow the scope for companies to differ in their approaches and emphasis in a particular five-year period as they seek to respond appropriately to the bespoke requirements of their networks and the regional nuances of their stakeholders.

We will propose a suitably aggregated asset classification in our FBPQ re-submission, aligned to the way in which we actually manage these asset types and our proposals for output measures. This will place assets that are managed in the same way and perform an equivalent function into the same group. Assessment of our proposals should be based on these groupings, rather than specific asset types.

We include detailed comments on the modelling approaches adopted in the relevant Appendices, but we observe as a general point that all the modelling is comparative, in which case any variance is due, at least in part, to the decisions and strategies of the other companies, over whom we have no control and little visibility. We trust that Ofgem are seeking to understand from companies where their forecasts are lower than the models would suggest, as well as higher, as these responses are co-dependent.

Also in general terms, we are concerned about the model's acceptance of unaudited data from the DNOs, in particular accepting the varying treatment of the oldest and/or undated assets in declared age profiles. The use of a standard distribution curve in the NLRE model and back-fitting using a small sample of activity data introduces further errors and suggests that the emphasis should be placed on the DNO forecast being the base assumption, modified by exception following model review, rather than the model as definitive, unless 'compelling' evidence is provided to the contrary.

We also note that the overhead line refurbishment submissions will not be assessed using the asset replacement model and note the proposals to carry out an assessment using run rate analysis, unit cost analysis and benchmarking. We welcome this approach as DNO practice varies significantly in this area, and overhead lines, more than any other asset type, do not comprise discrete assets but represent an amalgam of components.

We note the lack of update on unit costs in the paper and are concerned that Ofgem may be under-estimating the complexity of analysis in this area. We are concerned that apparent variations will be accounted for by definitional issues due to the lack of common industry definitions and auditing of the submitted data. In addition the risk of cherry-picking between the unit costs themselves and in the application of unit costs to

volumes is significant. This is potentially further compounded by the associated outputs and their treatment, such that independent assessments of volumes, unit costs and requisite outputs may be inappropriately combined.

4.2 Overhead lines

For ENW, our overhead line proposals are higher than most DNOs, particularly on the lower voltages, driven by our compliance programme. We have held discussions with Ofgem on this as part of the ESQCR re-opener process and have provided significant additional supporting information. For each and every pole in our submission, we can provide:

- Condition inspection reports
- Pole strength test results where justified following a hammer test
- Photographs

We are happy to share this detailed supporting information and asset data with Ofgem.

4.3 Balancing the portfolio

We have deliberately reined back other areas in the DPCR5 forecast to ensure that the overall programme remains affordable. For example, we have:

- dropped our previous proposals for refurbishing HV overhead lines to better withstand extreme events,
- not included the full CBRM-projected output for plant replacement,
- removed a number of reinforcement projects where updated load forecasts indicate that the risk may be manageable in the short-term.

In this we are consciously taking additional risk on some asset types, as evidenced by our plant fault rate projections in the FBPQ. It is our judgement that this represents the optimum near-term programme of investment in our network at this point in time. Other companies will be making similar judgements and coming to slightly different conclusions due to considerations of the asset base, stakeholders and customer service aspirations. Comparing these outcomes against each other risks determining an unrepresentative lowest common denominator.

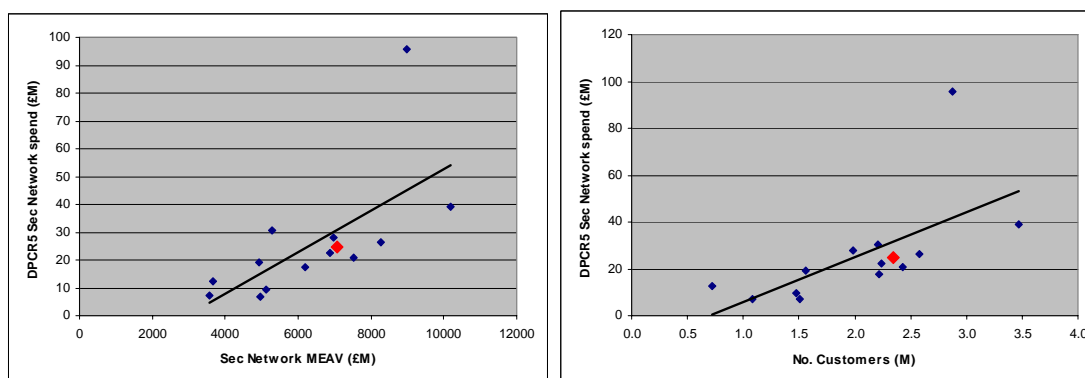
4.4 General reinforcement modelling (Appendix 6)

We were unclear how Ofgem have calculated the ENW component of the LRE model, in particular the N-2 schemes consideration. In discussion with Ofgem staff, it is evident that a number of errors have been made in compiling the data, which materially changes the modelling results. It is difficult for us to comment on the modelling results at this stage of development until a more definitive version is produced. It would also be helpful if Ofgem could circulate the models sooner rather than later as we are constrained in our ability to answer Ofgem's questions on variance to model results without a detailed view of both the model workings and the data inputs.

With respect to the primary network reinforcement modelling, G&P investment is, by its very nature, lumpy and we are unconvinced that in a five-year time window characterised by a small number of major projects, there is any particular correlation between historic cost base and future investment requirements. In relation to the data quality issue discussed earlier, we note that the model is entirely dependent on unaudited Maximum Demand (MD) forecasts. DNOs effectively have the opportunity to use inflated forecasts to generate a beneficial capacity/MD growth ratio and there is no proposal to undertake any check to remove this incentive. Due to the comparative nature of the model, this will have an effect on our own modelled outcome if it is not appropriately addressed.

For secondary network reinforcement Ofgem have highlighted ENW as having a significant increase in DPCR5. Comparison to total DPCR4 spend patterns is only one way of looking at the figures and masks a significant profiling issue. For ENW, we have delivered the programme set out in the DPCR4 submission for HV reinforcement; however the completion of the circuit studies initiated for the DPCR4 submission revealed significant further extant issues on the HV network. The projects initiated in response are now being planned and delivered, and form the bulk of our distribution reinforcement programme out to 2013. As a consequence, the DPCR5 forecast effectively maintains spend at the levels seen in the latter three years of DPCR4.

In addition, a comparison of reinforcement requirements with both secondary MEAV derived from Ofgem's workings and overall customer numbers suggests that our forecast is in line with that of other DNOs (ENW marked in red below).



4.5 Asset replacement modelling (Appendix 7)

4.5.1 Overall comments

We suggest that the key question posed by Ofgem in this section is actually secondary in nature. Whether volumes replaced are consistent with history or the rest of the industry are subsidiary considerations to the more important question of whether the volumes are appropriate to the presenting asset need based on quality asset condition data and the anticipated outcomes as a result of investment.

As discussed elsewhere, in general terms, we cannot comment on the appropriateness of other DNO submissions but are significantly affected by them due to the comparative nature of the models. Our allowance may also be dependent on the

quality of data in those models and the assumptions on which such data has been presented. We look forward to seeing the models – until then, we will only be able to comment in terms of the variances selectively presented to us by Ofgem, and speculate on other DNO data inputs that may be skewing the model or giving counter-intuitive results.

The assumption that ‘improved asset management’ inexorably leads to increases in expected asset lives is naïve. It is our experience that more detailed data collection generally alerts the asset manager to specific issues that had previously not been visible and can stimulate the need for increased rather than reduced investment in the short-term. With a greater knowledge of network issues, it is incumbent on DNOs as responsible operators and stewards to appropriately invest to mitigate problems that they may have been hitherto unaware of; however such enhanced asset data also offers an opportunity to manage interventions more appropriately over the medium and long-terms to seek the lowest whole-life cost strategy.

We note the reference to a separate unit cost assessment and that the results will be presented in the Initial Proposals. Ofgem should be aware of our concerns regarding the variability of unit cost approaches between DNOs and the potential non-comparability of data that results. From the unit cost survey and other discussions, it is likely that we will re-submit table C2 in the June re-submission.

4.5.2 Asset type-specific comments

We note the variances presented in Figures 5-9 and suggest that they illustrate little more than the variability evident due to DNOs having differing priorities, asset needs and output proposals for DPCR5. Below, we comment on specific assets but note that our ability to do so is hampered by lack of access to the models and input data.

Figure 5 (Supports) confirms what we would have expected - that for ourselves, overhead line supports is the area where variations are highest and we have discussed with Ofgem staff the reasons for this. In broad terms these are:

- Our programme is deliberately a significant increase on DPCR4 due to the associated clearance compliance programme and visibility of a significant number of defects due to recently-gathered comprehensive condition data for these assets.
- The variable quality of data in this area, as evidenced by the lack of a full data set in Figure 5,
- The need to take an overall view of overhead line investment to recognise differing DNO strategies in this area (refurbishment, pole replacement, rebuild etc) and avoid the significant risk of cherry-picking.

We also observe that this category needs to be combined with the supports equivalent, and due regard also given to investment that does not result in either the replacement of a support or length of conductor, eg pole refurbishments, fittings etc.

Figure 6 (OHL) is another indication of our revised overhead line strategy which has driven the way we have populated the FBPQ where we observe the ‘Low’s or ‘Very

Low's corresponding to the 'Very high's on supports. In terms of the 'High' for LV Mains, this is on the back of a submission for 38km of conductor replacement, representing 1.7% of installed assets over five years, illustrating the vagaries of the modelling process.

Figure 7 (Cables) we have deliberately limited investment in this area to allow us to manage overall network risk by focusing our attention on the overhead line network. Despite this, we appear high in some categories, notwithstanding the low volumes involved which suggests data issues (eg varying treatment of the oldest part of the age profile by DNOs, classification of 'consequential' outputs etc), or that fine distinctions are being drawn between what are insignificant forecasts in the context of the existing asset base.

Figure 8 (Switchgear) is an area where our CBRM approach is well developed and we have used this technique to accept the risk from a lower level of replacement than indicated by the models by being able to predict the impact of this reduction. On review with Ofgem, we have observed that the model is highly sensitive at higher voltages to the timing of outputs – for ENW; we have significant 132kV assets energised in DPCR5, but substantially funded in DPCR4.

Figure 9 (Transformers) This again is an area where CBRM is well developed and we have used this technique to accept the risk arising from a lower level of replacement than indicated by the models by being able to predict the impact of this reduction. The 132kV replacement programme is seen as high but is based on specific sites where condition information is driving their replacement. Due to the high value of these assets, we intend to present details on each project to Ofgem as part of the bilateral discussions.

4.5.3 Risks of cherry-picking

Great care will be needed when bringing volume and unit cost analysis together to ensure the risks of composite cherry-picking are avoided. For example, in areas where there is a real operational choice between replacement and significant refurbishment, care must be taken to ensure the (typically lower) replacement volumes are not matched with the (typically lower) refurbishment costs to create an unsustainable outcome.

Some specific asset types are explicitly considered together and do not fit Ofgem's very disaggregated modelling. For example, we treat 33kV switchgear as an asset category, where indoor or outdoor setting is a consideration in deterioration rates etc. Over the long-term, this produces an investment programme heavily biased towards the outdoor gear over the next 10 years, with a progressive increase thereafter in indoor replacements. As expected, Ofgem's model generates a 'credit' and corresponding 'debit'. We would expect these to be offset rather than used on a 'lesser-of' basis.

We also suggest that there may be anomalies in DNO population of the FBPQ tables that can lead to cherry-picking effects, eg conductor replacements with no associated fittings volumes and would welcome the opportunity to review this with Ofgem.

4.6 Responses to Chapter Questions

4.6.1 Do you agree with Ofgem's approach to assessing core network investment allowances based on the wide range of evidence detailed in the chapter?

See section 4.1

4.6.2 Do you agree with the primary network general reinforcement modelling methodology that Ofgem has adopted for DPCR5?

See section 4.4

4.6.3 Do you agree with the asset replacement modelling methodology that Ofgem has adopted for DPCR5?

See section 4.5

4.6.4 Is the outlined process for developing Initial Proposals suitable?

See section 4.1

5 Network Investment - Environment

5.1 Chapter Overview

Forecasts of DG activity and the unit costs of associated reinforcements remain highly uncertain and it is difficult to draw conclusions from these regarding an appropriate DG incentive rate. However there is clearly an increasing desire for DG to be connected, and we would therefore caution against weakening the underlying incentives at this time. We acknowledge that there may be a need to adjust the headline incentive rate in line with any “technical” modifications to the incentive methodology.

Our discretionary expenditure proposals are modest but do address a real issue for us in the timely provision of capacity in the CBD of Manchester. This expenditure is fully supported by our stakeholders. At this time we have not proposed any specific expenditure related to facilitation of future network flexibility; however we are committed to working with Ofgem in this area ensuring efficient development of the network.

The value of losses on our system remains volatile and we are unconvinced that the impact of our base case capital programme is material. We have proposed a trial installation of VAR compensation capacitors to reduce losses and it is important that initiatives like this are supported by an incentive mechanism that delivers a positive business case.

5.2 Distributed Generation

We note Ofgem’s comparisons between DPCR4 forecasts and outturn performance, but urge that care be taken in interpreting these results. We have the following comments on Table 5.1:

- Table 5.1 records average use of system network reinforcement only; however the DPCR4 DG incentive rate of £1.50/kW/yr was based on an estimated £50/kW average cost of total DG-related reinforcement costs. We acknowledge that it would be appropriate to adjust the headline incentive rate for DPCR5, but only to the extent that the incentive methodology is to be based on use of system reinforcement costs only.
- We understand that Table 5.1 is based on FBPQ table LR2 which in turn is based on direct costs only. Consistent with DPCR4, account must be taken of the indirect costs associated with the network reinforcement when setting the incentive rate.
- The DPCR4 unit cost of network reinforcement is shown as 4.69 which seems to be an error. We believe this should read 8.48 (ie $36.4/4290 \times 1000$).

We have further more general observations on the DG data and forecasts, as follows:

- In DPCR4 the DG that has connected has tended to use up the “cheap” spare capacity available; hence a small amount of DG related reinforcement has been required. DG developers have been cherry picking cheaper connection sites; but the drivers to connect more DG will change this. This is particularly true for generation connected to the network in the Cumbria area. Connection of modest amounts of generation in Cumbria in the DPCR5 period will require significantly more reinforcement.
- The DPCR5 DG volume forecasts nationally show a 100% increase on the DPCR4 volume. This is consistent with our local intelligence and forecasts, and is wholly appropriate considering the challenge facing DNOs to connect the level of DG required by central government, and recognises the likely effect of feed-in tariffs, when introduced early in DPCR5.
- Significant uncertainty remains in forecast DG volumes, unit costs and total costs. We are not surprised by the significant variation in MW and £/MW costs between DNOs due to the different technology mix assumed for each DNO area and different assumptions on cost apportionment factors and unit costs, also connection volumes or locations, which are not readily influenced by the DNO. For some technologies the projections may be viewed as scenarios rather than forecasts, ie although the upper limit of each technology type will be limited by regional factors which differ by DNO area (renewable resource, density of heat demand, developer activity), each part of the forecast might be equally valid if transposed into a different DNO area. We suggest that there is insufficient certainty in these forecasts to derive individual incentive rates for individual technologies or DNO areas.
- We suggest that a cap and collar arrangement is an appropriate mechanism for containing the risk on outturn costs. However, the non-linear nature of the current mechanism, based on rate of return, can lead to unintended consequences if low levels of expenditure are achieved in practice. We believe that the overall portfolio of incentives could be calibrated using rate of return methodologies, but that it would be simpler and therefore more meaningful to present the resultant caps and collars in terms of percentage of turnover, as is currently the case for the IIS scheme.
- In general, we would expect that higher average costs/kW would be associated with increased volumes of connecting DG, having a significant negative £ NPV impact on the DNO. Conversely, lower reinforcement costs per kW could feasibly occur in a scenario where overall connection volumes are lower, with a modest positive £NPV impact on the DNO. This suggests that even if there is a drop in reinforcement costs per kW between DPCR4 predictions and DPCR5 predictions, to keep an appropriate incentive on DNOs the incentive rate should not be scaled back to the same extent.

5.3 Discretionary expenditure for future network flexibility

We welcome the opportunity to develop a common approach with Ofgem to provide incentives to change the distribution networks, enabling changes as required by energy policy and to facilitate increased connection of DG, especially renewables.

Our submission seeks to improve the timescales in which we can provide significant new capacity in Manchester CBD by purchasing appropriate land for substation development. This is consistent with received stakeholder feedback.

We note Ofgem's disappointment with the DNO submissions however the specific example underlines the need for further clarity of what is expected here, and of how the costs of such discretionary expenditure might be treated; we were previously of the opinion that specialist staff for commercial arrangements for DG, or equally for DSM commercial arrangements, should be considered as part of the costs of such projects and critical to a positive business case. In which case these costs are not discretionary; they are an integral part of developing an efficient network. Notwithstanding this, and recognising the change of emphasis referred to above, we will review our submission in this area before our June FBPQ submission.

5.4 Losses

We have for some time installed low loss transformers for new connections, reinforcement and asset replacement. Therefore it is not envisaged that the continued installation of low loss transformers will significantly reduce losses but losses would be increased if we discontinued with this policy. It is therefore unjust that the losses target should be adjusted (tightened) based on low loss transformer installation as part of the base capital programme.

Our proposals are derived from a desktop exercise that indicated that we could reduce our losses on rural 33kV systems by the installation HV VAR compensation capacitors. We are hoping to demonstrate this with two projects; the first of which we intend to undertake on the Kendal 33kV network. However, it should be noted that the business case for this was based on the current incentive rate and the expenditure included in the RAV. Also the payback period for this investment spanned more than one price review period therefore we require certainty of the incentives applicable to these projects on an enduring basis.

It should be noted that there is extreme uncertainty surrounding any losses reduction forecast and that the potential benefits of any of the losses proposals are insignificant when compared to the magnitude of the energy distributed, bringing into question the logic of using the current output measure as an incentive.

We challenge the assertion that there are any "significant" increases/decreases in losses in Table 5.5. The figures in the column marked "Equivalent percentage of current losses" are all relatively small and collectively are likely to be outweighed by even less predictable factors such as theft of electricity.

5.5 Responses to Chapter Questions

5.5.1 Do you agree with our approach to assessing the forecasts of distributed generation, discretionary expenditure and losses and are there any other factors you think we need to take into consideration?

See section 5.2 to 5.4

6 Ongoing efficiencies and input prices

6.1 Chapter Overview

Ofgem's approach for projecting the ongoing level of efficiency expected by the DNOs will need to be carefully considered. The RORE analysis contained within the December Policy Paper highlighted that the DNOs have been unable to outperform (or even achieve) the assumed level of opex efficiencies for DPCR4. The failure of the upper quartile companies at DPCR4 to match the DPCR4 frontier shift assumption of 1.5% (initially set at 2.0%) suggests that Ofgem's methodology was overly aggressive. Ofgem need to consider the lessons from the past when determining the appropriate approach for DPCR5. We suggest that the level of frontier shift contained within RPI will be difficult to achieve and Ofgem should therefore exclude any additional frontier shift assumptions from the allowance setting process.

6.2 Ongoing efficiencies

Ofgem has employed the same methodology utilised at the Gas Distribution Price Control review to determine potential frontier shift opportunities. At that time ENW (operating as United Utilities Electricity) noted its concerns regarding the application of the frontier shift methodology and suggested that it would be inappropriate to apply significant frontier shift assumptions to companies who have been subjected to RPI –X price controls for nearly 20 years. The Ofgem approach takes historical information from an EU database of various industry sectors in an attempt to identify future productivity trends. The validity of this analysis will depend upon the comparability of the historic performance of identified sectors with the future performance of the DNOs. The two key variables for the robustness of the Ofgem exercise are the appropriateness of the timeframes and the choice of comparator sectors.

We would suggest that data from 1970 to 2005 is far less relevant than data from 1990 to 2005 for the simple reason that industries and technologies change and it makes little sense to assume that the productivity improvements achieved in the 1970s give any guide to the productivity potential of an industry between 2010 and 2015.

We have reviewed the Ofgem/CEPA proposals and identified concerns that three of the comparator sectors in Ofgem's data set look out of place:

- manufacture of chemicals – we suggest that this sector has little relevance to the operation and construction of electricity networks;
- manufacture of electrical equipment – on the basis that the productivity improvements that manufacturers of, say, transformers and switchgear are able to deliver are already reflected in the price that DNOs pay for materials. To apply these same productivity improvements a second time would be a double count; and
- financial intermediation - where Ofgem has unnecessarily narrowed down the broader finance, insurance, real estate and business services EU KLEMS sector and inadvertently discarded important information about the efficiency savings generated by providers of services such as HR, accounting, IT and insurance, all of which are directly relevant to DNO indirect costs.

We also note that the EU KLEM database is used to identify the total factor productivity movements relative to the movements in the Retail Price Index (RPI). Many authors have noted that the RPI contains a productivity assumption which would be difficult for a DNO to attain due to its construction ie it contains imported deflation and technological efficiencies.

There is a methodological error in the combination of the EU KLEMS data with CEPA's unit price proposals. EU KLEMS calculates growth in labour productivity relative to RPI whilst CEPA (in calculating input price impacts) are using the Average Earnings Index to calculate labour cost movements. Combining the three components (frontier shift, input prices and RPI) using differing indexation assumptions is likely to invalidate the results of the exercise.

We believe that the proposed approach should be used as a sense check rather than a methodology for calculating firm proposals for the levels of ongoing efficiency. Ofgem must be mindful of the DPCR4 operating cost underperformance (especially the frontier cost performers) and the potential implications of utilising a refined cost performance methodology alongside aggressive TFP assumptions and uncertain input price cost allowances. It is important to recognise that Ofgem has collected a significant amount of information on the DNO cost performance through the annual Regulatory Reporting Pack submissions and the Business Plan Questionnaires. Ofgem should utilise this data to inform the decisions on the trends for future expenditure. In ENW's own case an efficiency improvement from economies of scope and scale equivalent to 1.8% per annum is already included within our forecasts for network operating costs and indirect costs in our FBPQ submission.

6.3 Input price proposals

We have previously identified input price uncertainty as one of the most important issues for DPCR5. The introduction of output deliverables to the regulatory framework has made the discussions on a risk management mechanism in this area increasingly important. Our key message throughout the debate on input prices has been that the DNOs should be protected from the extremities but should be exposed to an appropriate level of risk to retain the incentive properties of the RPI-X framework. Similarly, customers should not be exposed to the risk that DNOs make windfall gains where circumstances result in extremely benign conditions.

The CEPA critique of the work carried out by the industry consultants and DNOs builds constructively to the extent that the projections of input price movements contained little consideration of the future economic conditions. Our work in Table C1 of the FBPQ contained a variance analysis of the RPE impacts using differing RPI expectations. We recognised the fact that RPEs will be larger when the revenue indexation mechanism is low/negative and smaller in years when RPI is high.

We have a number of concerns with the work conducted by CEPA. We believe that the three stage analysis is an appropriate mechanism to determine the need for risk protection but it relies upon subjective interpretation of the first stage (controllability, predictability and materiality). One of the fundamental differences between the CEPA report and the First Economics work is the exclusion of labour cost RPEs by Ofgem's

consultants. The CEPA report suggests that labour costs are considered as controllable, on the basis that the DNO has control over the design of bonus structures (whilst recognising that all other elements of labour costs are uncontrollable), and also predictable. The bonus element represents a very small aspect of the total cost of labour and is primarily there to help achieve the retention and recruitment of skilled labour. CEPA do not provide a rationale as to why they consider that labour costs are predictable. We disagree with this position as the predictability of total costs is inherently linked to the individual labour costs (which CEPA have acknowledged as uncontrollable).

First Economics has identified two different opinions contained within the consultants' reports:

- the First Economics work has DNOs (directly and indirectly) paying wage increases that exceed average earnings growth. This is principally because of the volume of infrastructure work over the next five years, combined with continued scarcity of skilled professionals, giving electrical engineers and infrastructure specialists the ability to extract above average pay increases from companies.
- CEPA has the DNOs (directly and indirectly) paying wage increases that at best match average earnings growth or that come in below average earnings growth. This is because they see recession adversely affecting the bargaining power of these same workers, especially if they work for contractors.

First Economics argue that the recession has had varying impacts on labour demand across the economy. In sectors like manufacturing, construction and banking, demand for labour has declined markedly. By contrast, the infrastructure/electricity sector is relatively well sheltered from the effects of recession. On the basis that individuals/contractors who were previously building houses and offices don't generally have the skills that the DNOs require, and assuming that the universities are still going to be producing a shortfall of electrical engineers and skilled infrastructure specialists, it is very difficult to argue that recession has a greater impact on the DNOs' labour than on the UK plc workforce in general. For this reason, it cannot be that DNO labour inflation will suddenly fall short of or at best match average earnings growth in the next few years.

The other significant area of concern relates to the proposal to adjust revenues by linking them to copper or steel commodity index movements. The CEPA report recognises that transaction costs (linked to exchange rates) are responsible for some of the volatility included within the DPCR4 input price movements. We identified this driver within our FBPQ submission and suggested that it was one of the reasons why it would be inappropriate to use a pure indexation mechanism linked to a commodity index. Whilst CEPA recognised the impact of the exchange rate fluctuations on the input price movement, they failed to include this element in the proposed indexation mechanisms. We believe that the second test (appropriateness of mechanism) should have identified the fact that costs are driven by more than copper/steel prices, and this factor adds an element of additional risk to the mechanism.

We are also concerned that suppliers and CEPA are suggesting that volatility of charges to suppliers is a reason why an input price risk mitigation tool should not be

used within the period of the Price Control. The proposal to log up any costs places additional risks and costs on the DNO which will need to be compensated through an increase in the cost of capital; however the most efficient solution may be through a mechanism which compensates DNOs in year. The alternative would be to provide an allowance which could be spread over the period to minimise the volatility.

Given the difficulty surrounding the identification of an appropriate index which reflects the true movement in input prices, we suggest that Ofgem provides an allowance for the DNOs to manage the risk. Additional cost pressures resulting from exceptional unforeseen events could be mitigated through the inclusion of a general price control reopener as we have discussed in chapter 10.

6.4 Responses to Chapter Questions

6.4.1 Have we identified the most relevant unit cost and productivity measures from other sectors to help inform our ongoing efficiency assumption for DPCR5?

Our response to this question is contained within section 6.2

6.4.2 When calculating these measures, which comparator sectors and time periods should we focus on?

Our response to this question is contained within section 6.2

6.4.3 What weight should we give to this analysis relative to other information?

Our response to this question is contained within section 6.2

6.4.4 What method should we use for setting our input price assumptions for DPCR5?

Our response to this question is contained within section 6.3

7 Customers

7.1 Chapter Summary

We remain concerned about the size of the overall scheme to improve service for the worst served customers and feel that this will significantly restrict our ability to materially improve the performance of our networks for these customers. A cost cap per benefiting customer would severely restrict investment options possibly to the extent that the scheme would merely replicate the existing interruptions incentive scheme which, as we have noted, was never designed to reach down to the extremities of the network

We are disappointed with proposals to weaken the interruptions incentive scheme which will result in the cessation of existing response measures and a marked drop in performance improvements. The willingness to pay survey indicated that customers place much more value on potential reductions from current service levels than they do on further improvements. This is strong evidence for the maintenance of the current incentive that has yielded the high quality of supply that customers value. We propose to move DNOs individual incentive rates toward the mean of existing rates such that the spread is reduced

We are also disappointed that Ofgem have not taken this opportunity to revise the methodology for setting interruption targets and propose that the step-change of the ratchet is replaced with a glide-path.

7.2 Worst Served Customers

We are pleased to note that you are seeking to firm up proposals for Worst Served Customers; early resolution of this can only be of help in ensuring that we are well prepared to deliver improvements from the start of DPCR5. Whilst the interruptions incentive scheme has been very successful at improving average performance, the need to ensure that the investment is appropriate in terms of value for money, means that it's not always viable to invest to improve the performance of networks supporting relatively low numbers of customers. This is not a failing of the scheme but rather an inevitable consequence of its construction; at some stage it becomes uneconomical to invest to improve performance. The proposal to set aside a specific allowance to enable DNOs to make appropriate investment to the benefit of these customers is a sensible first step, particularly given the dependence on electricity in a modern world. Clearly, once we have a better understanding of the effectiveness of this investment supported with reliable data then it will be appropriate for us to work together to develop this scheme further.

The proposals as set out in the May paper remain broadly similar to those in the December document. As such our views and concerns are largely unchanged. We are comfortable with the definition of a worst served customer and welcome the additional clarification on the number of minimum interruptions per year. However, we remain concerned about the size of the overall scheme and feel that this will significantly restrict our ability to materially improve the performance of our networks in these areas. Of course, the availability of funds to invest where traditionally investment was

non-viable is to be welcomed, but given that costs will be logged up during DPCR5 and only allowable onto the RAV following post investment appraisal of both eligibility and performance, it is also our view that there is a high degree of investment risk which is likely to constrain our investment options. We are sympathetic to concerns regarding possible inappropriate investments in the absence of any post investment tests, but we would suggest that when you consider the uncertainty and variability of future performance the proposals as outlined in the May paper introduce potentially unacceptable levels of risk.

It is our view that there should be no post investment test applied to these investments apart from that of eligibility. Any attempt to measure average performance improvement on a project (or circuit basis) would suffer from the variability of annual performance and it could not be guaranteed that thresholds would be attained. An alternative could be a higher level, overall assessment to identify an improving trend but even here it remains to be seen if the amount of investment is sufficient to materially impact performance.

Ofgem has invited views on the application of a cost cap per benefiting customer. We feel that this would severely restrict investment options possibly to the extent that the scheme would merely replicate the existing interruptions incentive scheme which as we have noted was never designed to reach down to the extremities of the network. The cost cap would prevent us from reaching sufficiently far enough down the performance curve and thus any investments would not benefit the very worst served customers. This brings into question the very purpose of this scheme and whether it remains appropriate to call it a worst served customer scheme.

7.3 IIS (Unplanned)

7.3.1 Incentive Rates

Customers' expectations of the electricity network are complex and are very much influenced by past experiences. Clearly, a customer in the centre of Manchester supplied via highly reliable and interconnected underground cables will have experienced a very much different network performance than a customer connected to a rural overhead line such as in Cumbria. As such, the relative expectations of network performance from these two customers are unlikely to be comparable and it follows therefore that rural customers, or customers connected to networks with atypical failure rates, would reasonably expect that we would be working hard to improve on this situation. Whilst performance on average of our network continues to improve it is evident that some customers still experience relatively low levels of performance and it is important that we continue to invest to improve in these areas whilst maintaining good reliability elsewhere.

The interruptions incentive scheme can be shown to have delivered sustained improvements in the reliability and quality of supplies to customers on average. The success of the scheme is particularly evident when assessed in the absence of any capital allowances. In previous price controls Ofgem has made capex allowances available to certain DNOs to encourage a move towards benchmark performance. However, for others (of which we are one) existing performance has been measured to be ahead of benchmark and therefore no allowances have been available. Instead,

further improvements in performance have been attained purely as a result of our ability to invest owing to the presence of the IIS incentive rate.

Any changes which have the effect of weakening the incentive rate, particular in the absence of an allowance, will reduce both our ability to invest economically in future network performance improvements and jeopardise existing levels of performance. Whilst customers in well serviced central and urban locations who already receive very reliable supply are unlikely to notice any immediate effects, customers in rural areas will be disappointed that further investment to improve the reliability of supplies in their areas are likely to diminish. It will also be necessary to re-assess existing operational practices in order to evaluate if they remain appropriate given the change in the underlying business case.

In our response to the December consultation we agreed in principle with the proposal to move to a scheme whereby all DNOs share equal incentive rates for customer interruptions and for interruption duration, since this approach is consistent with setting rates on the basis of the assessed cost to customers of supply loss. We were keen to qualify this by noting that existing arrangements have delivered significant performance improvements since their inception and that consistency of investment signals needs to be preserved. We suggested that a transitional approach toward cost reflective arrangements over a period of time would be appropriate. However, in the May paper, Ofgem are seeking to address the issue of differing incentive rates by moving toward a common incentive rate as informed by the willingness to pay (WTP) surveys. The survey indicates that customers place much more value on potential reductions from current service levels than they do on further improvements. This is strong evidence for the maintenance of the current incentive that has yielded the high quality of supply that customers value. It was our expectation that any change to incentive rates would be gradual and would attempt to move DNOs toward the mean of exiting rates. As such some DNOs would see a gradual reduction in the DPCR4 rate and others a gradual increase. Clearly this is not what is being proposed, with all DNOs seeing a reduction in their CI incentive rate in DPCR5 as Ofgem attempt to move toward the WTP level. We are disappointed with these proposals as we see this as a weakening of the incentive scheme which will impact on existing investments by reducing the expected value of future benefits, reduce the level of viable investment available to us and thus result in a marked drop in performance improvements when compared to previous years together with a need for economic re-assessment of existing response measures. It remains our view that there are still important performance issues that need to be addressed on networks and that whilst the vast majority of customers receive a very good level of reliability there are those that don't and it is these customers that will be adversely effected by this weakening of the incentive scheme.

It is important to understand that we are not referring to fault rates when we talk about performance. It is clearly both difficult and expensive to reduce failure rates on assets. The successful DNOs in recent years have been those that have sought to reduce the impact of faults on customers. This has come through innovation and creativity. As a direct result of the interruption incentive scheme we have established an extremely successful network automation solution which is conceptually close to a self healing network, whereby the network actively looks to restore as many customers as is possible post fault and to improve the operators understanding of fault location thus reducing restoration speeds. We are currently developing proposals which will

enhance the effectiveness of the existing scheme increasing its penetration and success rate. We are also looking at a transmission voltage equivalent of our distribution automation solution which we believe will both significantly improve operational resilience of the EHV system and reduce the impact on customers of large events. All of this would not be possible in the absence of the incentive scheme or if the incentive rate had been lower than the assumed level.

It is entirely appropriate for customer opinion to inform the basis of QoS investment in terms of developing an understanding of their appetite for further performance improvements or worsening. However, we would question the validity of using this approach to obtain precise customer value. The WTP results highlight regional differences in this value which are not obviously explained by analysis of current network performance levels, which may be as a result of selection bias in the survey.

If Ofgem are to progress with the proposals as outlined in the May paper then we would certainly suggest that you choose a different equalisation factor than the 50% proposed. We believe that given the need to protect exiting investment benefits and to avoid any worsening in current performance to customers that a 30% factor may be more appropriate. We would also seek clarification that proposed incentive rates are price linked. We would expect that these rates increase annually in line with inflation expectations.

In our FBPQ investment submissions we are proposing to invest a relatively modest amount of less than £7M in DPCR5 for the purposes of improving the reliability of supplies to our customers. An investment amount that we subsequently tested and validated with our stakeholders. A proportion of this investment will be necessary to ensure that our performance outcomes meet the expected targets set as part of this price review i.e. CML targets. However, as a result of our successful programme of QoS investment in previous price controls and the significant expertise that we have established within our business, we are confident that we can continue to gain value for money performance improvements throughout DPCR5 and this is reflected in our FBPQ QoS submission. The proposed initiatives merely build upon successful strategies we are currently adopting maximising the benefits that these approaches bring to our customers. These proposals have been formulated based upon an assumption of incentive rates which is largely equal to that of DPCR4. As a result of the May proposal to weaken the incentive rate it would be necessary for us to reassess these proposals.

As an alternative to the proposals you have made in the May paper we would suggest that you should attempt to move DNOs individual incentive rates toward the mean of existing rates such that the spread is reduced. The mean would remain unchanged but this would address the issue of varying investment yields for DNOs performing similar investments but with different rates.

7.3.2 Revenue Exposure

We agree with Ofgem's proposal to maintain revenue exposed to the incentive scheme at existing DPCR4 levels. However, as a result of the proposed change in incentive rates it becomes necessary for Ofgem to adjust the performance bandwidth about the target in order to preserve revenue exposures. In DPCR4 all DNOs shared equal performance bandwidths of 25% for CI and 30% for CML. Ofgem's proposals as outlined in the May document would see this change, such that each DNO has a

different bandwidth. The effects of these changes are not obvious and we would be concerned about unintended consequences. Examination of table 7.9 in chapter 7 shows a significant variation in the performance bandwidth for both CI and CML for each of the DNOs. It is not clear to us whether or not these changes are significant. At the very least they change risk profiles for DNOs and at worst merely act to increase the complexity of the scheme and reduce its overall transparency.

The bandwidths are directly associated with the changes that are proposed to the incentive rates. We have previously suggested that attempts to equalise incentives should be such as to move all DNOs toward the existing mean as opposed to WTP levels and in adopting this approach the significant variation in bandwidths would be reduced.

7.3.3 Targets

We are broadly in agreement with the Ofgem proposals for setting IIS targets in DPCR5 as outlined in the May document. Indeed, we welcome the proposal to differentiate DNOs that are frontier CI performers when setting targets for CML, thus avoiding an onerous double ratchet effect. The resulting CML targets however remain very challenging, requiring us to continue to explore opportunities to improve the CML performance of our networks. As we have already explored, our ability to invest economically to improve performance is sensitive to the incentive rate and we would reiterate that the proposals to weaken the incentives will affect our ability to attain the required CML outcomes via a reduction in CI. An approach which has proved particular successful in previous years.

As for CI targets, we are disappointed that Ofgem have not taken this opportunity to revise the methodology in light of issues that have been raised in previous consultations. In particular the issue of longer term incentives and regulatory uncertainty associated with the benefits of investments beyond the current price control. As we said in response to the December consultation, the current five-year arrangements for agreeing and setting targets and associated incentive rates can result in investment timing issues as the IIS rewards are effectively bounded within a price control period. We believe that this situation is compounded by the effect of applying a ratchet to targets at the end of the current period. Since historic performance improvements are locked in when setting forward targets, DNOs see reducing benefits from investments throughout the current price control period.

We proposed that Ofgem replace the step-change of the ratchet with a glide-path, such that the five-year targets are set at a gradually reducing level from the current target level down to the current average level by the end of the subsequent price control period. This mechanism would ensure that DNOs are able to account for benefits of investment beyond the price control period and would act to reduce the investment timing issues identified.

7.3.4 Allowances

As we said in response to the December consultation, we feel it appropriate to review the case for further capex allowances for CI gap closure in cases where there is a gap between a DNO's current performance and the performance suggested via benchmarking. Allowances ought to be considered in the context of the wider capex

strategies adopted by DNOs during DPCR4. As such we are supportive of the Ofgem proposal not to offer any capex allowances in DPCR5 for the purposes of CI gap closure. However, it is very important to recognise that DNOs are now reliant on the IIS incentive rate to drive further investment in QoS. As we have already commented, the proposals in the May paper significantly weaken the incentive on DNOs to improve performance and therefore we would suggest that the incentive rate proposals are inconsistent with the capex allowance proposal. Furthermore, we believe that capex investment has a part to play in improving the CML performance of networks. In our case, we are forecasting a need for continued CML performance improvements in order to attain the challenging CML targets that Ofgem are proposing for DPCR5 – targets which are based upon upper quartile CML/CI. It is our view that this performance improvement can be best attained via a reduction in the number of customer interruptions and the association interruption durations. It is for this reason, that in our FBPQ submission we identified a number of initiatives which were primarily aimed at meeting the draft DPCR5 CML performance targets. We believe therefore that a capex allowance should be afforded to fund these necessary improvements in CML performance.

Ofgem are also proposing to remove the provision of the cost allowance for restoration performance. We are disappointed about this proposal and we are unclear as to the rationale for it. We would ask that further details are provided regarding the reasons for removing the cost allowance.

7.4 Responses to Chapter Questions

7.4.1 Do you agree with the proposed mechanism (in full) for worst served customers?

No. We are comfortable with elements of the proposed mechanism but feel that it is too limited in size to have a material effect and that there remains a high level of investment risk which is prohibitive.

7.4.2 Do you agree with the proposed approach (in full) for setting unplanned targets for customer interruptions and customer minutes lost?

No. We are pleased to see progress in this area and are keen to reach a conclusion in order to allow us to begin to develop a better understanding of the challenge ahead. However, we feel that it is important to consider the issue of longer term incentives and the problems of regulatory uncertainty beyond the current price review.

7.4.3 Do you think that we should set a cap on the cost per benefiting customers within the worst served customers mechanism and, if so, what level should this be set at?

We would advise against the application of cost caps to this scheme to the extent that we are concerned that its presence would significantly impact on our ability to identify projects.

8 Network Output measures (inc Appendix 11 – Network outputs)

8.1 Chapter Overview

We are committed to outputs and to the development of a common outputs framework. We have pioneered some of the work in this area, particularly in terms of the presentation of condition indicators, use of Load factors as a decision tree, and the presentational alignment of Load and Non-Load risk.

We also note and agree with Ofgem's characterisation of outputs into three tiers which we think is a helpful framework for future development.

For any new framework to work, a clear initial understanding of the rationale behind its population and the limitations on the current data set will be necessary. As we seek to progress to a more mature, populated framework in DPCR5 which could potentially be used for benchmarking in DPCR6, it will be critical to ensure that the two necessary elements of common definitions and minimum accuracy standards are in place.

As this scheme will be developmental in its early stages, care will also need to be taken in the initial presentation of results.

8.2 Risk matrix population

We are fully engaged with Ofgem's Network Outputs group and have circulated proposals as to how our population of HI and LI 1-5 indices would look.

We suggest that the initial population of both HI and LI metrics should be on a deterministic basis and not correlated with 'timeframe for replacement' to avoid the circularity of having the investment programme correlated against the investment programme. In this case, it would be possible for DNOs to keep LI=5 or HI=5 assets on the system and it will be for DNOs to then determine the most appropriate interventions to manage the presenting risk, as this would allow consideration of all appropriate interventions, and DNO innovation in asset management. Simply using the replacement programme to calibrate the risk categories creates circularity, with no independent measure of the consequent effect on risk. It also fails to address the original intention of creating measures that would allow assessment of both 'tail' and overall population movement as proxies for near-term and longer-term risk.

There will be a need to clearly define each of the HI categories as different companies have different understanding and definition of HI. Our Health Indices combine both the condition and operability of the plant to give an overall indication of present 'health'. Operability is a factor used to model known issues with specific assets including inherent design issues, service history, availability of spare parts etc. This additional factor can increase the overall HI of the plant hence resulting in intervention earlier than for condition alone, or result in the case of tower lines in a redesign of the arrangements to meet current standards.

We understand that in some DNOs HIs are purely a measure of observable condition and do not consider these equally important issues.

Our current outline proposals for HI and LI population are shown below, illustrating both the mapping of our current detailed Health Indices, and also the potential broad correlation between HI and LI categories.

HI	Current HIs	Rationale	LI	Rationale
1	< or =1	New or As new	1	Significant spare capacity
2	>1 and < or = 4	Serviceable	2	Adequate spare capacity
3	>4 and < or = 6	Likely to require planned intervention in the next 10 years	3	Likely to require planned intervention in the next 10 years
4	>6 and < or =7	Planned intervention under consideration	4	Planned intervention under consideration
5	>8	Intervention underway	5	Current risk requiring mitigation

It should be noted that, at this stage, consequences are essentially ignored in both models and hence we should be careful about using the language of 'risk' and acknowledge that a major factor influencing investment priorities is missing.

In terms of setting a baseline and discerning the effects of investment from other impacts in the subsequent presentation of HI, we suggest that the following criteria will need to be taken into account when forming a view on data quality;

	Form of measure	Percentage actual observations p.a.	Index population	Average age of data used
4	Health Index	50-100%	100%	<2 years
3	Condition Index	20-50%	70-100%	2-5 years
2	Age	1-20%	50-70%	5-10 years
1	Other	0-1%	0-50%	10+ /missing

Such a scheme could be multiplicative (ie top score = 256) and then expressed as an index (0-100). Companies could also commit to appropriate version control procedures which could be reviewed in an RRP visit-style process to review key changes to data, methodologies and modelling assumptions, and normalise the baseline as a result. An alternative approach would be to count back the estimated effect of investment from an outturn risk profile, and assign the residual to movement in external factors or methodology.

We note the need for companies to make assumptions where data is not available which will make the dead band for the assessment of outputs for different companies and the assessment of the data quality and modelling used an important measure of the outputs and with the right incentives would drive to improved modelling and data quality

We support the view that fault rate for LV & HV overhead lines and cables is a useful current indicator of asset health and intend in DPCR5 to further develop our CBRM HI approach to cover most of these assets. Where we propose to commit to fault rates, we suggest that these should be based on a five-year rolling average of damage faults (excluding exceptional events), with a deadband to cover off annual variability. We will propose specific targets in our June FBPQ re-submission.

8.3 Linkage of outputs and investment

We welcome Ofgem's acknowledgement that allowances and outputs will be treated together as part of an iterative process from the Initial Proposals onwards, such that if outputs change, forecasts may need to change and vice versa.

We also note the proposal for annual tracking of outputs but caution that the benefits of this will be limited by the volume of inspections of different asset groups completed by each company, and also that some of the metrics will be 'slow-burn' in nature, with discernable trends only emerging with a few years of panel data.

8.4 Future developments

Developing higher tier outputs in DPCR5 is a laudable aim, but very difficult to achieve. We are already starting the development of a network wide tier one output measure and are looking to expand the assets covered by HI being our tier two outputs. We will be happy to share our evolving work in this area with Ofgem.

For some of the 'Other' areas of investment, it will always be intrinsically difficult to develop any form of meaningful Tier 1 or Tier 2 measure, Licence Condition or no Licence Condition due to the nature of the investment. These areas are often, by their very nature, single-minded investments with a very clear goal, usually related to the physical attribute of the asset (its defence against flood, asbestos within, visual profile etc). Relating these desired physical characteristics to a higher notion of risk is difficult and potentially meaningless.

We will propose specific outputs associated with each area of investment in this category in our June FBPQ re-submission. In this, we will carefully consider the scope for unintended consequences, eg measuring sites where asbestos is removed may negate the option of encapsulation which may both be cheaper, and lower risk to the staff working on it.

8.5 Responses to Chapter Questions

8.5.1 Question 1: Is Ofgem's proposed methodology for general reinforcement and asset replacement outputs appropriate?

Our response to this question is contained within section 8.2

8.5.2 Question 2: Is Ofgem's proposed approach for other areas of investment appropriate?

Our response to this question is contained within section 8.4

8.5.3 Question 3: What approach should be taken if a DNO fails to deliver the agreed outputs ie how could the incentives be adjusted?

Given the uncertainty over forms of measurement and definitions, we think it would be difficult to assess the mechanics of implementation at this stage; however it is clear that there will be a significant period of refinement as the outputs framework settles down. We draw the parallel with IIS where targets were only enacted two years after common definitions were agreed and reporting changes implemented. In addition, this involved changing established metrics (CIs & CMLs), rather than newly-invented constructs such as Load Indices.

We suggest that the most appropriate action is likely to be to take performance against agreed outputs into account during the DPCR6 process and make appropriate adjustments, rather than implement any form on ongoing or annual review. We look forward to developing these thoughts further with Ofgem in the coming months.

8.5.4 Question 4: Do you consider that the output measures proposed provide sufficient protection in their own right, or is it appropriate to have some form of additional safety net in the DPCR5 settlement, for example through monitoring investment volumes?

It will be important for both Ofgem and the DNOs to discern movement in output measures due to the effects of investment from movement due to other reasons, eg changes in assumptions or external factors. Therefore it is likely that some form of activity reporting will continue to be necessary, however this should only be used as the basis for informing future discussions, and not held as the measure itself, unless specifically agreed.

8.5.5 Question 5: Should there be an obligation on DNOs to further develop output measures during DPCR5?

We consider that a licence condition is an unnecessary means of ensuring DNO co-operation, particularly one which specifies successful achievement of the intractable (ie development of tier 1 or 2 measures for specific compliance areas of the programme). As demonstrated through the DPCR5 process to date, Ofgem will always have the option to amend the IQL mechanism for DPCR6 should appropriate co-operation not be forthcoming.

8.5.6 Question 6: We seek views from stakeholders on the role that outputs should play in DPCR5 and particularly how they can best be implemented and used.

We believe that outputs should form the basis against which the success of our investment programme can be measured; however consider that this question is aimed at a non-DNO audience.

9 Cost incentives

9.1 Chapter Overview

Throughout the DPCR5 discussions, we have championed the proposal to equalise the incentive power across the different areas of expenditure. Whilst Ofgem's proposals improve the balance of incentives for the DNOs, we believe that the differential treatment of business support costs will create a new and unhelpful boundary for DPCR5.

We suggest that the proportion of costs which are added to the RAV should be fixed based on the proportion that would have been capitalised in accordance with DPCR4 rules applied to DPCR5 spend (ie recognising the increase in capex as proportion of overall costs).

We have also proposed amendments to the scope of the IQI mechanism to reflect our concerns with the differential treatment of business support costs.

9.2 Regulatory consistency in depreciation treatment

We welcome Ofgem's commitment to make no significant changes to depreciation treatment. Regulatory consistency in fundamental decisions that affect the financability of DNOs is important in these difficult economic times because of the reassurance it provides for the providers of debt and equity finance.

9.3 Equalisation of incentives

We strongly support Ofgem's proposal to equalise the incentive power across areas of expenditure. The DPCR4 settlement has resulted in several material cost distortions; effectively penalising DNOs who choose to insource activities; and promoting capex at the expense of opex spend. We believe that an equalised approach will provide an incentive to DNOs to deliver lowest whole life cost solutions. We agree that such an approach should reduce the regulatory burden associated with cost reporting and checking the appropriateness of cost allocations.

We also support the proposed equalisation of incentives associated with pension administration costs and pension costs. This is consistent with the principle that where activities can be delivered via a number of different delivery routes the incentives associated with alternative sourcing models should be equalised to avoid cost distortions.

9.4 Proposed RAV addition rules

We support the use of fixed RAV addition as a basis for equalising incentive power. We are concerned, however that the proposed approach could result in disproportional increases to customer bills and creates a new boundary between business support costs and other network costs.

It is important that, in presenting these changes to RAV addition rules, Ofgem does not give the impression that the role of the RAV is fundamentally changing. The concept of the RAV is of great importance to investors; any misinterpretation of these changes – for example lack of clarity of the new concepts of “fast” and “slow” money - could cause investor confidence to be undermined.

9.5 Impact on customer bills

We believe that fixing RAV additions at the average proportion of costs capitalised in DPCR4 fails to take into account the differing mix of spend by the DNOs and fails to take into account the increasing proportion of capex within the DPCR5 cost base. Our interpretation of the methodology forecasts customer bills will increase more than they would under DPCR4 rules as a greater proportion of costs would be opex funded. We suggest that the proportion added to the RAV should be fixed based on the proportion that would have been capitalised in accordance with DPCR4 rules applied to DPCR5 spend (ie recognising the increase in capex as proportion of overall costs). This calculation needs to take into account the impact of business support, pension and pass-through costs have on RAV additions as well as taking account of the removal of direct and indirect costs associated with sole use connections.

9.6 Impact on DPCR5 boundaries

We believe that the differential treatment of business support costs will create a new and unhelpful boundary for DPCR5. In particular, the inclusion of network policy, IT and property costs within this category creates a material distortion to company decision making. The assumption that business support costs have only a weak connection to maintaining a distribution business is misguided. In particular the proposed approach:

- Discourages IT investment that increases customer service and reduces long term costs;
- Discourages DNOs who accommodate their workforce in operational buildings close to customers, hence reducing cost of travel time and improving customer service;
- Discourages DNOs who invest in development of network policies and R&D to identify and implement lowest whole life cost asset solutions; and
- Discourages businesses that drive overall efficiencies through investment in commercial & financial processes

We would like Ofgem to re-consider their proposal to treat business support costs as entirely opex. In particular, we recommend that IT, Property and network policy costs are subject to the same incentives as other network costs.

The risk that companies within wider groups might respond inappropriately to such treatment is not a valid reason for retaining a different treatment; cost allocation basis between companies within the same group should be managed by robust enforcement of cost allocation rules and apportionment bases.

9.7 Other RAV addition rules

We note that no decision has been made on RAV addition rules for pension costs yet. Whilst we recognise Ofgem's intention to take extra time to consider this important piece of expenditure in detail it is important that the treatment of this key area of cost is resolved as soon as possible.

We do not believe that DPCR4 related margin rules should apply to the fee earned by our Asset Service Provider (United Utilities Electricity Services Limited, UUES). UUES is not an affiliate of ENW, and our owners have no ownership interest in UUES or in the United Utilities Group. UUES is a third party company which operates under an arms-length commercial contract that places stringent obligations on it; the terms of the contract were developed to ensure that any fee earned by UUES is funded from savings relative to ENW's original business plan. Not allowing the fee to be funded undermines our innovative business model that will drive long term efficiency savings for customers. It is contradictory to the fees paid by ENW and by other DNOs to other suppliers.

We believe Ofgem should change the RAV treatment of customer contributions associated with shared use connection assets for DPCR5. Customer contributions should be added to the RAV on a consistent basis to the costs that they relate to. These rules must recognise that business support costs are often incurred in delivering connections activities. Such treatment would ensure that DNOs are not disadvantaged by changes to connections related activity during DPCR5.

We believe that Ofgem should continue the DPCR4 treatment for captive insurance costs. We note that a very wide range of insurance costs is reported with DNOs that use captive insurers often reporting the highest costs. A number of DNO decisions can distort the level of insurance costs incurred, including a DNOs appetite for risk. Where a DNO accepts higher insurance excesses and self-insures the DNO may incur higher levels of, for example, vehicle and transport costs, faults costs, etc. In the absence of detailed information about the level of costs incurred and the efficiency of insurance costs in general it would be inappropriate to allow margins earned by captive insurers to be funded.

9.8 Scope of equalised incentives and IQI

We support Ofgem's continued use of an IQI incentive to recognise information asymmetry between Ofgem and DNOs. We recommend some changes to the costs included within the IQI mechanism and have some suggested improvements to the methodology for establishing the benchmark to use within the IQI mechanism.

9.9 Costs included within IQI

We believe that the scope of the IQI mechanism should be adjusted in two ways.

Firstly, consistent with our suggestion that differential treatment of some business support costs is inappropriate, we recommend that IT, property and network policy costs are included within the IQI. This recognises the trade-offs in company decision making between these activities and other activities within the IQI.

Secondly, we question the logic of including groups of cost subject to triggers within the IQI. Having recognised that the requirement to spend in some areas is difficult to predict it seems illogical to include these activities within the IQI; at best this would provide a comparison of the DNOs assumptions against Ofgem's.

We agree that it is sensible to extend the incentive power results of the IQI to set the incentive rate of some areas of expenditure outside the IQI. This should include costs subject to trigger mechanisms.

9.10 Establishment of benchmark costs to include within IQI

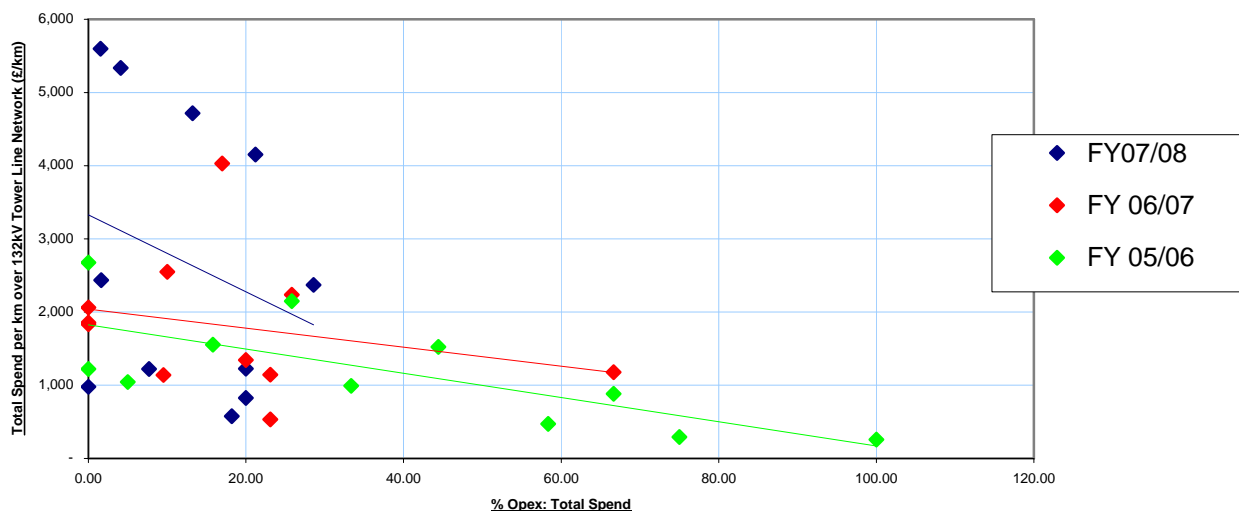
It is very important that the benchmark used within the IQI is robustly determined to avoid subjecting DNOs to undue penalties. In addition to the allowance setting comments we make in our response to chapter 3 and 4, we urge Ofgem to recognise the potential for "cherry picking" an inappropriate result from allowances setting.

We recognise the trade-offs between opex and capex approach and take into account the cherry picking that inevitably results from separate opex and capex allow-setting approaches in developing the benchmark.

Analysis has been undertaken to understand the varying whole life costs for assets on the network based on inspection and maintenance policy and condition based replacement. An example of this is the choice between the potential strategies of painting or refurbishing steel lattice towers which we have developed based upon relative whole life cost evaluation. The basis for the study was CBRM which is our preferred tool to manage condition modelling. In 2007 condition surveys were carried out on all our steel towers; the data was entered into a CBRM steel tower model and outputs produced. The outputs were used to develop a potential programme of refurbishment and tower painting, consisting of approximately a 3:1 painting to refurbishment ratio. An alternative option was a re-phased programme covering the same timescales developed to use a lower opex allocation for tower painting, resulting in a 1.3:1 ratio of painting to refurbishment. Due to a major shift in a potential refurbishment programme, a whole life cost comparison for each condition based output scenario over the DPCR5 period was carried out. This modelling demonstrated that the policy of tower painting with a greater opex allocation gives a more cost effective financial outcome and a lower whole life cost.

In support of this, the graph below uses data from DPCR4 RRP to show for all DNOs the normalised combined capex and opex spend per km of 132kV OHL against the percentage opex spend for the three years 2005/06- 2007/08. The graph shows a consistent trend, by increasing the percentage of opex spend there is a decrease in the total capex and opex cost per km.

DPCR4 Total Annual Spend against Opex Ratio for 132kV Tower Line Network



It is important to recognise the uncertainty associated with extracting a benchmark for the proportion of opex and indirect costs within the IQI benchmark from a model designed to assess all indirect and opex costs. There are material trade-offs between these areas of costs that can distort benchmarks based on components.

9.11 IQI incentive properties

We agree that the alternatives proposed to the existing IQI methodology are complex and that it is simpler to continue to use the traditional form of IQI. However, the issues raised, particularly the risk of overspending, are very real and must therefore be addressed via other means.

The risks of DNOs over-spending is much greater in DPCR5 than in previous price controls as a result of, for example, the commitment to deliver outputs, smart meter roll-out potentially requiring increased costs associated with inspection and replacement of cut outs, etc. This is particularly the case for DNOs who commit to strong outputs. Given Ofgem's intention to report progress against tier 3 outputs we cannot envisage how DNOs who commit strong Tier 1 and 2 outputs will gain any advantage from less scrutiny of spend. Instead, if DNOs who commit to strong outputs are not given greater rewards via IQI then Ofgem must take increased risk into account in the cost of capital calculation for those companies.

9.12 Answers to Ofgem's Specific Questions

9.12.1 Do you agree with our proposed approach to equalising incentives?

Our response to this question is contained within section 9.2

9.12.2 Have we identified the most appropriate costs to be within the equalised incentive and the IQI?

Our response to this question is contained within section 9.8

9.12.3 How should we set the "RAV additions percentage" that will determine the split between split between "slow" and "fast" money?

Our response to this question is contained within section 9.5

10 Managing Uncertainty

10.1 Chapter Overview

The DPCR5 settlement will need to recognise the significant shift in risk relative to the DPCR4 settlement. The introduction of outputs, the increase in risks associated with incentive mechanisms such as losses and IIS, potential changes in responsibilities and market risk associated with economic conditions has increased the risk profile of the DNO. Ofgem's proposals for the introduction of regulatory tools to manage uncertainty are welcomed. We propose that the imposition of a generic risk management tool (such as the substantial effects clause) along side mechanisms for specific identifiable risks which were not considered as part of the DPCR4 settlement will ensure that the overall level of risk in the price control settlement remains broadly consistent with previous settlements. We believe that protecting against the extremities and unforeseen risks to the business whilst retaining the incentive framework will provide a balanced DPCR5 settlement with a risk profile commensurate with investor expectations.

10.2 Developing a Framework for Uncertainty

In the previous price controls, DNOs have accepted Ofgem price control proposals based upon the appropriateness of the compensation rate to the level of risk exposure. The DNOs have recognised that several risks materialised during DPCR4 which could not have been reasonably predicted. The DNOs are not risk adverse entities but recognise that the investors provide the funding for future capital projects based on the premise that they are investing in a secure and low risk market. DNOs are therefore willing to accept levels of risk which are comparable with previous settlements but understandably seek some form of protection from the extremities. Failure to provide adequate protection will increase the cost of capital demanded by the investment community (who are highly sensitive to changes in risk profiles at the moment), leading to an increase in costs for customers. We believe that the perceived level of risk exposure contained within the DPCR4 settlement was appropriate and suggest that Ofgem should use the various mechanisms discussed below to return the DPCR5 risk level to a more appropriate level.

In our previous consultation responses, we have encouraged Ofgem to set out a predictable framework for dealing with uncertainty. We believe that a consistent methodology will allow investors and customers to understand how they are protected in the event of an unforeseeable event and that this approach minimises the cost to both parties. We have argued that the magnitude of the costs associated with the event, the size of the headroom available to absorb the fluctuation, and the regulatory treatment of the risk are likely to determine the impact of any specific event. Whilst the first two elements are impossible to determine in advance of the event, the regulatory mechanisms/framework can be discussed and agreed which will reduce the impact of an uncertain event. The regulatory framework also has a significant effect on how these risks are allocated between the shareholders and customers. The way in which risk and uncertainty are treated affects a number of issues, including:

- the incentives on the regulated business to behave efficiently;

- the ratio headroom that the company requires to accommodate fluctuations in Ofgem's cash flow modelling;
- the ability of the business to absorb cost shocks; and
- the price at which companies are able to raise risk capital as creditors will require a premium to accept greater risk.

10.3 Risk Management Toolkit

Ofgem has identified a series of regulatory tools for managing uncertainty. The proposals from CN for managing risk through a revised IQI have been dismissed due to reasons of complexity. We recognise that this mechanism may have some benefits in terms of a generic risk mitigation tool for capex uncertainty. However, our concern with the adoption of the IQI as a risk management mechanism is that it will detract from its purpose as an efficient bid and delivery incentive. Ofgem has also discussed the application of the RORE mechanism in DPCR5. The proposed caps and collars on individual incentive mechanisms would allow Ofgem to control the exposure of customers and DNOs against significant risks and unintended consequences. Using this tool to limit risk to DPCR4 comparable levels would be one benefit of the mechanism (although our concerns with the calculation methodology remain). As we have previously acknowledged, placing caps and collars on any mechanism may distort the behaviours that the incentive is seeking to encourage. Ofgem should be mindful that the consequences of risk mitigation may detract from the incentive properties of the price control.

It is also important to remember that the ultimate mechanism for pricing risk into the price control is the cost of capital. In some instances where no readily identifiable mechanism is available, it may be appropriate to increase the cost of capital as the most efficient risk protection mechanism.

10.4 Balancing Risk in the Price Control

The balance between individual protection mechanisms and generic reopeners needs to be carefully considered. CEPA's aforementioned "three tests" essentially assume that the DNO or Ofgem are aware of all of the risks facing the industry over the five year period. The recent banking crisis is a notable example of an unpriced risk and one which would fail to meet the CEPA test hurdle.

Generic and specific reopeners should be used to manage different types of risk. We would suggest that the role of a generic reopener is to provide protection against the unforeseen events which may occur after the conclusion of the price control settlement process. This approach naturally suggests that the mechanism should be designed around the impact of an event on the ability of a DNO to finance its efficient activities.

Ofgem identify the Interim Determination (IDoK) mechanism as an example of a generic reopener. This type of mechanism is an example of a specific reopener as the IDoK can only be triggered under explicit (and therefore anticipated) circumstances which are set out in the Water Conditions of Appointment. The Ofwat "substantial effect" clause is a more appropriate mechanism as it allows the water companies, or the regulator, to seek a change in price limits if circumstances beyond the companies' control change such that the total impact on the company exceeds a threshold in net

present value terms. There has been some recent criticism of the mechanism from water investors on the lack of clarity regarding this mechanism but Ofwat have noted that there is a need for the lack of application criteria to allow the mechanism to operate under non specific circumstances. The substantial effect clause is a well understood regulatory mechanism which should be transposed into DPCR5. We would suggest that the materiality level should be set at 10% of company turnover. Ofgem should also recognise that the Ofwat risk management mechanisms are never cited as dampeners to the cost of capital.

Ofgem's proposal to implement a logging up approach when utilising reopeners largely defeats the object of the mechanism. Ofgem's statutory obligation relates to efficient financing rather than charge volatility. This issue is repeatedly driven into discussions by suppliers who we believe benefit more from price stability than customers. Discussions on the deferral of revenues until the next price control places cash flow and financing risks upon the business.

Our position on the utilisation of a generic reopener suggests that it may only be appropriate to consider specific mechanisms for "known unknowns". We therefore suggest that a specific risk mechanism should only be implemented where an issue is readily identifiable and separable, where the imposition of a mechanism will reduce the level of risk upon the DNO (and not transfer the risk to the movements of an inappropriate index) that the impact is material and that a failure to do so would result in significant departure from the overall level of risk inherent in the DPCR4 settlement. The DNOs have identified numerous examples during the price control review (tax, changes in legislation, input prices) which require specific mechanisms. The imposition of a reopener to protect DNOs from extreme conditions and the genuinely unforeseeable will allow the DNOs to manage an appropriate level of risk.

We believe that it is sensible and appropriate to provide symmetric protection mechanisms. This approach ensures that neither customers nor DNOs are carrying disproportionate amounts of risk around any specific uncertainty.

10.5 Responses to Chapter Questions

10.5.1 Question 1: What balance should we adopt between mechanisms to manage specific risks (such as input price uncertainty) and a more general type of reopener to manage a wider basket of risks?

Our response to this question is contained within section 10.3

10.5.2 Question 2: What risks should be covered by specific mitigation mechanism, by a general type of reopener, and which should be left to the DNOs to manage?

Our response to this question is contained within section 10.3

10.5.3 Question 3: Are there any additional risk mitigation mechanisms that we should be considering that are not identified in this chapter?

Our response to this question is contained within section 10.2

11 Tax methodology

11.1 Chapter Overview

Ofgem has committed to maintaining the current approach to setting tax cost allowances on an ex ante basis. We are supportive of this approach, since we believe this incentivises the DNOs to operate efficiently and at the same time reduce the risk and cost to customers.

We agree with the common approach to setting capital allowances, which relies on an 'average' actual allocation based on DNO data. However, to ensure no overall advantage or disadvantage to DNOs, the average percentages used should be a true industry average and not moderated by Ofgem's view of how capex should be treated, as DNOs do not have the flexibility to change the way capex is treated once an agreement is reached with HMRC. The capital allowances also need to be analysed in such a way as to avoid distorting effects. A separate category for asset replacement would go a considerable way to overcoming this problem.

Ofgem's proposal to include a symmetric trigger mechanism to protect customers and DNOs against non controllable movements in taxation rates is consistent with the incentive based approach and is supported by ENW. We believe that the scope should be extended to cover changes resulting from significant HMRC practice notes and interpretations. This will still leave residual risks for other potential tax changes resulting from accounting changes, EU law and case law. Whilst the mitigation of some of the current tax risks is welcome it should be acknowledged that tax risks overall have increased considerably from the stable tax regime when the price control for DPCR4 was determined.

11.2 Modelling of Capital Allowances

We welcome the common approach which relies on an 'average' actual allocation based on reported DNO data.

We are however concerned with the moderated changes to the capex allocations, particularly in the non load related spend categories. The DNO percentages will be based on submitted tax computations as agreed by HMRC, so we find it surprising that an actual average across the industry would not be a sufficient measure of capex spend and that Ofgem consider it necessary to add their 'moderated views' of capex spend allocations. Once a tax treatment has been agreed by HMRC it is very difficult, if not impossible to change.

Having undertaken the detailed information requests on capital allowance percentages and given the time and effort put into collating this information, the model uses only high level summary percentages in the modelling of capital allowances. This could lead to considerable variations between actual and forecast capital allowances. Our view is that the percentages in the summary Table F8 (the first 26 percentage lines at the top of that schedule) should all be

used in allocating spend, rather than attempting to average those percentages for large classes of assets, if accurate forecasts of the DNO tax bills are to be made.

Referring specifically to the non load percentage allocations, the majority of the non load related spend occurs in the asset replacement category (76% on an industry basis). We find it surprising that applying the total percentages for non load related spend results in a deemed 4.7% of asset replacement as general plant spend and 39.8% as long life spend which is inconsistent with the average industry data. We would welcome clarification on how the percentages have been arrived at. For non load related spend, this does not appear to be an industry average or a weighted average of all non load related spend percentages.

Furthermore we cannot understand why for some categories there are separate percentages but not for asset replacement costs which accounts for 29% of total DNO spend over DPCR5.

We also could not determine how all costs from Table F8 should be treated. It is not clear to us how “the impacts of relative price effects” or “workforce renewal costs” are to be treated, as they do not appear to fit into any one of the categories listed.

We look forward to the proposal for the treatment of capitalised indirect costs and would appreciate an early view so that we can consider the approach and provide feedback at an early stage.

11.3 Opening capital allowance pool balances

The FBPQ re-submissions in June 2009 will reflect the revised capital allowance balances as per the latest submitted tax computations. Using these balances is consistent with the move toward an industry actual capex calculation.

An important point to note regarding the opening tax written down value balances that are to be used for DPCR5 is that these will be different to the balances that would have been calculated under the regulatory capex allocation rules. The tax allowances in DPCR4 were set using a generic set of percentages to allocate capital expenditure. The actual expenditure treated as capital for tax purposes in DPCR4 was higher than that per the Ofgem tax allowance calculations. Such expenditure would have been allowed as a revenue deduction by Ofgem in DPCR4, thereby reducing the DPCR4 tax allowance. By using the opening tax pools from the computations, which will include such expenditure from DPCR4, this will result in tax relief being assumed twice by Ofgem on the same expenditure, thereby under funding DNOs tax charge for DPCR5.

It would be sensible to minimise this issue recurring at the end of DPCR5 by ensuring as much as possible that regulatory and statutory tax capital allowance balances are aligned and we believe that all 26 percentages in the summary table should be used and not just a simple aggregation to reduce the number of categories used down to only six.

11.4 Tax trigger

We agree with the principle of a tax trigger for changes in tax legislation that is outside the control of DNOs and to this leading to a re-opener of the tax allowance, once an explicit materiality threshold is reached. We also agree that the mechanism should be symmetrical so that DNOs are not adversely affected by downside risk and customers benefit from upside risk.

The most appropriate approach would seem to be on a case by case basis but we agree that where there are several changes arising from one Finance Act, those changes should be considered in total as a single adjustment.

We note the comments regarding the measurability of the mechanism. Whilst we can understand Ofgem's need for a change to be measurable, it should be noted that there have been significant changes in case law and HMRC interpretations that have had a significant and measurable effect on DNO tax charges. The change in TB53 to deferred revenue expenditure was one such change. The exclusion of changes in accounting standards, HMRC practices (which are typically more difficult to assess and measure) and potentially changes in EU law will mean that DNOs still retain certain risks associated with changes in their tax charges that are outside their control.

In the current economic climate and in these times of unprecedented risk and uncertainty, tax risks are greater than ever before. We believe a trigger mechanism is a necessary requirement to maintain investors' views of and customer confidence in the current risk profile of DNOs. In terms of materiality, we would propose a measure of 0.5% of total base revenues to be acceptable. We consider that the excess amount above the threshold band should be subject to a revenue adjustment with DNOs retaining the risks and rewards for all amounts below the threshold.

This will mean that DNOs are still taking on a reasonable level of tax risk in relation to changes in tax legislation. Given the current economic environment and financial instability in the UK, it would not be sensible for DNOs to be subject to such large risks that are beyond the control of DNOs, especially as such risks could give rise to potential funding issues and arguably did not exist at the last price control review where markets were more stable and tax law changes were less of a risk. By retaining some of the risk but capping it at a sensible level, we feel that DNOs will retain a similar level of risk that was faced at the start of the current price control period.

11.5 Timing of revised revenues

Special Licence Condition B2 (SLCB2) deals with the pass through of allowed costs. An annual indexed allowance was given at the start of the price control for business rates and Ofgem's licence fee. Any actual under/over spends are deducted/added to the subsequent years allowed revenue. These particular costs are treated in this way because there is very limited control that the DNO management can exert. The impact of changes in the tax legislation would appear to fall within this same category of cost for revenue adjustment purposes and the

timing would be more closely match the cashflow impact on the DNO. The cost of any tax adjustment captured by the mechanism would also be known with relative certainty.

In terms of timing, if the Chancellor announced a tax rate change in say April 2010, with enactment from April 2011, then we would incorporate the change for 2011/12, with indicative prices announced to suppliers on 31 December 2010. However we have an obligation under DCUSA to inform suppliers of likely changes every quarter, so in reality we would be telling suppliers of the impact on prices as early as 30 June 2010, nine months before implementation and more than sufficient time for suppliers to implement changes to customer contracts.

The issue of communicating re-openers is much wider than just this issue and should be considered in conjunction with our response to Chapter 10 on Managing Uncertainties.

11.6 Modelling the tax deductibility of pension cost

We agree with the proposal to spread pension payments where they would be captured by the tax spreading rules.

We agree with the general approach to the adjustments to future revenues for over or under funding of pension payments in DPCR4 but would like to reserve further comment until the details of how this will operate are known.

Under funded pension costs received tax relief at only 28% in DPCR4 (the additional payments for ENW were made in 2008/09 and 2009/10). Any adjustments in DPCR5 should therefore reflect a tax rate of 28%.

We note that the financial model currently appears to double count capitalised pension costs. Such costs are deducted from profits (correctly) but also appear to be included in the spend qualifying for capital allowances. Capital additions for tax purposes should exclude all pension costs.

11.7 Corporation Tax instalments

If the desire is to fund tax on a cash basis in DPCR5 (ie recognising that under quarterly payments, half of the tax liability is paid in the year and half in the following year), it is important to ensure that there is no 'half year' gap in funding. It would seem to us to be simpler to apply a method of funding corporation tax on a P+L basis, as this avoids the need to consider quarterly payments and the tax allowance in each year will equal the tax charge, although the difference between the two methods should not be that materially different.

11.8 Tax treatment of incentives & IQL adjustments

Ofgem are minded to allow incentives on a 'pre tax' basis. It is not clear to us what the implications are for tax allowances in DPCR5 and we would appreciate a worked example of how this will work.

11.9 Excluded services

We would appreciate clarification on what is meant by excluded services being ignored in assessing the tax allowance. Our understanding is that the price control cost allowance covers distribution business activities, along with relevant excluded services.

11.10 Answers to Ofgem's Specific Questions

11.10.1 Is the approach to modelling DNOs capital allowances on a common basis representative of the industry position and does it ensure that no individual DNO is materially advantaged or disadvantaged by this methodology?

See Modelling of Capital Allowances section for our response.

11.10.2 Views are invited on whether the most appropriate option for the tax treatment of re-openers is the case-by-case approach.

See Tax Trigger section for our response.

11.10.3 Should the DNOs retain the risk and rewards for all amounts below/above the trigger threshold; or for the entire amount rather than the excess over the materiality trigger; and what should be the appropriate timing of adjusting DUoS revenues following both single and multiple trigger events?

See Tax Trigger section for our response.

11.10.4 We invite views on the practicality of communicating the likelihood of a trigger being activated and the methodology for it.

See Tax Trigger section for our response.

12 High impact low probability events (HILP)

12.1 Chapter Summary

We have specifically consulted stakeholders with respect to HILP expenditure. We have addressed HILP issues at our Stakeholder meetings held at locations across our franchise area and also at individual meetings with relevant Regional Resilience Teams. At all these meetings we have received endorsement for our HILP investment proposals.

We have submitted HILP investment in accordance with the methodology established by the DECC/ENA working group.

12.2 Ofgem's approach

We note Ofgem's concerns with regard to discrimination across the customer base in respect of security of supply. However, the basis/justification of the ENA HILP work centred the GVA value of the demand area to the economy of the UK. Furthermore it is not just those energy consumers located in Central Business Districts (CBD) that benefit: CBD consumers contribute disproportionately to the economic health of the wider region, as well as themselves providing a range of essential services. We also believe that all customers should pay to avoid the costs of social breakdown that would accompany a CBD HILP event. This was a point strongly made by many of our stakeholders.

More generally our stakeholder feedback leads us to believe there is general appreciation and acceptance of the value of providing superior security of supply to our CBD areas. It is further noted that Regional Resilience Teams believe that the current definition of CBD is too narrow and needs to consider densely populated areas that surround the CBD and the societal impacts of major loss of electricity supply.

12.3 FBPQ submissions

Our HILP proposals relate to the City of Manchester CBD. The value of the proposals is consistent with the August 08 submissions for all the DNOs except London (an accepted outlier in this respect) and the February submissions where proposals were made.

Our stakeholder feedback is consistent with that of the other DNOs ie customers are supportive of the idea that network security should be enhanced and believe that the costs of such enhancement should be shared by all customers.

12.4 Next steps

We welcome the opportunity to work with Ofgem to progress this area of debate.

13 Excluded Service

As indicated in our response to the initial consultation document for DPCR5 we support an all-DNO averaging approach to the forecasting of relevant excluded services revenues (second option). This approach provides the strongest incentive for DNOs to maximise excluded services revenues, benefiting future DUoS customers and encouraging a more efficient use of the network. DNOs should be encouraged to seek out service opportunities, providing appropriate economic messages to those customers who put additional demands on the network, ie customers with poor power factors, or by providing additional choice for customers. This meets the key criteria of an effective incentive mechanism.

Excluded services activities can be split between those activities driven by an obligation to satisfy an external demand (eg NTR) and those that are more optional for DNOs to offer (the majority of relevant excluded services). The new approach we are suggesting would apply to the latter with the status quo applying to the former.

The advantage we see in adopting this approach is that those DNOs with above average activity levels would be incentivised to maintain these levels and those with below average activity levels would be encouraged to increase activity to generate more revenues. These additional revenues would be observed and captured at subsequent price controls for the benefit of DUoS customers, influencing their bills and the DNOs investment needs. We also believe that this method is preferable due to its relatively straightforward nature and use of reliable data, avoiding the need to introduce further complexity into data capture and analysis, as proposed in other possible alternative approaches.

The average used to set forecast revenues for DNOs should be based on historic reported data in the RRP and revenue RIGs, averaged over recent years of the current price control (or FBPQ projections, if these are observed to be significantly different). These figures should be adjusted to take account of the likely policy changes in DPCR5, particularly for Top Up and Standby and Reactive Power whereby certain customers will no longer be separately charged. This change is as a result of all DNOs incorporating a common charging methodology from April 2010. The commentary associated with FBPQ Table F6 expands on this. An allowance should also be made for the relative size of the DNOs, which could be assessed using a scaling factor such as CSV or MEAV. We see the mechanism as relatively simple and we would be happy to have further discussion on the mechanics of how this would work.

We do not believe that the fourth option referred to in appendix 17 as “cost plus” would provide a suitable mechanism for the forecasting of excluded services revenues due to the potential disadvantages of this method as highlighted in point 1.11 of the document. This approach would effectively result in a separate control for excluded services which is unnecessary, increasing complexity and sub-optimal compared with the stronger incentive properties of the second option. The third option also does not provide a sufficiently strong incentive, compared with the second option.

On a wider point, as regulatory reporting matures and the size of the distribution business shrinks (as a result of regulatory unbundling), consideration should also be given as to whether the threshold on de-minimis activities should be increased to ensure

that the headroom provided is sufficient to enable DNOs to undertake appropriate new activities.